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THE BVILDER

AN : ILLUSTRATED : WEEKLY JOURNAL : FOR : THE : ARCHITECT : AND : CONSTRUCTOR.

"EVERY man's proper mansion-house, and home, being the theater of his hospitality, the seate of selfe-fruition, the comfortablest part of his own life, the noblest of his sonne's inheritance, a kind of private princedome, nay, to the possessors thereof, an epitome of the whole world, may well deserve, by these attributes, according to the degree of the master, to be decently and delightfully adorned." - - - - - - -

"Architecture can want no commendation, where there are noble men, or noble mindes."

—SIR HENRY WOTTON.

"OUR English word TO BUILD is the Anglo-Saxon Byldan, to confirm, to establish, to make firm and sure and fast, to consolidate, to strengthen; and is applicable to all other things as well as to dwelling-places."—DIVERSIONS OF PURLEY. - - - - -

"ALWAYS be ready to speak your mind, and a base man will avoid you."—WILLIAM BLAKE. - -

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THE FREEDOM OF HOLLAND

THOSE who were privileged to hear the most interesting paper read recently before the Royal Institute of British Architects by Dr. D. F. Slothower, upon the subject of "Modern Dutch Architecture," must have felt that there was being revealed to them a true expression of a very vital people, but of one whose national characteristics were of a very different nature to our own. Obvious vitality, extreme cleverness, and aspiration tinged with not a little of impatience, are not the uppermost signs of the typical British temper, and can find no startling expression in our national art. Vital as we are—and we must be so indeed if our Empire is itself to be explained—we do not wear the badge upon the sleeve, and we prefer to revel in the type of the slumbering lion. Were we poseurs, we should pose in the armchair. Neither do we lay claim to extreme cleverness, and our aspirations are things of the innermost heart, and of which we are reluctant to speak.

If, however, we are to understand at all Dr. Slothower's people—and it is necessary for our education that we should—we have to shake off that deadening, insular tolerance which we are apt to assume with some condescension; to become very wide awake, put aspiration against aspiration, and have the greatest sympathy with that spirit of impatience which, more often than not, is in itself a virtue. We have to lay aside the habit of taking everything once established for granted, before we can begin to enter into the spirit with which the modern Dutch school is inspired.

When we remember some of the wonderful feats of endurance and achievement carried out by just ordinary men during the war, we must at times wonder how much the network of daily habit, convention, respectability, and what not, hang round the neck as a dead load, and how much it serves its avowed purpose of protection. Habit should be the impulse which forgoes thought that thought may be turned to more useful purpose. Convention should be the unwritten law designed to co-ordinate individual action and give it a common purpose, and thus eliminate the clashing of individual interests. Respectability should be a concern for the susceptibilities of neighbours, that their attention may not be diverted through our oddities. Yet when once these institutions were swept aside the soldier seemed to show that the 90 lbs. pack was less of a burden.

Dr. Slothower's paper, like a waft of fresh air in a stuffy room, must have appealed to many as the opening up of a clear vista of freedom. Here was Youth dancing for joy and yet serious and looking far ahead in the utmost earnestness. Our national state in things architectural seemed in comparison a very dull thing indeed.

Habit has told the Englishman that the shopfront must not appear to stand upon a sheet of glass. The Dutchman revels in the miracle and piles up his bricks upon the void. "Why not?" says he. "We all know your mighty stone lintel is bolted to a girder, and your stout stone piers are but so many jackets round as many stanchions. Why not glory in your power, rather than assume the impotence of a fettered past?" Can we answer him in spirit as well as in words?

Convention tells us that we must lay our bricks flat—it is the way they always have been laid, and we all do it so. The Dutchman stands a brick on end upon the table and says, "Why not that way if I like?" Respectability demands a certain acceptance of the established order, and yet the Dutchman asks, "Of what service?"

Here we have had presented for our consideration an entirely new thing, so free from all preconceptions that we feel rather at a loss for the language in which to discuss it. We may well ask:—

First, is this a live movement and has it taken root, or is it all artificial? Can it be an offering to the thirsty God of Change, who will demand further and repeated sacrifices?

Second, can this movement spread to this country and in its present form, or can a national movement on parallel lines develop here?

He will be a wise man who can answer as time will answer, much as we shall each try to foretell. To ourselves, it appears to be a very live and vital movement, and an integral part of the political and social life of the Dutch people, but whether this passion for the "new" will be reflected in a long series of upsets, each getting so far and no farther, who can tell? That it should spread to England in its present form, we can only say, "God forbid!" It is Dutch and Dutch alone, and can make no universal appeal other than for a disinterested sympathy in its aims. It will bear no more the transplanting than will the dead styles of the past. Those who expect a repetition of the conditions that lead to the strong Dutch influence that has marked our domestic architecture in the past must remember that this was the accompaniment to a widespread influx of Dutch immigrants, a state of affairs that is not likely to be repeated in an overcrowded country that can no longer offer its hospitality to an unlimited number of foreigners. That there should be a parallel movement in this country towards freedom of thought, we must all devoutly hope and expect, but its expression must be as national as the work of which Dr. Slothower spoke to us.

It is a far call from Amsterdam to Wembley, yet not so far in spirit if we can read into the character of many of the new exhibition buildings there, a fresh attempt to express the function of new materials in a new way. That this has been done without a shock to our susceptibilities is merely a sign of that stability that is the keynote of our national temperament, and the trend of national thought will be directed thither rather than out of the country.

We are perhaps a little slow to move, but our momentum is steady and irresistible. Where others bound forward at a touch, as to give the impression that we have been hopelessly left, we groan a little at the impulse, but nevertheless move slowly ahead, so frequently to meet again the pioneers, returning wearied from some dead by-pass up which they have hurled themselves, and relieved to find once more the dull main road.

In the meantime we like to understand our neighbours and to learn from them, and those of us who listened to Dr. Slothower's paper with a free and open mind can feel that we have indeed had a holiday away from the humdrum.

We return from it a little bewildered, a little envious, and a little anxious. Bewildered, because there is so little in common with ourselves, to which we may anchor down our own ideas; envious, because of the young enthusiasm that is so little apparent among us; anxious in the sense that a parent may fear for the son who has left the home influence. What dangers he may meet? Can he resist them?

Perhaps the worst thing that can happen to the modern Dutch movement is that it should become the fashion to copy in other countries. If it escapes this fate it should live on to maturity, but otherwise it may be smothered.

NOTES

The Channel Tunnel.

THE project of the Channel Tunnel has been kept before the public with great energy and ability for some forty years, and the latest record in the form of an address to the Prime Minister reflects the general aspect of the scheme in a clearly summarised form. Lord Sydenham maintains that from the military point of view we should reap very great advantages, whilst the political and commercial advantages may be taken for granted. Sir Percy Tempest, the engineer to the scheme, estimates the present cost at twenty-one million pounds, and the time required for the whole work at about four-and-a-half years. It certainly appears that this great work might go through at once if the ghost of a possible national danger can be effectually laid. The direct link which it would supply from London to the whole world outside these islands must seem to many who have studied the matter as of inestimable value. Viscount Cowdray said, in March last, "I assume we all believe that any doubts as to the feasibility of the tunnel, or as to its paying a good return on the cost when it is made do not exist any longer. The only question which has to be solved is to get the Government to agree that no particular reasons—military or otherwise—are sufficiently great to prevent the Tunnel being constructed."

Lighting of Art Galleries.

IT is strange that a correspondent in our last issue, writing upon the proposed second Manchester Art Gallery Competition, should refer to the "top lighting" and "side lighting" of art galleries, but should make no mention of the "top-side" method of lighting, so ably advocated by Mr. Hurst Seager, and adopted with success in the Art Gallery at Wanganui, in New Zealand. In one of Mr. Seager's papers upon the subject, read before the R.I.B.A., he shows by diagram how this method can be successfully applied to a two-storied building, thus suggesting the fullest effective value to be gained out of a congested site without reverting to simple side lighting. There is no doubt that Mr. Seager's method is rapidly gaining adherents, and that it merits the serious study of all interested in this subject.

The Lay Press.

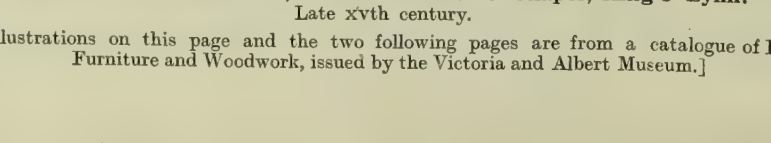
APPRECIATION of architecture is on the increase. Many of our leading newspapers include architecture among the subjects normally discussed in leading articles and elsewhere. We would like to see this movement spread. How often does one read leading articles, especially in minor journals, which show clearly that they are only stop-gaps, dealing as they do with some trivial detail or a subject of faint momentary interest? It matters little if the views expressed concerning architecture are unorthodox, or even wrong. We could at least tap a new source of legitimate interest and curiosity for the reader to consider, to criticise, or to contradict.

Building Advertisements.

A NO less healthy sign is the improvement visible in the advertisements of building materials. If, for example, a house is illustrated, it is now exceptional to find a stereotyped "villa"; we see, on the contrary, good lettering and well-drawn perspectives or elevations of reasonable architecture, embodying the qualities of imagination, with the result that architects are gradually gaining the habit of looking through the advertisements in the Press to the benefit of advertiser and architect alike. This benefit is, of course, recognised by the live advertiser, and the example cannot fail to be followed by his less enterprising competitor who, although he may know nothing of architecture himself, can still employ someone who does to design his building advertisements for him. We understand that the advertisement agent is now largely entrusted with the responsibility of production, and probably the public gain thereby; but we would remind these specialists that architecture also has its own technique, and that still more help might be enlisted from many brilliant young architectural draughtsmen.

A Guild for Street Decoration

THE aim to promote a common spirit among shopkeepers so that instead of cut-throat competition there should arise a more co-operative aim among them, towards more congenial and artistic surroundings, avoiding vulgarity and over self-assertion, is one to be welcomed. A Guild has been formed among the shopkeepers of Church-street, Kensington, a pleasant and in parts old-world thoroughfare running between Kensington High-street and Notting Hill Gate, the aim of which is to improve the appearance of the street, by the erection of artistic shop signs, more becoming treatment of shop fronts, and by any other means whereby the street may be made more attractive and its characteristics preserved. It is encouraging to learn that such a scheme is afoot which, well directed, and as its influence extends, should effect much in the way of improvement in our London streets. And it is more possible to effect such improvements in the quieter streets not yet wholly in possession of huge mercantile emporiums, and should emphasise the charm that lingers in these less hustling areas. The value of art to commerce is becoming better understood, and the shopkeepers of Church-street in uniting to preserve the character and amenities of their thoroughfare are doing a public service as well as helping themselves. An account in the press informs us that the Guild consists at present of fifty-eight members, and has enlisted the sympathy of a good many artists, and further assistance is requested from those interested in the movement. Tasteful business premises in tasteful streets, to greet the view of the passer-by, would make all the difference to the pleasure and interest with which we walk in them. So potent is the influence of any contribution towards beauty, for the bettering of life, that we are unconsciously affected, as the improvement in advertising emphasises our objection to vulgar and unsuitable display.



Fragments of Stall-Ends, from St. Nicholas Chapel, King's Lynn.
Late XVth century.

[The illustrations on this page and the two following pages are from a catalogue of English Furniture and Woodwork, issued by the Victoria and Albert Museum.]

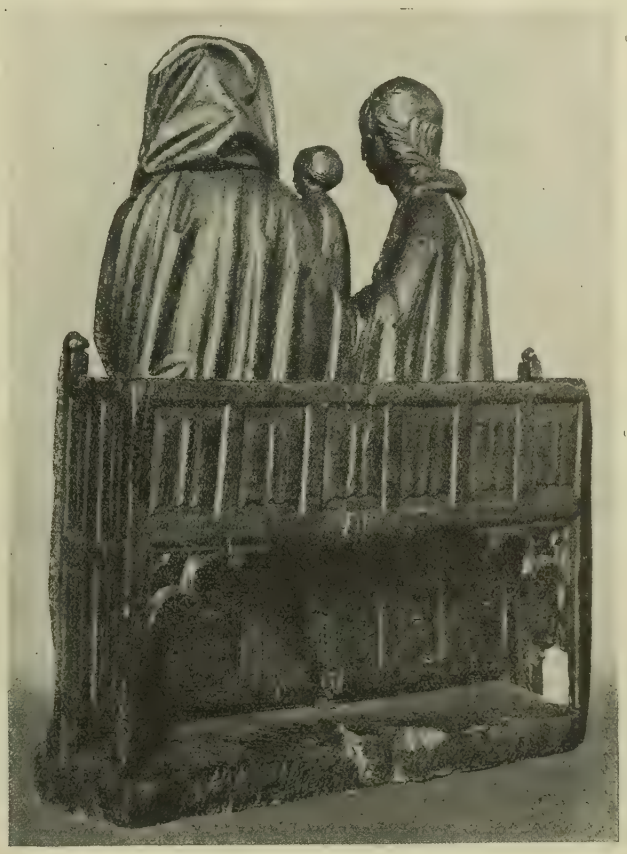


Upper Part of a Stall-End, from a Norwich Church.
xvth century.

Street Processions. STREET processions which are becoming more a feature of the time at this period of the summer are very much with us just now, and it is well to consider how they may have added to the gaiety, abundant good fellowship and co-operation which they already include, some features of greater beauty and artistic attractiveness. We watched only recently the passing through a suburban area of a procession stretching continuously for, perhaps, more than half a mile, made of symbolic groups, comic features, corporation dignitaries, local industries, and so on, representing much labour and enthusiasm, yet it could not be said truly that outside the human element itself, which presented many charming features both young and old, that it was possible to discern any approach amidst all its colour and gaiety to sensibility for real beauty or design. Nor perhaps are these processions for philanthropic purposes to be criticised if they fail to include that touch of a little higher sensibility towards beauty, which one misses in them. Yet so much goodwill, energy and expense might well be strengthened by what would give such added charm and interest to them. It is only when the influence of the architect and artist is properly felt that his contribution which could be so helpful can be forthcoming, and we suggest both to the architect and the organisers of these processions that they should consult together on methods by which better results could be achieved. We saw at the time of the Women's Suffrage movement in some of their street processions the difference where design and colour scheme play a more prominent part, and it appears to us that the promoters of these fêtes and processions for hospital and other charities might combine to improve their pageantry in such a good cause. We are glad always to see these processions united by so much good feeling for a cause in common, and could they also charm us with the appeal of a little more beauty an addition to the force of the appeal made through them would, we think, result.

Children and Ugliness. THE leading article in the *Children's Newspaper*, of June 28, contains some excellent straight talking, which we hope will sink into the minds of the coming generation. The following extracts illustrate the welcome rebellion against ugliness, which, sooner or later, must bear fruit: "We are getting on when a responsible member of the Government tells our architects that he would like to supply them with enough dynamite out of the public funds to blow up all the ugly buildings in our towns. . . . He suggested that a building which did not speak to the man in the street was not much good to the man inside. . . . This is excellent, and we have hammered at the idea for some time; but the trouble is that politicians, who grow eloquent in denouncing the squalor of our cities, never seem able to bring themselves to the point when dynamite is ordered, much less applied to the offending evil. We drift on, grumbling, but we do not take off our coats and say, 'Let us make this place beautiful, and that place noble; let us create our greatest works of art in the public streets, for the enjoyment of all and the uplifting of our people.' . . . But it is no use to lament the past. The best thing we can do is to work for the future." If our children can be sufficiently impressed with a desire for pleasant surroundings, they will certainly see that they get them.

The Building Trade Dispute. NOTWITHSTANDING our so-called progress, we are still confronted with the foolish, if not brutal, method of strikes and lock outs. Plenty of wise counsel has been offered to our workers as to the best way of attacking grievances, and some of the best of it has been given by their own leaders. We must all admit that times have changed and that the attitude of the employers of labour is, on the whole, a very near approach to reasonable conciliation. Whilst economic values have to play a major part in the world's affairs, it should be obvious to every man who thinks at all that there comes a point when the balance of profit and loss must be considered. It is true enough that the working man ought to look for a living wage, or even aim for something more, but so long as labour is an important factor in industrial problems, he and all will be compelled to abide by economic considerations.



Group, representing St. Anne, the Virgin and Christ, seated on a panelled bench. Late xvth century.

GENERAL NEWS

Professional Announcement.

[Mr. H. T. B. Barnard has removed his London office to 10, Bedford-row, W.C.1. Telephone: Chancery 7660.]

British School of Archæology.

The annual exhibition of the British School of Archæology in Egypt will be held at University College, Gower-street, from July 4–26.

A National Theatre.

The British Drama League held its fifth annual meeting recently at the British Empire Exhibition, when Mr. J. Alfred Gotch, President of the Royal Institute of British Architects, presented the prizes—as announced in our issue of last week—for the three best designs for a national theatre.

Obituary.

The death took place recently at his residence at Weymouth of Mr. Edwin Seward, F.R.I.B.A., the well-known architect. Mr. Seward was born in 1853 at Yeovil, and during his long professional career he was responsible for many notable buildings in South Wales, Monmouthshire and Cardiff.

French Bricks for Hull.

At a recent meeting of the Hull Works Committee a report presented by the City Engineer stated that in the housing work in the Hessle-road scheme, the number of bricklayers had been reduced, and employment refused because of the lack of bricks. The Committee accepted a British tender for one million bricks, but up to the present time the total quantity delivered had not been sufficient to employ more than 15 or 16 bricklayers. The report stated the best offer received for a real augmentation of the supply was an offer of French bricks, which would mean an extra £400 or £500. The Committee authorised the City Engineer to purchase one million French bricks on the terms mentioned, subject, however, to the Ministry of Health having no objection to their use in the building of subsidy houses.

Barracks for Housing.

The War Office recently refused Plymouth Corporation's request for the use of the ring of ancient forts surrounding the town as working-class dwellings, but is prepared to let them have Elphinstone Barracks at £3 7s. per week rent.

South Wales Institute of Architects.

The first summer visit, arranged by the Institute of Builders (South Wales Branch) jointly with the South Wales Institute of Architects (Central Branch), took place recently. The party met at Cardiff and proceeded by char-à-banc to Castell Coch. Afterwards the party proceeded to "Ty-Gwyn," the residence of Mr. J. E. Turner, J.P. (Chairman of the Institute of Builders, South Wales Branch). A vote of thanks to Mr. and Mrs. Turner was proposed by Mr. A. W. Julian, A.I.O.B., of Pontypridd, seconded by Mr. W. S. Purchon, M.A., A.R.I.B.A.

Peterborough Cathedral.

The Peterborough Cathedral Restoration Committee has just received a report from their architect, Mr. Leslie T. Moore, regarding the state of the roofs of the Cathedral. Mr. Moore states that hitherto proper investigation of the principal roofs of the Cathedral has been impossible owing to the darkness of the roof spaces, but with the installation of electric lighting the condition of the timbers can now be seen. Regarding the Choir roof, which dates from the end of the fifteenth century, the structure is in a precarious condition. Its present state and that of the ceiling is due to destruction by both the Death Watch and smaller beetles, combined with wet and dry rot; added to which the faulty design of the original scheme of construction and subsequent endeavours to correct it, without reframing, have produced such strains on the main timbers that the condition is serious, and the only satisfactory treatment would be a reconstruction with new roof trusses. In view of this report, the Committee has decided to take no further action at present in regard to the repair of the bell tower and rehanging of the bells, but have resolved to carry out the recommendations of the architect as to the roofs, and also to instal electric lighting in the Cathedral for congregational use.

Streatham Town Planning Scheme.

A recent report of the Town Planning (Special) Committee of the L.C.C. states the Council has decided to prepare a town planning scheme in reference to certain land, about 20 acres in extent, in the neighbourhood of Streatham Common. As regards new streets, a lay-out of the greater part of the land in question has already been approved by the Building Acts Committee, and they consider it desirable that the roads already sanctioned by that Committee should be prescribed. With regard to limitation of user, they suggest two divisions, the five acres to the south of "The Rookery" to be reserved as a public open space, and the remainder for residential houses. A general limit of 10 houses to the acre is proposed. As regards the proportion of the plots to be occupied by buildings, the houses in the neighbourhood contain two floors, and occupy about one-third of the plot, and it is considered that this limit should be adopted.

Victoria and Albert Museum.

The Victoria and Albert Museum has recently purchased a writing cabinet, signed "Samuel Bennett, London Fecit." This is an important example of English furniture at the time of Queen Anne, made of walnut wood, with marquetry decoration of arabesque ornament in light wood. The upper part, closed by a door inset with a mirror, framed with fluted pilasters and panels of inlaid ornament, contains a cupboard and shelves, in which the architectural motive suggested in the decoration of the exterior, is cleverly repeated. The lower part, with slope front and drawers, is fitted with a central cupboard flanked by drawers and pigeon-holes. The whole is surmounted by a pediment with carved scrolls and shield. This piece of furniture is of unusual importance from more than one point of view. It is a distinguished example of English furniture of the early part of the eighteenth century marked by high quality of workmanship. The fact that it bears the signature of the maker (inlaid on the inner surface of the door) makes it of particular value as a record, for it was not the usual practice for cabinet makers in England to sign their furniture. Two other signed examples of the work of Samuel Bennett are known, one of which further shows that he lived in Monmouth-square, London. The cabinet is at present exhibited in the West Hall of the Museum, near the main entrance.



Side-Table or Buffet. Early XVIth century.

COMPETITION NEWS

Bexhill Entertainment Hall.

The Bexhill Corporation invite designs from architects in the district for the erection of an entertainment hall. Premiums of £50 and £25 are offered respectively. Sending-in day, September 1.

The conditions of the Bexhill Town Hall Competition are not in accordance with the R.I.B.A. regulations, and members are advised not to take part until they have been revised.

Masonic Memorial.

Designs for rebuilding Freemasons' Hall, Great Queen-street, Kingsway. The competition to be conducted in two stages. Each of the architects submitting a design in the final competition will receive an honorarium of £500. Assessors, Sir Edwin Lutyens, Mr. Walter Cave, Mr. A. Burnett Brown. On receipt of one guinea competitors will receive conditions of the competition, which has the approval of the R.I.B.A., together with block plan of site.

Applications marked "M. M. M. Competition" must be received by The Grand Secretary, Freemasons' Hall, Great Queen-street, London, not later than August 23.

Barton-upon-Irwell Hospital.

The sending-in date for this competition is July 31.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Ross-Smith Memorial (Sept. 30; Feb. 21). Harrogate Infirmary (Sept. 30; May 30). Hamilton War Memorial (Sept. 1; May 30). Glasgow High School Memorial (Sept. 30; June 13).

MEETINGS

SATURDAY, *July* 5.

Edinburgh Architectural Association.—Visit to Dunfermline Abbey Church.

MONDAY–THURSDAY, *July* 7–10.

Institution of Sanitary Engineers.—International Conference.

MONDAY, *July* 7.

Royal Institute of British Architects.—A Special General Meeting will be held at 5.30 p.m. for the purpose of confirming the resolutions which were passed on June 17.

WEDNESDAY–SATURDAY, *July* 9–12.

R.I.B.A.—The Annual Conference of the Royal Institute of British Architects will take place at Oxford during this period.



On June 30 the discussion took place on the paper which was read by Mr. Charles A. Daubney, F.R.I.B.A., on June 23, on "The Proposed Reform of the London Building Law," which dealt with the recent Report of the Council's, London Building Acts Committee Major Harry Barnes, F.R.I.B.A., presided.

Mr. Searles-Wood, in proposing a vote of thanks to Mr. Daubney, said he had, by the excellence of his paper, put the members almost as *au fait* on the subject as if they had been members of the Committee themselves. They were most anxious that the subject should have full ventilation and discussion. On one point he disagreed with Mr. Daubney: he did not think the Committee could be accused of not desiring to improve buildings in the metropolis. He was not aware that the words in the report, "A healthier and brighter city," were deleted with ribald laughter. The Committee had been anxious to put at the end of the Report a record of their appreciation of the valuable work which Mr. Daubney had accomplished in expressing the views of the Committee: it had been carried through in a masterly fashion. It was not necessary to go into the details of the Report because Mr. Daubney had already covered the ground. He hoped the members present would take the opportunity of saying anything they wished as to improving the Report. Their suggestions would be referred back to the Committee, then to the Council, and finally to the L.C.C.

Mr. Delissa Joseph, in seconding the vote of thanks, said he could not recall an instance in which one could do so with more pleasure than on this occasion. He had been impressed not only by the knowledge Mr. Daubney had shown of the subject, but also by the extraordinary amount of pains and careful work accomplished. The Committee could not have attained its object but for his guidance, and for the ingenious manner in which he analysed the essential points of the Act. Not only had he helped the Committee in its work, but had taken upon himself the drafting of the Report, which by its clarity explained itself. If the Report had a fault it was the absence of reference to what had gone before. For the sake of historical accuracy there should have been some reference to prior work. He (Mr. Joseph) considered he was correct in saying that he had not allowed himself to be biased by the question of higher buildings when dealing with the Report: several suggestions had been incorporated. Under the 1894 Act no road was allowed unless it led from one street to another. The last Crescent-road, prior to the 1894 Act, was made by himself—Chelsea Embankment Gardens; it was completed a few days before the passing of the Act. He would suggest that the matter of three houses forming a road should be modified; it had a restrictive effect on the development of useful sites. With regard to the question of means of escape, although the proper methods were employed, it did not ensure the direction of the audience. They had not attempted to deal with the subject, but it was worth study. On ordinary occasions, in one of the finest theatres in London, he had seen the audience, when dispersing, choose to adopt different directions for their mode of exit; queues of people proceeding north away from the southern exit, and *vice versa*. Something should be done for securing the direction of audiences. Places of public worship were standing menaces to public safety: no adequate means of escape; galleries which made the situation more serious. He had long anticipated that something would be done in a new Act; four staircases were necessary.

With regard to the measurement of old premises before demolition, continued Mr. Joseph, if the plans were mislaid the absence of measured drawings would create a serious difficulty. He suggested a record should be sent to the offices of the L.C.C., so that they could always be found and not lost sight of. Mr. Daubney had said in the case of hotels there was provision for means of escape in a design; but there was nothing to ensure control as to the means of escape being kept clear: it was a vital thing. He had, personally, designed an hotel with ample alternative staircases, but when, after 15 years, he was called in to consider additions to the hotel he was horrified to find that not only were the emergency staircases blocked up with furniture and other material, but at the base of the staircase the door locked inwards. It was essential that means of escape should be kept clear when provided.

With reference to the question of higher buildings, Mr. Daubney had drawn attention to the fact that if an application failed with regard to the height of a building appeal could be made to the tribunal. The original draft of the Report sent up to the Council and adopted by them said that the ratio of 1½ times the width of the street should be established as fixed. Although the principle of 1½ times the width of the street was accepted, it was not necessarily a principle to be definitely incorporated in the Act.

It had been suggested that the question of higher buildings should be referred to the Fine Arts Commission. He was highly opposed to it; it had nothing to do with the Commission at all. Besides, such a step was the thin end of the wedge. The next thing would be that elevations would have to be submitted to the Commission.

There was a provision if an increased height of a building were required it was necessary, in order to get official sanction, that notice should be given to everyone within 100 yards of the building. Mr. Daubney had rightly suggested it should be removed. There had been a case where it had been necessary for an architect to serve notices to over 700 people.

Mr. Daubney had made reference to the fact that his expression "healthier and brighter city" had been deleted. The explanation was that after the ingenuity he had shown in dealing with the subject on practical lines they considered the expression might be considered inappropriate and not consistent with the serious work accomplished. Personally, he considered the suggestions put forward must result in a healthier and brighter London. He was satisfied if certain modifications were introduced in the recommendations it would not only result in a healthier, but also a higher London.

Mr. Horace Cubitt said he thought the Council had not given the subject of Mr. Daubney's paper the attention it deserved; it was not fair to the subject or the paper. It should have been dealt with at an ordinary evening meeting with representatives of the local authorities present. The paper dealt with an important subject, and Mr. Daubney had done a great deal of work in dealing with this most intricate subject in the very clear and concise way he had. The paper dealt with some important points of principle. Hitherto the building lines of London had been carried out in an haphazard manner. Also, there was the question of construction. In London all constructional requirements were in accordance with an Act passed twenty or thirty years ago. They could not get them altered without the Act being amended, whereas any local authority could easily get them altered. As a result they were subject to old-fashioned requirements.

There were, Mr. Cubitt thought, one or two other things the Committee might have considered. First there was the question of air space in office buildings. Office buildings were outside the requirements of air space. It was hardly right it should be so. They should be controlled with regulations as to light and air.

Second, there was the control of elevations. Liverpool had an Act whereby all elevations of new buildings had to be approved by a building authority of the town. He considered it would not be unreasonable if the L.C.C. had power to have elevations submitted to them—applications, of course, to be subject to appeal. If they took Whitehall, for instance, there was nothing to prevent anyone buying a building and putting up any monstrosity they chose.

Sir Henry Tanner said it was ridiculous to make application to the L.C.C. for every trivial variation in construction. Some sort of notice should be issued and made generally known, thereby avoiding repetition. In preparing the Report, the idea had been to aim at principles, leaving details, so that a good deal of work remained to be done.

Mr. W. E. Watson said it was agreed paragraph 10 of the Report would be endorsed by all practising architects. They found the officials of the L.C.C. were inclined to interpret the spirit of the Act and not too literally. With regard to a "Brighter London," they had better tackle the question of the size of fireplaces in ordinary buildings, and thus reduce the smoke which disfigured their cities.

Mr. Arthur Keen said the time of making the Report came at the end of the session, and after full consideration they came to the conclusion that it would be better to have the meeting in the afternoon. The reason why they did not invite the L.C.C. and others outside their own body, was because they wanted to get the views of their own members.

Mr. W. R. Davidge said they were not all unanimous as to the question of higher buildings. They were not generally in favour of buildings over 100 ft. high, although there were cases where such buildings could be put up without harm. Anything unduly high would upset the balance not only of a street but of a whole district.

The Chairman said that, as a member of the Building Committee of the L.C.C., he knew something that went on behind the scenes. The Report, he considered, lost nothing through being concentrated in the hands of a small number of the Committee. Architects were not archæologists, and the Building Law was of more importance than Assyrian art. He congratulated them on the promising stage the Report had reached.

With regard to higher buildings, there was, in the profession, divided views on the matter. He would not say that the attitude of the L.C.C. was that they should not have higher buildings, but many members were against it, and they could not show a united front. When dealing with buildings they were dealing with moneyed interests. Every exception made on behalf of a higher building had some sort of money value; and any exception was a matter of great difficulty for the Building Committee. If they departed from the by-laws as laid down and lent themselves to exceptions they created a precedent on the one hand, and on the other the possibility of complaint from people who did not seize the psychological moment when exceptions were granted. Any proposal about higher buildings, to be acceptable, must be of a detailed character, as when a man had sufficient light and air he considered it a reason for having further stories, and thus obtain increased financial value.

He was very glad to hear from more than one member of the cordial relationship existing between their profession and the officials of the L.C.C. It was a great advantage to have an architectural staff on the L.C.C.; they got a community of interests, and when reports were presented they were looked at from the architect's point of view. If they wished to get the matter through they must simplify it to the last degree for the L.C.C.

Mr. Daubney, in responding, said the Report could not have been accomplished without the co-operation of the Committee.

DRYBURGH ABBEY

By WILLIAM HARVEY.

THE ruins of Dryburgh Abbey stand upon the bank of the Tweed among a grove of cedars and beeches, and the light grey and fawn colour of the masonry is set off to perfection by the deep shade of the foliage. The stonework is in admirable contrast with its background and does not demand any cloak of ivy to render it more picturesque, though, as some of the illustrations show, a tangle of thick unregulated growth had been allowed to disguise the ruin before it passed, for proper care and conservation, into the hands of H.M. Office of Works (Historic Buildings Branch).

Founded at a spot so near the border of the two kingdoms and in the direct line of attack by the English, this offshoot establishment of the Præmonstratensians, White Friars from Alnwick, in Northumberland, has suffered partial demolition several times since its inauguration in 1150. Edward II is reported to have burned the Abbey in 1322; Richard II mutilated it again in 1385, after its restoration at the hands of Robert the Bruce; and it was further affected by the attacks of Sir R. Bowes and Sir Bryan Latoun in 1544, and by the orders of the Earl of Hereford in 1545.

Notwithstanding this succession of disasters, considerable portions of the Abbey church of thirteenth-century work, and of the conventual buildings, dating from the twelfth and fifteenth centuries, have survived, as shown on the plan (Fig. 1).

The north-east crossing pier and adjoining portions of the high wall of the north transept and the presbytery remain to show the nature of the thirteenth-century building. The out-corbelled springings for strong transverse arches, which formerly enclosed the upper part of the square space in the centre of the church, remain in position, with a fragment of vaulting included between them (Fig 2).

This central square appears to have been the only part of the upper works to have been covered with a vault, for the adjoining transept and presbytery walls have clerestories pierced by wall passages and light arcading which makes no adequate provision for the springing or abutment of vaulting. They seem to have been designed for the reception of the feet of an

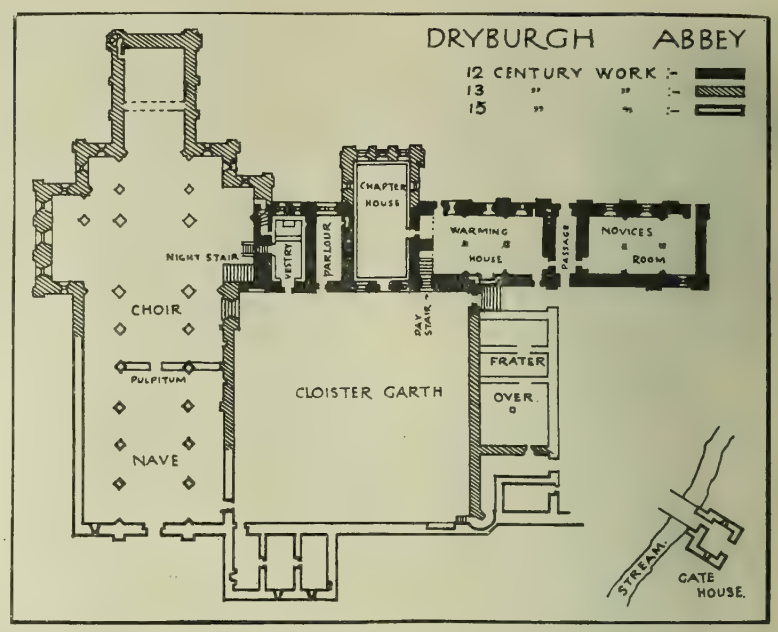


FIG. 1.

Figs. 5 and 7 are from Mr. Harvey's sketches. All other illustrations to this article are published by permission of H.M. Office of Works.



FIG. 2.—NORTH TRANSEPT, CONTAINING TOMB OF SIR WALTER SCOTT.



Fig. 5.—Detail of Ruined Stonework, Showing Superficial Smears of Cement.

arched raftered open-timbered roof, or some such covering of lighter weight. Some interesting simple rib and panel vaulting has been preserved over the aisles at a lower level, with a free treatment of the ribs at the corner of the aisle wall. Instead of one diagonal rib starting from the angle, two separate springers have been formed with a pair of ribs rising and converging towards a boss in the centre of the bay. Between the converging ribs, room has been found for a pointed niche outlined with vaulting ribs, which preserve the sequence of wall ribs in adjoining bays with some slight additional emphasis. The retention of this portion of the vaulting is important, not only for its historical and artistic value in itself, but because it supplies a fine blot of shadow behind the arches of the pier arcade, and makes of this part of the ruined church a sufficiently complete canopy above the tombs of famous men placed here, together with that of Sir Walter Scott. Although this may be regarded as the portion of the ruin which had received most care at the hands of former conservators, its dangerous state was demonstrated by the fall of a projecting stone of the presbytery clerestory before even temporary repairs could be undertaken by H.M. Office of Works.

Another part of the ruin which retains its full height is the south gable of the south transept (Fig. 3). Here the twelfth-century and thirteenth-century work are seen in juxtaposition, and the church adjoined the conventual buildings. A round headed arch in the west side of the gable wall and some fragmentary remains of steps mark the position of the night stair leading up from the floor of the church to the dormitory on the first floor of the twelfth-century building. Approach to the church from the dormitory via the cloisters was arranged by means of another doorway opening into the choir aisle, and a stair from cloisters to the first-floor dormitory was contrived at the north end of the calefactory or warming house. This flight was carried over a segmental arch supported by the west wall of the warming house and by a pier projecting from its north end wall. The illustration (Fig. 4) shows this arch covered with a heap of loose rubble and with dirt left after the removal of a heavy growth of ivy, but before repairs had been put in hand. The work had become extremely dilapidated under the system of leaving things to the protection of the ivy, and the mortar had dropped from between the voussoirs which were sagging and broken at their free ends. The dirt has now been carefully cleared away and scraped out of the joints piece by piece and the dangerously drooping stones supported, without alteration in their position, by the insertion of cement mortar tamped in hard in the joints between stone and stone.

The claims of solidity, of antiquarian interest, and of artistic harmony with the ruined appearance of surrounding masses were all adequately met by this judicious treatment.

Dryburgh Abbey has suffered severely from the removal of the squared stones which formed the ashlar facing of the lower parts of the walls. The most accessible stones, which happen to be those at the foot of the wall, always seem to have been chosen for the purpose of quarrying, and time and accident can be depended upon to bring down the rest. Every part of the ruins denuded in this way introduces a question of expediency in repair. What is the most appropriate treatment from both the artistic and the constructional point of view? Each case is judged upon its merits, and where the structure can be retained in equilibrium without the insertion of additional masonry the picturesque old rubble core is carefully consolidated and left to all appearance what it was before, though it is in reality transformed from a loose stone heap to a strongly united mass. The effect of the ruin is just as picturesque after repair, but safety and strength have been preserved, and the gradual but sure wastage due to time and weather are very considerably retarded.

The ruined mass of the south transept gable abounded in minor problems of this sort, and had their solution been attempted by the addition of new facing stones, piers, buttresses, or other external props, very little of the interesting original work would have been

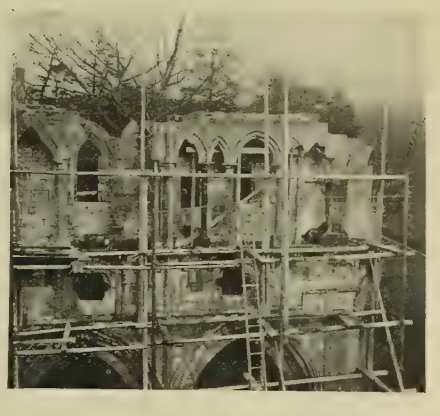


Fig. 9.—North Wall of Presbytery.

preserved to view. The genuine character of the ruins would have been hopelessly lost among the patches of new work, and with it their artistic value would have been altogether destroyed. Traces of one of the historic conflagrations remain upon the southern face of this gable wall, and where the ashlar exists at all it is deeply pitted and seamed with fractures. Some of the blocks have been split into minute fragments, and their condition gave rise to some anxiety as they were liable to wear away and fall to the ground in flakes. This extraordinary condition of things was met by applying the principle of internal consolidation upon a scale adapted to the minute character of the fragments, and the little fire-scarred pieces of stone were retained in position by a process invented for such purposes by the mason in charge of the repairs. An extremely thin coat of Portland cement is spread upon the two faces of stone that it is desired to join together. It is then allowed to get to a certain stage of "set," which can only be judged by experience, and the two parts are then brought into contact. If the right moment has been chosen, the suction of the cement is sufficient to join the



Fig. 6.—East Wall of Eastern Building after Repair.

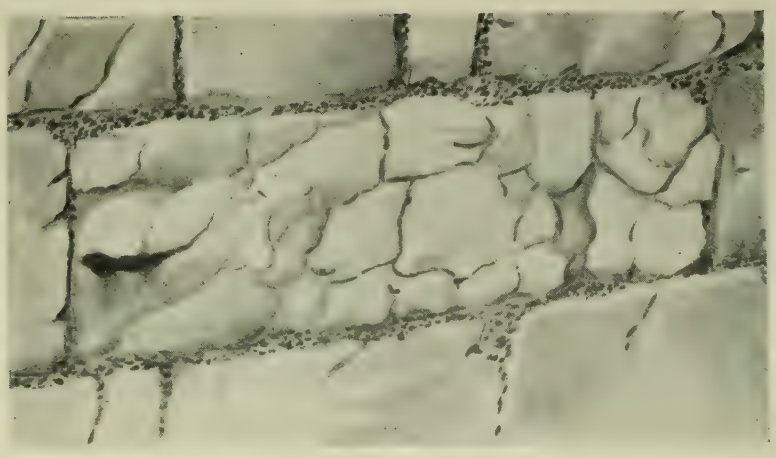


Fig. 7.—Stone Shattered by Fire and Preserved by Skilful Treatment.

stone and make a permanent repair capable of resisting adverse weather conditions. The cement is far more satisfactory than most of the so-called waterproof glues formerly used, but skilful work is necessary to obtain any results whatever. Small projecting pieces of stone that had been re-applied to the face of the building by this means proved capable of withstanding a heavy load though nothing but a faint hair line showed where the repair had been made. A piece of finished repair is seen in Fig. 7 where a stone that had been broken into thirty small pieces has been successfully retained in its position in the wall. Beside the interest of conserving historical evidences, these minor repairs are useful in developing the resources of the masons in mending the dilapidated tracery and mouldings without involving the wholesale demolition of bad parts and the insertion of new material.

Some Norman buttresses from which the lower facing stones had been broken away are shown in Fig. 6. The interior core had been left exposed in a formless and friable heap with the upper courses of facing feebly supported and liable to fall away in successive units or small groups. A glaring patch of new material would have been undesirable, and, as the weights to be carried were not judged to be more than the core could stand, if suitably consolidated, the repair was executed by this means. Each individual joint was cleaned out and cement mortar was forced right into the heart of the wall. The overhanging ashlar above was picked up upon a few courses of rough rubble corbels inconspicuously introduced at the top of the mass of rubble core. A slight difference in scale allows the new work to be recognised for what it is, an ingenious expedient in repair with the least possible intrusion of apparent new work.

Where repairs had been executed prior to the custody of the ruin passing into the hands of H.M. Office of Works, the usual trail of superficial cement pointing was visible. Instead of the cement having been forced in out of sight into joints already scrupulously cleaned for the purpose, it had been lavishly trowelled on in ungainly slabs across the dirt-filled joints and on to the faces of the stonework. In every case examined the cement applied in this manner was found to be cracking off and had parted company with the stonework leaving a trap for moisture and an ideal home for various examples of those less interesting forms of animal life that are found in the clefts of stones in damp places. In some parts this ornamental (?) cement work—for it could hardly be described as useful—had been smeared over wide areas of masonry, and the cement surface had been scored with unsightly lines and dents in attempted imitation perhaps of the rubble stonework hidden beneath. Actually, the appearance (Fig. 5) was as nauseating as the process of application was constructionally inept.

By far the greater part of the ruin had been left untreated to become picturesquely obliterated in a tangle of ivy and the accumulations of soil, twigs, old birds' nests, and other miscellaneous rubbish which gathers upon any surface that does not happen to be steep enough to precipitate it to augment the growing heap of debris about the wall foot.

Many people have proclaimed their love of the ivy mantle upon ancient buildings, but though it is quite possible to recognise their sincerity, it seems more than doubtful whether anything approaching real conservation is possible where large growths are permitted upon the walls. How a ruined building can be repaired and maintained in a state of permanent equilibrium, or even effectively surveyed in a preliminary attempt to discover its strength or weakness, when covered with foliage and dirt has yet to be seen. Hitherto, where the ivy has been retained, the attempts at repair have generally been in the nature of unsightly props and ties and of the superficial cement dabbling described above. It is surely more architectural, as it is certainly sounder construction, to treat the masonry to careful and unobtrusive repair and provide a setting of turf, flowers and foliage in positions where they will frame, and not obscure, the ruined masses of ancient building, and this course has been taken by H.M. Office of Works at Dryburgh Abbey with the very happiest effects.



Fig. 8.—Porter's Lodge and Gable of Frater, showing Excessive Growth of Ivy before Repair.

NEW WATERLOO BRIDGE

AT a meeting of the London County Council last Tuesday, Mr. H. Morrison, M.P. for South Hackney, made the following proposal:—That in view of the totally inadequate width of the present bridge, it be an instruction to the Improvements Committee, in arranging for the reconstruction of Waterloo Bridge, that the roadway shall be of such a width as will provide adequate facilities for general traffic and for the extension of the Council's tramways over the bridge, and that the arches shall be wider than the arches of the old bridge, so that navigation may be facilitated; and further that, having regard to the importance of the project in its relation to London traffic, application be made to the Ministry of Transport for an adequate grant towards the cost of the work."

The Society for the Protection of Ancient Buildings submitted to the Improvement Committee of the L.C.C. a report made to the Society by an engineer detailing a scheme for dealing with Waterloo Bridge which, it is stated, amounts to the replacement of the existing timber foundations by solid concrete and brickwork. It is suggested therein that modern engineering methods admit of this concrete being placed in position under the piers with perfect safety without disturbing a single stone of the existing structure. In submitting this proposal the Society stated that its adviser had not had the advantage of the data which had been collected by the Council, but suggested that if the scheme should prove to be feasible it would result in a great saving of public money and would avoid any interference with traffic. At the request of the Society the Committee interviewed the Secretary of the Society and its adviser. They were informed that the desire of the Society was that the present width of the bridge should be maintained and that the necessity for reconstruction should be avoided, and that it was with this object that the Society had obtained and submitted the report. It was stated that the Society's object in asking for the interview was that it might be placed in possession of the information upon which the Council's advisers had formed their conclusions as to the need for the reconstruction of the foundations.

In their report on April 1, the Committee stated that they were advised that the life of the foundations was coming to an end and that the cheapest way to reconstruct them was to take down the bridge and re-erect it. The question of underpinning was considered, but they were advised by the chief engineer that the type, weight and condition of the bridge and the restricted waterways ruled this method out. This opinion was confirmed at the time by Sir Maurice Fitzmaurice, C.M.G., F.R.S., and Mr. Basil Mott, C.B., who were acting in a consultative capacity.

At their request these advisers have given further consideration to the question of underpinning, particularly with reference to the proposals contained in the report above mentioned. They have submitted a lengthy and reasoned report in which they point out that it has been known for a long time that there are cracks in all the piers of the bridge, that from examination it has been found that in many cases the footings of the piers are very much broken away from the main structure, and that the bridge is in fact showing very general deterioration as the result of old age coupled with exceptional foundation loads and a rather obsolete form of foundation.

They state that they cannot imagine that the results of underpinning could have any other effect than to increase seriously the difficulties already apparent in the piers and superstructure, and that they are quite unable to agree with the statement that modern engineering methods admit of the concrete being placed in position under the piers with perfect safety without disturbing a single stone of the existing structure. They consider that even if the work could be carried out without serious accident there would be a grave risk to the old superstructure. They state that for the reasons given they are unable to accept the views put forward by the Society, and that they can find nothing which causes them to modify their original opinion that the best method of dealing with the bridge is to rebuild the old superstructure on new foundations put in either in a coffer dam or caisson.

THE LIGHTING OF PICTURE GALLERIES

AT the request of the teaching staff of the Architectural Association, Mr. Hurst Seager delivered to the advanced students of the School a lecture on his system of top-side-lighting for museum and picture galleries.

The subject of satisfactory museum lighting was, he said, one which did not seem to make much headway in this country. The admirable opportunity which the temporary buildings at Wembley would seem to have offered for a full-size experiment in his system had unfortunately been missed, and the results of the recent Hull Art Gallery Competition showed the premiated design to be conceived in the old-fashioned method of top lighting with all its customary defects of reflection and glitter in the pictures. An examination of the Palace of Art galleries at Wembley showed that the clerestory lighting adopted, pleasant enough for unglazed pictures, did not contribute anything towards the problem of reflections in those covered with glass.

In the Sarjeant Art Gallery at Wanganui, New Zealand, designed on the top-side-light principle, the lighting of the pictures was admirable, and Lord Leverhulme, in a recent visit, was so impressed with the fact that he had promised a collection of pictures to the gallery.

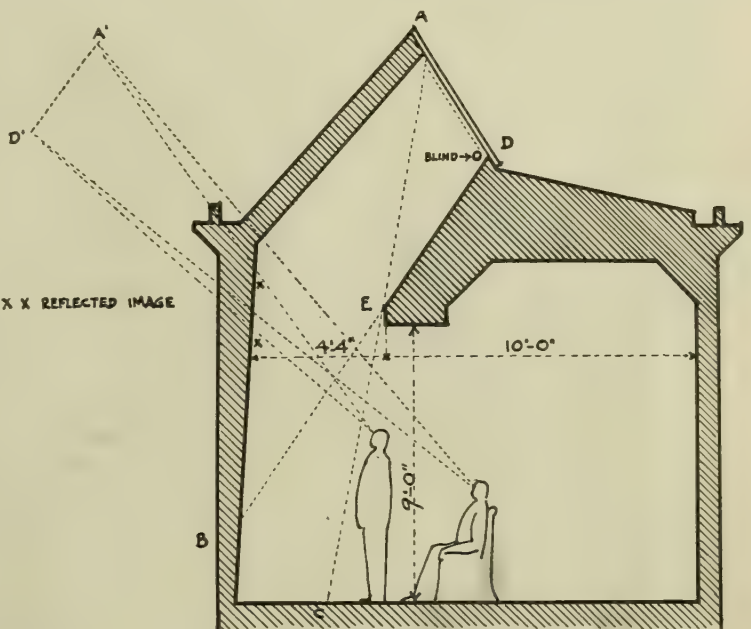
The lecturer exhibited a complete series of diagrams and photographs illustrative of his principles; some of these have appeared in the pamphlet reprinted by the R.I.B.A., and others, such as the section showing the lighting proposed for the museum at St. Quentin, to hold La Tours' pastels, are fresh. The success which had attended the adoption of his principles in the Louvre Galleries, which temporarily housed the La Tours, was, he said, convincing. The French press was unanimous in agreeing that the beauties of these pictures were seen, if not for the first time, at least afresh after their sojourn in ill-lit galleries.

Great importance was attached to the type of glass used, a demonstration on the lantern showing the remarkable diffusing qualities of kaleidoscopic glass and the poor properties in this respect of the usual plate glass, which gathered the light into a cross beam across the screen, causing confusing areas of shadow.

Mr. Hurst Seager made a claim only for the correctness of his principles and the ready possibility of their successful application. But he also pointed out that great architectural opportunities were open to this method by a combination of his bay system with larger rooms. There was, he said, a dramatic and beautiful effect of lighting obtainable with this system which would more than compensate for the lofty "architectural" halls in which the embellishments of cove and cap and cornice were seen not only in the flesh but reflected again in the glass of the paintings for which they were supposed to form a setting. No merchant would be willing to display his wares under such unfavourable conditions as were applied to many of the masterpieces in our painting collections.

Victoria and Albert Museum.

The President of the Board of Education has appointed Mr. Eric Robert Dalrymple Maclagan, C.B.E., to succeed Sir Cecil Harcourt Smith, C.V.O., who will retire from the position of Director and Secretary of the Victoria and Albert Museum on September 11. Sir Cecil Harcourt Smith, who was born in 1859, is an honorary F.R.I.B.A. and has held the post of Director and Secretary at the Museum for the last 15 years. Mr. Eric Maclagan has been Deputy Keeper, Department of Architecture and Sculpture at the Museum since 1921.



VILLE DE ST. QUENTIN
MUSEE DES PASTELS
DE QUENTIN-LATOUR

Section drawn by the Architect, M. BIGOT, from sketch design by MR. S. HURST SEAGER.

Fig. 4.—Warming House, looking North, showing Ruined Arch carrying Day Stair from Cloister to Dormitory.

Fig. 3.—South Transept from the East.

Dryburgh Abbey, (*See p.* 6.)

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ILLUSTRATIONS

North Wales Heroes' Memorial.

This building consists of departments for agriculture and natural science at the University of North Wales. It was erected by the North Wales Heroes' Memorial Council, and occupies a frontage of about 700 ft. in Deinial-road, Bangor, and comprises separate blocks for biology, chemistry and physics, each containing some 10,000 sq. ft. of floor area in rooms which include, in addition to lecture rooms, large laboratories and their adjuncts, considerable provision for research workers. Agricultural chemistry and forestry are accommodated behind and attached to the main agricultural building. All these blocks are of one-story. These buildings have one brick wall in white cement, slated roofs, and cement or asphalte floors; the walls internally being sand-lime bricks, unplastered. The main agricultural block, which forms the central feature of the scheme, is of two stories, faced in multi-coloured bricks, Portland stone dressings, and has a flat roof for greenhouses and open-air experimental work.

The contractors are Messrs. J. Laing & Son, Carlisle, and the sub-contractors: Heating, Messrs. G. N. Haden & Sons; electric light, Messrs. Drake & Gorham; fire-proof floors, The Kleine Flooring Co.; steel trusses, Messrs. Young & Co.; windows, Messrs. W. James & Co.; asbestos goods, Messrs. Bell's Asbestos Co.; hydrants, Messrs. Merryweather. Mr. Alan E. Munby, F.R.I.B.A., was the architect.

Deal and Walmer War Memorial Hospital.

This hospital is designed for twenty-six beds. Each group of wards has its own bath-room and sanitary annexe. A special feature has been made of the memorial entrance hall, which is panelled in teak. On the north side of the hall are the operating room, x-ray room, casualty surgery, dispensary, and porters' rooms. On the north side is the kitchen department with large open roofed kitchen, scullery, larders, and pantry. A separate building contains the mortuary and view chapel, ambulance garage, and rooms for the electric plant.

The whole of the building works were carried out by Messrs. G. H. Denne & Sons, of Deal. The sub-contractors were: Heating, Messrs. Jeffreys; sanitary work, Messrs. Doulton & Co.; teak floors, Messrs. The Acme Wood Block Flooring Co.; terazzo floors, Messrs. The Art Pavements Co.

Messrs. H. P. Adams, C. Holden & L. G. Pearson, FF.R.I.B.A., were the architects.

Bank at Chorlton-cum-Hardy.

The materials used in this Bank were sand-faced bricks by Messrs. W. T. Wright & Co., Sileby. The contractors, all of Manchester, were:—General contractors, Messrs. G. Macfarlane & Son, Ltd.; concrete and asphalte work and strong rooms, Messrs. Walter MacDonald & Co., Ltd.; drainage and plumbers' work, Messrs. Wm. Bailey & Co.; heating, Messrs. Saunders & Taylor; electric lighting, Messrs. J. Lomax, Kendal & Co.; tiling, Messrs. Conway & Co.; vents and window hoppers, Messrs. E. Hatton & Co.; patent composition floors, Messrs. Reliance Flooring Co.; grates, etc., Messrs. Wellfire Company; cast lead work, Messrs. G. Wragge, Ltd.; lead lights, Messrs. Leyland & Sons; carving, Messrs. Earp, Hobbs & Miller; fittings, Messrs. John Thomlinson. Messrs. Francis Jones & H. A. Dalrymple, F. and A.R.I.B.A., were the architects.

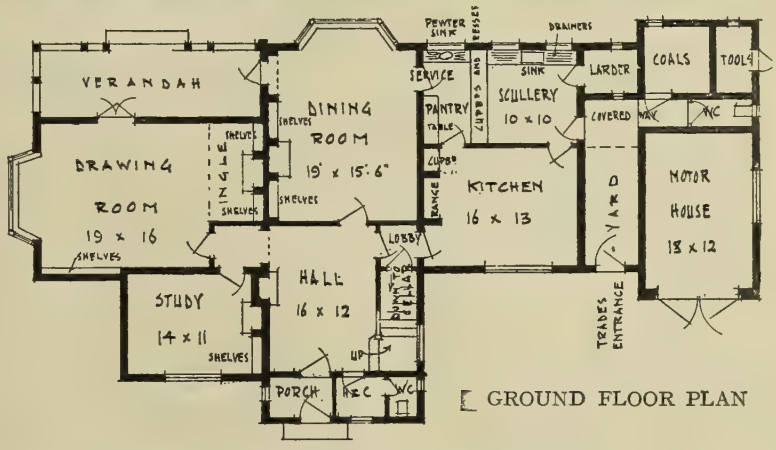
Bank at Sale.

The materials used in this building were 2-in. sand-faced bricks by the Ravenhead Brick Co. The roof is of pantiles, and the contractors, all of Manchester, were:—Contractors, Messrs. Robert Carlyle & Sons; steelwork, concrete work and strong rooms, Messrs. Walter MacDonald & Co.; steel windows, Messrs. Humphreys, Jackson & Ambler; hoppers and roof vents, Messrs. E. Hatton & Co.; heating, Messrs. G. N. Haden & Sons; electric lighting, Messrs. J. Lomax, Kendal & Co.; composition flooring, Messrs. Reliance Flooring Co.; strong room doors and fittings, Messrs. Chubb & Sons; fittings, Messrs. John Thomlinson; carving, Messrs. Earp, Hobbs & Miller. Messrs. Francis Jones & H. A. Dalrymple, F. and A.R.I.B.A., architects.

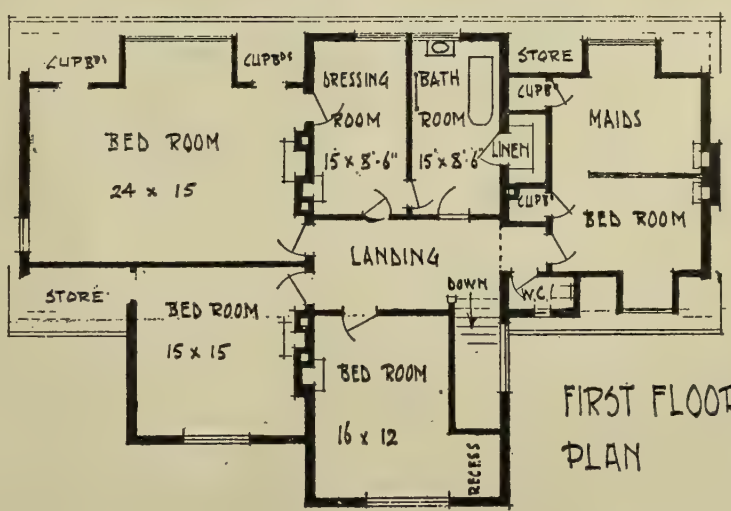
Houses, Stratford-on-Avon.

The illustration we give on p. 15 is from the design of Mr. L. L. Dussault, F.R.I.B.A., who has been developing this type of house with "Atlas White" Portland cement stucco.



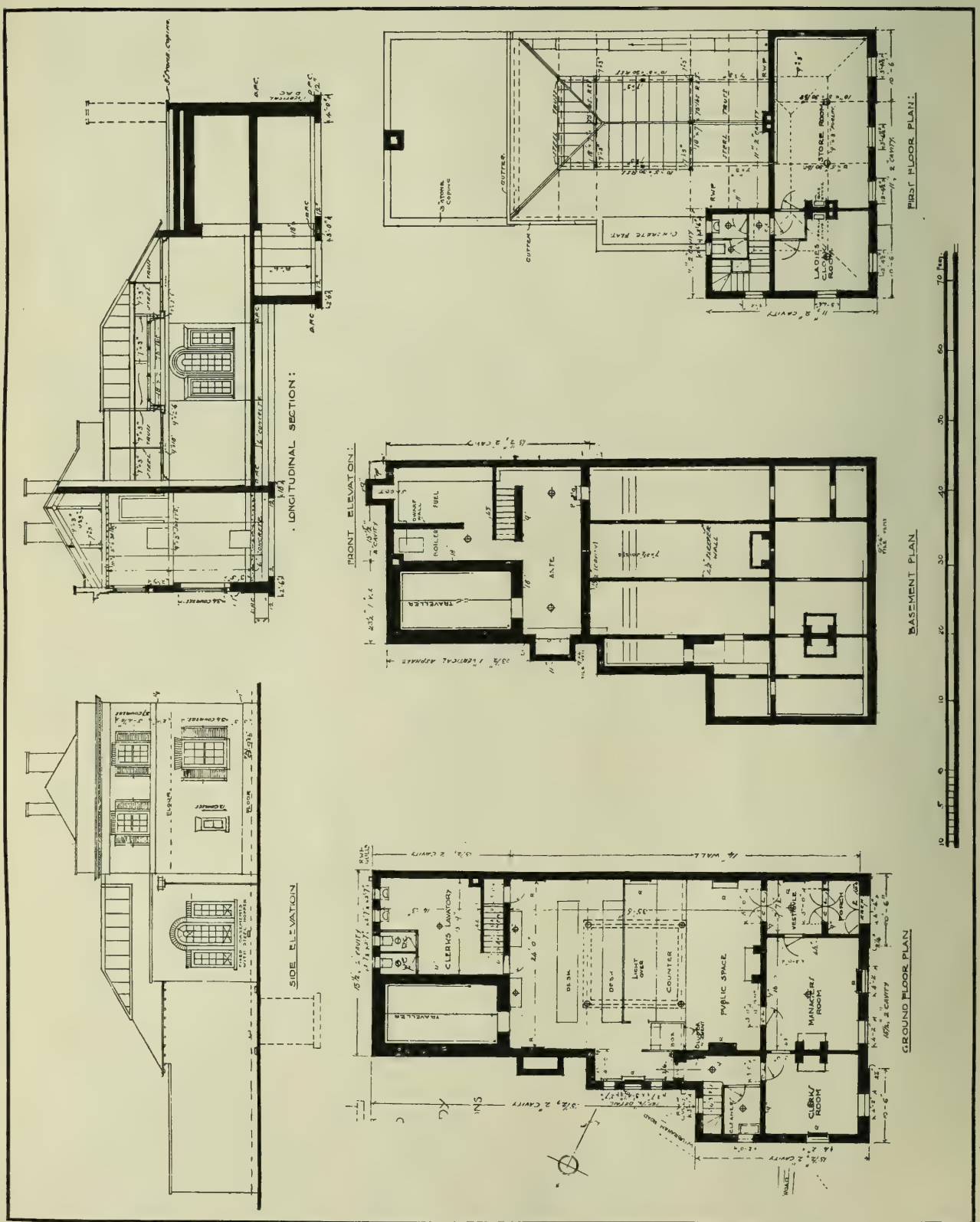


GROUND FLOOR PLAN



FIRST FLOOR PLAN

Avon House, Stratford-on-Avon. MR. L. L. DUSSAULT, F.R.I.B.A., Architect. (*See p.* 15.)



Manchester & Liverpool District Bank, Chorlton-cum-Hardy.

MESSRS. FRANCIS JONES, F.R.I.B.A., & H. A. DALRYMPLE, A.R.I.B.A., Architects.



Manchester & Liverpool District Bank, Sale.

MESSRS. FRANCIS JONES, F.R.I.B.A., & H. A. DALRYMPLE, A.R.I.B.A., Architects.

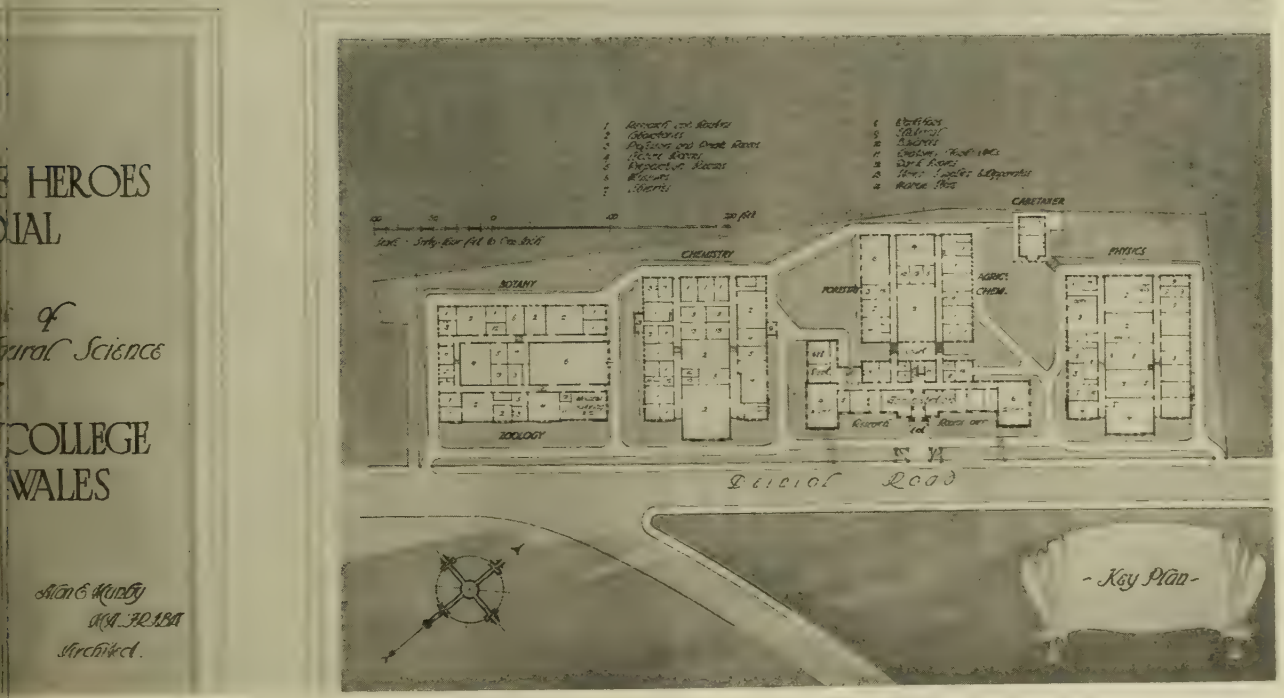




B.A. Exhibition, 1924.

Mr. Alan E. M




HEROES
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of
ural Science
COLLEGE
WALES
Allen E. Kirby
M.A. F.R.I.B.A.
Architect.
CARETAKER
PHYSICS
CHEMISTRY
BOTANY
FORESTRY
AGRIC. CHEM.
ZOOLOGY
Keep Off
Keep Off
Keep Off



R.A. Exhibition, 1924.

Messrs. H. Percy Adams. Charles Holl

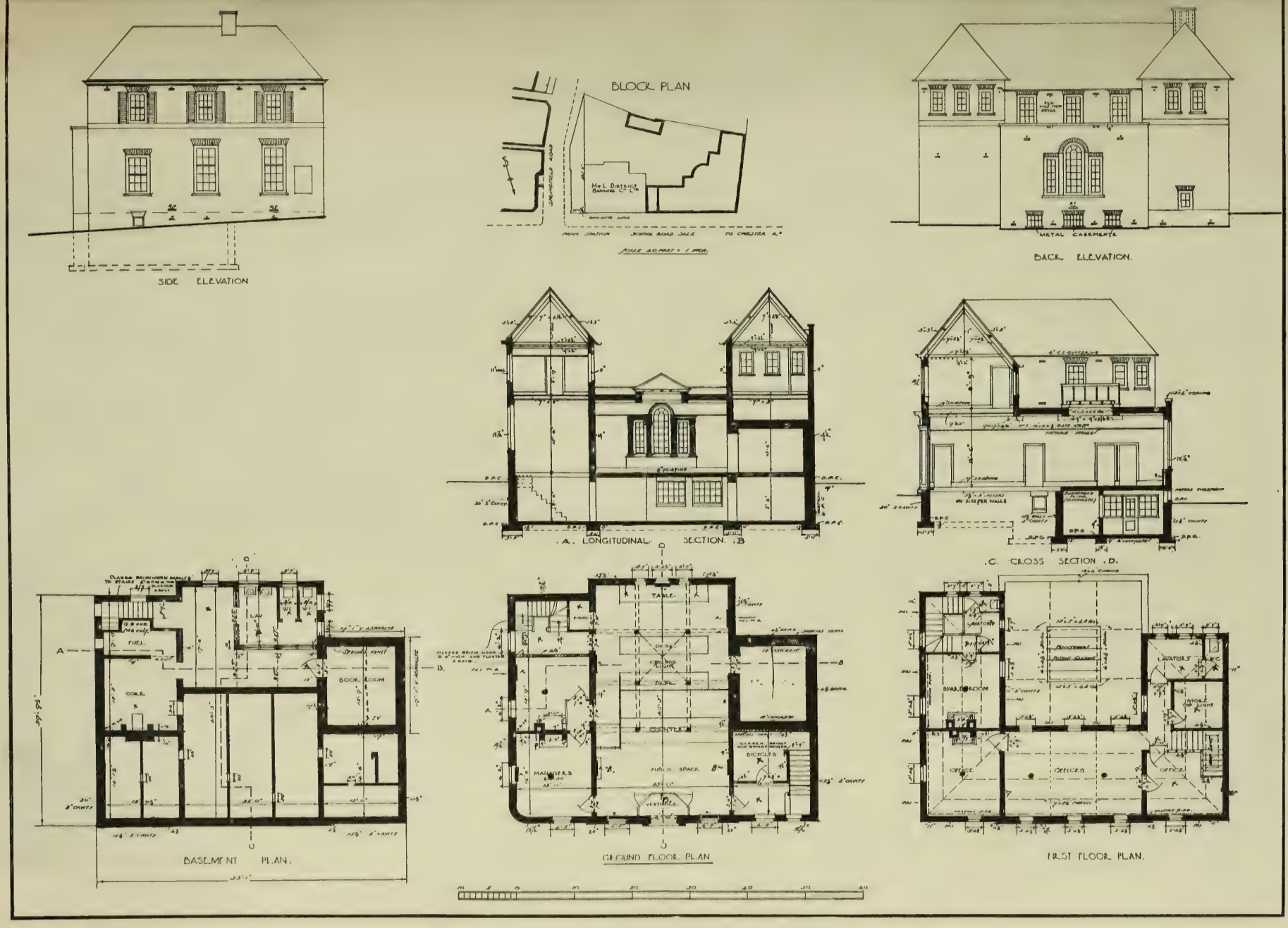


NEL G. PEARSON, FFF.R.I.B.A., Architects.



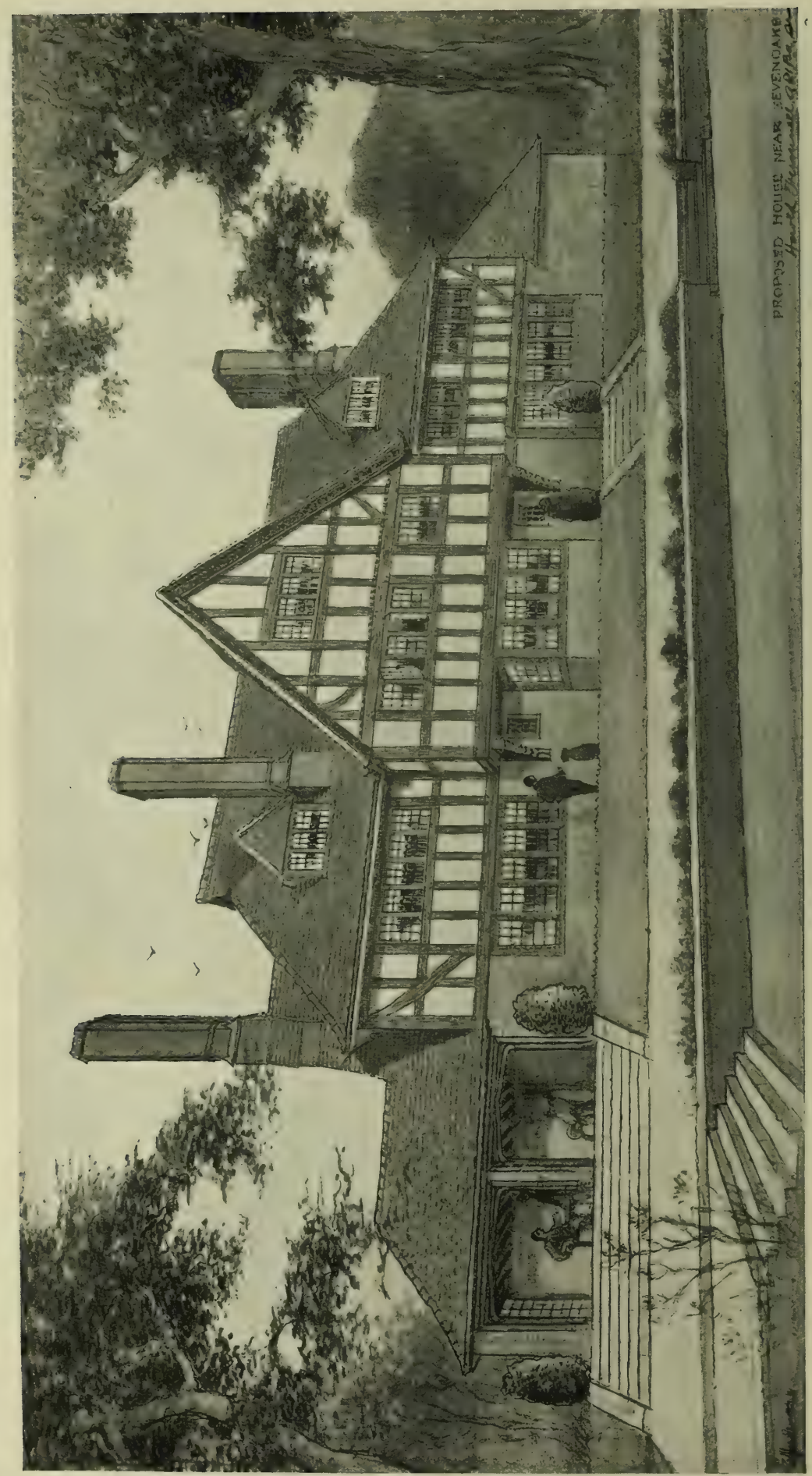
Manchester & Liverpool District Bank, Chorlton-cum-Hardy.

Messrs. Francis Jones, F.R.I.B.A., & H. A. Dalrymple, A.R.I.B.A., Architects.



Manchester & Liverpool District Bank, Sale.

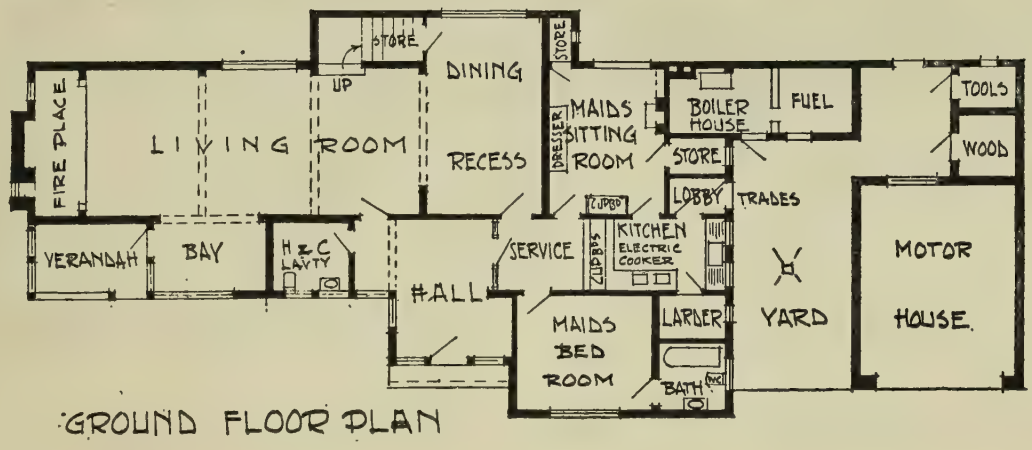
MESSRS. FRANCIS JONES, F.R.I.B.A., & H. A. DALRYMPLE, A.R.I.B.A., Architects. (*See p.* 11.)

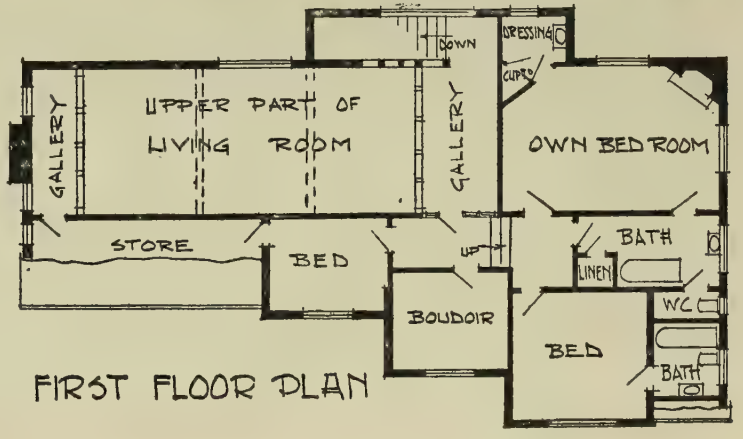


Proposed House near Sevenoaks.

Mr. Harold C. Trimnell, A.R.I.B.A., Architect.







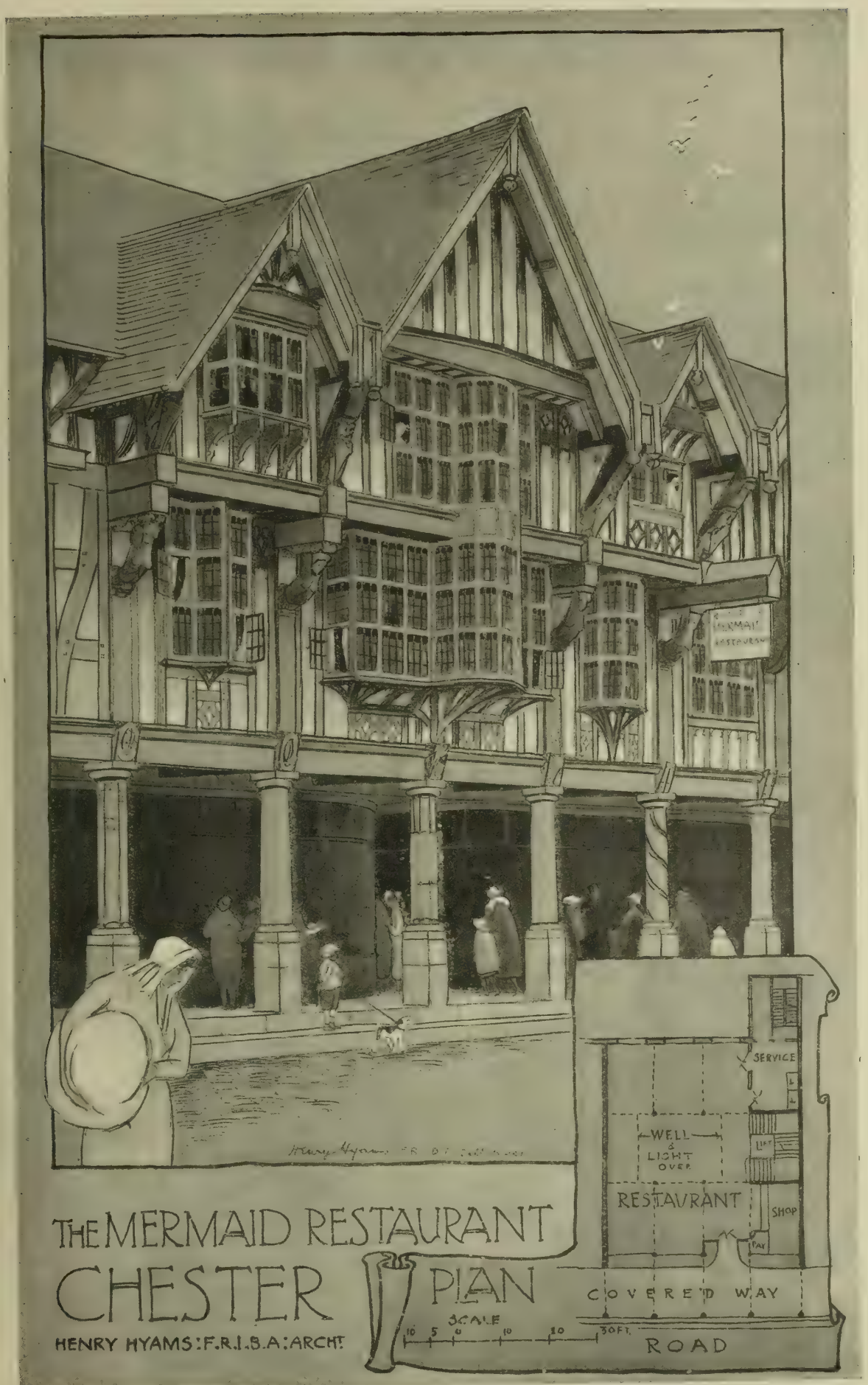
House, Stratford-on-Avon. Mr. L. L. Dussault, F.R.I.B.A., Architect.



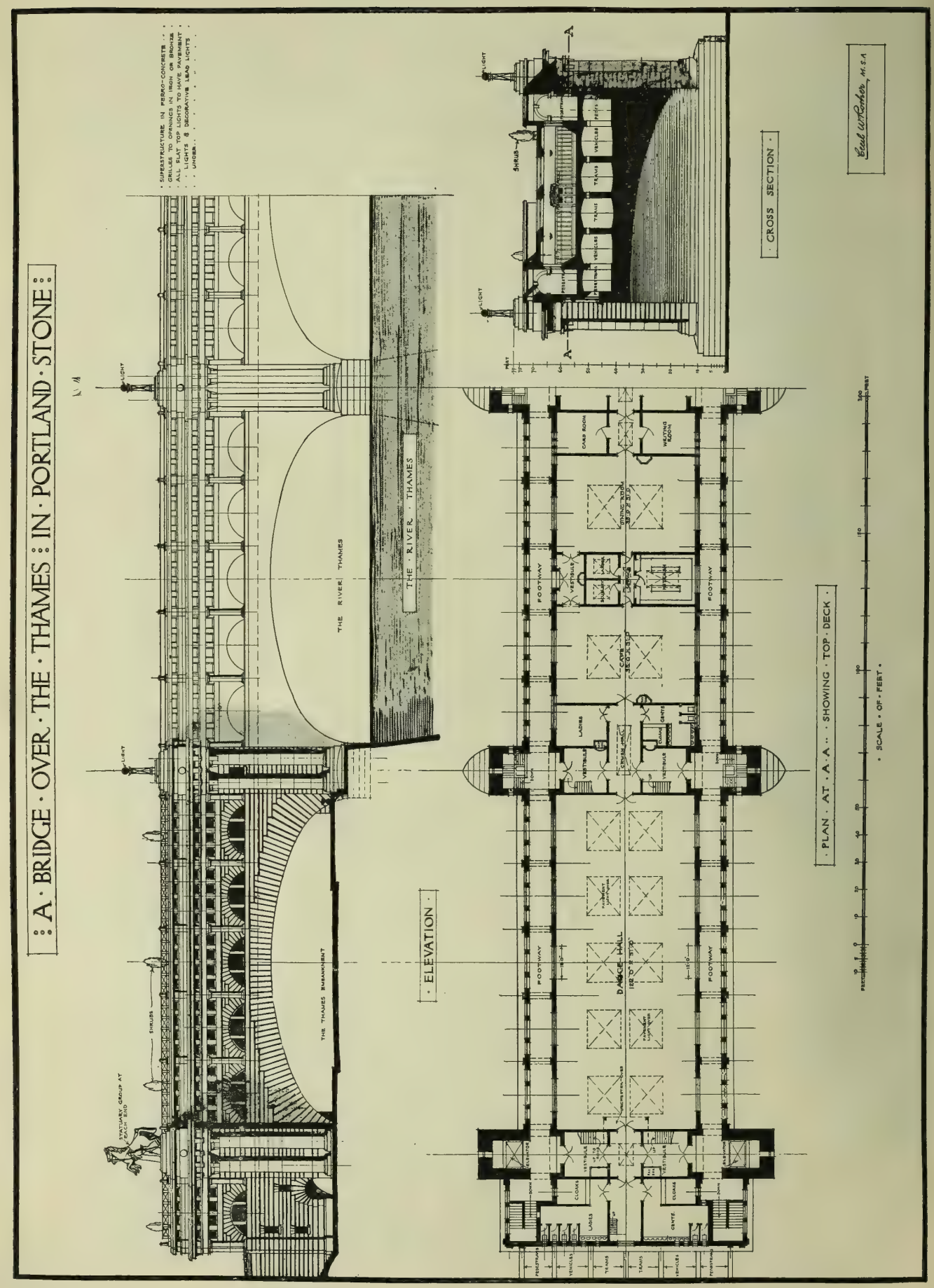
Altar in the Basilica, Wembley Empire Exhibition. Mr. W. H. R. Blacking, M.S.A., Architect.

The altar and reredos and the fitments and ornaments in the Basilica at Wembley were all designed by Mr. W. H. R. Blacking, M.S.A., and were carried out by Messrs. J. Wippell & Co., Ltd., of Exeter and London.

The reredos, of the traditional long, low form calculated to give dignity to the altar, contains a good deal of "Renaissance" detail, although in general design it follows the tradition of English fifteenth century work. The altar-posts, surmounted by tapers, support riddels of rose-coloured material. From the top of the reredos is suspended from a bracket and canopy a hanging pyx. The altar is set out according to the rubrics and traditions of the English Church for the Prayer Book Liturgy. The candlesticks and the large standards before the Holy Table are of wood, gilded.



This building is in the shopping centre of Chester, and comprises a restaurant on the ground floor and the two floors over. The structure is steel-framed, with reinforced concrete floors and faced with heavy half-timber oak-work framed together. The columns supporting the upper part externally are of granite. The roof is of thick green Westmorland slates. The architect is Mr. Henry Hyams, F.R.I.B.A.



Design for a Bridge across the Thames. By Mr. C. W. Rosher, M.S.A.

WESTMINSTER ABBEY RE-EXAMINED—V

By W. R. LETHABY.

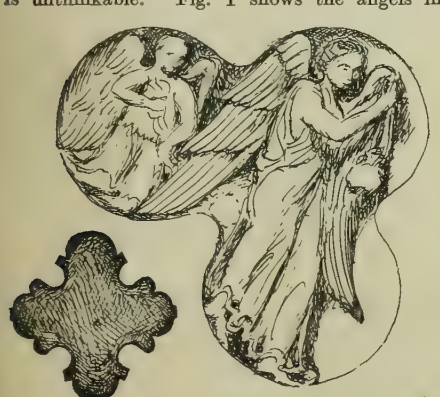
CHAPTER HOUSE: SCULPTURE, GLASS AND PAINTING.

The Annunciation Door.—The doorway entering the Chapter House from the vestibule is largely ancient. On the left and right are two very fine sculptures of Gabriel and the Virgin. The arch has a series of small figures in a trellis of foliage. Attachments at the springing and near the crown of the inner order show that there were sub-arches with a circle above. Some years before the great "restoration" was undertaken Scott wrote thus: "The doorway was double, divided by a central pillar, and with a circle in the head; whether pierced or containing sculpture I have been unable to ascertain, as it is almost entirely destroyed. The jambs and arch are magnificent. The former contain on their outer side four large shafts of Purbeck marble. Their caps are of the same material, and most richly carved, and the spaces between the shafts are beautifully carved."

According to Carter's description given before, the doorway showed indications above it of "open tracery (in the manner of the Chapter Houses of Wells and Southwell) cut away." Scott's first design for "restoration," given in *Gleanings*, pierced the tracery, but set an isolated image of the Majesty in the centre of the foiled circle. As this showed the back of the figure to the outside it was doubtless thought awkward, and in the executed work two Christs were substituted, back to back, on a very thin solid filling. I have long been convinced that such a figure or figures would not have been here. The predominating importance of the Annunciation group, the Angel on one side and the Virgin on the other, negatives the existence of another figure, central, but an anti-climax. An open foiled circle would have afforded an entrancing vision of the interior and its glorious windows. Moreover, the vestibule was required to be as light as possible because the windows of St. Faith's Chapel open to it.

On approaching by the flight of steps, the solid circle which now blocks the sight comes almost exactly in the visual line to the foiled circle of the eastern window. The ancient stonework itself in no way suggests a solid circle; what is left gives a tracery-bar profile similar to the general type found in the Church and the Chapter House itself (Fig. 1, B).

Finally and conclusively the large trefoil panels in the spandrels of the arch have minor figures of angels censing the Virgin, who stands in the niche on the right. If there was a central figure these spandrils must be seen in relation to it, and that such figures should be turning their backs on a Majesty, the centre not only of the composition but of the Universe, is unthinkable. Fig. 1 shows the angels in



B FIG. 1.

the trefoil on the right who turn away from the centre towards the Virgin (compare Fig. 2).

The figures of the Virgin and Angel are very noble sculptures, full 6 ft. high. They are so strikingly similar to a pair at the Virgin's door of Amiens Cathedral that it may not be doubted that ours are imitated from the French figures which were more or less copied at Reims also, as indeed was the whole portal. The idea of the design is that the Virgin carries a book of the prophecies, and she lifts her right hand in surprise while the Angel expounds what was written. I have shown that the north transept front, with its sculptured portals, was a modified copy of the west front at Amiens. The resemblance between the sculptures at Westminster and at Amiens suggests that not only the mason at Westminster but the sculptor as well studied French models.

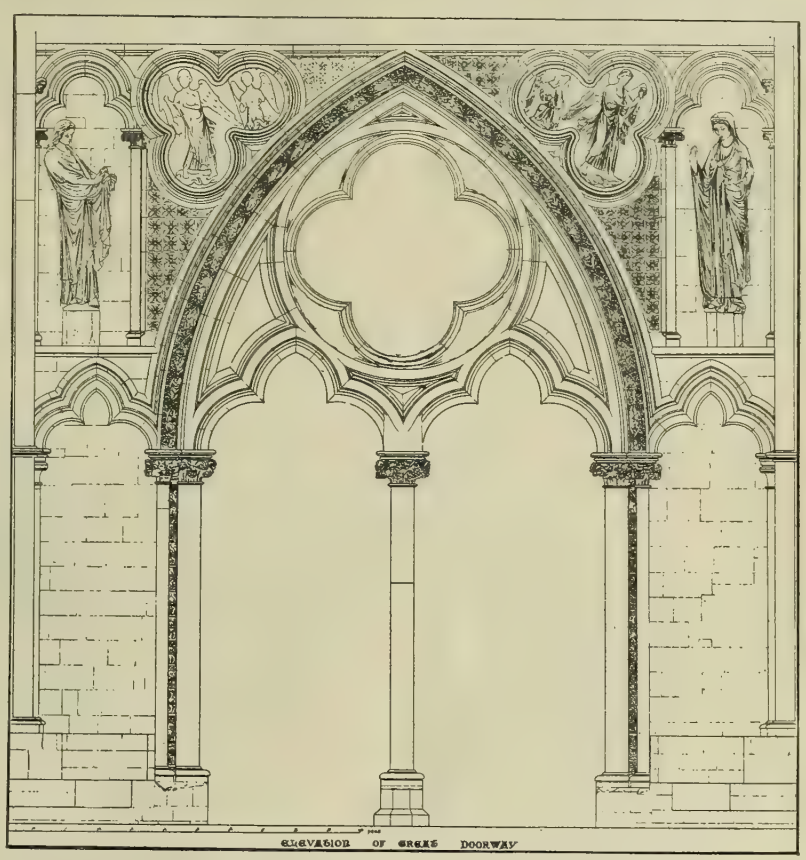


FIG. 2.—Drawing by E. C. SHEARMAN (altered).

The arch-order, which is carved in openwork of foliage containing little figures, is largely old. Many of the figures carry scrolls and they are doubtless prophets. The jambs of this doorway have vertical strips of sculpture between the columns, both inside and out; but the north and south jambs are not similar. The two strips on the north have only foliage, while the two on the south have many little figures set one over the other in scrolls of foliage. At the top of the inner set of figures is Christ. The head is broken away, but the cruciform nimbus remains. The outer set has the Virgin at the summit—a very perfect and remarkable little figure. Over these two figures are pretty canopies, and there are others over the foliage strips of the north jamb, each of which has two birds perched under their shelter—symbols of concord. The little figures of the strips can better be studied from the admirable old casts made about 1860 and now at South Kensington, than at the doorway itself. The foliage, which contains the series which is terminated above by the Virgin, is a rose branch, showing buds and flowers. None of the small figures can be identified, with the exception of one about the middle, which has the horns of Moses. One next below is half clothed and is putting his hose off or on; one near the bottom holds a square block; one near the top is clothed like a friar, or possibly a pilgrim; most are sleeping in a way that recalls the figure of Jesse in "Jesse-trees," to which the design is obviously allied.

The inner strip of the south jamb has, under the Christ figure, others of kings set in scrolls of formal foliage.

Now the arch-orders of the Virgin's Door at Amiens, from which the Annunciation Group was imitated, contains three sets of small images—angels, kings, and patriarchs (?). They are described by Durand as ten angels with censers and candlesticks; twelve kings; fourteen personages in the scrolls of a vine with no identifiable symbols—"evidently the two [last] together represent the genealogical tree of the Virgin Mary, but Jesse is not here." At Amiens and at Westminster, there were more regular trees of Jesse. The exact intention of the sculptor beyond the association of the Virgin and the rose branch is not clear.

The general derivation of these jamb figures from Amiens is, however, certain. Even the crowd of censing angels in the trefoils above the arch seem to follow those of the third arch order at Amiens. If the small figures of the jamb at Westminster are compared with those of the Jesse tree proper at Amiens, illustrated by Viollet le Duc, it will be seen that in each case the figures have little patches of ground under their feet from which the scrolls and foliage spring out; this is so alike in both cases that relation is certain. The small angels in the trefoils just spoken of are rather badly decayed, and from below give little idea of how beautiful they must have been. After close inspection this may just be guessed and good photographs might bring it out.

The sculptures were certainly designed by one who had studied the Virgin's Porch at Amiens. It was specially thought of as the Annunciation Door, and it should be a comfort to us to be able to think away the intruded vain imaginings of the tympanum; the doorway thus becomes a unity—it and the whole Chapter House stands in the "composition" for the House of the Virgin. The doorway at Salisbury has a central

sculpture (originally the Virgin ?) but there were no side sculptures; the whole tympanum is solid, and the sub-arches are not tracery bars.

With the data of the span, the curves at the springing, and the radius of the central circle, we may accept the general lines of the tracery. Possibly Scott found some indication which suggested the central quatrefoil in the circle. The single central column is guaranteed by the



FIG. 3.

tracery section and the size of the jamb columns. The capitals of the jamb columns are in marble elaborately sculptured—one of those on the south side has lions amongst the foliage. This capital is ancient and so, in the main, is its next neighbour. The imitative work is so clever or specious that it is difficult to be sure of anything without testimony, but the northern capitals may be copies of broken ones. I have a letter from Mr. C. Burgess (1909), who worked on "the restoration," in which he says "the capital with the lions is old; most of the others in arcade are modern, also the heads." There is a cast of the lion capital at South Kensington (Fig. 3).

This noble doorway is one of the most beautiful things in English art.

Jesse-tree Doorway.—The outer entrance from the cloister must have been equally beautiful, but it is now terribly decayed. "Over the entrance into the Chapter House was placed the statue of the blessed Virgin with our Saviour in her arms, and two Angels, one on each side, all richly enamelled and set forth with gold and blue, some vestigia or footsteps of all which are still remaining whereby to judge the former splendour and beauty thereof" (Keepe, 1683). When Keepe wrote there was probably actual memory of the central figure. The two angels are ruins of most beautiful figures, apparently by the sculptor of the Annunciation. The field of the tympanum is covered with strong scrolls of formal foliage, now so much decayed that only the "shadows" of them may be seen. Old sketches, however, and the careful measured drawing by Mr. Knight at the Victoria and Albert Museum, have preserved some record. A sketch made by Poynter about 1820 of part of the scrolls on the arch-space shows that they had doubled stems; this is a point in development which is confirmed by Knight's drawing. An accurate looking woodcut of this foliage in *Gleanings* is without much value, as it was done from a poor sketch now at Westminster.

Knight's drawing just mentioned shows some jointing in the form of a little gable over the central plain space against which the image of the Virgin was placed, and it is evident that there was a canopy here. This is confirmed by the existence of two minor corbels attached to the base on which the statue stood, for these must have supported small shafts under the canopy (Fig. 4). The figure of the Virgin, we may suppose, was like that of the Virgin's door at Amiens. The attitude of the angels on either hand suggests to me that they may have carried candlesticks; the angels surrounding the Virgin at Amiens bear candlesticks and censers. One of the angel images is much injured; the other is a very beautiful headless figure (Fig. 5). There is no doubt as to the doorway having been painted brilliantly and gilt. In the Victoria and Albert Museum, Burges Collection, is a drawing which carefully recorded traces actually existing sixty or seventy years ago. The field of the tympanum was blue with gilt foliage, the hollows reinforced with vermilion. This explains the rather timid colouring on Carter's original drawing in the Gardner Collection. The ground is tinted blue, there is red here and there in hollows, and some of the carving is yellow for gilding.

One of the arch orders is carved with the "Stem of Jesse," and this was certainly copied from the central portal at Amiens (see Viollet le Duc and Durand). There Jesse appeared twice over, being the bottom figure on each side, while the stem terminated at the apex in figures of the Virgin and Christ. According to the text with Carter's excellent plate of our doorway, "the three lowest figures are precisely the same on both sides of the arch. . . . It is probable it was intended that one side should represent the Kings of Israel and the other those of Judah, both having had in common for ancestors Jesse, David and Solomon." It is said that in the centre of the top is the figure of the Virgin and Child, but this, I suppose, meant the central sculpture. The foliage on the tympanum was considered to be part of the Jesse-tree. Fig. 6 is from a sketch of the arch made about 1910.

Enlarged sketches of the figures by Carter show that most of the figures had crowns and the second figure on each side had a harp—that on the left may still be seen. Carter's plate shows also the round, nest-like units of foliage which decorated the other arch order. The central part of each boss which was undercut has now disappeared. Many years ago I made a sketch, which is enough to show that it was almost identical with carving around the blank



FIG. 4.



Fig. 5.

tracery at the end of the inner vestibule. Old descriptions gave details of the colouring and gilding of the Jesse arch. If I were younger I would compile a restored drawing of this wonderful doorway, one of the most romantic things in English art. I wish we could interest ourselves in such drawings instead of destroying authentic antiquities and calling that restoration. The vault of the northern alley of the outer vestibule is a restoration, the southern alley, with its fine bosses, is original.



Fig. 6.

The work in the inner vestibule is largely authentic. The most doubtful major feature is the three-light window on the south side. Scott spoke of this as "a remarkable window now destroyed, but of which, by cutting into the walls, I have been able to gain some clue to the design." In his illustration he shows a high central portion flanked by two lower lights which have curious long trefoils in the spandrils above. The window as restored is like this except that the high central portion is of one light instead of two, as in the illustration. Mr. S. Weatherley told me that sufficient indications were found when the work was done to make the form certain. Indeed, it is clear that there is not room for four lights. The upper cusps

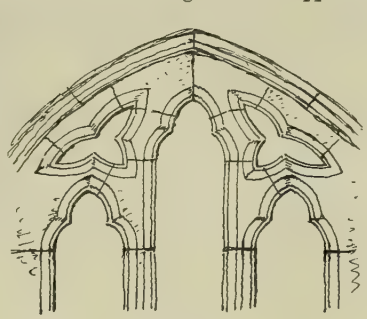


Fig. 7.

of the long trefoils are still old within, and the window may be accepted as of ancient form. The idea of the trefoils was probably taken from those over the Annunciation door which were borrowed from those over the West Rose at Amiens. Fig. 7 is from the exterior of this window. Fig. 8 is the end of the inner vestibule mentioned above.

Glass and Painting.—We have seen that Burges recommended grisaille glazing, but his advice was not followed. Since that time, remnants of such glass have been found in the apsidal chapels of the Church. The companion or daughter Chapter House at Salisbury had grisaille windows with a bright shield of arms set in each light. That this was the arrangement, too, at Westminster, is further proved by what Sandford says of heraldic shields:—The arms of Henry III and Eleanor of Provence "are yet standing in several windows in the Abbey—the arms of Raymund, Earl of Provence, are painted in the Chapter House windows and several other windows; the arms of Eleanor of Castile are in a glass window on the west side of the north cross." Three or four of these shields of arms still exist in the glazing of the apse windows. It is evident that the Chapter House of Westminster had similar glazing to that at Salisbury, and like that it must have been a vast vessel of light. At present the windows are filled with deep-dyed tints and the electric light has been brought in. At Salisbury Chapter House the centres of the large roses had pairs of figures, a King and an ecclesiastic, set on a grisaille ground. This, too, was probably taken over from Westminster.

The panels of the wall arcade contain paintings of "The Doom" and "The Apocalypse." These are of the fourteenth century, and I gave some description of them in the *Spectator*, July 7, 1923. The arches and diaper work above the eastern bays only, show traces of colour and gilding, which may be of the original work. In Piers Plowman's "Crede" is a

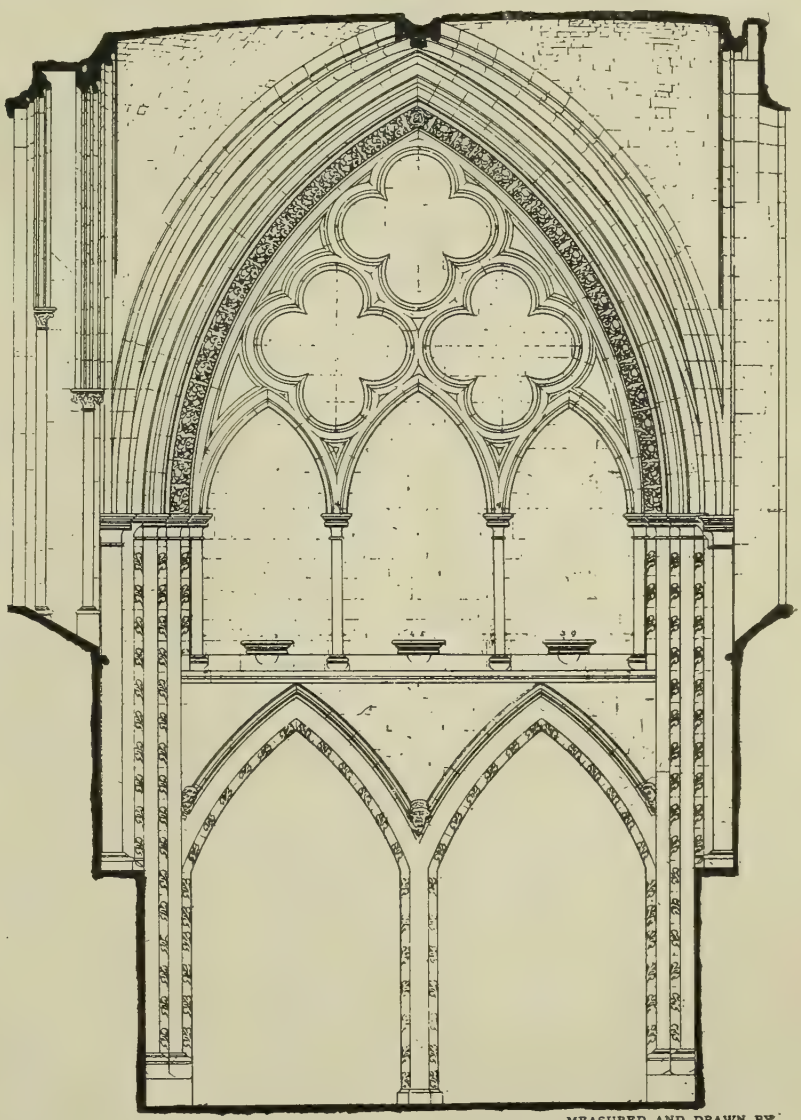


Fig. 8.—Measured and Drawn by E. C. Shearman.

passage describing one of the great Friaries of London as having a Chapter House "painted all round like a Parliament house," and this allusion may have been suggested by the recent decorations of what is known to have been the meeting place of Parliaments at Westminster. The large provision of stone seats around the Great Octagon suggests that Henry III had from the first intended to use it for such assemblies.

Crypt.—Under the Chapter House is a crypt, which is well described in *Gleanings*. It is very strong and was doubtless intended for a Treasury. The walls are nearly 18 ft. thick; three doors intervened between it and the south transept, the stone stair stops about 4 ft. from the bottom and is continued by a short detachable wooden stair which looks like a thief trap. In the central pillar of the crypt are some cavities closed by thin stones.

It has been argued recently that this was the King's Treasury robbed in 1303—the most famous burglary in English history. The chief evidence is that the place robbed is said to have been "under the Chapter House." That seems conclusive, until we remember that "under" was often used in the sense of inferior and near, as under-hill, under-shaft. In the account of the affair given in *Gleanings* are two quotations from documents, one of which is translated, "The treasury near the Chapter House," and the other "below." Another Abbey treasury, the chapel of the Pyx, is under the Chapter House in the second sense. I should not enter on this much disputed subject were it not that I may put on record some evidence from the structure which may be helpful.

I doubt whether the Crypt actually beneath the Chapter House was at an early time in regular use; for long it must have remained very damp. In 1909 it was cleaned out and then nothing more than a mortar floor was found. Scott says that earlier it had been "filled up some feet above its natural level with earth," and that he "lowered it to the original level." Such raising of the level with earth suggests flooding.

Mr. Hall, in "Antiquities of the Exchequer," says that the King's great Treasury was the Chapel of the Pyx. "Here the King's four crowns and the other regalia were deposited with many jewels as late as the reign of Henry VI." He objects to the view that "the treasure of the Wardrobe was normally situated below the Chapter House," but he adds, "it was there undoubtedly in the nineteenth year and later" (1291, &c., *cf Archæologia*, xliv). There is a record that the Treasury "under the Chapter House" had a new floor of tiles laid in 1291. This entry is discussed by Mr. Clayton, in the *Archæological Journal* (1912), and he concluded that it probably refers to the Chapel of the Pyx, where a tile floor of about that date still exists. Again the violated Treasury is said to have been under "the Monks' Chapel," which those who accept the crypt solution think may be another name for Chapter House, whereas the Monks' Chapel may have been St. Dunstan's, close by on the other side of the Pyx.

The vault or walls of the crypt have never been broken through, and Mr. Westlake suggests that the thief "cut through the iron bars" of one of the crypt windows. The evidence, however, seems to point to a hole in a wall.

The burglary was effected from the Cemetery between the Dormitory range and the palace. The chief thief was Richard de Podelicote, who was assisted by John, a mason, who made the "engines" or implements of iron used in making a breach in the wall. Podelicote worked at it for months before he obtained entry. Professor Tout reproduced a rough contemporary sketch of the thief at work, and it has been suggested that windows appear here. I only see an indication of a vaulted structure.

At the inquiry it was asserted that four years previously an attempt had been made to break into the same treasury from the cloister side. It is evident that this piece of evidence is strongly in favour of the Pyx site, although it has been said that it "need not necessarily do so, for it would be possible to attack the undercroft of the Chapter House from the Cloister side." I cannot see how, and in any case no window was accessible from this side. Again, Mr. F. Bond thought that the Poets' Corner door was an insertion made in order to give access from the palace to the crypt, since it cuts into the arcading on the left. The doorway seems to me to have been foreseen and built in with the work. Leaving the difficulties involved in the Crypt hypothesis, I wish to point out that there is some material evidence which suggests that the external wall of the Chapel of the Pyx against the Cemetery was at some time broken through. Directly inside the thirteenth-century north door, which Scott believed to be the original entrance to "the Pyx," is a patch of repaired walling low down, which looks, as was pointed out to me by Mr. Wright, as if it might have been the actual point where the thief entered. Outside is a blind corner sheltered by a Chapter House buttress so completely that it is easy to think that a man might long have worked here hidden. The north doorway just mentioned is that which has fragments of some skin (said to be human) which lined it within. The existing doorway into the Pyx from the Cloister is later than 1303; possibly this door was formed and the old one walled off from the Pyx (as at present) in consequence of the robbery, as is suggested in *Gleanings*.

Exterior.—The outside of the Chapter House has been almost entirely renewed. In the junction with old work near Poets' Corner we see that the new masonry takes up with the old courses. Here and there on the sides towards the south Scott left patches of the old face; he speaks, indeed, of having found a portion, which had been sheltered, as being so fresh that there were masons' marks on the stones. This is a point not otherwise known. In one bay stones of most of the courses show (September, 1923) 5 to 9 inches high—notice how narrow, and this was characteristic of the exterior masonry generally. It is curious that the walling was different in each bay, the number of courses between plinth and window cill varying from about sixteen to twenty-two. Scott followed the old coursing throughout; he also probably had authority for making the buttress slopes in continuous planes. The drip at the bottom (one ancient fragment inserted) is of the typical French section. The plinth is also a French profile.

Old sketches show that the lines of the main subdivisions of the windows appeared here and there on the exterior parts. Of the flying buttresses, additional works of the fourteenth century, stones remain here and there. There is a record that in 1377 some boatloads of stone were employed on the "pinnacles of the Chapter House" (Rackham); probably this gives the actual date of the erection of new buttresses. The one next to Poets' Corner seems to have been first built with the "restoration"; it does not appear on the plan in *Gleanings*.

The Mason.—The entrance to the Chapter House, if not the whole of this work, as I now think probable, was executed by Master Alberic working by sub-contract. The accounts show that much masonry work was done by "task," and this was doubtless a means of pressing it forward to meet the desires of the impatient King. In a fabric roll of 1248–9 at the Record Office, Master Alberic appears as receiving the then large sum of £45 for "task work" on the Cloister. As I observed before, "it is evident from the large sum (worth, say, £1,000) that he must have had several assistants, and that he was carrying out a contract for the workmanship of those bays of the Cloister which belong to the first work"—and, I would add, lead from the Church to the Chapter House.

I also pointed out that Master Alberic was mentioned three times on the "Long Roll" of 1253 (published in *Gleanings*). "It is noted on the back of the Roll that at a certain time he had begun three windows by task." (The note says "with three companions," so it is clear he was working with his staff.) In the shorter Roll of this year (K.R. 466, 30), entitled: "Account of divers works at the Church, Chapter House, Belfry and Palace," Alberic's name also occurs, and "he is there said to have been engaged on the entrance to the Chapter House. It seems that we may definitely assign the bays of the Cloister leading to the Chapter House and the entrance of the latter to Master Alberic. We have seen that the system of task work was largely made use of, and Master Alberic seems to have been engaged in the execution of such work from the beginning."

The three windows mentioned above I thought might refer to the traceried bays of the early part of the Cloister, but on the whole this is unlikely. The windows may have been in the Chapter House or in the entry. The traceried openings of this part of the Cloister are now only copied work, but old drawings by Carter show that they are accurate copies. The original work even had the curious pebble-like lumps filling up narrow gaps in the tracery. Of the capitals I am less sure, but there is a sketch of one like the new ones at South Kensington which was made by Collings in 1842 (E. 4086). It is certain that Master Alberic was engaged for many years and probably from the beginning of the works. I am drawn to think that he, with his own men, probably executed the Chapter House entirely under the general direction of the Chief Master. The windows and the wall arcade were designed by a master who had studied French works, but there seems to be a distinct difference of feeling between the details of the church and the Chapter House with the bays of the cloister leading to it. This confirms the evidence of the documents.

I have no note of the sum, if any, mentioned on the Short Roll as paid to Alberic, but in the Long Roll of the same year appears: "for task at the entrance to Chapter House 50s." Such a small sum (say £50) could only have paid for small finishing work, but as the year was 1253 when the windows were already erected (see below), that is what we might expect, and finishing off would be done by the original artist.

In the Long Roll of 1253 is noted that Master Alberic was paid for 1,280 feet of "voussoirs with fillets at 3d. a foot," for "50 assises" (facing blocks) at 5d. each, and for "seven steps cut by task work." The seven steps may be those in the Chapter House vestibule.

The title given above of the Short Roll implies that the Chapter House was to some extent regarded as a separate work. This Roll includes an item for canvas used in closing the window, of the Chapter House; a second payment was of 53s. 4d. for two images made by task works which Professor Prior has suggested may be the lovely Annunciation group itself.



Saddleworth War Memorial on "Pots and Pans" Hill.

Mr. G. B. Howcroft, A.R.I.B.A., Architect.

THE TOWN-PLANNING INSTITUTE

Mr. T. H. Mawson (President) took the chair at the annual meeting of the Institute, held on June 20, at 92, Victoria-street.

The following were elected on the Council for the ensuing year:—Members: P. Abercrombie, S. D. Adshead, Thomas Adams, W. R. Davidge, F. M. Elgood, W. T. Lancashire, H. V. Lanchester, T. A. Lloyd, T. H. Mawson, B. Parker, G. L. Pepler, H. E. Stilgoe, F. L. Thompson, R. Unwin. Legal Members: E. R. Abbott, R. A. Reay-Nadin. Associate Members: F. W. Platt, J. A. Webb, E. Willis. Legal Associate Member: C. P. Lovelock.

It was decided to increase the subscription by £1 1s. per annum.

The Model Clauses: Convenience and Amenity.

Mr. Reginald Bruce, A.R.I.B.A., contributed a paper on the above subject in which he said that, in approaching the subject of convenience and amenity, one was confronted with a great variety of matters, all of which, to a greater or less degree, affected the comfort and happiness of the people, and the well-being of a town. Some were perhaps of such a contentious nature that they had so far been intentionally omitted. Others, perhaps less important, might be considered as minor details, but as "trifles make up the sum of life" so he ventured to say that these comparatively small matters had a very considerable bearing upon amenity and convenience. The furnishing of towns might be mentioned, but this together with other similar matters the local authorities were themselves responsible for. The author suggested that steps might be taken to improve the name-plates of streets, and he asked why electric light and tramway standards should be placed in the centre of roads. Then he asked why should every open space be surrounded by a hideous iron fence, and why it was that squares in towns were so often spoiled by the intrusion of public conveniences. Dealing with the clauses regarding "Safety of Traffic," he said it was most essential that the question of line of vision should be carefully dealt with. The clause regarding the preservation of trees was a wise provision, and it would be interesting to learn why it had been omitted from so many schemes. The question of advertisements had already been dealt with by the Advertisement Regulation Act, 1907, and the Ancient Buildings Amendment Act of 1913.

The clause in the Models certainly did not seem to carry the matter much farther, but did it not leave too many loop-holes by which people might escape from the real objects aimed at, and would it not be better to make more definite regulations controlling the size of any advertisement height above ground, size of lettering, and so forth? Also would it not be well to insist upon every person proposing to fix advertisements, subject to certain exceptions, of course, obtaining the consent of the local authority? As the clause read at present, it would appear that anyone could fix an advertisement, and then it would have to be proved that it was detrimental to the amenities of the district. The clauses dealing with the maintenance of private gardens were very desirable, but why were not allotments included? Some restrictions should be placed also on vacant land, derelict property, and other untidy yards and places which were detrimental to the amenities.

The Model clauses had unquestionably been admirably prepared, and referred to most matters with regard to which control was desirable. There was, however, one important omission concerning a matter the consideration of which had perhaps been delayed a little too long, and that was the character of buildings and the control of design. This was, undoubtedly, a very contentious subject and therefore the greater reason why it should be fully discussed.

It was generally agreed that a sense of beauty was inherent in most people, and if the inhabitants of a town could be imbued with a feeling of civic pride and be brought to realise that the local authority was really endeavouring by means of town planning to secure amenities for the benefit of the community as a whole, streets which it would be a pleasure to walk in, buildings which were objects of beauty, gardens and open spaces to rest in, he was sure that any restrictions which were made would not be difficult to carry out. He believed, too, that architects, builders and all concerned in the development of towns would readily co-operate with the local authority to secure what was desired. To secure control with respect to the character of buildings and nature of building materials was, perhaps, not easy; but might not the same have been said with regard to all aspects of town planning, yet the Acts were passed and further legislation would be carried through. Concerning this particular aspect it might be said that too much rigidity might be fatal to the desired effect; what was required was elasticity without looseness, and control without officialism.

Character of buildings did not appear to have been generally dealt with in schemes so far approved, and Ruislip-Northwood stood almost alone in having inserted a clause dealing with the matter.

The clause reads: "If, having regard to the nature and situation of the site of any building or buildings proposed to be erected or altered, or to the character of any buildings erected or in course of erection in the neighbourhood of such site, the Council is of opinion that the character of the building or buildings proposed to be erected or altered would be injurious to the amenity of the neighbourhood, whether on account of the design or the undue repetition of the design or the materials to be used, the Council may require such reasonable alterations to be made in regard to the design or materials as they may think fit, and may require the plans to be amended accordingly." Provision was also made for any case of dispute, when the President of the Royal Institute of British Architects would be asked to appoint an arbitrator whose decision would be final and conclusive.

The question of who was to decide the many matters which would arise was a very vital one; the arrangement in case of dispute just referred to might work very well for a district like Ruislip-Northwood, but it is open to doubt whether it would be equally satisfactory in a large and more highly developed town.

A number of suggestions could probably be put forward; one was that an Advisory Art Committee—or perhaps some more appropriate term could be applied—should be set up for each town, or possibly a district, to which would be submitted for consideration and recommendation matters relating to proposed buildings or alterations, open spaces, town furniture, and any other matters which might be considered as affecting amenity. Such a committee could be constituted on somewhat similar lines to, say, the one existing in Birmingham, and would provide for representation by the local authority, certain local societies and schools, and some persons with special technical knowledge. In addition, there should be an expert town planner with no local interests—such expert, he suggested, would not be a member of the committee, but would be retained to be called in from time to time as circumstances required, and, if necessary, to submit detail schemes for any particular parts of the district.

It might be contended that local authorities were the elected representatives of the people and therefore had the sole right of deciding all matters brought before them, but, generally speaking, he thought that members of local authorities would admit that they were not qualified to deal with matters relating to the architectural treatment of building, civic designs, and art matters generally. The officials, too, working under a town-planning scheme, which controlled design and relative matters, would welcome the formation of some impartial body to which such matters could be referred.

Mr. Goodrich (United States) said he thought there were more favourable opportunities for working out town planning in England than in America. The paper was of great interest to Americans, but he thought under the zoning regulations in force in the States there was power to do many of the things the author had suggested.

Mr. T. Adams, in moving a vote of thanks to the author, said he had every sympathy with his points of view, but doubted the practicability of putting into effect his suggestions regarding the characters of buildings. When the Ruislip-Northwood clause was under discussion, the point was raised whether it was possible to arbitrate on a matter of taste, and, knowing the differences of opinion which existed among eminent architects, made him think the introduction of such a clause would meet the difficulties. He would rather that every town had a consulting architect to advise it on such matters, but he doubted if architects would agree to that.

Mr. E. Willis remarked that architects could help them greatly in the matter of proper angles of vision at junctions of roads by making a big set back in the ground floor of their buildings. He thought they required more legislation with regard to advertisements, for the electric signs in the main streets of London were a blot to the eye-view.

Sir R. Paget agreed that legislation in regard to advertisements was required. Every advertisement ought to prove its truth and its beauty. Traffic crossings were becoming matters of fundamental importance, and local authorities should have further powers to deal with the matter. They had railway stations, and yet the public, through lack of vision, was content to stand in the rain whilst waiting for omnibuses and tramcars.

Mr. L. M. Jopling thought it dangerous to associate town planning with art. The right way in which to approach the public with regard to town planning was to show that it was based on economic principles. The only way to get better advertisements was to improve the public taste.

Mr. L. Rosevear pointed out the difficulties which Eastbourne had experienced in regard to finding sites for public conveniences. He also referred to the hideous effect of allowing all sorts of shacks on allotments.

Mr. E. R. Abbott said at Ruislip they absolutely prohibited any building on allotments. The local authority provided a shed for the holders, and this was the only way to deal with the matter. Clauses about the character of buildings were useless, unless the local by-laws conformed with them, and he felt that the Ministry of Health must make up its mind whether it would continue to allow many of the buildings which had been erected, or insist on proper building.

Major Lovelock remarked that at Carshalton they had taken a lot of trouble to preserve trees, and now an expert told them that on account of age most of the trees must come down.

The President said it was foolish to plan a road with trees which would only last 20 years. It was advisable to call in an expert forester first.

Builders' Excursion.

Messrs. Howard & Co., builders and contractors, of 3, Broad-court-chambers, Bow-street, W.C.2, recently held their annual outing. The day was spent at Clacton-on-Sea. The chairmanship was in the hands of Mr. G. R. Perkin, manager to the firm.

THE BRITISH SOCIETY OF MASTER GLASS PAINTERS

THE annual general meeting of the British Society of Master Glass Painters was held recently at 6, Queen's-square, presided over by the Earl of Crawford. To add interest to the occasion a very various and representative collection of photographs of mediæval glass was shown at the meeting, largely due to the initiative of its Secretary, Mr. Noel Heaton, whose researches on the technical side of glass are well known. This Society, which has now become well established, has for its objects: (1) To promote whatever may tend to elevate the art of glass painting and staining; (2) to take all necessary steps for the preservation of the ancient glass of this country; (3) to formulate the usages and customs of the craft, &c., and generally to draw together the interests of craftsmen and promote their union together. The first object will appear at once the most hard and difficult of attainment, and reminds one of that reply of Goethe's to the young man who desired to improve the world, that he would find it a proud and difficult task. At the same time, there is evidence of an improvement in craftsmanship of a kind—if that were enough—even if we are compelled to miss the evidence of a more deeply-felt impulse. It may be that until a wider scope in subject matter establishes itself and many of the hereditary respectabilities of "ecclesiastical" art are replaced by more vital constituents, and by a greater conviction in the artist himself, it will present itself mostly as a survival because it does not embody enough of present life and experience. And it would seem that this no society can secure for us. It is the individual who stands above organisation in whose prerogatives lie more first-hand direction, to whom we must look for improvement, and perhaps it requires even from him a new conversion to replace old worlds with new. Art is such a personal thing, emerging so unexpectedly, and so often away from all the machinery intended to promote it, that we have to be careful lest in promoting the one we lose sight of the other. It is natural by association to seek strength for a cause in order to make ourselves and our aims more felt. But the danger of all such organisation which is now better discerned whether we call it "registration," "promoting high standards," or "encouragement of art," is that it does not secure the aid. The strength of the average presses hardly on the individual, and the best is at a discount with the good, which becomes its enemy. Nor is this the result of "mere cussedness," but arises from its own nature, which is to promote what it knows, and the best is unknown, because it is revelation. If this seems too hard a saying, it is the witness of not a few who have watched the enormous development of societies in recent years, and the effect of such organisation over the last years.

This is said without intention to deprecate the usefulness of such a society within its own limits; sincerely directed as we believe it to be towards the improvement of the art of stained glass. What must always remain more important is art itself, which organisation cannot endorse.

Associations—organisation of whatever kind—to "elevate" art will never supply what the properly-directed virtues of a people can only supply for themselves, and though the former may play their part in minor ways, the future will unfold to us more and more a choice less directed by machinery, because the fulfilment of a proper citizenship requires that we should ourselves distinguish and recognise the good when we see it.

If we miss in such a society the means for effecting such improvements as the elevation of the art of glass painting, it is because that task can only be sustained by the artist himself, and craftsmanship is not enough. The source of service through a society such as the British Society of Master Glass Painters appears rather to lie in its contribution to the scientific side of the craft of stained glass, and its watchfulness for the preservation of ancient glass. On this side the society has an advantage in its able Secretary, Mr. Noel Heaton, whose labours have so long been directed with much success to investigation on this side. There is much useful work to be done in these directions which does not give challenge to the views we have expressed. We must look to the artist for the source of art and no organisation can hope to take that place, or intervene between him and his more direct relation. Organisation is not authority, though often mistaken for it, and it is where it claims to decide for us or intervenes to impose its own standards that the freedom of the arts no less than the ideal of democracy itself is seen to become threatened.

BOOK REVIEW

The A.B.C. of Nineteenth-Century English Ceramic Art. By J. F. BLACKER. (Stanley Paul & Co., Ltd.) Price 15s. net.

Let us say at once that the "A.B.C." part of the title is quite harmless. There is nothing alphabetical between the two covers apart from the index which is quite excellent and exhaustive. The "A.B.C." merely brings it into line with some half-dozen books by the same author. On its first appearance in 1911 the book was published under the shorter title of "Nineteenth-Century English Ceramic Art," and it may now be regarded as a text-book. In writing the histories of the still extant nineteenth-century factories, many of them of earlier foundation, such as Wedgwood and Worcester, the author has gone to the fountain heads for data, and has gleaned information which will be new to many readers. A brave attempt is even made to clear up the age of Wedgwood's specimens where the mere mark is but an unsure guide. We will forestall the collector—may we say the "average" collector?—who says, "I want nothing to do with the nineteenth century." Let him remember that Walton, who commenced making his now much-prized figures in 1790, was still modelling in 1839 and, but for the "relentless hand," might well have lived to exhibit his latest productions in the 1851 Exhibition. Nineteenth-century ceramic art has begun to "sing," from the collector's point of view, to some considerable "tune" before the twentieth century has run its first quarter. Is a piece of pottery or porcelain "antique" or desirable if made in 1799, or "modern" and worthless when dating from 1801? Who but the collector with horse-sense would have predicted to-day's high prices, for example, of the productions of the brothers Martin or William De Morgan? The Martins were not well able to work much before 1875, and we have before us a Sotheby catalogue of November, 1919, showing a collection of fourteen signed pieces—jugs, bottles, vases—ranging from £7 to £20, and a pottery clockcase fetching £48 under the hammer. What these specimens were priced at at the Southall kilns we leave to the estimates of those collectors who had the good fortune to know the four brothers more intimately. The Martins were artists to their finger-tips, never out to make money. Their secrets died piecemeal as each brother passed away—the last not more than a year ago—but the truth remains that whatever these men touched with the "potter's thumb" will live. He who thinks he would not care to possess (or, perhaps, knows nothing of) a William De Morgan dish with its wondrous pulsating lustre which vies with that adorning the Hispano-Moresco chargers, or a jug or bottle in the style and feeling of old Rhodes or Damascus, let him straight away examine the "recent acquisitions" at the South Kensington or the London Museums. Examine in detail George Tinworth's masterpiece in plastic art in Truro Cathedral—"Going to Calvary"—and he will find something in contemporary art in the spirit of the fifteenth century. The story of Tinworth's early struggles and final emergence from an apprenticeship to a wheelwright's shop is a romance scarcely surpassed by that of Bernard Palissy. The mass productions of the English factories of the last century give pride of place to nothing on the Continent or elsewhere. Our potters, perhaps beyond all other artificers, have proved that use and beauty can walk hand in hand. The mass production is for the masses; but the things that tell for the elect are those which bear the individual impress of the artist. Mr. Blacker is an industrious writer who helps us to a better knowledge of things worth knowing in nineteenth-century ceramic art. The 526 pages of letterpress interspersed with 1,200 illustrations of wares and pottery marks will be a boon to the collector who grasps the fact that the comparatively new wares of the recent yesterday will be the antiques of to-morrow. The potter's art did not die in this country when the Bow and Chelsea factories closed down any more than it did in China when the Emperor Kien Lung was gathered to his fathers in 1795. The book is a useful addition to the working library of the dealer in antiques and, having read it, the collector need never again be fobbed off with the Stafford shire plate or jug of 1850 which "has been in the family for 150 years."

The Studio Year. (London: Offices of *The Studio*, Ltd.) Price 7s. 6d. net.

The "*Studio* Year Book of Decorative Art" contains a review and record of the latest development of architectural design decoration and the furnishings of the house and lay-out of the gardens, both here and on the Continent. Many good examples of English domestic work are illustrated, and much ingenuity and skill in the planning of both house and garden is displayed. Attractive coloured plates are given. The furniture and pottery section are also well represented, and from the contents of the number a good idea may be formed of the trend of modern art of to-day.

THE ROYAL SANITARY INSTITUTE

THE congress of the Royal Sanitary Institute which is to be held in Liverpool shortly will concentrate a large amount of expert attention on many problems and proposals relating to public health.

The eleven sections and conferences included in the arrangement of the meeting will be presided over by the following well-known authorities: The Right Hon. the Lord Mayor of Liverpool; Lieut.-General Sir William Leishman, Director-General, Army Medical Department; Dr. T. M. Legge, Senior Medical Inspector of Factories; Dr. E. W. Hope, Medical Officer of Health, Liverpool; Mr. John A. Brodie, City Engineer, Liverpool; Dr. T. W. Naylor Barlow, President of the Society of Medical Officers of Health; Alderman Moyles, J.P., Chairman, Liverpool Port Sanitary Authority; and Mr. E. G. Mawbey, City Engineer, Leicester.

An attendance of over 1,000 is expected, being largely officers and representatives of Government departments, municipal and public health authorities in the United Kingdom, but including also many representatives of Foreign Governments, Dominions and Colonies of the Empire.

The opening address will be given by the President, the Most Hon. the Marquess of Salisbury, and the popular lecture by Professor H. R. Kenwood, of the University of London, who will deal with modern civilisation from the health standpoint.

The subjects covered by the papers to be discussed indicate the controlling influence that hygiene has in all periods and conditions of life. Attention will be given to maternity and child welfare, public health education, and the value of voluntary public health work. The question of housing will be dealt with from several points of view. As a demonstration of many of the subjects, a large health exhibition is held in connection with the meeting.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

*** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

Claims Against Bankrupt Contractors.

SIR,—Your article in the Enquiry Bureau column about claims and bankrupt contractors is rather interesting to us. Would you give us some information on the following case ?

A contractor who had all his goods from us in the shape of hoists and winches got a mortgage from the bank which covered all plants. This builder eventually was foreclosed by the bank, and we are informed that there are no assets available for any creditors. This would appear to us to be a case of bad justice, and we are informed that the continuation of the building is being carried on by another contractor.

In your opinion, is there any redress for us ?

"R. W."

[In answer to "R. W." particulars as to the nature of the mortgage might have been given with advantage, since it is important to first determine whether it is one coming within the Bills of Sale Acts, 1878, 1882 and requires to be registered.

If the land on which the building work was being carried on is mortgaged to the bank, the mortgagor's right to enter upon and take possession of the premises does not require to be registered as a bill of sale; but where the mortgage confers on the mortgagee, as against the mortgagor a power to sell unfixed materials and plant independent of the power to enter upon and take possession of the premises, which can be exercised without the latter power being exercised, then the mortgage does require to be registered as a bill of sale. See Climpson *v.* Coles (1889) 23 Q.B.D. 465. So, too, an assignment of a building agreement, *i.e.*, an agreement in which the consideration is the grant of a lease so far as it assigns the plant and materials must be registered. See Church *v.* Page (1892) 67 L.T. 800.

An ordinary building agreement between a landowner and a builder is not within the Bills of Sale Acts, in so far as it relates to plant and materials merely by reason of a provision in the agreement, that such plant and materials when brought upon the land, are to be considered as annexed to the land, or are to become the property of the building owner. In this case, the building owner would in any event have a lien on the plant and materials; and they might pass to him by express agreement.

A mortgage, however, by a builder of his interest in a building agreement, and to secure money advanced to enable him to carry out the building agreement, differs very materially from a mere building agreement; and if it includes plant and materials it must be registered as a bill of sale.

Since the bank has foreclosed the assumption is that the mortgage was duly registered. The bank is, therefore, in the position of a "secured creditor," whereas the enquirer's position is that of an unsecured creditor and with no redress. He can only take a dividend if one is available, and since it is said that there are no assets, "R. W." must unfortunately suffer loss, as others have done in like circumstances, and when by seeking proper advice at the outset he could have been protected by customary means.

The fact that the work is being carried on by another contractor does not affect the question.]

Various.

SIR,—I should be glad to hear of (1) Makers of the little Yorkshire cooking stoves, with prices, &c.; (2) to receive quotations for well matured concrete blocks, 18 in. × 9 in. × 4½ in. and 4 in., both smooth-faced and rough, for external walling, from makers within practical road distance of Wokingham; (3) what is a fair price for concrete walling, ex-cuttings, walls, 4½ in. concrete blocks, 2 in. cavity, and 4½ in. breeze concrete inner wall, built in cement and sand—Reading area ?

"J. V. A."

Stains on Slates.

SIR,—I frequently notice that turrets or hipped roofs that are covered with green Westmorland slates and crowned with an iron or copper cross or finial, flashed with lead, get very badly marked with black stains, that stretch a long way down the roof. It does not seem to show on Welsh slates (except the green Welsh), and I do not remember seeing it when the finial was lead only. Can you or any of your readers suggest the cause, prevention, or cure ?

R. T. BECKETT.

Garage Doors.

SIR,—Can any of your readers suggest an economical, simple, and well-running form of garage door, suitable for a small garage about 8 ft. wide, the doors being about 7 ft. 6 in. wide ? There is thus no room for doors to slide sideways, and I do not like the appearance of a rolling shutter. Ordinary pair of doors can be made to look very nice, but they are apt to blow off their hinges and generally get in the way.

"BUILDING."

Insulating.

[REPLY TO "INSULATION."]

SIR,—Cork certainly has very excellent insulating qualities, but is expensive and not now frequently used. A more usual material is silicate of cotton made up in various forms, and this has been found to be very efficient.

There is, I believe, now on the market an insulating building brick of the ordinary brick dimensions, and largely composed of the above material. Such bricks lend themselves very conveniently to incorporation with new structural work, and perhaps the best use of all can be made of them by constructing the wall as ordinary cavity walls, the inner skin being in the insulating bricks with the outer in ordinary brickwork, thus gaining the additional advantage of the air cavity to check the transmission of heat. The ceiling can be covered with slabs of the same material. There are various firms that specialise in insulating material, and their help would be advisable. Names and addresses can be obtained from any good trade catalogue.

"L. X."

We have received a letter from a correspondent, in reply to "Insulation," dealing with another method of insulation, and this has been forwarded to "Insulation."

Wages on Public Works.

The Public Works Conciliation Board has fixed the award, dated June 23, for the London Area, namely: The City and County of London and the whole of the districts of all the local authorities, the whole or any part of whose district lies within the Metropolitan Police district.

The award fixes the rate of wages, to be effective for the three months, July, August, and September, as follows:—Blacksmith, 1s. 8d.; concrete leveller, 1s. 3½d.; duct or earthenware drain layer, 1s. 4½d.; fitter, 1s. 8d.; granite mason kerb, &c., 1s. 9d.; granite sett dresser, 1s. 8d.; jointer, 1s. 4½d.; kerb fixer, 1s. 8d.; pavior, 1s. 8d.; petrol locomotive, petrol roller, or petrol air compressor plant driver, 1s. 5½d.; pipe jointer (iron up to 6 in.), earthenware or concrete pipes and conduits, 1s. 4½d.; pipejointer (iron) above 6 in. diameter, 1s. 5½d.; platelayer, 1s. 4½d. to 1s. 5½d.; platelayer labourer, 1s. 3½d.; pneumatic pick operator, 1s. 4½d.; rammerman, 1s. 4½d.; scaffolder, 1s. 6½d.; screeder, 1s. 4½d.; steam roller driver, 1s. 7½d.; street mason and flag dresser, 1s. 8d.; tarpot man, 1s. 3½d.; timberman, 1s. 4½d.; wood block layer, 1s. 4½d. Men working in "boots," 1d. per hour extra; watchman, 7s. 6d. per shift minimum day or night.

The hours of labour and overtime rates remain as before.

LAW REPORT

Court of Appeal.

The Master of the Rolls and Lords Justices Warrington and Sargant.

Leeds Ancient Light Case.

Slack *v.* Leeds Industrial Co-operative Society, Ltd.

This action again came before the Court last week.

The plaintiff, Mr. C. H. Slack, a wholesale baker and confectioner and the owner and occupier of premises on the west side of Albion-square, Leeds, brought the action against the defendant society, the owners of 11, 13, and 15, Albion-street, Leeds, for an injunction to restrain the defendants from erecting on the site of those premises, which if carried to the height proposed, would cause, it was alleged, a serious and substantial interference with the curtain of the plaintiff's ancient windows. Mr. Justice Romer, who heard the action in the Chancery Division, upon the evidence held that the plaintiff was entitled to an injunction, which he granted; but he stated that he would have preferred to award damages in lieu of an injunction, but he thought that upon the authorities he had no jurisdiction to do so in the case of a threatened wrong. The case then went to the Court of Appeal, where the sole question argued was whether the Court had jurisdiction to award damages in lieu of an injunction in the case of a threatened wrong, and the Court on that occasion, by a majority of the Lords Justices, upheld the view of Mr. Justice Romer that it had no jurisdiction to award damages in lieu of an injunction. The case was then taken to the House of Lords, where by a majority of the Law Lords it was held that the Court could grant damages in lieu of an injunction in the case of a threatened wrong, and the action was remitted to the Chancery Division for the case to be tried on its merits; but it was decided to take the case straight to the Court of Appeal for the Court to decide the matter, having regard to the fact that Mr. Justice Romer had expressed the opinion that he would have granted damages in the place of the injunction if he had had jurisdiction to do so.

Having heard the arguments of counsel and the evidence, their lordships held, following the rule laid down in the case of Colls against the Home and Colonial Stores, Ltd., by the House of Lords, that damages should be awarded the plaintiff in lieu of an injunction, the Master of the Rolls, stating that it would be a very serious matter to prevent the defendants from making the best use of the site, having regard to the nature of the buildings in the proximity of Albion-square and the importance of the ordinary development of that part of an industrial town like Leeds.

The order for an injunction was accordingly discharged, and the case remitted for the purpose of damages being ascertained, either before an official referee or, if the parties agreed, before a special referee.

Nigerian Timber.

Those interested in the building trade should be interested in the timber exhibit in the Nigerian section of the Wembley Exhibition arranged by the British Nigerian Co., Ltd., for the Nigerian Government. It is, perhaps, a little-known fact that the resources of Nigeria are capable of supplying practically every want of the builder. Mahogany, equal to the best-known varieties, can be obtained of the same quality, but much lower price. Walnut, which is employed in the construction of most of the furniture in the exhibit, is also another Nigerian product. Cheaper substitutes of these woods can also be obtained. Another wood assured of a future is ekki (African red ironwood), probably the hardest and most durable timber known. The resources of West Africa are almost inexhaustible, and it seems probable that with the deforestation of the better-known timber-supplying countries, Nigeria will become the chief source of supply.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Vibration of Heavy Motor Traffic.

MR. GOSLING, Minister of Transport, informed Sir W. Davidson that he had no statistics as to the approximate number and value of buildings which had been damaged or collapsed as the result of vibration due to heavy motor traffic in London. The remedy for this vibration lay not in the placing of further limitations on the weight and speed of heavy motor-cars, but rather in the strengthening and improvements of road surfaces, a process which was being pushed forward as rapidly as circumstances permitted.

Direct Labour.

Mr. T. Johnston asked the Minister whether he was aware that houses built by the Building Workers' Guild at Irlam were £260 cheaper than the same size and quality of houses built by profit-making contractors; that houses built by the Office of Works at Pontypridd were £194 per house cheaper than the private contractor's prices; that the direct labour scheme at Norwich saved the city £25,000 on contractors' prices; that direct labour at Tonbridge saved £200 per house; that direct labour at Southgate saved £350 per house; and that direct labour at Bentley saved £200 per house; and if he would see that facilities and encouragement were given to local authorities to set up local works departments.

Mr. Wheatley said he was unable to check the figures given and should be glad to hear on what they were based. In some of the cases the final accounts of the housing schemes had not yet been received. He was quite prepared to encourage a local authority to undertake building by direct labour if satisfied that the authority could make efficient arrangements for the supervision of the work and that the method was likely to prove financially advantageous to the ratepayers.

Mr. D. G. Somerville: Is it not a fact that the figures now quoted do not include overhead or departmental charges at all, and that in many cases the accounts have not yet been settled?

Mr. Sunlight: Is the Minister aware of the failures of attempts to build houses in this way?

Mr. Wheatley: I had no previous knowledge of these figures; I have seen them now for the first time. My answer is based on my own experience in other places.

Price of Bricks.

Mr. Ayles asked the Minister of Health whether he was aware that a Bristol firm recently raised the price of bricks in Bristol by 4s. 6d. per thousand for common engineering and stock bricks, and 5s. per thousand for all other bricks; and whether, in view of the adverse influence this had on the cost of house building, he would take immediate steps to stop these increases by giving municipalities power to take over the brickyards within their area or in their vicinity, or by other means.

Mr. Wheatley said he had not received information concerning the particular case referred to. He was proposing in the Building Materials (Charges and Supply) Bill that the Government should be given extensive powers to deal with unreasonable prices.

The Subsidy.

Mr. Hobhouse asked the Minister whether, in view of the shortage of houses and the small rateable value of the smaller urban districts, he would consider so amending the financial provisions of the Housing Bill as to place those areas in the same position with respect to the subsidy as the purely agricultural districts.

Mr. Wheatley said the Government carefully considered the matter referred to, but it was not found possible to make provision for additional assistance for the areas in question. He had undertaken, however, that on the occasion of the first review of the amount of Exchequer subsidy which, under the new Bill would take place in 1927, the case of these areas should again be specially considered.

Local Authorities and the 1923 Act.

Mr. Mills asked the Minister if his attention had been called to the number of local authorities who were refusing to co-operate in any way with any of the provisions of the 1923 Act; and whether, in view of the anxiety among houseless citizens to build houses for themselves, he could outline any scheme by which central application might be made subject to proposed houses conforming to local by-laws.

Mr. Wheatley said he was advised that all local authorities in whose areas serious pressure for houses could be said to exist had already taken some action under the 1923 Act either directly or by assisting private enterprise. He trusted that under the new Housing Bill such action might be widely developed but he thought it undesirable and probably impracticable to deal centrally with individual applications from all parts of the country.

Smoke Abatement Bill.

Mr. Wheatley informed Mr. E. D. Simon that the Smoke Abatement Bill would be introduced in the House of Lords in the next few days.

Slum Clearances Schemes.

Mr. Wheatley informed Mr. Gilbert that three slum clearance schemes in the County of London were confirmed in 1923 and 1924, comprising 668 houses, an area of approximately 13 acres, and a population of 3,760. Several other schemes were under consideration.

Mr. Greenwood informed Mr. Naylor that the Act of 1923 provided for an Exchequer contribution on a half-and-half basis towards the cost of slum clearance schemes (including the rehousing of the occupants) undertaken by local authorities. Since 1919 eleven such schemes had been confirmed in the county of London, and others were under consideration.

Size of Subsidy Houses.

Mr. T. Thomson asked the Minister, with regard to his recent negotiations with the representatives of local authorities as to the terms of his new Housing Bill, what steps he took to resist their demand that the subsidy should be limited to the small type of houses specified in the Housing Act of 1923.

Mr. Wheatley said he was satisfied that if local authorities built sufficient of the larger size of houses specified in the Act of 1923, the housing conditions of the country would be much improved. There was nothing in the Act to prevent local authorities building a larger type of house, but it was felt that the country could not subsidise them.

Houses Needed.

Mr. Wheatley informed Mr. E. D. Simon that while it was not practicable to make a close estimate of the total number of houses required, he was satisfied that the Government were not over-estimating the need in aiming at the production of 2,500,000 houses for Great Britain during the next fifteen years.

Mr. D. G. Somerville: Does the right hon. gentleman still anticipate that 2,500,000 houses will be built in fifteen years? Mr. Wheatley: Yes; at least that number.

Guild Contracts.

Mr. Wheatley informed Mr. Baker that when the Housing Bill was passed, he would be prepared to consider the arguments for and against guild contracts on their merits in consultation with the local authorities and the Advisory Committees which he proposed to set up; but at present he could go no further than that.

Rural Needs.

Mr. Greenwood informed Mr. E. Brown that according to the reports made by rural district councils in 1919, 83,659 houses were required during the subsequent three years in rural districts to meet unsatisfied demands, and 66,751 to replace unsatisfactory houses. Since that date, 56,618 houses had been erected in rural districts with State assistance, and a further 11,907 were in course of construction. In addition, 22,425 houses were erected by private enterprise without State aid during the year ended March 31 last, and a further 11,288 were in course of construction at that date. It was estimated that roughly one-third of the parishes in rural district council areas would not be treated as agricultural parishes for the purpose of the increased subsidy under the proposals in the new Bill.

Office of Works Houses.

Mr. Jowett, First Commissioner of Works, informed Mr. Westwood that the numbers of houses built by direct labour by the Office of Works during the years in question were as follows:—

1919	56
1920	48
1921	1,169
1922	1,428
1923	1,893
	4,594

The following statement was submitted to the Public Accounts Committee in 1923, showing the average cost per house under building schemes carried out by the Office of Works by direct labour as compared with similar schemes carried out for local authorities under contract in the same area and during approximately the same period:—

Area.	(1) Schemes carried out by the Office of Works.		(2) Schemes carried out for adjacent Councils.	
	A 3.	B 3.	A 3.	B 3.
	£	£	£	£
London	877 ..	978 ..	912 ..	1,010
Provincial—				
Birmingham		776		926
Durham	734 ..	880 ..	896 ..	1,005
Hull	643 ..	749 ..	811 ..	926
Kent	669 ..	695 ..	879 ..	1,001
Wales	690 ..	832 ..	727 ..	866

Note: The figures in column 1 are exclusive of the cost of land, roads and sewers, and of a headquarters' charge of 2·75 per cent. to cover Office of Works expenditure on architects', quantity surveyors' and other services.

Those in column 2 are exclusive of the cost of land, roads and sewers, architects' and quantity surveyors' fees, and salaries of clerks of works. Type "A 3," non-parlour house with three bedrooms; Type "B 3," parlour house with three bedrooms.

Concrete Roads.

Captain Brass asked the Minister of Transport whether his attention had been called to the grave risks run by all motor traffic travelling on the new concrete roads in wet weather; and, whether, in view of this danger to the public, he would consider the question of cancelling contracts for such roads and substituting therefore contracts for roads with a less slippery surface.

Mr. Gosling said a slight degree of slipperiness in certain states of the weather was, he feared, part of the price we had to pay for the smooth, durable surface which modern traffic demanded. He was not aware that concrete roads were peculiar in this respect, and he saw no grounds for advocating the cancellation of contracts.

The Society of Architects.

The jury of assessors in the Society of Architects' Victory Scholarship Competition, for a Reception Pavilion in an Exhibition, have selected nine drawings in the preliminary competition by the following competitors:—R. H. Brentnall, Bristol; A. C. Todd, Liverpool; A. C. Townsend, Liverpool; J. Addison, London; A. E. Cameron, London; Miss A. M. Hargroves, London; C. H. Short, London; S. Thomson, London; G. A. Butling, Liverpool.

The Final Competition will be held on August 9, the title of the programme for which will be disclosed to the competitors seven days beforehand. The whole of the Esquisses are on exhibition at 28, Bedford-square, from 10 a.m. to 5 p.m. daily, until Friday, July 11, inclusive.

THE BUILDING TRADE

THE HOUSING BILL

The most satisfactory feature in the second reading of the Housing Bill was that the Bill, contrary to the wishes of the Government, was committed to a Committee of the whole House. A Bill such as this, involving huge commitments extending over such a long period, should never be considered merely by a Committee "upstairs," and there is a further advantage in the Bill being considered by Committee of the whole House, for such a course gives it a better chance of being considered on its merits apart from party politics, although the present conditions of parties in the House, we fear, inevitably leads to a certain amount of "window dressing," each Party having an eye upon a possible general election.

The Minister of Health certainly did not succeed in the second reading debate in explaining away the inherent difficulties in his scheme, or add to any of the arguments or statements he made when bringing forward the "money" resolution. The Government have evidently felt that the Bill should justify itself in a period of three years, or they would not have taken powers to terminate all contributions at the end of that period in clause 4. Yet those arrangements justify no such conclusion. The Minister laid great stress on the so-called agreement with the building trade, which he asserted would contribute to the certain success of his measure; but what does that agreement on his own showing amount to? That building labourers are to be taken in, and the skilled trades are to be augmented by the admission of apprentices, raising the age from the limit of sixteen years to twenty. The success of the scheme, in the admitted shortage of skilled labour, therefore, depends on these young men or youths whose term of apprenticeship was not to exceed four years. The rule that the "pace of the fleet is that of the slowest ship," in other words, according to the Minister, that the output of the bricklayer is determined by the slowest bricklayer in his group, has not been relaxed, and thus the campaign is started with an army deficient in numbers and ill-equipped, and the only recruits which are to be available must be in training for some four years, whilst the Minister, by clause 4, has reserved power to scrap the whole scheme in three years, and thus the much-vaunted guarantee to the building trade is of little value.

In the country there is a large body of persons accustomed to building and dealing with the very class of dwelling-house now required—the private builders—who in the past have supplied those dwellings and often owned them, and who would have continued to do so without charges on the public had it not been for economic causes beyond their control. In 1910 their enterprise was first checked by an impossible and ill-devised system of taxation, and when the war came their property was placed under restrictions imposed upon no other class.

It has been said that private enterprise in building is dead, but what are the facts? The very day after the report of Mr. Wheatley's speech was published there was published a statement made by Mr. Wheatley in reply to Sir Kingsley Wood showing the position of housing schemes under the Act of 1923. That statement shows:—

Houses authorised by the Minister of Health up to June 11, 1924—

To be erected by local authorities...	49,937
,, ,, private enterprise	92,380

Houses included in definite arrangements on or before June 1, 1924—

Schemes of local authorities ...	
Number of houses included in contracts or in approved direct labour schemes	30,597
Private enterprise—	
Number of houses included in undertakings given by the local authorities under section 2 (3)	57,225
Number of houses approved by the Minister under section 3 and included in contracts ...	4,742

Under a third table, building progress at June 1, 1924, we find—

	Schemes of Local Authorities.	Private Enterprise.
Foundations completed ...	7,409	15,470
Roofed in	5,343	11,280
Total under construction ...	12,752	26,750
Completed	5,471	8,532

The dead seem extraordinarily quick!

We know that the Minister will say that the houses erected by private enterprise are only for sale, and that he is trying to provide houses which must be let, so now we will see the kind of encouragement he is offering private enterprise to erect houses for letting.

To the local authority he gives a subsidy of £9, leaving private enterprise with £6. That is the encouragement given to expiring private enterprise, which according to Mr. Wheatley has come to him for protection and advice. The essential of any Housing Bill should be that private enterprise should be given equal opportunities and not that the municipalities and local authorities should be given a preference.

It must be remembered that Mr. Wheatley, in his speech on the second reading, deplored the fact that the country had accepted the principle that the business of the country should be carried on by private enterprise, and said he thought that form of enterprise should be scrapped, but said he had strived to act as an honest man among the competing people. (We quote from the Parliamentary report in the *Times*.) We, of course, impute no other motive to the Minister of Health, but we do claim that private enterprise in his scheme should be put on an equality with the local authorities. In the course even of the next fifteen years this difference of £3 in the subsidy will make all the difference when the houses built under the scheme come to be let, especially when rents come to be decontrolled, and those rents will fall more quickly the greater the competition, and competition must come from private sources.

Therefore we emphatically contend that in this Bill private enterprise should be placed on strict equality with the local authorities, and the private builder should be given the same opportunities of offering his houses at the same rent as the State-aided local authorities.

It is urgent that party politics should, as far as possible, be laid aside in considering this national question, and it is very unfortunate that owing to the money clauses there is great difficulty in effecting any amendments in this Bill. The wisdom of the House of Commons should be concentrated upon it and all parties should be free to suggest amendments of a practical nature; but there is great ground for fear that it may be found that the House may be forced into the position that the Bill must either be taken as it is or be rejected altogether. That would make an undesirable party measure of this Bill, and it would be used for party purposes at any election, and this would be most undesirable.

We hope the Bill will be found capable of being amended and otherwise being considered on its merits, but we must point out once again its effect.

In the future the whole working class will be housed in municipal dwellings, in so far as they desire to rent and not to buy their houses, and the private landlord will be wiped out. Private enterprise in letting houses will be an impossibility in face of competition with the subsidised local authorities, who, moreover, may well find that the rates can be drawn upon to meet current charges if necessary. The local authorities will be placed outside competition, and the restriction on rents imposed by the Bill, which is impracticable, being made with reference to a fixed date, August 3, 1914, will prove illusory in practice, and thus eventually they may be able to fix what rents they choose. The local authorities are not always the best or most sympathetic landlords, and the country should take careful thought before they nationalise in this sense the working-class dwellings.

THE BUILDING TRADE DISPUTE

Mr. T. Shaw, M.P., Minister of Labour, in his efforts at mediation in the dispute, met representatives of the Executive of the Operatives' Federation at the House of Commons last Monday. After a further interview with the operatives and the Disputes Committee of the employers' federation, the following statement was made by the employers:—

"Mr. Coppock attributes to members of the National Federation of Building Trades Employers unconstitutional acts by paying rates of wages other than those negotiated by the Wages and Conditions Council. In doing so he fails to distinguish between payments by our members and payments by many other employers of building trades labour who are not under any agreed obligation to observe the negotiated rates. The prevailing shortage of certain classes of labour has caused such people to offer special inducements in order to attract a supply, but in the overwhelming majority of cases federation members have been entirely loyal to the agreements entered into. However the case may be, it is quite clear that the acts Mr. Coppock complains of could not take place except with the connivance and co-operation of his own members.

"Mr Coppock also states that the last section of the lock-out notice is a breach of the Wages and Conditions Council's agreement inasmuch as the purport is to enter into an agreement with those who are not controlled by the decisions of the Council. The contrary is the fact. So far from the federated employers proposing to enter into arrangements with those uncontrolled by the conditions of the Council, the federated employers are merely continuing the Council conditions in respect of all those they propose to retain in their employ when the lock-out takes place. Mr. Coppock's federation, however, is guilty of a formal breach of the Council's constitution by directing its regional officers to approach the employers in each region with the object of inducing them to make separate regional or local agreements—a thing they are expressly forbidden to do by the constitution of the Council.

"Also Mr. Coppock says that the employers are using the alleged breach of agreement at Liverpool as a case for a national lock-out. The origin of the Liverpool situation was itself the breach of an agreement on the part of the operatives concerned and it is now a breach of an award of the National Wages and Conditions Council. But the employers only regard the Liverpool position as the culminating case in a prolonged series of breaches of agreements and of attempts to undo the effect of the award of Sir Hugh Fraser which purported to settle the dispute of twelve months ago. . ."

The Minister of Labour announced on Wednesday that he would cause a public Court of Inquiry to be held into the cause of the dispute. The lock-out notices will take effect on Saturday unless agreement is reached beforehand. Conferences of the representatives of the employers and operatives were being held when we went to press.

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A., F.R.S.I. (Barrister-at-Law).

XI.—THE CONTRACT (2).

Entire or Lump Sum Contracts.

A building contract, by which it is agreed that a fixed sum of money shall be paid by the employer to the contractor by way of consideration for stated labour and materials done and provided, the contractor doing the whole of the work to completion, is called a "lump-sum" or "entire" contract. No payment is recoverable by the contractor for work or material, thereunder, until completion, unless there is a clause for interim payments, or unless the employer or his agent has obstructed the performance of the contract. Incomplete performance disentitles, by default, the contractor to any payment not already made, and leaves him liable, further, for non-performance. A contract is still "entire" if payment is to be made at completion on measurements and a schedule of prices, by valuation or by arbitration. A contract for labour only, excluding materials, is not usually construed as an "entire" contract. In some cases where payments are made apportionable and to be due as the benefit accrues the entirety of the contract may be thereby destroyed; that is by the divisability of the contract.

In Sumpter *v.* Hedges (1898), 1 Q.B. 673, the plaintiff had abandoned his contract, and A. L. Smith, M.R., said: "The law is that where there is a contract to do work for a lump sum, until the work is completed the price of it cannot be recovered."

When non-completion is not due to abandonment by the contractor, but to obstruction by the employer, the former may recover on a quantum meruit. See Dakin & Co., Ltd., *v.* Lee (1916), 1 K.B. 566.

There may, of course, be further conditions, precedent to payment included in the contract, such as the approval of the architect or employer, or both.

In Appleby *v.* Myers (1867), L.R. 2 C.P. 651, there was a contract by plaintiff to erect certain machinery, at specified prices for particular portions, each for each, and to maintain in repair for two years, the cost to be paid on completion of the whole. Whilst some portions were complete, and others incomplete, accidental fire destroyed the whole—machinery, materials, and the pre-existent premises. Both parties were held excused of further performance, and the plaintiff could not claim for those portions he had completed prior to the fire.

Contracts of Measurement, Schedule of Prices, etc.

A measurement contract is one to execute to completion works, at a price to be ascertained by measurements taken and referred to in an agreed schedule of prices. It is equally an "entire" contract, as one in which a lump sum cost is agreed. See Appleby *v.* Myers (1867), L.R. 2 C.P. 651.

The contractor is under an obligation to complete the whole at the rates in the schedule, in so far as they can be applied thereto; and where the work does not come under the descriptions included in the schedule, then at reasonable prices.

In Walton-on-the-Naze U.D.C. and Moran (1905) Hudson on Building Contracts (Vol. 2) 376, there was a contract which included a "cast iron outlet pipe to low water mark." The plan showed the pipe extending to low water mark, but the section showed a further extension into the sea of 279 ft. There was a priced bill of quantities, and the length of pipe taken was that shown in the section, but no special rate was shown for under-water works. The work was carried out according to the section, and the last, about 279 ft. were beyond low water mark. The contractor claimed, and was awarded, extra payment, based on an increased rate, for the portion beyond low water mark. It was held that the price in the schedule, for work to low water mark, could not be applied to the extension beyond. In a measurement contract there is no implied agreement that it is divisible in the sense of payment, for work done at any juncture, being then due.

The fact that a schedule of prices omits any special item shown on the drawings does not free the employer from liability to pay for such work when done. However, the contractor must execute such an item as it is shown and described, as being essential to the satisfactory completion of the job; and he must trust to exacting fair and reasonable payment. If no price is fixed in an entire contract, as, for example, a contract by deed, the contractor is bound to complete and the employer is bound to pay quantum meruit. See Whittle *v.* Frankland (1862), 2 B. & S. 49.

An agreement to do repairs and make perfect a specified work has been held to constitute an entire contract, remuneration becoming due at completion of the service rendered.

When variations have been ordered and carried out, they cannot be put forward to support a claim for setting aside the lump sum and pricing out the whole work by measurements. They must be treated separately as extras, and the payment involved added to the lump sum, omissions being deducted therefrom if provided for by the terms of contract. See London Steam Stone Saw Mills *v.* Lorden (1900), Hudson on Building Contracts (Vol. 2) 301. That is to say, the bill of quantities defines the extent of work to be done for the lump sum, and any work beyond this limit, which the contractor is requested to do, and performs, must be paid for in addition to the said lump sum. See Patman & Fotheringham, Ltd. *v.* Pilditch (1904), Hudson on Building Contracts (Vol. 2) 368.

Sub-Contracts and Sub-Contractors.

In order to secure an invitation to any special sub-contractor in whom the employer has confidence, or to give the employer power to determine the contract in the event of the general contractor going bankrupt, it is usual to insert a clause stipulating that there shall be no subletting or assignment of any part of the works, without the express consent of the employer.

However, the sanction of custom permits much subletting, especially for such works as tiling, slating, plastering, steelwork, heating, lighting, etc. But it is in the discretion of the employer or his agent to object to any sub-contractor under the above stipulation; and if any such is introduced without the consent of the employer, the general contractor is guilty of an invalid act. See Ryan *v.* Willoughby (1900), 31 Can. S.C.R. 33. Also, if the consent of the employer is not a condition and the general contractor sublets at his own discretion, he is liable to the employer for defects and default. See British Waggon Co. *v.* Lea (1880), 5 Q.B.D. 149.

A contract between the general and the sub-contractor binds these parties exactly as the general contract binds the employer and general contractor; and it is usual to embody, or refer to, any clauses of the general contract, which affect the sublet work and its completion when drawing up the subcontract.

Subletting may be governed by a provisional or prime cost item, and the desired sub-contractor named or left to the choice of the employer at the time the work or article is

COMPARISON OF PRICES OF BUILDING MATERIALS BETWEEN AUGUST 4, 1914, AND JULY 1, 1924

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	June 1, 1924. £ s. d.	July 1, 1924. £ s. d.	Rise or Fall during Month. (Per cent.)
Bricks—					
Best Stocks	1 16 6	3 3 6	4 3 6	4 3 6	—
Flettons	1 14 0	2 7 8	2 13 3	2 13 3	—
Glazed	13 0 0	17 17 6	22 0 0	22 0 0	—
Thames Ballast	5 9	17 0	10 6	10 6	—
Thames Sand	7 3	17 0	15 6	15 6	—
Shingle (¾ in.)	—	15 0	14 0	14 0	—
Portland Cement	1 17 0	3 8 0	2 18 0	2 18 0	—
Ground Blue Lias Lime	1 0 0	2 2 6	2 4 6	2 4 6	—
Grey Stone Lime	1 8 0	2 7 0	2 11 9	2 11 9	—
Bath Stone	1 7½	1 7	2 9½	2 9½	—
Portland Stone	2 4½	2 10½	4 4	4 4	—
Good Sound Building Timber—					
4 in. × 11 in.	16 10 0	53 0 0	34 0 0	34 0 0	—
3 in. × 7 in.	13 0 0	46 0 0	25 10 0	25 10 0	—
3 in. × 11 in.	15 0 0	50 0 0	30 0 0	30 0 0	—
2 in. × 11 in.	—	51 0 0	30 0 0	30 0 0	—
2 in. × 7 in.	—	46 0 0	24 0 0	24 0 0	—
3 in. × 4 in.	—	—	24 10 0	24 10 0	—
Slates—					
24 in. × 12 in.	—	—	37 12 6	37 12 6	—
22 in. × 12 in.	—	—	34 0 0	34 0 0	—
20 in. × 10 in.	—	—	25 12 6	25 12 6	—
16 in. × 10 in.	—	—	17 12 6	17 12 6	—
16 in. × 8in.	—	—	13 15 0	13 15 0	—
R.S. Joists	9 10 0	—	13 10 0	13 10 0	—
Iron—					
Common Bars	9 0 0	16 10 0	13 10 0	13 10 0	—
Mild Steel Bars	9 5 0	21 0 0	12 10 0	12 10 0	—
Steel Bars	9 5 0	19 10 0	13 0 0	13 0 0	—
Cut Nails	11 10 0	29 0 0	20 10 0	20 10 0	—
Sheet Lead	22 15 0	40 0 0	41 0 0	42 10 0	+3.66
Glass—					
15 oz. Sheet	2	7	3½	3⅜	—3.57
21 oz. „	3	8	5¼	5	—4.76
26 oz. „	3¾	9	6	6	—
Raw Linseed Oil	2 4	8 4	3 9	3 9	—
Turpentine	2 6	11 0	6 2	6 0	—2.70
Ground English White Lead	30 5 0	60 10 0	55 0 0	57 0 0	+3.64
White Lead Paint	—	83 10 0	78 5 0	80 5 0	+2.56
Red Lead	28 10 0	47 0 0	52 0 0	52 0 0	—

required on the job. The latter course permits the employer the advantage of competitive prices and current rates.

Contracts with Public Bodies.

Under various Statutes contracts with Government departments, public bodies, and all corporations aggregate must, in general, be made under seal. See Hunt *v.* Wimbledon Local Board (1878), 3 C.P.D. 208, and Young *v.* The Mayor of Leamington (1883), 8 App. Cas. 517.

Breach—Petition of Rights.

Government contracts are those where payment is to be made from funds voted by Parliament. Some are made with the Crown and others with other public bodies—and in case of breach by the contractor it is the Attorney-General who enforces the terms of these contracts; whilst any grievance of the contractor, he being a "subject," can only vent in a Petition of Rights, which may be written or printed and addressed in a prescribed form to the Sovereign—the form is in the schedule to the Petition of Rights Act, 1860. This is to be left at the Home Office "that right may be done," and the granting of the fiat is an act of grace.

Variations under a Sealed Contract.

If any contract is by statute under seal, any variations of such contract must also be made under seal. See Ranger *v.* G.W. Rly. (1854), 5 H.L.C. 72.

Remuneration under a Sealed Contract.

It is generally accepted that contracts entered into with municipal corporations must express the intention of the body corporate; and this can only be satisfactorily signified by authorised persons affixing the seal of the corporation. The sole exception is that officials of an urban council may enter into contracts for the U.D.C. up to £50 value of work, without the seal of the corporation. This check is in the interests of the ratepayers as quasi-shareholders. Conversely, the other party to a contract with a corporation, which has omitted to affix its seal under the statute, cannot be sued for any breach of the contract. See Wandsworth Board *v.* Heaver (1885), 2 T.L.R. 130.

In Lawford *v.* The Billericay R.D.C. (1903), 1 K.B. 772, it was held that the absence of the seal of the corporation was no answer to a claim for payment for works done or goods supplied under such unsealed contract, when the works done, or goods supplied, were necessary to carry into effect the statutory powers vested in the corporation or the purposes for which it existed as a public body. But, in Baker *v.* Holme Cultram U.D.C. (1915), 85 L.J. K.B. 799, it was held that Parliamentary agents could not recover fees under an unsealed contract, nor on a quantum meruit.

It is also interesting to note that under the restriction or permission to U.D. Councils to make contracts up to £50 value without seal, that it would appear a contract made for a sum not exceeding £50 per day is enforceable although the first demand may be for a large accumulated amount; the argument being that the contract value is the daily rate of remuneration only. See Eaton *v.* Basker (1881), 7 Q.B.D. 529.

Again, in a recent case, Nixon *v.* Erith U.D.C. (1924), 40 T.L.R. 1, 1 K.B. 87, it was held that the plaintiff, a quantity surveyor, could not recover fees for quantities he had prepared and professional services rendered because his instructions were taken from the architect, and he had no contract under seal of the corporation. The decision in the case referred to above, of Lawford *v.* Billericay R.D.C., was pleaded as a precedent, but it was stated that the principle in that case would only extend to contracts made in the fulfilment of a duty imposed by Statute on any corporation, other than an urban authority.

But it is not prudent for anyone to execute any consideration for a corporation without first obtaining the seal.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
E. Glam. (Mon. Vall)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0¾
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2¾
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0¾
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾

(For rates of wages in the Building Trade in Scotland, see page 30.)

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND.

Aberdeen.—HOUSES.—The Corporation Housing Committee, after consideration of a report by Dr. Kelly, City Architect, and Mr. J. T. Sorley, Town Chamberlain, decided to ask the Scottish Board of Health to include 20 additional houses in the sixth housing development of the Council. The Corporation Plans Committee has approved of plans of six houses at a cost of £8,300, and of alterations to eleven existing buildings, at a total cost of £2,645.

Arbroath.—BUNGALOW.—The Dean of Guild Court has passed plans for a bungalow in Salisbury-place, and two semi-detached cottages in Green-street.

Govan.—HOSPITAL.—Messrs. James Keppie & Henderson, Glasgow, are preparing plans of a new hospital for the West of Govan and District. This project is being developed under the Elder Bequest Fund. A site has been secured on Moss-road, at the junction of Berryknowes-road and Llanglands-road.

Edinburgh.—OFFICES.—The Midlothian E.C. intend to borrow £4,000 for the purchase and alteration of 9, Drumsheugh Gardens, for administrative Offices.—VARIOUS.—The Dean of Guild Court has passed the following plans: John Brown & Son, two villas at Brunstane-road; Thomas S. Henderson, bungalow, at Hillview-terrace, Blackhall; Miss Lang, bungalow at Cairnmuir-road, Corstorphine; Alexander Murdoch, two semi detached houses at Dovecot-road, Corstorphine; D. C. White, conversion of self-contained house at 10, Buckingham-terrace, into three separate houses.—Representatives of the Lord Provost's Committee and the Housing Committee of the T.C. have paid a visit to Calton Jail with a view to ascertaining the possibility of using the building for housing. It was agreed to remit the matter to Mr. Horsburgh Campbell, the Housing Director, to prepare a report.

Coupar Angus.—SCHOOL.—The T.C. has passed plans which were submitted by the E.C. for additions to Coupar Angus School. The new buildings will be erected on the vacant ground to the west of the present school.

Helensburgh.—REBUILDING.—At a meeting of the Dumbarton U.F. Presbytery held recently, plans were approved for the rebuilding of Helensburgh West Church. The cost is estimated at between £14,000 and £15,000.

Menstrie.—SCHOOL.—The Clackmannan C.E.C. has the architect's plans and an estimate at £2,400 for additions to Menstrie School under consideration.

Tillicoultry.—HALL.—The T.C. has approved of plans for a new hall in connection with the E.U. Church.

Renfrew.—HOUSES.—The T.C. will invite tenders for the erection of houses in connection with the slum clearance scheme.

Dumbarton.—HOUSES.—The Corporation has decided to proceed with the improvement scheme at Sunnybank, the purchase of which property has now been completed. It is proposed to erect new houses and shops.

Greenock.—HOUSES.—The Corporation Housing Committee has accepted tenders for the erection of 180 houses in the neighbourhood of Sinclair-street, in the east end of the town. The amount of the tenders accepted is £75,000.

Kincardine.—HOUSES.—At a meeting of the Standing Joint Committee for Fife, held recently in Cupar, a report was submitted on various sites throughout the county for the erection of police houses, and it was agreed to proceed with the erection of houses at Thornton, Chapel, Leslie, Windygates, Saline, and Kincardine.

Blairgowrie.—IMPROVEMENTS.—The T.C. has under consideration the question of improvements at the Public Hall.

Gogarburn. — EXTENSION. — The Edinburgh District Board of Control is recommended to extend the present institution at Gogarburn so that additional accommodation may be provided for at least 500 mental defectives.

Alexandria.—HOSPITAL.—It is proposed to provide a cottage hospital for the Vale of Leven. Broomley House, on the Tullichewan Castle grounds has been purchased out of a portion of a bequest of £15,000 under the will of the late Henry Brock, of Darleith, Cardross.

Alloa.—SCHOOL.—The Clackmannan C.E.C. propose to renovate Sunnyside, St. John's, and St. Mungo's schools, and clean and repaint the staffrooms in the Grange School, Alloa, during the summer holidays.

GLASGOW SCHOOL OF ARCHITECTURE

THE following awards (Session 1923–24) have been made by the Glasgow School of Architecture. The External Assessor was Mr. Paul Waterhouse.

John Keppie Scholarship (£100), G. F. Shanks. Minor Travelling Scholarships, F. Wylie, R. W. Elder, V. Deas, J. Miller. Institute of Architects Prizes.—1 (£3 3s.), V. Deas; 2 (£2 2s.), (drawing), P. McNeil; 3 (£2 2s.) (measured drawings), T. S. Cordiner. J. B. Wilson Book Prize, A. Cordiner. Whitelaw Silver Medallion, J. Miller. Whitelaw Bronze Medallion, J. T. King. School Medallions.—Gilt, L. G. Farquhar, J. Miller; Silver, F. Wylie, G. Bartholomew, R. Ross, A. Purves; Bronze, T. Cordiner, W. A. Macdonald, Ian Macdonald, A. Cordiner, G. Delachy, S. Knowles, Miss McEwan; Hon. Mention, W. P. Robbie, J. B. Russell, F. Murison, Miss Baillie.

Scottish Buildings.

Three additions have been made to the list of Scottish buildings under the guardianship of His Majesty's Commissioners of Works, who, through their Ancient Monuments Department, are taking steps to place them in the best possible state of preservation. These buildings are Lincluden Convent and College, Dumfriesshire, the property of the Duchess of Norfolk, and the two East Lothian castles of Tantallon, which belong to Sir Hew Hamilton Dalrymple, Bart., and Dirleton, owned by Lieutenant-Colonel J. P. Nisbet Hamilton Grant, D.S., of Biel. A f weeks ago the Department opened the Monast of Inchcolm to the public, and it is understo it is their intention to pursue the same pol with every historic building which comes un their care.

Cottage in 1776.

In view of the recent ter-jubilee of Rob Tannahill, it is of interest to note that his fath in 1776, built a one-story thatched cottage at following cost:—

	£ s.
Wood	13 13
Windows	5 4
Wright work	3 16
Mason work	16 9
Plastering	2 10
Roof and Safe Lintels	3 0
Thatch, Twine, and Wages	2 14
Steaching	6 12
Nails	1 3
Sand	1 4
Bricks, Carriage, and Tolls	1 2
Smith work	0 18
Carter's wages and tolls	0 5
Rigging	0 6
Drink	1 14
	£60 16

Glasgow-Edinburgh Road.

The Ministry of Transport has intima approval of the recent decision of Glasgow C poration to accept the offer of Messrs. H Symington & Sons, Ltd., for the constructio the first section of the new Glasgow-Edinbu road, that between Glasgow and Baillieston. is expected that work will be started within next fortnight. The amount of the offe £179,573. Of the men to be employed on work a minimum of 90 per cent. will be dr from the Glasgow Employment Exchanges.

Paisley War Memorial.

The unveiling ceremony in connection w the Paisley War Memorial has now been fi for July 27. The memorial is the work of Robert Lorimer, R.A., Edinburgh, and G.A. Meredith Williams, Edinburgh, the ar tect and sculptor respectively.

Perth War Memorial.

Lord Forteviot of Dupplin has given £10, for the restoration of the ancient Church St. John's, Perth, as a city and county memorial. St. John's Church, which is m tioned as early as the twelfth century, has b several times renovated.

BUILDING TRADE WAGES IN SCOTLAND

THE following are the present rates of wages in the building trade in the principal towns Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for er that may occur:—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-Masons' layers' t Labourers.
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½
Airdrie	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Alexandria	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2¾
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½
Blairgowrie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Dumbarton	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½
Dumfries	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2¾
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2¾
Falkirk	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½
Hamilton	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Hawick	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2¾
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Kirkcaldy	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2¾
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2¾
Leith	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Motherwell	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Stirling	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2¾

* The information given in this table is copyright. The rates of wages in the various towns in England Wales are given on page 29.

CONTRACTS, COMPETITIONS, &c.

me contracts still open, but not included in this List, see previous issues. Those with an asterisk ertised in this number. Certain conditions beyond those given in the following information osed in some cases, such as that advertisers do not bind themselves to accept the lowest or any that a fair wages clause shall be observed; that no allowance will be made for tenders: and osits are returned on receipt of a bona-fide tender unless stated to the contrary.

ate given at the commencement of each paragraph is the latest date when the tender, or the names illing to submit tenders, may be sent in; the name and address at the end is the person from whom where quantities, forms of tender, &c., may be obtained.

ILDING AND PAINTING.

4.—**Harrow Weald.**—HOUSE.—For erection hed house, Kenton-lane. Mr. S. Darrington, 61, road, Kingston-on-Thames.

.—**Barry (Glam).**—HOUSES.—For erecting, for Garden Suburb, Ltd., a further 108 houses, s and sewers. Mr. T. Alwyn Lloyd, architect elsh Housing and Town-Planning Trust, Ltd., ral-road, Cardiff. Deposit £3 3s.

.—**Frome.**—ADDITIONS.—For construction of nd scullery at the Infirmary of the B.G. Mr. nt, Clerk. Public Offices, Frome.

5.—**Hanwell, W.7.**—WOOD FLOORING.— and laying a new deal floor for the dining e Central London District School, Greenford-Hanwell, W.7, for the Managers. Mr. George l, Clerk to the Managers, at the above school.

.—**Lancashire.**—PAINTING.—For painting of ges and fencing on approaches thereto, for shire C.C. Mr. W. H. Schofield, County reston.

.—**Macclesfield.**—REPAIRS.—For repairs to 's Church premises, for the Parochial Church Messrs. Whittaker & Bradburn, architects, ld.

—**Par Station.**—HOUSE.—For the erection of e at Par Station, Cornwall. Mr. Alfred J. architect, Truro.

.—**Preston.**—PAINTING.—For decorating in- Avingham Institute. Mr. T. R. Jolly, Prin- ston.

.—**Shanklin.**—HOUSE, &c.—For erection of and house for the Shanklin Gas Co. Taylor, Engineer, Company's Offices, Shanklin.

—**Slaithwaite, &c.**—RENOVATIONS, &c.—For ns and repairs at schools at Slaithwaite, e, Milnsbridge and Holmforth, for the West .C. Mr. W. Healey, Divisional Clerk, 4, street, Huddersfield.

—**Truro.**—BUNGALOW.—For the erection of at Daniell-road, Truro. Mr. A. J. Cornelius, Truro.

—**Worthing.**—PAINTING.—For painting and ing work at the Cookery and Manual Instruc- e, Elm-grove School and St. George's School, T.C. School Architect, Municipal Offices'

.—**Aberdare.**—ALTERATIONS.—For altering ng of a balcony at the Cinema, Cardiff-street, berdare Cinema (1922), Ltd. Messrs. Thomas & Sons, architects, Clifton-street, Aberdare.

—**Accrington.**—PAINTING.—For decoration of hools during summer holidays, for the T.C. Newton, Borough Engineer, Accrington.

.—**Altrincham.**—PAINTING.—For painting ps and name plates, for the U.D.C. Surveyor, ll, Altrincham.

.—**Baildon.**—PAINTING.—For painting, &c., on Council Schools—Sandal, Woodbottom, Park. Mr. E. H. Steel, Divisional Clerk, nk Chambers, Shipley.

.—**Batley.**—WALL.—For railing, gates and walling, Wilton Park, for the T.C. Borough Brunswick-street, Batley.

.—**Beddington Corner.**—HOUSES.—For the nd completion of 44 brick-built houses on rchard site, for Beddington and Wallington Mr. S. F. R. Carter, A.M.Inst.C.E., Engineer yor of the Council, Council Offices, Walling- posit £2 2s.

.—**Blackpool.**—CONVALESCENT HOME.—For on of convalescent home for the Lancashire ire Miners' Welfare Committee. Sir T. R. Ellis, Secretary, 18, King-street, Wigan. 1 1s.

—**Bridgend.**—ALTERATIONS.—For alterations ions to Masonic Buildings, for the Ogmore Freemasons. Mr. O. D. Davies, architect, s-terrace, Nantyffyllon. Deposit £2 2s.

.—**Co. Durham.**—HOUSES.—Erection of 50 n Shield Row Housing Estate, for Stanley istrict Council. Council Surveyor, Mr. A. e, Council Offices, Stanley, co. Durham. 2 2s.

—**Crowmarsh.**—HOUSES.—For the erection of at South Stoke, for the R.D.C. Messrs. J. D. Sons, architects, Abingdon.

.—**Cwm.**—PAINTING.—For the painting of e of the Cwm and Tallistown Institute. Mr. , secretary, Cwm and Tallistown Institute, n.

.—**Dublin.**—ALTERATIONS.—For structural s at the Central Fire Station, Tara-street, for City Treasurer, Exchange Buildings, Lord treet, Dublin. Deposit £1.

.—**Enniskillen.**—HOUSES.—For the erection king-class houses, for the U.D.C. Mr. James Surveyor, Town Hall, Enniskillen.

.—**France.**—CEMETERIES.—Construction of ately 33 cemeteries in France, for the Imperial ves Commission. Contract, 1924 "U." Works Department, Imperial War Graves on, 82, Baker-street, London, W.1. Deposit

.—**Grange, Banff.**—HALL.—Erection of Hall. Messrs. D. & J. R. M'Millan, archi- , Crown-street, Aberdeen.

.—**Hampton.**—HOUSES.—For the erection of on the Priory-road site, for the U.D.C. Mr. mbers, Surveyor, Public Offices, Hampton, Deposit £2 2s.

JULY 7.—**Huddersfield.**—HOUSE.—For erection of house in Thornhill-road, Marsh. Mr. J. Ainley, architect, 3, Chapel Hill, Huddersfield.

JULY 7.—**Hull.**—PAINTING.—For painting properties under the housing scheme, for the T.C. City Architect, Guildhall, Hull.

JULY 7.—**Laleham, near Staines.**—COTTAGES.—Erection of two five-roomed cottages of similar design with the construction of the necessary drains, &c., both in the parish of Laleham, near Staines; also for the construction near one of the cottages of the superstructure only of a house (approximately 28 ft. by 14 ft. by 13 ft. high to roof plate) for containing venturi meter recorders, for the Metropolitan Water Board. Office of the Board, Chief Engineer's Department (Room 201), New River Head, Rosebery-avenue, Clerkenwell, E.C.1. Deposit £5 to the Accountant.

JULY 7.—**Littleton.**—COTTAGES, &c.—For the erection of two detached five-roomed cottages and superstructure of venturi meter house, at Littleton Reservoir Works, for the Metropolitan Water Board. Chief Engineer's Department, Rosebery-avenue, Clerkenwell, E.C.1. Deposit £5.

JULY 7.—**Penistone.**—ALTERATIONS.—Adaptation of rooms and buildings at Grammar School. Education Offices, County Hall, Wakefield.

JULY 7.—**Plymouth.**—REPAIRS.—For repairs to premises at 2 & 3, Eton-terrace, 2, High-street, Stonehouse, and 30, George-street, Stonehouse, for the T.C. Medical Officer of Health's (Housing) Department, Town Hall, Stonehouse, Plymouth.

JULY 7. — **Portsmouth.** — MOSAIC FLOORING.—Works to be done and materials to be supplied in relaying the mosaic flooring to the main corridors of the Town Hall, for the Portsmouth Borough Council. Borough Engineer's Office, Town Hall, Portsmouth.

JULY 7.—**Sacriston.**—PAINTING.—For painting, &c., at Primitive Methodist Church. Mr. R. R. Cuthbert, 5, Heugh-Hedge, Sacriston.

JULY 7.—**Stanley.**—HOUSES.—For the erection of 50 houses, for the U.D.C. Mr. A. Routledge, Surveyor, Council Offices, Stanley.

JULY 7. **Truro.**—HOUSES.—For the erection of eight non-parlour houses at Newham-road, for the T.C. Mr. F. A. Barnes, City Surveyor, Municipal Buildings, Truro. Deposit £1.

JULY 7.—**West Bromwich.**—CHILDREN'S HOME.—Erection of children's home at Great Barr Park, in accordance with specification and plans prepared by Messrs. Pite, Son & Fairweather, architects, 12, Carteret-street, Queen Anne's Gate, Westminster, London, S.W.1, for the Walsall and West Bromwich Unions Joint Committee. Mr. A. H. Ward, clerk, 22, Lombard-street, West Bromwich. Deposit £5 5s.

JULY 8.—**Batley Carr.**—POINTING.—For pointing, &c., at the Batley Carr Wesleyan Church and School. Mr. G. Greenwood, 1, Carlisle-street, Batley, Carr, Dewsbury.

JULY 8.—**Belfast.**—WALL.—For the rebuilding of the stone boundary wall on the north-west side of Shore-road and Whitewell-road in connection with the Street Widening Works. City Surveyor, Belfast.

JULY 8.—**Bolsover.**—HOUSES.—Erection of 30 houses with streets and sewers, for the U.D.C. Mr. Hoten, Surveyor, Bolsover. Deposit £1 1s.

JULY 8.—**Coalville.**—CLOCK TOWER.—For proposed clock tower to be erected at the junction of High-street and Mantle-lane, Coalville, Leicestershire, for the Coalville Urban District War Memorial Committee. Messrs. McCarthy, Collings & Co., architects, Central Chambers, Coalville. Deposit £3 3s.

JULY 8. — **Greenwich, S.E. 10.** — UNDERGROUND CONVENIENCE.—Construction of an underground convenience for both sexes, at the foot of Blackheath-hill, Greenwich, for the Council of the Metropolitan Borough of Greenwich. Borough Engineer, Town Hall, Greenwich, between the hours of 10 a.m. and 4 p.m. (Saturdays, 10 a.m. and 12 noon).

JULY 8.—**Heanor.**—PAINTING.—For the cleaning and painting of the Centenary Hall and offices, for the Wesleyan Church. Mr. Walter Bullock, Mundy-street, Heanor.

JULY 8.—**Hinchliff Mill.**—VARIOUS WORKS.—For work at the undermentioned schools: Hinchliff Mill, plasterers and joiners; Hade Edge, plasterers and painters. Mr. W. Heeley, Divisional Clerk, 4, Macaulay-street, Huddersfield.

JULY 8.—**Houghton-le-Spring.**—SCHOOL.—For the erection of secondary school for the Durham C.C. Messrs. Hays & Gray, architects, Wingate.

JULY 8.—**Hove.**—PAINTING.—For the internal painting and other work at the East Hove School, Davigdor-road, and the external painting at the Portland-road school, Portland-road, for the T.C. Mr. H. H. Scott, Surveyor, Town Hall, Hove.

JULY 8.—**Leeds.**—SHELTERS.—For shelters in various parks, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds.

JULY 8.—**Liverpool.**—BUILDING, &c.—Erection of a new operating block and adaptation work at Mossley Hill Hospital, Liverpool, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

JULY 8.—**Liverpool.**—VARIOUS.— For (1) new sanitary towers at Kirkdale Homes, (2) painting at Walton Institution, (3) slating and tiling at Cottage Homes, Wavertree, for the West Derby B.G. Mr. E. B. Bailey architect, 9, Cook-street, Liverpool. Deposit £1 1s. in respect of contract No. 1.

JULY 8.—**London, W.8.**—PAINTING.—Repainting the street lamp columns and lanterns throughout the Royal Borough of Kensington, for the B.C. Borough Engineer and Surveyor, Town Hall, Kensington, W. 8.

JULY 8.—**Mexborough.**—CONVERSION.—For conversion of offices, &c., at Mexborough Garden-street School. Education Dept., County Hall, Wakefield.

JULY 8.—**Middlesex.**—HOUSES.—Erection and completion of 31 houses on the Priory-road Site, Hampton, for the Hampton U.D.C. Mr. Sidney H. Chambers, Surveyor to the Council, Public Offices, Hampton, Middlesex. Deposit £2 2s.

JULY 8.—**Morley.**—PAINTING.—For painting works at various schools, for the T.C. Mr. F. Turner, Borough Surveyor, Town Hall, Morley.

JULY 8.—**Penistone.**—PAINTING, &c.—For the painting and other repairs to the 94 houses at Cubley Garden Village, for the U.D.C. Mr. Jos. A. Wainwright, Clerk, Housing Committee, Penistone.

JULY 8.—**Sheffield.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Beauchief, Sheffield, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

JULY 8.—**South Kirkby Moorthorpe.**—SCHOOL.—For the provision of a Middle School at South Kirkby Moorthorpe. Education Department, County Hall, Wakefield.

JULY 8.—**Thurnscoe.**—SCHOOL.—For erection of school, for West Riding E.C. Education Dept., County Hall, Wakefield.

JULY 8.—**Wood Green.**—REPAIRS, &c.—For (a) summer repairs to schools, (b) reconstruction of certain offices at schools, for the U.D.C. Mr. C. H. Croxford, Architect, Education Authority, Town Hall, Wood Green. Deposit £1 1s.

JULY 9.—**Bradford.**—FREEZING ROOMS.—For erection of additional freezing rooms at the cold storage, St. James' Market, for the T.C. City Architect, Town Hall, Bradford.

JULY 9.—**Dumbarton.**—PAINTING.—For the painter work of 40 houses, at Silvertonhill, for the T.C. Mr. Wm. A. Macartney, Burgh Engineer, Dumbarton.

JULY 9.—**Edinburgh.**—ARTIFICERS' WORK.—For an artificers' works contract in the Lowlands District of the Scottish Command. Royal Engineer's Office, 29, Rutland-square, Edinburgh.

JULY 9.—**Glasgow.**—WALLS.—For the repair and repointing of walls at London-road, Parkhead, Queen Mary-street, Rosemount, and Springfield Public Schools, for the Education Authority. Education Offices (Property Department), 129, Bath-street, Glasgow. Deposit 10s. 6d.

JULY 9.—**Hackney.**—PAINTING.—For the repair, cleaning, and painting of pavilion "D" and Mortuary, workshops, &c., at the Infirmary, Homerton, E.9, for the Board of Guardians. Mr. F. R. Coles, Clerk, Hackney Union, 2, Sidney-road, Homerton, E.9.

✱JULY 9.—**Kensington, W.10.**—FLATS AND COTTAGES.—Erection of 36 flats and four cottages on a further portion of the housing site near Barlby-road, North Kensington, comprising the fourth section of the St. Quintin Housing Scheme, for the Royal Borough of Kensington. Mr. Horace Rapson, Town Clerk, Town Hall, Kensington, W.8. Deposit £2 2s.

JULY 9.—**Kent.**—BLOCK OF BUILDINGS.—Erection of a new block of buildings at the Mental Hospital, Barming Heath, Maidstone, for the Kent County Mental Hospitals Committee. Mr. W. H. Robinson, F.S.Arc., Sessions House, Maidstone. Deposit £10, in the form of a cheque.

JULY 9.—**Leeds.**—ALTERATIONS.—For alterations to "The Hollies," Weetwood-lane, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds.

JULY 9.—**Littlehampton.**—WALLS.—For the demolition and rebuilding of walls at Wick, &c., for the U.D.C. Surveyor, Littlehampton.

JULY 9.—**Liverpool.**—BATHS, &c.—For erection of public baths and washhouses. Minshull-street, for the T.C. Land Steward and Surveyor, Municipal Buildings, Liverpool.

JULY 9. — **Liverpool.** — PAINTING. — For cleaning, painting, &c., at Chatham-place Special School. Land Steward and Surveyor, Municipal Buildings, Liverpool.

JULY 9.—**London, S.W. 18.**—INTERNAL CLEANING.—Internal cleaning to wards at St. James' Hospital, Ouseley-road, Balham, S.W. 12, for the Guardians of the Wandsworth Union. Mr. F. J. Curtis, Clerk, Union Offices, St. John's-hill, Wandsworth, S.W. 18.

JULY 9.—**Normacot.**—ROOFING.—For roofing and partitions at Christ Church (U.M.) Sunday School. Mr. J. S. Adams, 291, Uttoxeter-road, Normacot, Stoke-on-Trent. Deposit £2.

JULY 9.—**Nottingham.**— PAINTING.—For cleaning and painting at St. Catherine's R.C., Forest Field, Leen Side, and London-road Council schools; also for lime-washing school outoffices in five districts. Mr. W. J. Abel, Clerk, Education Office, South-parade. Deposit £1 each contract.

JULY 9.—**Nottingham.**—TELEPHONE EXCHANGE.—Erection of a new telephone exchange at Sherwood, Nottingham, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

JULY 9.—**Sheffield.**—PAINTING.—For painting, distempering, &c., and for asphalting, required to be done at certain Council schools. Mr. F. E. P. Edwards, City Architect, Town Hall, Sheffield.

JULY 9.—**Walsingham.**—ALTERATIONS, &c.—For alterations, repairs, painting, &c., at the Union House, Great Snoring, for the Board of Guardians. Mr. H. F. Swain, Thursford, Walsingham, Norfolk.

JULY 10.—**Bedwellty.**—HOUSE.—For the erection of a caretaker's house at the Council's Isolation Hospital. Mr. Dan. H. Price, Surveyor, Aberbargoed.

JULY 10.—**Brighouse.**—BUILDERS' WORK.—For joiners' and builders' work at the Brighouse Secondary School for Girls. Director of Education, Education Office, Brighouse.

JULY 10.—**Cwmbran.**—DRILL HALL.—For the erection of drill hall and instructor's quarters at Cwmbran (Mon), for the Monmouthshire Territorial Army Association. Messrs. Habershon & Fawckner, architects, 41, Hgih-street, Newport. Deposit £2 2s.

JULY 10.—**Glyn-Neath.**—ALTERATIONS.—For alterations and additions to Old Bethania Chapel. Mr. D. C. Williams, architect, Bryn Eithin, Court Sart, Briton Ferry.

JULY 10.—**Holywood.**—COTTAGES.—Erection of 14 cottages for ex-service men, for the Ministry of Finance for Northern Ireland. Secretary, Ministry of Finance, Belfast. Deposit £1.

JULY 10.—**Llanelly.**—ADDITIONS.—For additions to the Llanelly General Hospital. Messrs. J. & B. E. Evans, architects, 42, Stepney-street, Llanelly. Deposit £2 2s.

JULY 10.—**Luton.**—ADDITIONS, &c.—(1) Erection of teachers' room at Surrey-street Boys' School, (2) wood block floor, for Waller-street School, for the T.C. Borough Engineer, Luton.

JULY 10.—**Luton.**—PAINTING.—For painting at Tennyson-road, Dunstable-road, St. Matthew's-road, Hitchin-road, Waller-street, Chapel-street, Christchurch, and Osborne-road Schools, for the T.C. Education Secretary, 3, Manchester-street, Luton.

JULY 10.—**Manchester.**—EXTENSIONS.—Extensions to bowl house at Alexandra Park, Moss Side Recreation Ground, and Birchfields Park, for the T.C. City Architect, Town Hall, Manchester. Deposit 10s. 6d.

JULY 10.—**Morriston, Glam.**—TELEPHONE EXCHANGE.—Erection of a new post office and telephone exchange at Morriston, Glam, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

JULY 10.—**Northern Ireland.**—COTTAGES.—Erection in Holywood Urban District, co. Down, of 14 cottages for ex-Servicemen, for the Ministry of Finance for Northern Ireland Irish Sailors and Soldiers' Land Trust. Secretary, Minister of Finance, Room 35, 15, Donegall-square West, Belfast. Deposit £1.

JULY 10.—**Torpoint Ferry.**—OFFICES, &c.— For the building of offices and a workshop at Torpoint Ferry, for the Cornwall C.C. Mr. L. D. Thompson, County Architect, County Hall, Truro.

JULY 10.—**West Riding.**—PAINTING.—For the internal and external painting, &c., of the following schools: Goole Alexandra-street, Goole Boothferry-road; Goole Old Goole, Rawcliffe, Rawcliffe Bridge, Thorne, Thorne Moorends, Hatfield Levels, Hatfield Woodhouse, Stainforth, Sykehouse, Reedness, and Adlingfleet. Mr. E. L. Harrap, West Riding Education Offices, Goole.

JULY 11.—**Burnley.**—EMPLOYMENT EXCHANGE.—Erection of an employment exchange at Burnley, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

JULY 11.—**Devonshire.**—RENOVATIONS.—For renovations and other work at the undermentioned Council Schools: Bovey Tracey, Bradford, Brixham Furzehamhill, Buckfastleigh, Colyton, Dunsford, Filleigh Castlehill, Highampton, Hittisleigh, Ilfracombe Hermitage, Marwood, Newton Abbot Highweek, Newton Abbot Wolborough, Newton-street, Northam Appledore, Northmolton Heasley-hill, Paignton Curledge-street, South Brent, Tedburn St. Mary, Teignmouth, Upottery, Walkhampton Foggintor, and West Down, for the Devon C.C. Architect's Office, 1, Blackall-road, Exeter.

JULY 11.—**Dublin.**—PAINTING.—For external painting works at the buildings, &c., in the Phœnix Park, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin.

JULY 11.—**Huddersfield.**—ADDITION.—For the erection of an additional story over Museum at Ravensknowle, Dalton, for the T.C. Borough Architect, 26, Ramsden-street, Huddersfield.

JULY 11.—**Leeds.**—CONVERSION.—For conversion of 40, Park-lane into municipal offices, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds.

JULY 11.—**London, E.C.4.**—REPAINTING.—Repainting certain staircases, external work to certain buildings, certain chambers, and alterations and redecorations to the Common Room, in the Temple, E.C.4. Treasury Office, 2, Plowden Buildings, Middle Temple-lane, E.C.4.

JULY 11.—**Queensbury.**—PAINTING.—For painting, colour-washing, &c., at Denholme Council School, Sheaf Council School, Queensbury Catherine Slack Council School, and Queensbury Chapel-lane Council School; and repairs to playgrounds, Denholme Council School. Mr. B. Leah, Education Office, Bingley.

JULY 12.—**Bingley.**—ELECTRICITY WORKS.—For erection of electricity works, for the U.D.C. Mr. H. Bottomley, surveyor, Myrtle-grove, Bingley.

★JULY 12.—**Bradford.**—HOUSES.—(1) Erection of 10 Class "A" houses and 18 Class "B" houses, Housing Scheme No. 10, Thornton; (2) erection of 52 Class "A" houses and 8 Class "A2" houses, Housing Scheme No. 11, Swain House Estate, for the Corporation of the City of Bradford. City Architect, Town Hall, Bradford.

JULY 12.—**Bromley.**—DECORATIONS, &C.—For the following works at Aylesbury-road School, viz., external decoration of school and caretaker's cottage; making new entrance to school; and providing Portland cement screed to southern wall of school. Education Offices, Bromley. Deposit 10s. each tender.

JULY 12.—**Gardenstown (Banff).**—HOUSE.—For erection of house at Gardenstown. Agent, Commercial Bank, Gardenstown, Banff.

JULY 12.—**Golcar.**—RENOVATIONS.—For renovations at the Golcar Crow-lane Council School. Mr. W. Heeley, Divisional Clerk, 4, Macaulay-street, Huddersfield.

★JULY 12.—**Guildford.**—HOUSES.—Erection of 10 pairs of three-bedroom non-parlour houses in Cline-road, Guildford, for the Corporation of Guildford. Mr. Reg. C. Knight, Town Clerk Town Clerk's Office, Guildford.

JULY 12.—**Heckmondwike.**—PAINTING.—For painting interior of George-street Congregational Church. Mr. M. B. Armitage, 47, Cemetery-road, Heckmondwike.

JULY 12.—**Holyrood.**—ALTERATIONS.—For alterations to the stable block, Holyrood Palace. Architect, H.M. Office of Works, Edinburgh. Deposit £1 1s.

JULY 12.—**Marsden, &c.**—VARIOUS WORKS.—For renovations and repairs at the schools named: Marsden Council Mixed School, builders; Golcar Knowl Bank Council School, builders, plumbers; Golcar Wellhouse Council School, builders, painters; Golcar Scapegoat-hill Council School, painters; Milnsbridge Council School, builders. Mr. William Heeley, Divisional Clerk, 4, Macaulay-street, Huddersfield.

JULY 12.—**Warwick.**—HOUSES.—For the erection of 41 houses, 32 parlour and 9 non-parlour type, upon the Emscote site, Warwick, for the T.C. Messrs. Francis P. Trepess & Son, architects, 1, Church-street, Warwick.

JULY 14.—**Ardrossan.**—PAINTING.—For painting Parish Church and Hall. Mr. T. Guthrie, Clerk to the Trustees, Ardrossan.

JULY 14.—**Ashton-under-Lyne.**—LAUNDRY.—For the reconstruction of the laundry, for the B.G. Mr. G. J. Gibbs, 7, Lune-street, Preston. Deposit £5.

JULY 14.—**Cardiff.**—GYMNASIUM AND HANDICRAFT BLOCK.—Tenders (based on firm prices for materials, and subject only to variations owing to fluctuations in wages), for the erection of a gymnasium and handicraft block at the Canton Municipal Secondary Schools, Cardiff, for the Cardiff Education Committee. Mr. T. Pierson Frank, Architect to the Committee, City Hall, Cardiff. Deposit £2 2s.

JULY 14.—**Chelmsford.**—PAINTING.—For painting external iron and wood-work of 172 cottages, for the R.D.C. Mr. J. Dewhurst, Surveyor, Council Offices, Chelmsford.

JULY 14.—**Chester.**—ALTERATIONS.—For alterations to convert Bishop Graham's Memorial School into a maternity and child welfare centre, for the T.C. Mr. C. Greenwood, City Engineer, Chester. Deposit £1 1s.

JULY 14.—**Dewsbury.**—PAINTING.—For the painter's and decorator's work required in connection with alterations to Moorlands Hall, for the T.C. Borough Surveyor, Town Hall, Dewsbury.

JULY 14.—**Elton.**—PAINTING.—For painting the Conservative Club. Steward, The Club, Elton, Bury, Lancs.

JULY 14.—**Hemel Hempstead.**—BUILDING WORKS AND ALTERATIONS.—Erection of new vagrant wards and alterations to existing buildings, at the Hemel Hempstead Poor Law Institution, for the Guardians of the Union. Clerk to the Guardians, 1, The Broadway, Hemel Hempstead. Deposit £1 1s.

JULY 14.—**Hornchurch, Essex.**—DEPOT BUILDINGS.—Erection of lorry sheds, workshops, and cart sheds, including roads, fences, drains, &c., and for repairing and painting existing buildings and cottage at the Depot, Rainham-road, for Romford R.D.C. Mr. W. J. Grant, Surveyor to the Council, 16A, South-street, Romford.

★JULY 14.—**Kingston-on-Thames.**—FARM BUILDINGS.—Erection of a range of farm buildings (about 1,170 ft. super. area) with yard, &c., and for an addition to an existing building, both at Leigh Place Farm, near Reigate, for the Surrey Agricultural Committee. Mr. C. R. Harding (Major), County Land Agent, County Hall Annexe, Kingston-on-Thames. Deposit £1 1s.

JULY 14.—**Portishead.**—COTTAGES.—Erection of 10 cottages at South-road, Portishead, for the Urban District Council. Mr. F. H. Smith, Surveyor to the Council, Council Offices, Portishead. Deposit £1 1s.

JULY 14.—**Preston.**—LODGE.—For the rebuilding of lodge at the Isolation Hospital, Deepdale-road, for the T.C. Borough Surveyor, Town Hall, Preston.

JULY 14.—**Radcliffe.**—PAINTING.—For painting New Jerusalem Church, Radcliffe. Mr. Jas. E. Davenport, 37, Suthers-street, Radcliffe.

JULY 14.—**Stalybridge.**—FOUNDATIONS.—For the excavating and concrete work required in the foundations of new power station, Stalybridge. Messrs. W. H. George & Son, architects, 7, Warrington-street, Ashton-under-Lyne. Deposit £1 1s.

JULY 14.—**Stonebroom.**—SCHOOL.—For the erection of a new Council School for about 600 children, at Stonebroom. Mr. George H. Widdows, County Offices, St. Mary's-gate, Derby. Deposit £1 1s.

JULY 14.—**Tanfield Lea.**—INSTITUTE.—For erection of Memorial Institute, Tanfield Lea, Durham. Mr. H. A. Curry, architect, Front-street, Stanley. Deposit £1.

JULY 14.—**Wetherby.**—HOUSES.—For the erection of four houses at Tockwith, for the R.D.C. Mr. H. Smith, Clerk, Council Offices, Wetherby.

JULY 14.—**York.**—MESS ROOM.—For the erection of a pay and mess room in Rougier-street, for the T.C. Mr. F. W. Spurr, City Engineer, Guildhall, York.

JULY 15.—**Aberayron (near).**—HOUSE.—For erecting a house at Myroilau (Card.). Mr. E. Llewelyn Lewis, architect, Lampeter.

JULY 15.—**Bangor (Ireland).**—HOUSES.—For erection of 44 houses, for the U.D.C. Surveyor, Town Hall, Bangor, Ireland.

JULY 15.—**Mirfield.**—ADDITIONS.—For provision of assistant master's common room at Mirfield Grammar School. Education Department, County Hall, Wakefield.

JULY 15.—**Morley.**—PAINTING.—For painting interior of Morley Hall Maternity Home, for the T.C. Mr. F. Turner, Borough Engineer, Morley.

JULY 15.—**Otley.**—ADAPTATION.—For adaptation of room at Westgate Council School. Education Dept., County Hall, Wakefield.

JULY 16.—**Littleport.**—PAINTING.—For painting of Sandall's Bridge, for the Ouse Drainage Board. Engineer to the Board, 90, Hills-road, Cambridge.

★JULY 16.—**London.**—CLEANING, PAINTING, &C.—Separate tenders for cleaning and painting and repairs at (*a*) Head Office, Victoria Embankment, E.C.4; (*b*) Sheffield House, Sheffield-street, W.C.2, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 in respect of each work.

JULY 16.—**London, N.W.1.**—BUILDING WORKS.—Building works required to be executed at the St. Pancras Hospital, 4, King's-road, N.W.1, for the Guardians of the Parish of St. Pancras. Mr. B. Chapman, Clerk to the Guardians, Town Hall, Pancras-road, London, N.W.1.

JULY 16.—**Newcastle-on-Tyne.**—TELEPHONE STATION.—For the erection of a Telephone Repeater Station, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary, H.M.O.W.).

★JULY 16.—**Tooting, S.W.17.**—FIREPROOF FLOORING.—Providing and laying a fireproof floor to a ward pavilion at Tooting Bec Mental Hospital extensions, Church-lane, Tooting, S.W.17, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4, and at the Engineer-in-Chief's Dept., Sheffield House, Sheffield-street, W.C.2.

JULY 16.—**Various Places.**—BUILDING, CLEANING, AND PAINTING.—(1) Building new single wards at Colindale Hospital, Hendon, N.W.9; (2) cleaning and painting works and repairs at various hospitals, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 in respect of each work.

★JULY 17.—**Acton.**—HOUSES.—Erection of four houses at Acton. A. H. Middleton, architect, 8, Richmond-road, Wanstead, Essex.

JULY 17.—**Chorley, Lancs.**—POST OFFICE.—For the erection of a Post Office for the Commissioners of H.M. Office of Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary, H.M. Office of Works).

JULY 18.—**Kingsbury, N.W.9.**—HOUSES.—Construction of 24 houses at Buck-lane, Kingsbury, N.W.9, for the Kingsbury U.D.C. Mr. R. C. N. Newport, Surveyor to the Council, Council Offices, Kingsbury-road, The Hyde, N.W.9. Deposit £3 3s.

JULY 18.—**South Walsham.**—ADAPTATIONS.—For adaptations and repairs to Manor Farm House, South Walsham, for the Norfolk C.C. Mr. V. Playle, County Land Agent, Shire House, Norwich.

JULY 18.—**Union Quay.**—REBUILDING.—For the restoration of Union Quay, ex-R.I.C. Barracks. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin. Deposit £1.

JULY 19.—**Essexford.**—RECONSTRUCTION.—For re-erection of station buildings, for the Great Northern Railway Co. of Ireland. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

JULY 19.—**Southampton.**—BRIDGES.—(*a*) Reconstruction of Titchfield (south-east) County Bridge, situated about ¼ mile from Titchfield, with 5 ft. diameter concrete tubes; (*b*) widening of Pudbrook Bridge, situated about ½ mile west of Botley, consisting of extending the existing 10 ft. span brick arch by 5 ft.; (*c*) widening and reconstruction of Waltham Chase Bridge, situated about 1 mile south of Bishop's Waltham, with 3 ft. 6 in. diameter concrete tubes, &c. Mr. W. J. Taylor, County Surveyor, The Castle, Winchester. Deposit £1 1s. each contract.

JULY 21.—**Chelmsford.**—PAINTING.—For painting Admiral's Park water tower, for the T.C. Borough Engineer, Chelmsford.

JULY 21.—**Rowley Regis.**—PAINTING, &C.—For painting at various schools, for the U.D.C. Mr. F. T. Wilson, Secretary, Education Committee, Rowley Regis.

★JULY 22.—**Bromley.**—COTTAGES.—Erection of four blocks of two cottages on the Housing Estate at Bromley Common, for the Town Council of Bromley. Contractors may tender for the erection of the four blocks, or for two, four or six cottages. Mr. Fred. H. Norman, Town Clerk, Borough of Bromley, Municipal Offices, Bromley, Kent. Deposit £2 2s.

★JULY 22.—**Nottingham.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Arkwright, Nottingham, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

★JULY 23.—**Berks.**—COTTAGES.—Erection of eight cottages at Broadmoor Asylum, Berks., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

JULY 23.—**Birkenhead.**—HOUSES.—For the erection of 193 subsidy houses in concrete or brickwork, on the Derby Park Estate, for the T.C. Mr. Chas. Brownridge, Borough Engineer, Town Hall, Birkenhead. Deposit £2 2s.

JULY 23.—**Dover.**—PAINTING.—For painting and decorating works at the elementary schools during the summer holidays, for the T.C. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House, Dover.

JULY 23.—**Dublin.**—CATTLE ENCLOSURE.—For provision of cattle enclosure at Sheriff-street Goods Station, for the Great Northern Railway (Ireland) Co. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

★JULY 24.—**Bournemouth.**—FOUNDATIONS.—Foundations contract of the new pavilion in the Pleasure Gardens, Bournemouth, for the County Borough of Bournemouth. Mr. Herbert Ashling, Town Clerk, Town Hall, Bournemouth. Deposit £1 1s.

JULY 25.—**Rothwell.**—ADDITIONS.—For additions at Isolation Hospital, for the Rothwell, Methley, and Hunslet Joint Isolation Hospital Committee. Messrs. W. E. Richardson & Wm. Whitehead, joint architects, Rothwell.

★JULY 25.—**Wood Green, N.22.**—PAVILION.—Erection of a pavilion in the Albert-road Recreation Ground, for the Wood Green U.D.C. Engineer and Surveyor to the Council, Town Hall, Wood Green, N.22. Deposit £1 1s. (payable to the Treasurer).

NO DATE.—**Aughamore.**—CHURCH.—For the erection of a church at Crossards, Aughamore, near Ballyhaunis, co. Mayo, for the Rev. P. Molloy, P.P. Mr. R. M. Butler, architect, 23, Kildare-street, Dublin.

NO DATE.—**Burbage.**—HOUSE.—For the erection of a house, Green-lane, Burbage. Messrs. G. E. Garlick & Son, architects, Royal Exchange Buildings, Buxton.

NO DATE.—**Clevedon.**—HALL.—For the erection of a parish hall in connection with St. John's Church, Clevedon. Messrs. Fry, Paterson & Jones, architects, 28, Waterloo-street, Weston-super-Mare.

NO DATE.—**Clown.**—HOUSES.—For the erection of 30 houses at Clown, for the U.D.C. Mr. J. Haslam, architect, Worksop.

NO DATE.—**Dumbarton.**—HOUSES.—Erection of 27 blocks, comprising 112 houses, at Bonhill, for the Dumbarton C.C. Mr. J. Weeks, architect, 88, College-street, Dumbarton.

NO DATE.—**Scotshouse.**—CHURCH.—For the erection of a church at Scotshouse, Clones, co. Monaghan, for the Most Rev. P. McKenna. Mr. R. M. Butler, architect, 23, Kildare-street, Dublin.

FURNITURE, MATERIALS, etc.

JULY 9.—**Leyton.**—MATERIALS.—Supply of matrix to the U.D.C. Surveyor, Town Hall, Leyton, E. 10.

JULY 10.—**Brighton.**—MATERIALS.—Supply of (1) 600 tons of granite paving setts; (2) 7 sets manganese steel points and crossings; (3) 160 tons of B.S. No. 7 rails, in 60 ft. lengths, for the Brighton Corporation. Tramways Engineer, Lewes-road, Brighton.

JULY 12.—**Maryport.**—MATERIALS.—Supply of tar macadam, broken granite, limestone and chippings to the U.D.C. Surveyor, Town Hall, Maryport.

JULY 14.—**Guildford.**—MATERIALS.—For the supply of various materials for eight months, for the T.C. Borough Surveyor, Guildford.

ENGINEERING, IRON AND STEEL.

JULY 5.—**Colne.**—BRIDGE.—For widening of Wanless Water Bridge, near Colne, for the Lancashire C.C. Mr. W. H. Schofield, County Surveyor, Preston.

JULY 5.—**Kirkby Lonsdale.**—BRIDGE.—For reconstruction of Ellersbeck Bridge, near Kirkby Lonsdale, for the Lancashire C.C. Mr. W. H. Schofield, County Offices, Preston.

JULY 5.—**Neath.**—BRIDGE RECONSTRUCTION.—For reconstruction of canal bridge, for the U.D.C. Mr. H. Alex. Clarke, Borough Engineer, Neath.

JULY 7.—**Kenilworth.**—PIPES, &c.—For the supply of cast-iron water main and specials, &c., to the U.D.C. Mr. Sholto Douglas, Surveyor, Council Offices, Kenilworth.

JULY 7.—**Poulton-le-Fylde.**—BRIDGE.—For the construction of a bridge over the main dyke, for the Lancashire C.C. Mr. W. H. Schofield, County Surveyor, Preston.

JULY 8.—**Plymouth.**—SUBWAY.—For the erection of a subway in the vicinity of the Southern Railway Station, Ford, for the Plymouth T.C. Mr. J. Wipperley, Borough Engineer, Plymouth. Deposit £2 2s.

★JULY 10.—**East Ham.**—HEATING.—Supply and erection of heating and domestic hot-water supply plant, including alteration to the existing plant, at the Isolation Hospital, East Ham, for the East Ham County Borough Council. Borough Engineer's Office, Town Hall, East Ham, E.6. Deposit £2 2s.

JULY 10.—**Thurnscoe.**—RESERVOIR.—For the construction of a covered concrete service reservoir to hold 600,000 galls. of water, for the U.D.C. Messrs. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £5 5s.

JULY 12.—**South Shields.**—TRANSFORMER STATION.—For erection of transformer station on Cleadon housing site, for the T.C. Mr. F. T. Sissons, Borough Engineer, South Shields. Deposit £1 1s.

JULY 14.—**Keighley.**—FOOTBRIDGE.—For construction of steel footbridge at Lower Laithe Reservoir, for the T.C. Mr. M. R. Barnett, Engineer, Town Hall, Keighley.

JULY 14.—**Keighley.**—IRON STANDARDS, &c.—Supply of cast and wrought iron standards, tube hand railing, &c., at Lower Laithe reservoir, for the T.C. Mr. M. R. Barnett, Engineer, Town Hall, Keighley.

JULY 14.—**Keighley.**—STEEL JOISTS.—For supply of rolled steel joists and other steelwork for Bracken Bank Reservoir Works, for the T.C. Mr. M. R. Barnett, Engineer, Town Hall, Keighley.

JULY 14.—**S. Africa.**—STEEL ROOFING.—For supply of a structural steel umbrella roof, for the S. African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-street. Ref. AX/1042.

★JULY 15.—**Burnley.**—LIFT.—For an electric passenger lift at the Town Hall, for the C.B. The Borough Engineer and Surveyor, Town Hall, Burnley.

JULY 15.—**Egypt.**—WATER FILTERS.—For the installation of water filters, pipe lines, &c., at Assouan, for the Egyptian Ministry of the Interior, Dept. of Overseas Trade, 35, Old Queen-street, S.W. Ref. AX/1043.

JULY 15.—**Fiddown.**—BRIDGE.—For the reconstruction of the destroyed portion of the road bridge over the River Suir, at Fiddown, for the Great Southern and Western Railway Co. Chief Engineer, Inchicore, Dublin.

JULY 16.—**Aberdeen.**—RESERVOIR.—For the construction of a concrete covered service reservoir of a capacity of 7 million gallons at Airy Hall, near Aberdeen, for the T.C. Mr. George Mitchell, Water Engineer, 41½ Union-street, Aberdeen. Deposit £5.

JULY 18.—**London.**—MATERIALS, &c.—Supply to the South Indian Railway Company of (1) Helical and volute springs; (2) well curbs and caissons for Ferok and Kallayi Bridges. Company's Offices, 91, Petty France, S.W.1. Charges, 2s. 6d. for (1) and £1 for (2).

JULY 21.—**Fort William.**—PIER.—For construction of a reinforced concrete pier and approach viaduct and works at Fort William, for the British Aluminium Co. Messrs. S. S. Meik & Buchanan, 16, Victoria-street, S.W. Deposit £5.

JULY 26.—**Llangollen.**—RESERVOIR.—For construction of small country reservoir and laying water mains at Garth and Fron-Cysllte, for the R.D.C. Messrs. Berrington, Son & Watney, Wolverhampton. Deposit £5 5s.

AUGUST 12.—**Portsmouth.**—QUAY WALL.—For the construction and maintenance in repair for twelve months of a new quay wall, for the T.C. Mr. Arthur W. Ward. Borough Engineer, Town Hall, Portsmouth. Deposit £3.

ROAD, SANITARY, AND WATER WORKS.

JULY 5.—**Dingle.**—SEWAGE, &c.—For construction of sewerage system and water supply system for the town of Dingle, Co. Kerry, for the R.D.C. Mr. P. H. McCarthy, engineer, 26, Lower Leeson-street, Dublin. Deposit £2 2s.

JULY 5.—**Honley.**—ROADS.—For paving works, for the U.D.C. Mr. H. N. Royston, Surveyor, Honley. Deposit £1.

JULY 5.—**Kendal.**—ROADS.—For laying down a sample length of reinforced concrete road, for the Westmorland C.C. Mr. C. E. Hines, County Surveyor, 12 Lowther-street, Kendal.

JULY 5.—**Tividale.**—SEWAGE WORKS.—For the construction of new storm water and settling tanks, filter beds and other works at Sewage Outfall Works, Tividale, near Dudley, for the Upper Stour Valley Main Sewerage Board. Mr. William Fiddian, 13, Church-street, Stourbridge. Deposit £3 3s.

JULY 7.—**Altrincham.**—ROADS.—For making-up new street, 150 yds. long, for the U.D.C. Surveyor, Town Hall, Altrincham.

JULY 7.—**Barnes.**—ROADS.—For making-up Muirdown-avenue, Bracken-gardens, Shottfield-avenue, Treen-avenue, and Westmorland-road, for the U.D.C. Mr. G. Bruce Tower, Surveyor, Mortlake, S.W.

JULY 7.—**Cardiff.**—WATER MAIN.—For the construction and laying of a pipe line from Whitchurch to Fairwater—Ely, for the T.C. Mr. C. H. Priestley, City Hall, Cardiff. Deposit £2.

JULY 7.—**Doncaster.**—ROADS, &c.—For roads and sewer construction on Warmsworth-road housing site, for the T.C. Mr. R. E. Ford, Housing Surveyor, Doncaster. Deposit £2 2s.

JULY 7.—**Edinburgh.**—SEWER AND SEA WALL.—For construction of intersecting sewer and sea wall, Portobello to Seafield, for the T.C. Burgh Engineer, City Chambers, Edinburgh.

JULY 7.—**Irlam.**—ROADS.—For improvement of Victoria-road. Mr. J. J. Robinson, 306, Liverpool-road, Irlam.

JULY 7.—**Lochgelly.**—WATER MAINS.—For supply and laying of steel and cast-iron mains, for the T.C. Messrs. Hunter, Duff & Middleton, 42, Frederick-street, Edinburgh. Deposit £2.

JULY 7.—**London.**—WATER MAINS.—For the laying and jointing of 42 in. and 36 in. diameter cast-iron mains between Cricklewood and Marble Arch, for the Metropolitan Water Board. Mr. Henry E. Stilgoe, Chief Engineer, New River Head, Clerkenwell, E.C.1. Deposit £20.

JULY 7.—**Romford.**—SEWER.—For laying 1,000 yards of 12 in. stoneware pipe sewer, for the U.D.C. Mr. F. G. Beaumont, Surveyor, Romford. Deposit £2 2s.

JULY 7.—**Wharfedale.**—SEWER.—Construction of new sewer, Pool Bank, near Leeds, for the R.D.C. Mr. Charles E. Barrow, surveyor, Manor-square, Otley.

JULY 8.—**Buxton.**—ROADS.—For the making-up of New High-street and Glebe-road, Fairfield, for the T.C. Mr. F. Langley, Borough Engineer, Town Hall, Buxton.

JULY 8.—**Skelmanthorpe.**—WATER MAIN.—For laying of 6 in. and 4 in. cast-iron water-pipes, and the construction of brick manholes, &c., at Tentercroft Mills, Skelmanthorpe. Mr. P. N. Brown, architect, Hollowgate, Holmfirth.

JULY 9.—**Carlisle.**—ROADS.—For widening section of Whitehaven to Barrow main road, for the Cumberland C.C. Mr. G. O. Lockwood, County Surveyor, Carlisle. Deposit £1.

JULY 9.—**East Ham.**—TRAMWAY.—For reconstruction of the tramway and highway in High-street North, Forest-drive, and Aldersbrook-road, for the T.C. Mr. J. Birch, Borough Engineer, Town Hall, East Ham. Deposit £2 2s.

JULY 9.—**Rathdown.**—WATER MAINS.—For providing and laying water mains, fittings and accessories in the Greystones district, for the R.D.C. Mr. R. M. Butler, 23, Kildare-street, Dublin.

JULY 9.—**Maldon.**—ROADS.—For widening portion of Mill-road, for the T.C. Mr. T. R. Swales, Borough Surveyor, Municipal Offices, Maldon.

JULY 9.—**Millom.**—ROADS.—For widening the Whitehaven to Barrow main road, near Millom, for the Cumberland C.C. Mr. G. O. Lockwood, County Surveyor, The Courts, Carlisle. Deposit £1.

JULY 9.—**Wolverhampton.**—ROADS.—For the repair of roadways at the Poor Law Institution, for the Board of Guardians. Mr. A. G. Aldridge, Clerk, Poor Law Office, Wolverhampton. Deposit £1 1s.

JULY 10.—**Bedwellty.**—ROADS.—For the construction of roads and sewers for 12 houses at Twyn-y-ffald, Blackwood, for the U.D.C. Mr. Dan. H. Price, Surveyor, Aberbargoed.

JULY 10.—**Leeds.**—ROADS.—(a) Paving and concreting, &c., of portion of the tramway track in Town-street, Stanningley; (b) paving and concreting, &c., of portion of the highway in:—Elland-road, York-road, Town-street, Stanningley, Hunslet New-road, Hunslet-road; (c) two-coat asphalte macadam surfacing (labour and material) in:—Hunslet New-road, Hunslet-road; (d) reinstating of trench openings in the city from July 1, 1924 (paviors' and masons' work), to March 31, 1925. Mr. J. B. Hamilton, Commercial Manager, 1, Swinegate, Leeds. Deposit £1 1s. each contract.

JULY 10.—**Willington and Crook.**—PAVING.—For carrying out sett paving, flagging, &c., on the Durham—Crook main road in Willington and Crook, for the Durham C.C. Mr. Albert E. Brookes, County Engineer, Shire Hall, Durham.

JULY 12.—**Chester.**—ROADS.—For the reconstruction with mastic asphalt on reinforced concrete foundations of Christleton-road, reconstruction with granite setts on reinforced concrete foundation of Watergate-street, for the T.C. Mr. Charles Greenwood, City Engineer, Chester. Deposit £1 1s.

JULY 12.—**Howden.**—SEWAGE WORKS.—For drains and sewage disposal works at Poor Law Institution, for the B.G. Messrs. Fairbank & Son, Lendal Chambers, York. Deposit £1 1s.

JULY 12.—**Middlewich.**—ROADS.—For laying 6 in of concrete, and paving with 5 in. × 4 in. granite setts, and grouting with pitch, a portion of Kinderton-street, Middlewich, for the U.D.C. Surveyor, Town Hall, Middlewich.

JULY 14.—**Edinburgh.**—ROADS.—For the construction of Section J-K, Newbridge to Edinburgh, Contract No. 7, of a new road from Glasgow to Edinburgh, for the T.C. Mr. D. A. Donald, 249, George-street, Glasgow. Deposit £3 3s.

JULY 14.—**Gelligaer.**—SEWERS.—For the construction of about eleven miles of 15 in. 12 in. and 9 in. diameter glazed stoneware and cast-iron pipe sewers, &c., for the U.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £7 7s.

JULY 14.—**Romford.**—ROADS.—For making up 850 yards of roads at Hornchurch, for the R.D.C. Surveyor, 16A, South-street, Romford.

JULY 14.—**Romford.**—SEWER.—For construction of sewerage work at Harold Wood, for the R.D.C. Mr. W. J. Grant, Surveyor, 16A, South-street, Romford.

JULY 14.—**Rugby.**—WATER MAINS.—For providing and laying 3,124 lin. yds. of 4 in. and 3 in. cast-iron water mains, &c., on the estates of the Rugby Freehold Land Society, for the R.D.C. Mr. J. E. Weeks, Surveyor, Hillmorton Paddox, Rugby. Deposit £3 3s.

JULY 14.—**York.**—ROADS.—For road and sewer work at Salisbury-road, for the T.C. Mr. F. W. Spurr, City Engineer, Guildhall, York. Deposit £2 2s.

JULY 15.—**Benfieldside.**—PAVING.—For sett paving, flagging, &c., on the Lanchester Shotley Bridge main road, for the U.D.C. Mr. T. Knox, Surveyor, Council Offices, Blackhill, Co. Durham.

JULY 15.—**Brentford.**—ROADS.—For surfacing sections of Ealing-road, for the U.D.C. Mr. W. J. W. Westlake, Surveyor, Clifden House, Brentford.

JULY 15.—**Ealing.**—ROADS.—For making up Midhurst and St. Aidan's-roads, for the B.C. Mr. W. R. Hicks, Borough Engineer, Town Hall, Ealing. Deposit 10s. 6d. each road.

★JULY 15.—**London, W.C.1.**—CONVENIENCE.—Construction of an underground convenience for men and women in Cross-street, Leather-lane, E.C.1, for the Metropolitan Borough Council of Holborn, Mr. E. F. Spurrell, Borough Surveyor, Council Offices, 193–197, High Holborn, W.C.1.

JULY 15.—**Wolverhampton.**—TAR PAVING.—Repairs to school playgrounds, tar paving and rock asphalte, for the Wolverhampton Education Committee. Director of Education, North-street, Wolverhampton.

JULY 16.—**Guildford.**—ROADS.—For the reconstruction of an existing highway with reinforced concrete, for the T.C. Mr. W. G. Cross, Borough Engineer, Municipal Offices, Guildford. Deposit £2 2s.

JULY 16.—**Leyland.**—ROADS.—For making-up Herbert-street, Newsome-street, part John-street, and the streets on the north and south side of the Public Hall buildings, for the U.D.C. Mr. M. H. Wilkinson, Surveyor, Public Hall Buildings, Leyland. Deposit £1.

JULY 19.—**Carnforth.**—SEWER.—For construction of 120 yards of 9 in. and 80 yards of 6 in. stoneware sewers, for the U.D.C. Surveyor, Carnforth.

JULY 19.—**Porthcawl.**—ROADS.—Construction of 1,200 yards lineal of new road between the Esplanade, Porthcawl, and Newton-road, also between The Moorlands School and the Globe Inn, Newton, for the U.D.C. Mr. T. L. Oliver, Council Offices, Porthcawl. Deposit £3 3s. for each of two contracts.

JULY 21.—**Richmond.**—WATER MAIN.—For laying 750 yards of 9 in. and 340 yards of 7 in. diameter cast-iron pipes, &c., for the T.C. Mr. H. P. Williamson, Water Engineer, Riverside, Surrey. Deposit £2.

JULY 23.—**Erith.**—ROADS.—For reconstruction of carriageway, footpath, &c., of the widened bridge in Bexley-road, for the U.D.C. Surveyor, Erith. Deposit £1.

JULY 25.—**Brentford.**—ROADS.—Construction of a further section of about three furlongs of the Great West-road at Brentford, for the Middlesex C.C. Mr. A. Dryland, County Engineer, Middlesex Guildhall, Westminster, S.W. Deposit £21.

★JULY 28.—**London.**—SEWER (BRICK AND CONCRETE).—Construction of a 4 ft. diameter sewer in brick and concrete, of a total length of about 200 ft., with weir chamber and tumbling bay, Bell Wharf outlet, Shadwell, in the Metropolitan Borough of Stepney, in the Administrative County of London. Chief Engineer, L.C.C. Old County Hall, Spring Gardens, S.W.1. Deposit £5.

NO DATE.—**Garnant.**—EXCAVATION.—For excavating and reinstating about 1,000 yards of ground in various roads at Garnant, for the Ammanford Gas Company. Manager, Gas Co., Ammanford.

NO DATE.—**Gloucester.**—ROADS.—For laying a reinforced concrete road foundation on the Gloucester—Tewkesbury road at Norton, for the Gloucester C.C. County Surveyor, Shire Hall, Gloucester. Deposit £2 2s.

NO DATE.—**Salcombe.**—ROAD.—For the making-up of Devon-road, for the U.D.C. Mr. J. G. Howard, Surveyor, Council Hall, Salcombe. Deposit £2.

Competitions.

(See Competition News, page 4.)

Auction Sales, Tenders, etc.

JULY 8, 9, AND 10.—**Hayes.**—Messrs. R. & W. Mack will sell, by instruction of Messrs. Lyon & Co. (Dudley), Ltd., plant and machinery, corrugated iron, piping, timber and miscellaneous stores, &c., at Hayes C.S.D. Depot, Middlesex. Auctioneers, "Academy of Arts," Blackett-street, Newcastle-upon-Tyne.

★JULY 8.—**London, S.W.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, timber, fittings and building materials (from demolition of aircraft buildings, Regent's Park), at 255, Clapham-road, S.W., at 1.30 Auctioneers, 365, Norwood-road, S.E.27.

JULY 8.—**Tunbridge Wells.**—Messrs. Hampton & Sons will sell, at the St. James's Estate Rooms, 20, St. James's-square, London, S.W., freehold property, Tunbridge Wells, in the premier position at the corner of important cross roads, comprising over one acre. Auctioneers, 20, St. James's-square, S.W.1.

JULY 8.—**Willesden Green, N.W.**—Messrs. Ernest Beard will sell valuable premises, comprising spacious yards, workshops, offices, &c., with the plant and machinery, situate Nos. 3, 5, 7, 9, and 11, Grange-road, Willesden Green, on the premises in one lot. Auctioneer's Offices, 109, Great Russell-street, Bedford-square, W.C.1.

JULY 9.—**Chedworth.**—Messrs. Bruton Knowles & Co. are instructed by the Right Hon. the Earl of Eldon to sell, at the Estate Yard, Compton Cassey, Stowell Park Estate, close to the Roman Villa, Chedworth, the valuable timber machinery and building materials, oak, deal, teak, and other timbers, and miscellaneous effects. Auctioneers, Albion Chambers, Gloucester.

JULY 9.—**Langley, Bucks.**—Messrs. D. Smith & Garrard (amalgamated with Messrs. H. & R. L. Cobb), in conjunction with Messrs. Robt. W. Mann & Son, 12, Lower Grosvenor-place, S.W.1, will sell, at the London Auction Mart, 155, Queen Victoria-street, E.C.4, freehold property, "Langley Broom," area 37 acres. This land can be developed without detriment to the amenities of the residence, together with two cottages, stabling, garage, gardens and grounds. Auctioneers, 4 and 5, Charles-street, St. James's-square, London, S.W.1.

JULY 10.—**Bookham (Surrey).**—Mr. C. E. Clark will sell, without reserve, at Eastwick Buildings, Lower-road, Great Bookham, Surrey, large quantities of bright sound square timbers, quartering, weather-boards, &c. Auctioneer, Beddington House, near Croydon, Surrey.

✱JULY 10. — **Rickmansworth, Herts.**—Messrs. Charles R. Davis & Co. will sell, at the yard and workshops, No. 192, Uxbridge-road, Mill End, Rickmansworth, *re* A. S. Larrett (in bankruptcy), by order of the trustee, the stock-in-trade and plant of a builder, decorator and undertaker. Auctioneer, 285, Borough High-street, S.E.1.

✱JULY 15.—**London, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of Mr. H. H. Elliott, at Arch No. 95, London-street, plant and stock of a packing-case manufacturer. Auctioneers, Newington Green, Islington, London, N.16.

✱JULY 15 AND 16.—**London, N.1.**—Messrs. Charles R. Davis & Co. will sell, at the premises, No. 3, Barnsbury Park, Liverpool-road, N.1, *re* Geo. Slade & Co., Ltd. (in voluntary liquidation), by order of the Liquidators, woodworkers', builders', and contractors' extensive and valuable woodworking machinery, motive power, plant, stock-in-trade, and office furniture. Auctioneers, 285, Borough High-street, London, S.E.1.

JULY 16.—**Horley (Surrey).**—Mr. C. E. Clark will sell, without reserve, at Market Field, Horley, Surrey (near "King's Head" Hotel), timbers and builder's effects. Auctioneer, Beddington House, near Croydon, Surrey.

JULY 19.—**Bucks.**—Mr. G. Francis Duck will sell, unless previously disposed of, three wooded building sites, South Park, Gerrard's Cross, suitable for country residences. Freehold; main drainage. Auctioneers, Gerrard's Cross.

JULY 22.—**Deptford Green, S.E.**—Messrs. Fuller, Horsey, Sons & Cassell will sell, by order of the Directors of A. Lloyd & Sons, Ltd., wood-box and packing-case making machinery and stock, on the premises, at 11 o'clock. Auctioneers, 11, Billiter-square, E.C.3.

✱JULY 29.—**Surrey.**—Messrs. Hampton & Sons will sell, by order of trustees, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1., four plots of freehold building land ranging from nearly 3¼ acres to over 5 acres each, extensive frontage to Sandy-lane, at Longcross, near Chertsey, Surrey. Auctioneers, 20, St. James's-square, S.W.1.

Public Appointments.

JULY 5.—**Wakefield.**—Quantity Surveyor's Assistant required by C.C. of the West Riding of Yorkshire. Mr. Louis J. Newton, M.S.A., County Quantity Surveyor, County Hall, Wakefield.

JULY 5.—**Wimbledon, S.W.**—CLERK OF WORKS.—Clerk of Works in connection with the building by a private contractor of 87 houses, on the Council's Estate, Lower Downs-road. Borough Engineer and Surveyor, Town Hall, Wimbledon, S.W.18.

JULY 10. — **London, W.1.** — FORTHCOMING EXAMINATION.—Male cartographer in the Hydrographic Department of the Admiralty (19–25). The Secretary, Civil Service Commission, Burlington-gardens, London, W.1.

JULY 12.—**Staffordshire.**—Draughtsman in the Architect's Department required by the Staffordshire Education Committee. Mr. Graham Balfour, Director of Education, County Education Offices, Stafford, accompanied by three recent testimonials.

✱JULY 12.—**Somerset.**—Architectural Draughtsman in the County Architect's Office, Weston-super-Mare, for the Somerset County Council. The successful candidate will be required to serve a probationary period of six months. The County Architect, Lloyd's Bank Chambers, Weston-super-Mare, with copies of three recent testimonials.

✱JULY 15.—**Nuneaton.**—Building Inspector and General Assistant required in the Borough Surveyor's Office. Mr. R. C. Moon, A.M.Inst.C.E., Borough Engineer, Municipal Offices, Nuneaton.

✱JULY 16.—**Neath.**—Architectural Assistant and Temporary Architectural Assistant required by Glamorgan C.C. Mr. W. James Nash, F.R.I.B.A., County Architect, Metropolitan Chambers, Neath, Glam.

SEPTEMBER. — **London, S.E.1.** — (*a*) Lecturer in architecture and building; (*b*) instructor in brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week. Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1.

✱NO DATE.—**Wandsworth.**—Teacher of Architectural Design required by Wandsworth Technical Institute. The Principal, High-street, Wandsworth, S.W.18.

PROPOSED NEW BUILDINGS & OTHER WORKS *

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERAYRON.—Plans passed by U.D.C.: House for Miss M. A. Jenkins, at Penmaen; house for Miss S. Jones, Mydroilan.

ANNFIELD PLAIN.—The U.D.C. has approved plans for the erection of 26 houses at Carmyers, by the South Derwent Colliery Co., Ltd.

BANSTEAD.—Croydon-lane is to be widened by the Epsom R.D.C., at a cost of £8,762.

BARKING TOWN.—The M.H. has sanctioned the Town Quay extension, to cost £3,792. A site on the Upney Estate, which is to be developed, has been secured for a new elementary school. The General Purposes Committee suggests that the Council should agree to the principle of providing a site in the district in the event of Mr. Fanshawe agreeing to re-erect the Town Hall. Plans passed: Celluloid store, West Bank, for the River Roden Co.; rebuilding Volunteer beerhouse, Abbey-road, for Messrs. Charrington & Co.

BARNES.—The Surrey E.C. has had sketch plans for the proposed secondary school for boys at Barnes, and forwarded them to the U.D.C. for consideration.

BATH.—The Corporation Properties Committee proposes to roof over the Kingston Bath site at a cost of from £2,500 to £3,000.

BEDWELLTY.—The U.D.C. is to reconstruct the bridge at Cwmpenmaen.

BELFAST.—Plans passed by T.C.: Sixteen villas, Nendrum-gardens, for Mr. S. Nelson (Mr. R. Lynn, architect); villa, Downview-avenue, for T. S. Johnson, (Messrs. Hobart & Heron, architects); villa, Myrtlefield-park, for Mr. S. McDowell (Mr. T. R. Eagar, architect); shop, Newtownards-road, for Mr. T. W. Rollins (Mr. G. W. C. Porte, architect); further additions to Royal Victoria Hospital (Messrs. Young & Mackenzie, architects); six villas, College-park, Belmont, for Mr. J. O. Templeton (Mr. John MacGeagh, architect); six houses, Sandhurst-drive and Strandview-street, for Mr. S. McGladery (Mr. A. B. Dobson, architect); conversion of cinema theatre, York-street, into two shops and warehouses, for Mr. T. McManus (Mr. R. Lynn, architect); eight houses, Pretoria-street, for Mr. W. J. Orr (Mr. L. H. Hodgins, architect); maternity home, Malone-place (Mr. Godfrey W. Ferguson, architect); premises, Woodstock-road, for the Northern Banking Co. (Messrs. Tulloch & Fitzsimons, architects); villas, Knock-road, for Mr. R. J. Kerr (architect, Mr. Hugh Gault); rebuilding of premises, for Mrs. Beatrice O'Neill (Mr. W. J. Convery, architect); two villas, Downview-avenue, for Messrs. F. T. Lloyd Dodd & W. A. S. Macpherson; stores and motor garages, Lisburn-road, for Mr. W. H. Sloan (Mr. N. H. Graham, architect).

BIDEFORD.—The partial rebuilding and widening of the Iron Bridge, Landcross, at a cost of £5,000, is included in the Devon C.C. bridge scheme.

BOCKING.—A parish meeting has approved a scheme for the extension of the local cemetery, at a cost of £400.

BOLTON.—Plans passed by T.C.: James Latham, two houses, Greenland-road; W. Higson, house, Lostock Junction-lane; Thos. Blakley, house, Lever Edge-lane; Wm. Heaton & Sons, Ltd., offices, Delphhill Mill; Great and Little Bolton Co-operative Society, Ltd., new shops, Halliwell-road, and rebuilding shops, Venture-street and Steele-street; Deane Conservative Club, club house, back Wigan-road; Thos. Taylor & Sons, Ltd., plant house, Grecian Mills, Lever-street; Albert Bardsley, six houses, Higher Swan-lane; Earl of Bradford, streets and levels, Bromwich-street.

BRADFORD.—Preliminary designs have been prepared by the Town-Planning Department for a new bridge over the River Aire between Greengates and Rawdon.

BRAMPTON. — The R.D.C. has approved a plan submitted by Mr. H. E. Ayris, architect of Carlisle, for the erection of a bungalow at Heads Nook.

BRIDGEND.—The Penybont (Bridgend) R.D.C. has approved plans passed for the proposed Penyfai sewerage scheme, estimated to cost £3,000, and has submitted them for Ministry approval.

BRIDLINGTON.—Plans passed by T.C.: Mr. J. R. Earnshaw, house, Bempton-lane, for Mrs. Young; Mr. S. Dyer, two houses, South Back-lane, for Mr. Holtby; Mr. C. L. Waite, 16 houses, Priory Estate, for Mr. W. Witting; Mr. C. F. Johnson, house, Hilderthorpe-road, for Mr. C. Cooper; Mr. C. F. Johnson, house, Easton-road, for Mr. H. Palmer.

CAMBRIDGE.—Plans passed by T.C.: Three houses, Haig-road, for A. W. Collett & C. H. Woolhouse; two pairs of houses, Huntingdon-road, for S. French; two pairs of houses, Cherryhinton-road, for A. Beavis; house, Leys-road, for Col. W. A. Wood; Harvey Goodwin Home, Harvey Goodwin-avenue, for the Church of England Waifs and Strays Society; house, Church Rate-walk, for Mrs. M. W. Sewell; pair of semi-detached houses, Coniston-road, for G. R. & H. B. Howes; house, Herschel-road, for J. Trevor Spittle; bungalow, Haig-road, for H. W. Jackson; house, Milton-road, for W. J. Balls; house, Glebe-road, for W. Bowett.

CARMARTHENSHIRE.—The Cwmamman U.D.C. is to carry out a scheme of damming the River Pedol.—The M.H. has suggested the making of an additional block to the Llanelly General Hospital as a maternity centre. As against this the B.C. proposes the conversion for the purpose of Park Howard House.

CASTLEFORD.—The C.C. has decided to publish the necessary notice for the proposed erection of a middle school for 600 children at an estimated cost of £24,000. A site has been purchased on the Airedale Housing scheme, 4.18 acres in extent, for the purpose of erecting the Glass Houghton and Airedale new school.

CHERTSEY.—The M.T. has approved of improvement works on the Weybridge-Chobham-Bagshot road, between the Chertsey Urban District boundary and its junction with the Guildford-Bagshot main road, at a cost of £37,750.

CHESTER.—Plans passed by T.C.: House, Westminster Park, for G. Day; organ chamber at St. Mark's Church, Saltney; two houses, Curzon Park, for J. Edwards & T. Moyle; bungalow, Lache-lane, for F. Rowcliffe; four houses and eight flats, Handbridge, for the Duke of Westminster; house, Stocks-lane, for G. Fernside.

CHESTER-LE-STREET.—The U.D.C. has instructed its surveyor to prepare plans and estimates for the erection of a fire station.

CHESTERFIELD.—Application is being made to the M.H. for sanction to borrow £8,000 for the purpose of erection of new baths at Storforth-lane. Plans have been approved for the erection of 74 houses.

CHORLEY.—The T.C. is to proceed with the scheme of extensions at the main sewage works.—Plans passed: Trustees of Cedric Houghton, new premises and alterations to existing anchor premises, St. Thomas's-road and Market-street; Chorley Corporation, additions to sewage works, Common Bank; Exors. of W. Hampson, pair of houses, 17 & 19, Lawrence-road; Mr. H. Pope, house, Euxton-lane; Messrs. W. H. Collison & Son, pair of detached houses, Collison-avenue.—The course of the Clancutt brook near the culvert is to be diverted and a rubble retaining wall built.

COVENTRY.—The City Council proposes to level and drain Radford Common.

CROCKFORD.—Plans for a new bridge have been prepared by the Surrey County Surveyor, who is to negotiate with the Lords of the Manor and other people interested, and also to ascertain whether the M.T. will be willing to make a grant of 50 per cent. of the cost of a new bridge.

CROYDON.—Plans passed by T.C.: Grace & Marsh, Ltd., factory, Aurelia-road; J. Midmer, four houses, Ena-road; J. Midmer, 30 houses, Cedars-avenue; Thorn & Co., house, Crown-lane; S. H. Laver, three houses, 12, 14 & 16, Fernham-road; S. W. Parker, 33 garages, 330 & 332, London-road; H. Payne, bungalow, The Glade, Ham Farm; H. G. Colson, cloakroom, St. Augustine's-avenue, "The Beeches"; Cox & Jones, two houses, Broughton-road; G. H. Dales, two shops and houses, Brigstock-road; F. Bridgland, six garages, Brighton-road, Purley; Crowley Bros., 25 houses, Colliers Water-lane and Dovercourt-avenue; S. Brockwell, bungalow, The Glade, Ham Farm; G. & A. Parris, house, Haling Park-road; C. F. E. Wells, four houses, Lodge-road; Paish, Tyler & Crump, house, Shirley-road; J. Carpenter, two houses, Leicester-road; J. Rodda, four houses, Norbury-avenue; Chart, Son & Reading, four shops with flats over, Brighton-road, Purley; C. Banks, shop, Bingham-road; W. A. Tyler, house, Ham Farm.

DARLINGTON.—The B.E. has given its approval to a sketch plan for the erection of the new Council schools at Cockerton.

DORKING.—The Surrey C.C. has agreed to the proposal of the U.D.C. that the proposed improvement at the junction of High-street with London-road should be commenced at the earliest possible moment, as the first part of the general east and west road scheme in the district.—The M.H. has held an inquiry into the application of the R.D.C. to borrow £14,500 for the purposes of sewerage and sewage disposal for the parish of Capel.

DRONFIELD.—A sewage scheme estimated to cost £2,000 is being considered by the U.D.C. In this scheme it becomes necessary to carry the new sewer under the main line of the L.M. & S. Rly.

DUBLIN.—The Dublin Port and Docks Board have agreed to contribute £12,500 towards the cost of a pedestrian tunnel under the River Liffey. It is estimated that the whole scheme will cost £60,000.—Plans passed: Thirty houses, Vernon-avenue, Clontarf, for Mr. D. Fitzgerald.

DUDLEY.—Plans passed by T.C.: House, Ednam-road, for Miss L. Stainton; alterations, 107 & 108, Hall-street.—Fresh tenders are to be invited by the T.C. for the erection of 52 houses at Woodside.

EGHAM.—The Surrey C.C. notifies the U.D.C. that it proposes to proceed with the reconstruction of Ruins Bridge, Virginia Water, as already arranged with the Office of Works and the M.T.

EPSOM.—The U.D.C. is calling upon the C.C. to make early provision for a secondary school for boys.—The E.C. has prepared plans for an infants' school.

FARNBOROUGH.—Plans passed by R.D.C.: Cow-house, Poplars Farm, Mollington, for Mr. Holbech; house at Sibford Gower, for Mr. James Basham.

FINCHLEY.—The U.D.C. is to carry out an important scheme at Tally Ho! Corner, at a cost of £16,000. The widening of the road from Regent's Park-road to Manor House is proposed, at a cost of £5,867. A footpath diversion is proposed, to facilitate the development of the Oakleigh Park Estate. Surface water sewers are to be laid in East End-road, at a cost of £5,275. Plans recommended: House, Meadway, for Mr. W. Gibson; house, Northway, for Mrs. A. Norton; two houses, Christchurch-avenue, for Messrs. McCann & Dixon;

See also our List of Contracts, Competitions, etc.

two houses, Brookland-hill, for Garsubil, Ltd.; sewers, Hampstead Garden Suburb, for Co-Partnership Tenants, Ltd.; 13 houses, Great North-road and Sylvester-road, for West Streatham Building Co., Ltd.; new road, Oakleigh Park Estate, for Messrs. Tuckett, Webster & Co.; extension of surface water sewer, Brookland-hill, for Co-Partnership Tenants, Ltd.; seven houses, Rosemary-avenue, for West Streatham Building Co., Ltd.; house, Stanhope-avenue, for Mr. J. H. S. Chevallier; three houses, Grosvenor-road, for Mr. J. J. Rainbird; eight houses, Hervey Close, for Mr. F. W. Bristow; four houses, Moss Hall-grove, for Mr. F. W. Bristow.

FRIMLEY.—The Surrey C.C. is asked by the U.D.C. to provide a secondary school for the district.

HALIFAX.—The M.T. has approved the borrowing of £13,000 for the erection of tramway offices in Powell-street, for the Tramways Committee. The M.H. has also sanctioned the borrowing of £4,492 for the purpose of widening Wheatley-road.

HARTLEPOOLS.—The War Office has requested the Port and Harbour Commissioners to submit a design and estimate for a new lighthouse on the breakwater.—The West Hartlepool T.C. has decided upon the reconstruction of The Rink at a cost of about £6,000, to provide a dancing floor for 700 people, and with seating accommodation for 1,500 to 1,600 for public meetings and concerts.

HARTLEY (NORTHUMBERLAND).—Preparations are being made for the erection of a memorial hall for the village.

HESSLE.—Notice is given by the East Riding E.C. of a proposal to erect a new elementary school for 400 children.

HESTON AND ISLEWORTH.—Plans passed by U.D.C.: Mr. P. H. Watkins, two houses, Barrack-road; Mr. F. L. Gower, bungalow, Staines-road; Mr. T. Chapman, house, Clare-road; Mr. F. Marshall, house, Tivoli-road; Mr. T. H. Isted, two houses, Osterley-crescent; Mr. H. B. Henderson, bungalow, garage and freezing room, Tivoli-road; Messrs. Roper, Son & Chapman, house, Thornbury-road; Mr. W. J. Harris, bungalow, Great West-road; Messrs. Roper, Son & Chapman, house, Bulstrode-road.

HEXHAM.—Plans passed by R.D.C.: House at Allendale, for Mr. W. A. Cadbury; cottage, Southwood, Corbridge, for Mr. A. P. Ker; house at Bridgewood, Haydon Bridge, for Co-operative Society, Haydon Bridge; house at Riding Mill, for Dr. Horseman; cottage at Threepwood, for Mr. J. C. Straker; villa, Corbridge, for Mr. J. Dodd; bungalow, W. Horsley, for Mr. R. Blythe; bungalow, Croft-lane, Horsley, for Mr. J. Turnbull; bungalow, E. Ovingham, for Mr. Greener.

HOLMFIRTH.—A new working men's club is to be erected at Underbank.

HULL.—A picture-house of considerable size and importance is to be erected on the site of the present Theatre-de-Luxe adjoining Paragon Station. A block of property occupied by Messrs. Strelling Bros., Ltd., has been secured; the scheme is estimated to cost £20,000.

ILFORD.—Plans passed by U.D.C.: W. D. Key, shops and offices, Cranbrook-road; Harber & Cox, six houses, 38–48, Lynford-gardens; R. Stroud, 11 houses, 50–70, Farnham-road; J. Aylott, garages and hairdressing saloon, 592, Green-lane; Sunnyside Development Syndicate, 11 houses, 105–113, Park-road, and 283–293, Kingston-road; W. H. Knox, two houses, 30–32, Parkway; W. H. Knox, four houses, 9, 10, 11 and 12, Levett-gardens; W. H. Knox, road and sewers, Levett-gardens; G. H. Naish, bungalow, New North-road.

ILKESTON.—Plans passed: Cottage, Queen's-avenue, Mr. A. J. Tomlinson; house, Park-drive, Mr. J. H. O'Connor; house, Longfield-lane, Miss K. Booth; store, Bath-street, Mr. W. H. Turner; house, Longfield-lane, Mr. Jas. Cooper.

KEIGHLEY.—The M.H. has sanctioned a loan of £5,500 for the erection of 10 houses at Sutton, for the R.D.C.

KIDDERMINSTER.—Plans passed: House on Bewdley Hill, for Mr. H. Ashcroft; bungalow at Grosvenor-square, for Mr. Allen; bungalow in Sutton Park-road, for Mr. F. Adams; bungalow off Hoo-road, for Mrs. C. M. Johnson; conversion of buildings into two cottages in Radford-avenue, for Mr. M. E. Howell; house in Sutton Park-road, for Mr. H. R. Beams.

KINGSBRIDGE.—In connection with a scheme for the erection of a Science block at the Grammar School, the E.C. is suggesting the possibility of an alternative scheme to cost £650.

LEICESTER.—The M.H. has given its assent to the Council's application to borrow £630,000 for the purposes of extending the sewage disposal and flood works of the city.

LINTHWAITE.—The U.D.C. has accepted tenders for the erection of 12 houses in Cowlersley-lane, and four houses in South-avenue, for £6,163 and £2,004 respectively.

LITTLE WOODCOTE.—Land is to be leased by the Surrey C.C. to the local branch of the British Legion for the erection of a clubhouse.

LONDON (HACKNEY).—Plans passed by B.C.: A. Gordon, surgical wards, operating theatre and mortuary at the Maternity Hospital, 153-163, Lower Clapton-road; G. H. Burghes, conversion of 96, Clapton-common into residential flats; G. Baines & Son, Primitive Methodist Church and Schools, Ravensdale-road.

LONDON (LAMBETH).—The L.C.C. propose to erect an additional story at the London School of Printing and Kindred Trades, at an estimated cost of £2,000.

LONDON (LEWISHAM).—Plans passed by B.C.: R. J. Aitchison, seven houses, Elsinore and Woolstone-roads; T. A. Boughton, 32 houses, Penberth-road; A. Fitzsimmons, three shops next Fire Station, Perry-vale; C. Cutler & Sons, factory and detached house, Hither Green-lane; P. B. Dannatt, ten houses, Cranston and Loxton-roads; P. B. Dannatt, six houses, Cranston-road; Arthur J. Glock, four houses, Manwood-road; Chas. Engram & Co., 10 houses on east side and 10 houses on west side of Como-road; F. T. Bush, house, Love-lane; Walker, Clinging & Co., house, Pearfield-road; J. W. Matthews, house, Coniston-road; Middletons (Builders), Ltd., house, West-hill.

LUTON.—Flood relief works are to be carried out in Biscat-road, at a cost of £2,925. A site on the Russell Hill housing estate has been scheduled for the erection of an elementary school.

MALDENS AND COOMBE.—The U.D.C. proposes to commence a scheme for widening Kingston-road between the Southern Railway bridge and Avenue-terrace, at a cost of £7,358.

MANSFIELD.—Plans passed by T.C.: F. H. Moore, new street, Eakring-road; F. H. Moore, two houses, Budby-avenue; Wm. A. Edey, bungalow, Sutton-road; Joseph Clarke, two houses, Southwell-road, Rainworth; W. Marriott, conversion of house into house and shop, Rosemary-street; J. Bird, lock-up shop and store, Woodhouse-road; F. H. Moore, house, Budby-avenue; A. Norris, conversion of house into house and shops, Rosemary-street; Wm. Lee, house, Little Barn-lane; E. Walker, house, Southwell-road, Rainworth; H. James, Junr., two houses, Sandhurst-avenue; Geo. Butler, two houses, Waverley-road; C. Radburn, stable, Derby-street; Jones & Clifford, two houses, Sandhurst-avenue; L. Donaldson, house and institute, Chesterfield-road; James Rowell, house, Westfield-lane.

MARGATE.—Plans passed by T.C.: House, De La Warr-parade, Mr. J. E. Maynard, for Mr. W. R. Spreckley; house, Collington-rise, Mr. J. E. Maynard, for Miss G. Nott; bungalow, off Peartree-lane, Mr. C. T. Armstrong, for Miss Ayres; house, Westville-road, Mr. C. W. Freeman, for Messrs. T. W. Mason & Son, Ltd.; house, Cranston-avenue, Mr. C. W. Freeman, for Messrs. T. W. Mason & Son, Ltd.; house, Clavering-walk, Mr. E. H. Gandy, for Mrs. H. Farquharson; bungalow, Mayo-lane, Messrs. Stevens & Sons, for Mrs. K. E. Smith; pair of semi-detached houses, Magdalen-road, Mr. G. H. Gray, for Mr. F. G. King; house, De La Warr-road, Mr. G. H. Gray, for Mr. I. Browning; house, De La Warr-road, Mr. G. H. Gray, for Mr. G. S. Perrett; house, Knebworth-road, Mr. D. B. Sceats, for Capt. F. Neville; house, De La Warr-road, Messrs. Ching & Co., for Mr. Botley; two flats and maisonettes, West-parade, Mr. T. L. McCormick, for Mr. W. A. McCormick; bungalow, Peartree-lane, Mr. E. H. Bray, for Mr. W. M. Sendall.

MERTHYR TYDFIL.—The M.H. has sanctioned the borrowing of £4,660 for purchase of properties, repairs to same, and demolitions of buildings. Sanction has also been received to expenditure of approximately £10,500 on unemployment relief roads widening schemes.

MIDDLESBROUGH.—The Corporation Housing Committee has received sanction for the borrowing of £22,197 for the erection of 27 houses at Martongrove, and 30 houses at Acklam-road.

MILTON REGIS.—Kemsley is the name to be given to the model village that is to be erected near Messrs. Lloyd's new paper mill, for the accommodation of the workpeople there, and when completed it is expected that the new suburb of Milton Regis will consist of 500 houses.

MITCHAM.—The widening is suggested of the railway bridge over Mitcham-road, and the railway company is being approached on the matter. The Surrey C.C. has received a letter from the Mitcham U.D.C. asking for the improvement of Streatham-road bridge and Waterfall bridge. The U.D.C. is asking the C.C. to purchase a site for a secondary school for girls.

MYNYDD ISLWYN.—The U.D.C. is to erect an iron girder and concrete bridge over the Sirhowy River, near the Factory, Blackwood.

NEWHAVEN.—The R.D.C. has approved of plans for 23 houses at Rottingdean.

NORTH SEATON.—The L.N.E.R. are to erect, at a cost of £90,000, a new steel viaduct at North Seaton, Northumberland, over the River Wansbeck, in place of the old wooden structure.

OLD FLETTON.—Plans passed by U.D.C.: House, High-street, for W. H. Burton.

OXFORD.—The "Roebuck" Hotel has been bought by Messrs. Woolworth, and is to be converted into a large store.

PAISLEY.—It has been decided by the Paisley Abbey Restoration Committee to commence the work of the restoration of the choir of the Abbey as far as present funds will permit.

PENRITH.—The R.D.C. has agreed to have plans and estimates prepared with a view to carrying out works of sewerage and sewage disposal at Gamblesby.

PLAISTOW (DEVON).—A house is to be erected by the C.C. at the quarry, for the foreman, at a cost of about £400.

PLYMOUTH.—Plans passed by T.C.: J. Mumford, six houses, Connaught-avenue; Wills & Co., six houses, Pennycross Park-road; W. C. Vickery, houses, Thornhill-way; W. Medland, house, St. George's-avenue; S. R. Griffen, house, St. Barnabas-terrace; A. D. Bickell, two houses, Swilly Estate; F. Westcott, six houses, Swilly Estate.

PONTEFRACT.—Plans passed by R.D.C.: Lay-out of Redhill Farm Estate, Ferry Fryston, for Mr. S. Smith. The M.H. has sanctioned the borrowing of £310 for road works, £140 for sewer works, and £8,370 for the erection of buildings in connection with the Brotherton scheme.

PONTYPOOL.—Negotiations are proceeding with the local authorities concerned regarding a proposal for a new road from Pontnewynydd to Pontymoile.

PRESTWICH.—The U.D.C. is negotiating with the Ecclesiastical Commissioners regarding a proposed road across Rectory Estate. Schemes for the construction of public conveniences are under consideration. Plans passed by U.D.C.: Six houses, Bland-road and Corwen-road, for Mr. W. Sykes; two houses, Mildred-avenue, for Mr. H. Richardson; six houses, Woodland-crescent, for Messrs. Knowles & White; eight houses, York-drive, for Mr. G. F. Darbyshire; semi-detached houses off Carlton-drive, for Mr. J. W. Davies; proposed Type houses on Park-road and Singleton Lodge Estate, for Building Estates, Ltd.; villas, York-drive, for Mr. J. Buckley: two pairs of villas, corner of York-drive and Lincoln-drive, for Mr. J. Buckley. The M.H. has sanctioned loans of £4,862 for street works and surface water sewers, and £442 in respect of local sewers.

RENFREW.—The Dean of Guild Court has passed plans for new offices for the Parish Council. Mr. H. Neil is the architect.

RHONDDA.—Preliminaries to the erection of a new Territorial Army drill-hall are being advanced at Pentre, Rhondda. A site is now being prepared.

ROTHWELL.—Plans passed by U.D.C.: House at Ouzlewell Green, for Mr. T. E. Ward; house at Roydslane, for Mr. G. Haigh; and house on the Lofthouse housing site, for Mr. H. Illingworth.

RUGBY.—Application to U.D.C. for subsidies Mr. J. Y. Rowse, two houses, Cromwell-road; Mr. J. Barnwell, house, Dunchurch-road; Mrs. R. J. Satchell, house, Lodge-road; Mr. A. Woodford, house, Holbrook-avenue.

SATTENHAM.—Sanction is being sought by the Surrey C.C. for a loan of £39,240 for the erection of a tuberculosis sanatorium.

SHIPLEY.—The U.D.C. is negotiating for a site at Shipley Fields for an electricity sub-station. Tenders are to be invited for reinforced concrete work in connection with the reconstruction of the sewage disposal works. Plans passed: Three pairs of semi-detached houses, Glen View-road, for Messrs. S. Wray & Co.; office, Leeds-road, for Messrs. W. Dawson & Son; four pairs of semi-detached houses, Bargrange-avenue, for Messrs. H. Chippindale & Co.; two houses, Glen View-road, for Messrs. T. J. Northwood and J. W. Fitton; two houses, Coppy-road, for Messrs. W. Pitts & Sons; two houses, Redburn-drive, for Mr. A. Chippendale.

SOUTHEND-ON-SEA.—Plans passed by T.C.: Stables, caddies' room, &c., Thorpe Hall Golf Club, G. A. Burges; two bungalows, Acacia-drive, J. W. Beere; bungalow, Glenbervie-drive, A. W. Goodhew; two houses, Kenilworth-gardens, F. J. Gregory; bungalow, Cheltenham-drive, J. C. Williams; house and garage, Western Esplanade, R. T. Howard; six houses, Fairmead-avenue, A. Bint; two bungalows, Station-road, Leigh, A. Butt; two houses, Woodcote-road, H. Smith Bros.; two bungalows, Cheltenham-drive, J. Wood; bungalow, Darlinghurst-grove, A. L. Lawrence; vicarage, St. Margaret's Church, Leigh, Rector and Churchwardens; two bungalows, Station-road, W. A. Gardner; two houses, Priory-avenue, I. W. S. Atkinson; four houses, Southview-drive, Messrs. Dow Bros.; conversion of house into flats, 6, Devereux-terrace, Mrs. Joicey; house and garage, Crowstone-road, J. Clark; three houses, Fairfax-drive, C. Llewellyn; conversion of house into shops, London-road, G. F. Ramuz; house, Leigham Court-drive, Mrs. H. Leeming; two houses, King's-road, J. Pollard; two houses, Sandleigh-road, H. C. Howard; ice factory, Guildford-road, Southend Ice & Cold Storage Co., Ltd.; conversion of house into shop, 377, Westborough-road, H. Smith; house, St. John's-road, Dr. F. Isdell; four houses, Lyme-road, R. T. Hammond &. Co.; two houses, Stirling-avenue, Walker Bros.; six houses, Elm-grove, E. Salmon; saw mills, London-road, O. H. Best; four houses, three in Gordon-road and one in Sydney-road, A. W. Goodhew; two houses and shops, London-road, A. D. Martin; seven houses and nine shops, Broadway, Leigh, Marrable Bros.; house and shop, Southchurch-road, F. C. Fletcher; conversion of two houses into shops, 895–897, London-road, F. Smith; conversion of two houses into shops, London-road, G. Martin; house, Blenheim-crescent, W. Hance; house and garage, Woodcote-road, W. A. Gardner; secondary school, Eastwood Boulevard, Southend Education Committee; three houses, Westbourne-grove, W. C. Ginn; house and garage, Woodcote-road, H. Smith Bros.; bungalow, Woodfield-gardens, W. A. Schrier; bungalow, Crosby-road, A. J. Cross; dairy, London-road, Clement's Dairies; bungalow, Kingswood-chaise, Mrs. Reid: two houses, Hainault-avenue, A. J. Hullord; store and garage, Fermoy-road, Barclay, Perkins & Co.; house, Burges-road, C. Matthews; house, Clieveden-road, Miss C. E. Atkins; bungalow, Cumberland-avenue, Mrs. Kendrick: new roads and sewers, Chalkwell Hall Estate, Chalkwell Hall Trust, Ltd.; two flats, North-avenue, H. Smith; three bungalows, Eastcote-grove, Purkiss Bros.; two houses and garage, Gainsborough-drive, T. Wiggins; two flats, Nelson Mews, J. Vineall; two houses, Lonsdale-road, W. Pennell; house, Central-avenue, C. Leswell; two bungalows, Tunbridge-road, G. P. Harrison; house, Alexandra-road, H. Marriner; conversion of house into shop, Stromness-place, T. Brown; house and shop, Southchurch-road, F. C. Fletcher; conversion of two houses into one, and additions, Leigh-road, Dr. W. Sarra; two flats, Trinity-road, J. Hiller; four houses, Northview-drive, F. W. Taylor.

SPENNYMOOR.—The U.D.C. has decided to carry out a scheme of road improvements, commencing in High-street at the Arcadia, and extending to the Four-lane Ends. The estimated cost is £27,742.

SPRINGHEAD.—The West Riding E.C. are proposing improvements to the Council's school. Plans have been submitted to the West Riding C.C. for the proposed improvement and widening of the main road from Grotton to Lydgate, with a view to making the road a width of 75 ft. The estimated cost is £25,000.

STANSTED.—Plans passed by R.D.C.: Bungalow at Ugley, for Mr. Sawkins: bungalow at Park-road, Elsenham, for Mr. W. Squires; bungalow at Little Hallingbury, for Mr. A. Craven.

STOCKTON.—The T.C. is to provide a further 300 houses in addition to the 100 now sanctioned.—Plans passed by the T.C.: Two houses in Gainford-road, for Mr. A. E. Carter, Finkle-street; six houses in Sydenham-road, for Mr. J. W. Carter, Oxbridge-lane; and two houses in Imperial-crescent, Norton, for Messrs. Blackett's Constructional Co.

STOKESLEY.—Plans have been passed by the R.D.C. for a pair of houses at Yarm, for Mr. A. Coates; house at Yarm, Mr. C. E. Holt; shop and warehouse at Great Ayton, Messrs. Dixon Bros.

STOURBRIDGE.—The B.E. has called attention to defects at the Secondary School for Girls, and the

(Continued on p. 37.)

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.
Flettons, at King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	3 8 3
Best Stourbridge Fire brick:—	
2½ in.	8 11 0
3 in.	10 3 0

GLAZED BRICKS—

	£ s. d.
Best White Ivory, and Salt Glazed Stretchers	22 0 0
Headers	21 10 0
Quoins. Bull-nose and 4½in. Flats	28 10 0
D'ble Str'tch'rs	30 10 0
D'ble Headers	27 10 0
One Side and two Ends	31 10 0
Two Sides and one End	32 10 0
Splays and Squints	30 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
⅜ in. Shingle for Ferro-Concrete	14 0	" "
¼ in.	15 0	" "
⅜ in. Broken Brick	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Padding-ton.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

	£ s. d.
Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5

White basebed, 3d. per ft. cube extra.
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.
Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 3
6 in. rubbed two sides, ditto "	5 9
3 in. sawn two sides slabs (random sizes) "	2 1½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 5½
1½ in. to 2 in. ditto, ditto "	1 3

HARD YORK—
Delivered at any Goods Station London.

Scappled random blocks. Per Ft. Cube	5 6
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 4½
6 in. rubbed two sides ditto "	6 0½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 5
2 in. self-faced random flags. Per Yard Super	7 11

ARTIFICIAL STONE.

	s. d.
Delivered in London Area in full van loads. per ft. cube	6 6
Plain " "	7 9
Moulded " "	8 3
Cills	

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 6
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

× 11	£37 10	1 × 9	£36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/-	1¼	33/6
¾	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
⅝	17/6
¾	21/-
1	26/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle				0	2 8
Dry Wainscot Oak, per ft. super, as inch	0	2 0	to	0	2 6
⅜ in. do. do.	0	1 6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1 9	to	0	2 6
Cuba Mahogany	0	3 0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per load	45	0 0	to	50	0 0
American Whitewood planks, per ft. cube	0	14 0	to	0	16 0
Best Scotch Glue, per cwt.	4	10 0	to	—	
Liquid Glue, per cwt.	4	7 0	to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
Ditto hand made ditto	5 12 6
Ornamental ditto	5 17 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ½ in.	13 10 0
⅜ in.	14 10 0	⅝ in. to 2⅜ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28¾ %	35 %	45 %
Steam	22½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2⅜	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2⅜	3½d.
3½ in.	1/6½	1/2⅜	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1⅜	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5⅜
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5⅞	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3⅜	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.	£ s. d.
Common Bars	13 10 0 to	14 10 0
Staffordshire Crown Bars— good merchant quality	14 10 0	15 10 0
Staffordshire "Marked Bars"	17 0 0	18 0 0
Mild Steel Bars	12 10 0	13 10 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..	14 0 0
Hoop iron, basis price	16 10 0	..	17 10 0
" Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black— Ordinary sizes to 20 g.	15 0 0	..	16 0 0
" " " 24 g.	16 0 0	..	17 0 0
" " " 26 g.	18 0 0	..	19 0 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..	22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..	24 10 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22 0 0

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	43 0 0
Pipe in coils	43 10 0
Soil Pipe	46 10 0
Compo pipe	49 10 0

NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

	£ s. d.		
Old lead, ex London area, at Mills per ton	30 0 0	..	—
Do., ex country, carriage forward per ton	31 0 0	..	—

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1½ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-	101/- per doz
8 lbs. S. traps	35/-	45/-	66/-	126/- "

COPPER—	£ s. d.	
Strong Sheet per lb.	0 2 3	.. —
Thin "	0 2 4	.. —
Copper nails "	0 2 3	.. —
Copper wire "	0 2 4	.. —
TIN—English Ingots "	0 2 2	.. —
SOLDER—Plumbers' "	0 1 1	.. —
Tinmen's "	0 1 3	.. —
Blowpipe "	0 1 4	.. —

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes per gallon	0 3 7
" " " in barrels "	0 3 9
" " " in drums "	0 4 0
Boiled " " in barrels "	0 4 0
" " " in drums "	0 4 2
Turpentine in barrels "	0 5 9
" in drums (10 gall.) "	0 6 0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	57 0 0

GENUINE WHITE LEAD PAINT—
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spodol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots

	per ton delivered		
Red Lead, Dry (packages extra)	per ton	52	0 0
Best Linseed Oil Putty	per cwt.	0	16 0
Filocol	per cwt.	0	15 6
Size, XD Quality	fkn.	0	3 6

[Concluded on next page.]

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds	10½d.
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d.,21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d.,21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Oxford Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 7 6
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine		0 9 0
Cuirass Black Enamel		0 7 0

PROPOSED NEW BUILDINGS

(*Continued from* p. 35.)

County E.C. intimates that it is alive to the need for new school buildings, which will be proceeded with if satisfactory tenders can be obtained.

STREFFORD.—Under a grant from the Miners' Welfare Fund the Strefford Collieries Co., Ltd., have decided to erect pit head baths.

SUNDERLAND.—The R.D.C. has approved plans from private builders for the erection of 27 houses at Fulwell.

SURBITON.—The Westfield Lodge Estate is being developed by Messrs. Jones & Co., and an agreement has been made with the U.D.C. regarding widenings, &c.

—The B.E. has sanctioned the purchase of Allbury House and grounds as a site for a secondary school. Sketch plans for the conversion of the building have been submitted, but the B.E. has asked for preliminary plans for a future complete school for 400 boys, and these plans are now being prepared by the C.C.

SUTTON.—The Southern Railway proposes the reconstruction of the railway station, and in this connection the U.D.C. proposes road widenings, &c., at a cost of £13,852. The U.D.C. is asking for the provision of new secondary schools for boys and girls.

TAMWORTH.—Plans have been approved for a new school for St. John's, which will provide accommodation for 218 scholars.

TAUNTON.—Plans passed by T.C.: House, Peter-street, for Mr. F. C. Spear; house, Winchester-street, for Mr. Lawrence.

TAVISTOCK.—The County Architect has been asked to prepare plans for an additional class-room at the Galworthy council school.

TEDDINGTON.—An elementary school for 400 children is to be erected at St. Mark's-road, by the Middlesex E.C.

THORNABY-ON-TEES.—Pair of bungalows, Thornaby-road, for J. W. McLeod.

THORNE.—The R.D.C. have been considering the question of a sewerage scheme necessitated by increased colliery population, and have passed the scheme prepared by their engineers, Messrs. W. H. Radford & Son, of Nottingham.

THURNSCOE.—Providing that sanction can be obtained for the necessary loans, the U.D.C. propose to undertake the construction of a new reservoir, a £22,000 sewage disposal scheme, and an extension to the present waterworks.

TORQUAY.—The M.H. has approved plans for the erection of accommodation for nurses at the Whitecliff Hospital. The E.C. has submitted an estimate of £4,000 for the purchase of "Torville," and of garden ground lying between "Torville" and the secondary school, to be utilised for the purpose of the erection of a technical school.

TOTNES.—An estimate of £8,500 has been prepared for the erection of a secondary school for girls. The plans provide only for the accommodation which is absolutely necessary and do not include a central hall. The T.C. proposes an improvement at Station-road, to cost £395.

TOTTINGTON.—Plans approved: Pavilion at bowling-green, Two Brooks; bleachworks, for the Bleachers Association. The D.C. propose widening of Church-street to 36 ft. from the lower end of Bank-street, and the formation of footpaths and new footpath between school yard and Bank-street.

UPTON.—The Surveyor to the R.D.C. has been instructed to put down a new 3 in. water main to the Isolation Hospital at an estimated cost of £700.

UPTON PYNE.—The Devon C.C. has prepared plans for the erection of a small-pox hospital, at a cost of £3,000.

UXBRIDGE.—Plans passed by U.D.C.: War memorial at junction of St. Andrew's-road and Park-road.

WALLINGTON.—Sketch plans have been prepared by the Surrey County Architect for the new secondary school for girls, and submitted to the Governors.

WALLSEND.—Messrs. Swan, Hunter & Wigham Richardson, Ltd., have inaugurated a housing scheme in connection with land they own at Station-road. This land will allow for the building of 65 houses.

WALTHAMSTOW.—Plans passed by U.D.C.: Two shops, Winchester-road, Kind & Co.; bungalow, Falmouth-avenue, H. Johnson; store and van shed, Nicholson-road, J. Sands; house, Winchester-road, H. J. Pettit; stores and office, Barrett-road, E. J. Good.

WANDSWORTH.—Plans passed by B.C.: Messrs. W. Downs, Ltd., house, Abbotsleigh-road, Streatham; Hays' Wharf, Ltd., cottage and garage at Roehampton-court, Roehampton-lane; Mr. C. M. Gibbs, house, West-hill, Southfield; Messrs. W. & E. Hunt, club house at Kenilworth-court, Lower Richmond-road, Putney; Mr. E. Wilson, house, Old Devonshire-road, Balham; Mr. J. R. Smith, re-drainage of 38, 40 & 42, Nelson's-row, Clapham South; Mr. H. R. Thorp, four houses, Moyser-road, Streatham; Messrs. T. H. Adamson & Sons, additions to 3, Gressenhall-road, Southfield; Mr. F. Dickins, seven houses, King's-avenue, Clapham South; Messrs. H. F. Buchan & Co., 22 houses in Byrne-road and Culverden-road, Balham; Mr. W. J. F. Gillett, three houses, Valley-road, Streatham; Veritas Mantle Works, collodion house, Garratt-lane, Fairfield; Messrs. H. & T. Danks (Netherton), Ltd., boiler house, &c., at Columbia Graphophone Co.'s premises, Bendon-valley, Springfield; Wandsworth Borough Council, depot stores and storekeeper's apartments at Streatham Depot, Streatham High-road.

WEALDSTONE.—Plans approved: Two houses, Whitefriars-avenue, for the Guild Housing, Ltd.; house, Kenton-road, for Mr. A. Chivers; two houses, Nibthwaite-road, for Messrs. Brooker & Jarvis.

WEST HARTLEPOOL.—Plans passed by T.C.: Captain W. J. Brackenbury, two houses and garages, Tudor-terrace, Seaton Carew; Mr. E. Mehegan, bungalow, Caledonian-road; Colonel Thomlinson Temperance Institute, institute and club premises, Waldon-street and Houghton-street.

WEST WESTMORLAND.—The R.D.C. is to obtain tenders for work at the sewage works.

WESTON-S.-MARE.—The M.H. has held an inquiry relative to the application of the U.D.C. to borrow £1,700 for the purpose of constructing a reinforced concrete model pond on the foreshore.

WHICKHAM.—The U.D.C. have approved of plans submitted by Messrs. John Bowes & Partners, Ltd., for the erection of 65 houses at Marley Hill.

WHITLEY.—In connection with the Whitley Upper and Flockton Joint Councils' decision to instal new pumps and to build a new reservoir for the joint water-works, it was decided to make application to the Public Works Loan Board for the borrowing of £1,100. Mr. F. Massie, of Wakefield, is to carry out the scheme.

WILLESDEN.—Plans passed by U.D.C.: Five houses, Holland-road, Harlesden, by Messrs. Done, Hunter & Co., for Mr. R. J. Curner; four houses, Oxgate-gardens, Cricklewood, for Mr. F. W. Brealy; six houses, Mount Pleasant-road, Brondesbury, by Mr. G. A. Sexton, for Mr. A. E. Williams; two houses, Mount Pleasant-road, Brondesbury, for Mr. C. W. B. Simmonds; 10 houses, North-way, Neasden, for Mr. S. Moss; two cooling towers, Acton-lane, Harlesden, for the Metropolitan Electric Supply Co., Ltd.; 48 houses, Ellesmere-road, Dudden-hill, for Messrs. Pearce & Taylor.

WILLINGTON (DURHAM).—Messrs. Straker & Love, owners of the Brancepeth Colliery, have presented a site in the new part of Willington, near the Urban Council's new houses, in connection with a welfare scheme, the total cost of which is £18,000.

WINDLESHAM.—The Council school is to be improved by the E.C. at a cost of £1,350.

WOKING.—The Surrey E.C. has approved a scheme for the adaptation of one of the recently purchased huts as a dining room and assembly hall, for the County School for Girls, at an estimated cost of £415. The B.E. has approved the proposal to provide a caretaker's cottage at a cost not exceeding £500, and the plans are in course of preparation.

WOLVERLEY.—In connection with Sebright's endowed schools, the B.E. is being pressed to form a new scheme under which a new school can be built.

WORCESTER.—The City Council has decided to widen Northwick-road, at an estimated cost of £2,705. Application for sanction to borrow this amount is being made to the M.H.

FIRES.

HENLLAN (CARD.).—Damage estimated at £12,000 was done by a fire which destroyed the Henllan Woollen Factory, owned by Alderman John Lewis.

LONDON.—Damage amounting to many thousands of pounds has been caused by fire at a large four-floored building in Fitzroy-court, Euston-road, used as a packing department by Messrs. Ewart & Son, Ltd., geyser manufacturers.

PORTHCAWL (GLAM.).—The Casino Cinema has been gutted by fire. The damage is estimated at £35,000.

BUILDING SURVEYORS' ASSOCIATION

A MEETING of this Association was held at the Auctioneers' and Estate Agents' Institute, Manchester, recently.

The subject of an examination for building surveyors occupied some considerable time. A report of the executive committee showed that considerable progress had been made with the R.I.B.A., with a view to setting up the Institute's Examination for provincial building surveyors, with one or two slight amendments thereto. The amendments recommended referred mainly to the more modern type of construction and the practices peculiar to provincial areas. The recommendations will be sent forward to the R.I.B.A. for their approval, when it is hoped that a complete scheme for a recognised examination will be set up, in which case all applicants for membership after a date to be subsequently fixed will be required to hold a certificate or diploma of the R.I.B.A. Important developments were approved relating to the revision of rules, which now include the admission of honorary members, who will be drawn from technical experts or professional men interested in the work of the Association. Provision is now made for retired members to continue their membership on payments of 50 per cent. of their retiring membership fee. Provision is also embodied in the new rules for the election of a president and vice-presidents. The following were subsequently elected as honorary members of the Association: Mr. James Wilding, Surveyor and Engineer to the Runcorn M.D. Council; and Mr. F. O. Creswell, Liverpool.

After a full three years' work, the Association has now made what is hoped to be progressive changes in the personnel of its officers. The retiring Chairman (Mr. W. J. Stone, Bootle), was unanimously elected President for 1924-5. It was pointed out by him that building surveyors outside the Metropolitan area, up to three years ago, had no organisation of any kind, and that it would require continued efforts, with a sound educational policy, and an examination scheme, to bring the Association to such a degree of efficiency that would enable it to bring pressure upon local authorities. Mr. Stone then nominated Mr. Walter Percival (Stoke-on-Trent), as Chairman for the coming year, which was carried unanimously. The retiring Secretary (Mr. W. A. Warwick) was unanimously elected to be Vice-Chairman, and will continue his work of Treasurer to the Association. Mr. Walter Rodgers (of Stoke-on-Trent) was elected Secretary, and Mr. Morris Crossland (of Leeds) appointed Organising and Press Secretary. In addition to the principal officers, the committee is representative of the following areas: London, Manchester, Liverpool, Cheshire, and Leeds.

NEW BUILDINGS IN LONDON

Pimlico.—ALTERATIONS.—Extensive alterations are being made to the Metropolitan Police station at Gerald-road. Mr. G. Mackenzie Trench, A.R.I.B.A., is the architect for the work. Messrs. Lole & Co., of Trafalgar-square, S.W.3 are the builders. The price of the work is £8,219.

Tothill-street.—ALTERATIONS.—The work now being done at "Imperial House," Tothill-street, consists of extensive alterations to the internal planning, new electric passenger lift installation, re-arrangement of sanitary appliances, fitting up testing laboratories, and redecorations throughout. The premises are to be occupied by the Associated Portland Cement Manufacturers. The work is being carried out under the instructions of the architects, Messrs. Henry Tanner. The sub-contractors are:—Lift installation, Messrs. Waygood-Otis, Ltd.; general building work, woodwork, sanitary installation and drainage, decorations and plaster work are being carried out by Messrs. Holland & Hannen & Cubitts, Ltd., of 258, Gray's Inn-road, W.C.1.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1¼

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/8	1/9	2/0
Deal shelves and bearers	"	1/5	1/7	1/10
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run.	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	"	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/4
Sash fasteners	11½d.	Mortice locks	5/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	17	0
Plain compound girders	"	20	0
Do. stanchions	"	23	0
In roof work	"	28	0

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do.	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		£	s.	d.
Milled lead and laying in flashings and gutters	per cwt.	59	0	
Do. Do. in flats	"	57	0	
Extra labour and solder in coated cesspools	each	6	9	
Welt joint	per ft run.	0	6	
Soldered seam	" "	1	6	
Copper nailing	" "	0	6	

	½"	¾"	1"	1½"	2"	4"
Drawn lead waste per ft. run	1/1	1/9	1/11	3/5	4/2	
Do. service "	1/8	2/2	2/7	3/10		
Do. soil "						7/6
Bends in lead pipe each					3/3	8/2
Soldered stop ends "	1/2	1/8	2/1	2/10	3/6	
Red lead joints "	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints "	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws "				14/7	19/6	
Bib cocks and joints "	6/4	9/7	15/4	41/-		
Stop cocks and joints "	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	2
Do. Do. Sirapite	" "	2	4
Do. Do. Keen's	" "	3	3
Add sawn lathing	" "	1	5
Add metal lathing	" "	2	3
Portland cement screed	" "	1	10
Do. plain face	" "	3	0
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8
26 oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do. 2 coats	" "	1	3
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece	2/- to 4/-	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ASHWELL.—For erection of a village hall. Mr. F. W. Nicholls, Market-place, Oakham :—

G. Brisley, Whissendine	£995
E. S. Ireson, Stamford	967
A. E. Brown & Co., Grantham	925
*J. Simpson, Braunston	705

BATH.—For the erection of pump house and oil store, for the Asylum's Committee of the T.C. :—

*Brown & Co., Bristol	£738

BATH.—For additional partitions and alterations at Oldfield Boys' and Girls' School, for the T.C. :—

*J. Stone, Ltd.	£258

BATH.—For painting at West Central School, for the T.C. :—

J. Long & Sons	£246

BATH.—For works at various schools during the summer holidays, for the T.C. :—

*Watts Bros.	£103	13	2
*Hopes Bros.	133	10	0
*Hopes Bros.	116	17	0
*G. Burden	189	0	0

Walcot Parochial—
St. Paul's—
Lyncombe St. Luke's—
St. Saviour's—

BATH.—For construction of Lansdowne elevator tank, for the T.C. :—

*Heywood & Wooster	£2,249

BATH.—For supplying and fixing iron fencing round Lansdowne elevated tank, for the T.C. :—

*C. Holcombe	£144 3 9

BROOKWOOD.—Accommodation for nurses at the Mental Hospital, for the Surrey C.C. :—

*Bunning & Fitton Adams, Ltd., Godalming	£12,432

CHESTERFIELD.—For the erection of Hasland and Birdholme Baths, in Storforth-lane, for the Corporation :—

*P. & W. Anderson, Ltd. (Accepted subject to approval of M.H.)	£6,851

CROYDON.—For erection of Wickham-road sub station, for the T.C. :—

Truett & Steel, Ltd.	£292
J. Smith & Sons, Ltd.	248
R. Mansell	237
*D. Waller	187

CROYDON.—For the erection of a sub-station at Violet-lane, for the T.C. :—

*D. Waller	£560

CROYDON.—For supply of 800 tons of 60 ft. tram rails, for the T.C. :—

Bolckow, Vaughan & Co. : £9 18s. 1d. per ton

DORKING.—For the erection of houses under No. 2 scheme, for the U.D.C. :—

Type (pairs)—			
*Cummins & Son	£1,040	0	0
J. Crewdson	1,000	0	0
Collins & Son	1,169	3	0
A. & P. Clear	905	0	0
W. H. Brown	1,017	0	0
J. Bodle	942	0	0
G. J. Arthur	996	1	6
Type (fours)—			
G. J. Arthur	£1,918	7	4
J. Bodle	1,870	0	0
W. H. Brown	2,010	0	0
A. & P. Clear	1,736	3	0
Collins & Son	1,961	0	0
J. Crewdson	1,960	0	0
*Cummins & Son	1,965	0	0
E Type (pairs)—			
G. J. Arthur	£1,201	19	0
J. Bodle	1,168	0	0
W. H. Brown	1,261	0	0
A. & P. Clear	1,011	15	0
Collins & Son	1,336	0	0
J. Crewdson	1,160	0	0
*Cummins & Son	1,198	0	0

DUDLEY.—Repairs and decorations at Clinic, for T.C. :—

‡M. Hipkiss, Netherton	£235 16

DURHAM.—For the erection of 14 houses at Pity Me, for the R.D.C. :—

T. Coates, Durham	£7,966
E. Rutter & Son, Esh Winning	6,762
*H. Bowers, Rowlands Gill	6,720

FARNBOROUGH.—For re-tiling houses at Warmington and Farnborough, for the R.D.C. :—

*E. Matthews	£220

FINCHLEY.—Construction of sewer from Totteridge-lane to Lansdowne-road, for U.D.C. :—

‡Shearman Bros., Cambridge	£20,113 15

GLASGOW.—For carrying out extensions to Dalmarnock Electricity Power Station, for the Electricity Committee of the Corporation :—
Excavator, Brickwork, and Mason's Work—

‡John Train & Co., Glasgow	£80,993

HANWORTH.—For the construction of sewage and sewerage disposal works, for the Blyth and Cuckney R.D.C. :—

*Smith & Haslam, Doncaster	£318

HATFIELD.—For erection of 24 cottages, for the R.D.C. Messrs. Crickmer & Foxley, architects, 1, Lincoln's Inn Fields, W.C.2 :—

Thomas Shillitoe, London	£14,400
Robert L. Tonge, Watford	13,900
J. Willmott & Sons, Hitchin, Herts	12,187
Arthur Cole, Ltd., Luton	11,948
Herbert King, Watford	11,170
Bennett Bros., W. Letchworth	9,768
T. Day & Son, Luton	9,648

HOUNSLOW.—For painting work at Hospital Dispensary, for the Middlesex C.C. :—

*R. Blackburn, Chiswick	£118

ILFORD.—For erection of additional accommodation over battery room at electricity works, for the U.D.C. :—

*Hammond & Miles, Ilford	£2,149

ILFORD.—For extensions at Green-lane sub-station, for the U.D.C. :—

*Taylor & Co. (Ilford), Ltd.	£3,005 19 6

LEMONROYD.—For the construction of new sewage and sewerage disposal works, for the Rothwell U.D.C. :—

*Radford & Son.	

LITTLE EATON.—Supplying and laying 9 in. cast iron and stoneware pipes, under L.M. & S. Railway, for the Shardlow R.D.C. Engineers, Messrs. Elliott & Brown, of Nottingham :—

G. F. Tomlinson, Derby	£650
*H. H. Barry, Radcliffe-on-Trent	530

LONDON.—For erection of an assembly hall at the secondary school, Ealing, for the Middlesex C.C. :—

*A. Monk	£2,860 13

LONDON.—For supply of thirteen 60 in. steel pipes and specials for the suction main at Walton Works extension, for the Metropolitan Water Board :—

*Clayton, Son & Co.	£1,171

LONDON. —For laying Section 2 of the Campden to Cricklewood main, for the Metropolitan Water Board :—

Monk & Newell, Ltd.	£113,314	8	4
Thomas Muirhead & Co., Ltd.	99,308	0	0
Sir John Payne Gallwey, Ltd.	95,665	4	8
Wm. Press & Son	91,318	8	7
David Weston & Co., Ltd.	87,750	11	3
John Mowlem & Co., Ltd.	82,615	18	3
Wilson Lovatt & Sons, Ltd.	79,457	2	6
John Cochrane & Sons, Ltd.	74,732	6	6
*Sir W. G. Armstrong, Whitworth & Co., Ltd.	67,999	13	6

LONDON.—For supplies, &c., for the Metropolitan Water Board :—

*J. Arnold & Sons (160 *tons of sand*)	£320	0	0
*Stewarts & Lloyds (*steel pipe*)	180	0	0
*British Reinforced Concrete Eng. Co. (*fabric*)	196	12	6

LONDON.—For remedying the damp state of basement tenements No. 1, Probyn House, and No. 98, Norfolk House, and for repairs to roof and walls of No. 93, Norfolk House and No. 80, Jessel House, for the Westminster C.C. :—

Mowlem and Co., Ltd.	£253	3	10
R. M. Pearson	189	0	0
Townsends (Builders), Ltd.	178	6	6
E. D. Hook, Ltd.	148	7	8
*Sims & Russell	144	13	6

LONDON.—For painting the interior of Billingsgate Market, for the City Corporation :—

F. Smith & Co.	£4,129	0	0
W. Lawrence & Sons	2,855	0	0
W. Lidstone & Son	2,200	0	0
*Beaumont & Sons	1,897	5	10

LONDON.—For the painting of non-provided schools approved by the L.C.C. :—

*E. D. Winn & Co.—Christ Church (St. Marylebone)	£631	0	
*Sabey & Son—St. John Evangelist R.C. (Islington, S.)	693	0	
*W. M. Brand—Stoke Newington Parochial (Stoke Newington)	239	0	
*F. C. Hoskins & Co., Ltd.—St. Margaret's C.E. (Abbey, Westminster)	198	10	
*G. Barker—Holy Trinity (Linehouse)	269	0	

LONDON.—For the adaptation of No. 74, Pentonville-road, with the ground in the rear, for the purpose of a district office for repairs to schools, for the L.C.C. :—

W. S. Barton & Co.	£750	0	0
The Pitcher Construction Co., Ltd.	729	0	0
Holland & Hannen & Cubitts, Ltd.	725	0	0
F. Cottrell, Ltd.	716	0	0
Whitbys, Ltd.	715	0	0
John C. Mather	681	0	0
Sims & Russell	659	0	0
Townsend & Pearson, Ltd.	646	5	0
Lole & Co.	646	0	0
W. T. Lawrence	599	3	4
Arthur H. Inns, Ltd.	560	0	0
Stevens & Sons	553	10	0

LONDON.—For construction of above-ground portion of convenience at Foster Memorial Park, for the Lewisham B.C.

A. T. Peyton	£570	0	
*C. Cutler	551	10	

METROPOLITAN ASYLUMS BOARD.—The following tenders have been received by the Board :—

Tooting Bec Mental Hospital extension—Patent glazing to roofs of covered ways—

†H. Hope & Sons, Smethwick	£384	12	0

Eastern Station—Extending roof of yard, &c.—

†W. S. Sharpin	615	0	0

South-Eastern Station—Extending roof of yard, &c.

†C. H. Boyd & Son, Ltd., W.	1,823	0	0

Belmont Laboratories—New forage store—

†G. Pauling, Ltd.	235	0	0

Sheffield-street Hospital—Cleaning and painting—

†E. Proctor & Sons	110	0	0

North-Eastern Hospital—Cleaning and Painting—

†M. Greenwood & Son, Ltd.	2,359	19	0
L. Kazak	2,560	0	0
J. Hocking & Co.	2,598	0	0
Yeomans & Richardson	2,850	0	0
W. Hussey	3,110	0	0
J. S. Fenn	3,194	0	0
A. E. Robinson	3,950	0	0
W. Palmer & Sons	5,495	0	0

Southern Hospital—Cleaning, painting and repairs—

†E. Proctor & Sons	£880	0	0
D. C. Bowyer	1,089	15	0
P. Miller & Son	1,313	0	0
J. S. Fenn	1,650	0	0

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Eastern Hospital—Cleaning, painting and repairs—
†L. Kazak 1,075 0 0
J. Hocking & Co. 1,219 0 0
J. S. Fenn 1,279 0 0
W. Palmer & Sons 1,477 5 0
Park Hospital—Cleaning, painting and repairs—
†J. S. Fenn 687 17 0
E. Proctor & Sons 690 0 0
Barnes & Co. 756 0 0
L. Kazak 810 0 0
J. Hocking & Co. 825 0 0
W. Bickerton 1,192 0 0
Wandsworth Casual Ward—Cleaning, painting and repairs—
†J. Hocking & Co. 353 0 0
Paddington Casual Ward—Cleaning, painting and repairs—
†Robert Young's Construction Co., Ltd. 131 15 6

Park Hospital—Weighbridge foundations—
†Barnes & Co. 249 0 0
Tooting Bec Mental Hospital extension—Laying terrazo paving—
†Diespeker & Co., Ltd. 104 10 0

NEWRY.—For construction and erection of a modern steel swing bridge over the canal for the Harbour Board Commissioners :—
Sir Wm. Arroll & Co., Ltd., Glasgow.

PLYMOUTH.—For the supply of cast-iron pipes, for the T.C. :—
*Clay Cross & Co., Ltd. £1,103 14 3

PORTSMOUTH.—Alterations to 30, Fratton-road, for Mr. Gorfett. Messrs. C. W. Bevis & Son, architects, Southsea :—
F. Privett, Southsea £1,037
John Lay & Co., Portsmouth 945
Saml. Salter, Southsea 915
Tanner Bros., Southsea 900
*Jno. Croad, Portsea 884

PORTSMOUTH.—For building of garage and additions to residence at Hayling Island, for Mr. E. W. Gilbett. Messrs. C. W. Bevis & Son, architects, Southsea :—
*John Lay & Co.

SOUTHGATE.—For the erection of an assembly hall at Minchenden Secondary School, for the Middlesex C.C. :—
*G. Godson & Son £1,830

TADCASTER.—For the laying of new water mains for the Tadcaster R.D.C. :—
*A. Green & Sons, Kippax.

THORNABY-ON-TEES.—For 155 privy conversions in No. 7 district, for the T.C. :—
*E. Harrison £1,254

WALTHAMSTOW.—For lime whiting schools' out offices, for the U.D.C. :—
*Lucas Bros. £157

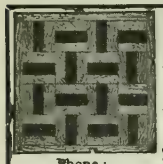
WALTHAMSTOW.—For renovation at schools, for the U.D.C. :—
Wynn's-avenue School £851 0
Selwyn-avenue School 186 0
*J. R. Osborne—
Queen's-road School 246 10
*H. C. Earl—
Blackhorse-road School 199 10
*Lucas Bros.—

WARRINGTON.—For painting and decorating of the Co-operative Hall and anterooms, in Cairo-street. The Secretary of the E.I. Co-operative Society, Ltd., 15, Cairo-street :—
C.W.S., Ltd., Building Dept. £372 0
W. Winstanley & Co. 370 8
F. Ball 261 0
A. R. Clare 250 0
Hesketh & Son 238 0
*Thos. Allen & Son 185 0
(All of Warrington.)

WARRINGTON.—Supply of 1,200 lin. yds. of 5 in. by 15 in. granite edging, for T.C. :—
*Summerfield & Lang, Ltd.—Price not recorded.

WELLINGTON.—For repairs and improvem to the Wesleyan Church and School. Mr. A. Jenki M.S.A., architect, Wellington, Salop :—
General Repairs—
*R. & J. Millington, Oakengates £335 0
Renovations—
*G. H. York & Co., Wellington 312 7

WESTHAMPNETT.—For the erection of six hou at Walberton, for the R.D.C. :—
*A. Crane & Son, Worthing £2,900


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THE INSTITUTE AND OXFORD

THE recent Council election of the Royal Institute of British Architects gave such a decided verdict in favour of the policy of the Council of amalgamation with the Society of Architects in agreement with the Council of that body that the referendum which opponents of he Institute policy asked for and which was agreed to at the ecent special meeting of the Institute at Caxton Hall, seemed o promise nothing more than a confirmation of the vote given t the election, except, of course, the agreement between the wo parties within the Institute—*i.e.*, Defence League and the Emergency Committee—which was made a condition of the roposed referendum. Following the three-to-one majority vhich the election gave in favour of the Council's policy, a ostal vote so soon after the election did not appear to be ecessary as a means of ascertaining the mind of the electorate, ut as a means of putting an end to party politics and elec- ioneering within the Institute, and the interminable arguments vith which we are all too familiar, we welcomed the proposal, nd the special meeting at Caxton Hall appeared to welcome t in much the same spirit. We had never any doubt that the ote given at the election after an exhaustive discussion of the nstitute proposals really expressed the opinion and wishes of he members to bring about if possible an amalgamation of the nstitute and the Society, with the further object of going to arliament as a united profession with a Bill for the statutory egistration of architects. The result of the referendum, herefore, does not surprise us; it does no more than confirm previous decision and should, as we believe it will, put an end o a controversy which was harmful to the prestige of both the nstitute and the profession. An opportunity is now afforded or all reasonable men to work together for the common good f the profession and of going forward with a practical policy n which a substantial majority of the profession are at one, nd from which we can hope for really useful results within reasonable period. The idea of registration undoubtedly nakes a strong appeal to many members of the profession, and rom the protection which they believe it will afford they see cure for many of the difficulties and hardships which confront hem in their daily practice. Whether they are right or wrong ve do not know, nor do we know what the fate will be of any Bill for their protection against unfair competition which may e presented to Parliament; but we can surely believe that never before has there been so good a chance as there is to-day f such a measure succeeding—or rather, as there will be if the olicy of the Institute is confirmed by the Society of Architects, as ve believe it will be, and is finally endorsed by the Privy Council. Whatever the fate of the Registration movement, ts advocacy on principle being now the policy of the Institute, here is apparently no longer any reason for the existence of society which was formed forty years ago to secure what at hat time the Institute was opposed to, and with the amalgama- ion of the two bodies we shall at last obtain a supreme Institute epresenting a great and united profession. Is that not in tself a result to be desired: an end to a long and weary con- roversy which justifies the means?

We do not know whether the annual conference of the R.I.B.A. has been accidentally or designedly delayed this year, but that it follows not only the annual elections but the postal vote is a happy fact, for the Oxford conference which should be held in an atmosphere of good will is the first general meeting of architects—for, of course, invitations have been extended to all the Societies, including the Society of Architects—since the amalgamation proposals were agreed to by the Institute, and the conference will represent if not *de jure* then *de facto* a united profession. No more suitable city for such a meeting could have been selected, for here in this ancient city of learning we find some of the best examples of our art of past and present times, and we find learning and art flourishing by the side of commerce and industry. Oxford is not a dead city, for its long history and tradition are carried forward with a progressive vitality which is essential in a modern city whether of learning or commerce, but it is not the actual survival of the ancient town or its mediæval charm and its picturesqueness which make it such a wonderful city; it is also, as Mr. Stirling Taylor points out in his admirable little work on Oxford,* the mental survival of a great social idea in mediæval life. "The University is the still living body of a great human institution which was a dominant factor of the Middle Ages. England, like Europe in general, has passed on into a modern world, but nowhere quite so completely as in Oxford has one large fragment of the mediæval life continued as a still breathing reality. . . Oxford University to this moment carries on that work of an educational guild which made it one of the most famous cities of the Middle Ages. The mediæval period was the age of guilds; and the guilds were perhaps its most characteristic social features. To this day Merton College and the others of its kind are performing on the very same spot, in the very same buildings often, the work which was allotted to them by their first founders." And it is in this city that architects are meeting this week shortly after the Council election and referendum; and now that our political differences are composed and our policy settled and we are on the threshold of a step which cannot fail to add to the responsibilities and duties of our Institute—as well as, we may hope, to its prestige and influence—we may remind ourselves while in this ancient city which devoted itself to "the care of the mind and the soul" that while architecture is an art it ranks among the learned professions. In our efforts, therefore, to secure protection against the unqualified practitioner we must not forget the obligations imposed upon us as members of a learned profession which is at the same time a science and a business. In the Middle Ages a city could devote itself to a life of thought, and though we cannot achieve anything under our modern social system comparable with the dominant characteristic of Oxford, we can at least remember the spiritual aspect of our calling, which this conference at Oxford will surely do something to stimulate if we realise in some measure the idea which was the origin of such a city as Oxford, and which has remained paramount throughout its long history.

*Oxford; a Guide to its History and Buildings, with twenty-five illustrations and a map, by G. R. Stirling Taylor. London: Longmans Green & Co.

NOTES

The Referendum. THE result of the postal vote which the Caxton Hall special meeting of the R.I.B.A. agreed should be taken is a complete confirmation of the result of the recent Council election, and the fact that the proposals for the amalgamation with the Society of Architects have been endorsed by 1,712 members against 267 shows how very widespread is the desire for unification of the profession, especially as on a separate poll of the Licentiates of the Institute 886 voted for the proposals against 22. So far as the R.I.B.A. is concerned, all the necessary steps have been taken and it is clear that the Council's policy has a quiet unprecedented measure of support. The matter will now be submitted to the members of the Society of Architects, and if they approve of the proposals the necessary Petition will be submitted to the Privy Council. At the meeting of the Institute held on Monday for the purpose of confirming the resolutions passed at the meeting held on June 17, the only dissentient was Professor Beresford Pite, and even he expressed himself wholly in favour of unification, but not of registration. We know, of course, that while the profession as a whole believe in registration as a protection against unfair competition, there are well-known and highly-respected architects who do not; but cannot the artistic liberty which they desire be secured under Registration?

The Society of Architects and the Proposals. AN extraordinary general meeting of the Society of Architects will be held at King George's Hall, Caroline-street, Tottenham Court-road, W.C.1, on Thursday, the 24th inst., at three o'clock in the afternoon, for the purpose of considering, and, if thought fit, passing the subjoined Resolution, viz.:—"That this Meeting hereby approves, ratifies and confirms the Provisional Agreement for Amalgamation dated the 29th day of May, 1924, and made betewen the Royal Institute of British Architects of the one part, and the Society of the other part, and hereby directs the Council of the Society to carry such Agreement into effect either with or without modification." Should the above resolution be passed by the requisite majority it will be submitted for confirmation as a special resolution to a second extraordinary general meeting, and such meeting will be held on Friday, August 8th, at the Registered Office of the Society, 28, Bedford-square, London, W.C.1. We have no doubt the resolution will be agreed to and if it is both parties to the proposals—*i.e.*, the R.I.B.A. and the Society—will have reason to congratulate themselves on a result which they believe to be in the best interests of the profession. The members of the Society may be reminded that the new class of Licentiateship in the R.I.B.A. must not be confused with the old one. The new Licentiate class is to be raised to the status of corporate membership sharing equally with Fellows and Associates the rights and privileges of voting powers on all subjects, the use of the designation "Chartered Architect," and the opportunity of proceeding to the Fellowship of the R.I.B.A. when qualified to do so. It is therefore obvious that members of the Society who are transferred to corporate membership of the R.I.B.A. will not only obtain the privileges of such membership, but will also gain the enhanced prestige and professional status which corporate membership in a Chartered body confers upon the holders.

The Building Trade Dispute. WE must all regret that the absence of a proper understanding between the employers and operatives has led to such an unfortunate dispute, the merits of which, with charge and counter charge made by the two sides, it is not easy to ascertain. The strike is not by any means complete, and employers in various parts of the country appear to be engaging men at the increased wage of one halfpenny per hour demanded. In Liverpool, according to Mr. Barron, speaking on behalf of the operatives, out of 2,000 bricklayers and masons who came out on strike there are no more than 158 out of work. The same speaker is reported to have said, "It is due to the bad organisation of the Liverpool employers that they do not employ one-half, possibly one-quarter, of the available labour in Liverpool. Out of 5,000 joiners in Liverpool, there are only 400 on strike. The one way to settle the difficulty is for the employers to grade the wages consonant with the economic condition of the industry. That would have raised the whole of the Liverpool rate and there would have been no trouble at all." Mr. B. B. Moss, however, speaking on behalf of the Liverpool Building Trade Association, stated that "The Liverpool Employers' Federation is one that embraces 90 per cent. of the employers and is one of the best organised in the country. There has, however, been a large amount of speculative building in Liverpool by men who are not really builders, but are merely dabbling in the building trade." Though we deplore the strike, we are glad the Court of Inquiry is presided over by Lord Buckmaster, who has already shown a determination to deal impartially with the situation and the evidence, and from whom we should have a helpful report, especially



Oxford: The High.



Oxford : Old Clarendon Press and Sheldonian.

if cognisance is taken of the statements which we give on p. 65, made by Mr. Nicholls on output and cost.

Strikes and What they Settle.

"Strikes settle the justice of nothing; they only decide how long one side or the other is prepared to suffer. If you have a conference at the end of a strike or lock-out, one party declares it is being crushed by the other." These sensible remarks were made by Lord Buckmaster, the President of the Court of Inquiry set up by the Minister of Labour to inquire into the dispute between the employers and operatives in the building industry, and we believe his opinions are shared by the public at large, as they certainly are by those directly affected by the dispute. And these were not the only sensible observations the President made, as was shown by his surprise at the delay in arranging a meeting between the Liverpool employers and operatives, which might have prevented either strike or lock-out. When told that a meeting had been held, he asked why there had been so much delay and why a meeting was not arranged at the beginning, as with Liverpool "settled the whole thing would be settled?" The Inquiry was concluded on Tuesday with the expectation that an informal conference will be arranged at once for a discussion between all parties. A report of the proceedings appears on pp. 64–65.

Oxford and Burford.

Architects in their enthusiastic enjoyment of the charms of the manifold and artistically varied periods represented by the buildings in this University are naturally apt to overlook the fact that many of the ordinary undergraduates moving about among the colleges entirely fail to recognise their architectural beauties. Colonel de Sales la Terriére, as an old student, tells us in his just published book, "Days that Are Gone," that in his day they all went in and out and round about taking little notice, if any, of their environments. The author, in after life, abundantly made good and evinced a sufficient recognition of the value of historic buildings by purchasing Burford Priory, when he enjoyed the fascinating enterprise of renovating its denuded walls after a century of disuse and decay. His achievement received, he says, "nothing but kind words from critics, both professional and amateur. But I had always a lurking sense that the whole place was a fraud and that I perpetuated a fraud in restoring it." The last of the Lenthalls had practically pulled down the whole original house, except the chapel and drawing room wing and south side, rebuilding a smaller house with the old stones, so that this so-called fine specimen of the Renaissance architecture of Oxfordshire was mostly only one hundred years old, dating from about 1808. When sketching Burford Priory many years ago we duly noted at the time how some of the stone bay moulded work had actually been nailed on and one length of this was suspended in mid-air from an iron pin. The fame of Col. de Sales la Terriére's restoration brought to Burford callers and "societies" of all kinds and descriptions. The Architectural Association on two different occasions made excursions to Burford, one of the most delightful villages in that part of England and well within reach of Oxford.

Housing Proposals.

We give on page 63 a memorandum of the Housing (Financial Provisions) Bill now before Parliament, which has been issued by a committee of the National Federation of House Builders. The memorandum indicates points on which the Bill in their opinion fails to carry out the expressed intentions of the Government and which in consequence will do "irreparable injury to the housing conditions of the country if it becomes law in its present form," and they also put forward suggestions as principles which should be enforced "if it is hoped to secure the most rapid production of houses from all available sources and if the State-aided housing is not to destroy all private enterprise in the great business of housing the people." The object of these suggestions is to render it possible for private capital to be attracted to housing and for investors to return to housing as a favourite investment. Any suggestions with this object deserve careful consideration.



Oxford : A Distant View.

GENERAL NEWS

Professional Announcement.

Messrs. Gething & Rolley, A.R.I.B.A., have purchased the business of the late Mr C. A. Downton, architect and surveyor, of Coventry-street, Kidderminster, and will carry on the practice at their office, Kingsley Hall.

Change of Address.

Messrs. Falconer, M.S.A., Baker & Campbell, of Gloucestershire, have removed their London office to 27, Soho-square. The telephone number remains unchanged.

Mr. Frank Windsor has removed to 1, Station-approach, East Croydon.

R.I.B.A.

The International Congress of Architectural Education will take place in London, from July 28—August 2. Headquarters: 9, Conduit-street.

Builders' Charitable Institution.

The new almshouse of the Builders' Charitable Institution, at Hounslow, was formally opened recently by the Lord Mayor, who was accompanied by the Lady Mayoress and the Sheriffs.

Cardiff School of Architecture.

The following awards have been made as a result of the sessional examinations at the School of Architecture at the Technical College, Cardiff. Mr. Paul Waterhouse, Past President of the R.I.B.A., was the External Examiner:—

Fourth Examination: L. Monroe, W. O. Oakley, B. W. Thomas.

Third Examination for the Certificate awarded at the end of the three years' full-time day course, exempting from the R.I.B.A. Intermediate Examination: V. Banks (with distinction), J. B. Wride (with distinction), H. A. Barton, E. Byrd, F. Harper.

First Examination: P. G. Budgen, J. T. Banks.

Royal Archaeological Summer Meeting.

The following programme has been arranged in connection with the forthcoming Summer Meeting at Winchester, from July 16-23.

Wednesday, July 16.—Cathedral and Monastic Buildings. Deanery. Evening Meeting.

Thursday, July 17.—Motor to Longstock Entrenched Dock. Danebury Camp. Mottisfont Priory. Romsey Abbey. Mayoral Reception.

Friday, July 18.—St. Catherine's Hill. St. Cross. Winchester College. Wolvesey Castle. Annual General Meeting.

Saturday, July 19.—Motor to Merdon Castle. Beaulieu Abbey.

Monday, July 21.—Motor to Portchester Church and Castle. Titchfield. Bishop's Waltham Palace and Church. Evening Meeting.

Tuesday, July 22.—Motor to Old Basing. Monk Sherborne. Sherborne St. John, The Vyne. Evening Meeting.

Wednesday, July 23.—Hyde Abbey Gate. West Gate. Winchester Castle. Museum. St. John's Church. St. Peter's Church.

Royal Society of Arts.

The Council has awarded the Society's Silver Medals to the authors of the following papers read before the Society during the past session:

Papers read at the Ordinary Meetings: Sir Frank Baines, "The Preservation of Ancient Monuments and Buildings"; Sir Richard A. S. Paget, Bart., "The History, Development and Commercial Uses of Fused Silica"; Major-Gen. Sir Fabian Ware, "Building and Decoration of the War Cemeteries"; Frank Hope-Jones, "The Free Pendulum"; Brig.-Gen. Sir Henry Maybury, "The Victoria Dock District and its Roads"; T. Thorne Baker, "Photography in Industry, Science and Medicine"; Mrs. Arthur McGrath (Rosita Forbes), "The Position of the Arabs in Art and Literature."

Papers read in the Indian Section: Brig.-Gen. H. A. Young, "The Indian Ordnance Factories and Indian Industries"; Sir Richard M. Dane, "Manufacture of Salt in India."

Papers read in the Dominions and Colonies Section: C. Gilbert Cullis, "A Sketch of the Geology and Mineral Resources of Cyprus"; The Right Hon. Sir Frederick Lugard, "The Mandate System and the British Mandates."

The National Gallery.

Twelve pictures from the collection of Mr. Henry Wagner have recently been placed on view in the east vestibule of the National Gallery, on each side of the door leading into the Spanish rooms. Of the five pictures to the left of the door, one is a characteristic specimen of Adam Elsheimer, representing the "Baptism of Christ." The other four are Flemish works of about the year 1500. Three so far remain anonymous; the fourth, an "Ecco Homo," has been recognised for some time as a work by Jan Mostaert. The seven Italian pictures include a very early painting of "The Dead Christ," Venetian work of the fourteenth century, still covered with a sheet of very early hand-made glass; a powerful "Noli me Tangere," by Jacopo di Cione, a somewhat injured "Pieta," by Ambrogio Lorenzetti, and examples of Tommaso da Modena and Bartolo di Fredi. With them must be mentioned a "S. Paul," apparently from the famous studio of Verrocchio, and a picturesque "Salver," also painted in Florence, c. 1450, by the so-called "Cassone Master." On its face the Salver represents "The Triumph of Love," on the other side are the Arms of the Strozzi family. These make a valuable addition to the small nucleus of works by the Italians which the Gallery already contains.

COMPETITION NEWS

Scottish Rugby Union Stand.

The adjudicators have made the following awards in this competition:—(1) Equal: Messrs. Redpath, Brown & Co., Ltd., Edinburgh, and Mr. R. S. Sherar, Edinburgh; (2) Mr. J. A. Orrell, Manchester; (3) Mr. W. Forgan, Edinburgh. The contract for steel has been placed with Messrs. Redpath, and premiums have been awarded to Messrs. Sherar, Orrell, and Forgan respectively.

Public Baths, Newton-in-Makerfield.

Designs are invited for the erection of Public Baths at Newton-in-Makerfield. Premiums of £150, £50 and £25 are offered respectively. Applications for conditions to the Clerk to the Council not later than July 25.

Barton-upon-Irwell Hospital.

The sending-in date for this competition is July 31.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending in date, and second the issue of *The Builder* in which full particulars were given):—Ross-Smith Memorial (Sept. 30; Feb. 21). Harrogate Infirmary (Sept. 30; May 30). Hamilton War Memorial (Sept. 1; May 30). Glasgow High School Memorial (Sept. 30; June 13). Masonic Memorial (Aug. 22; June 13. Bexhill Entertainment Hall (Sept. 1; May 30).

Letters on the Building Trade Dispute we give on p. 61.



Oxford: St. John's College.

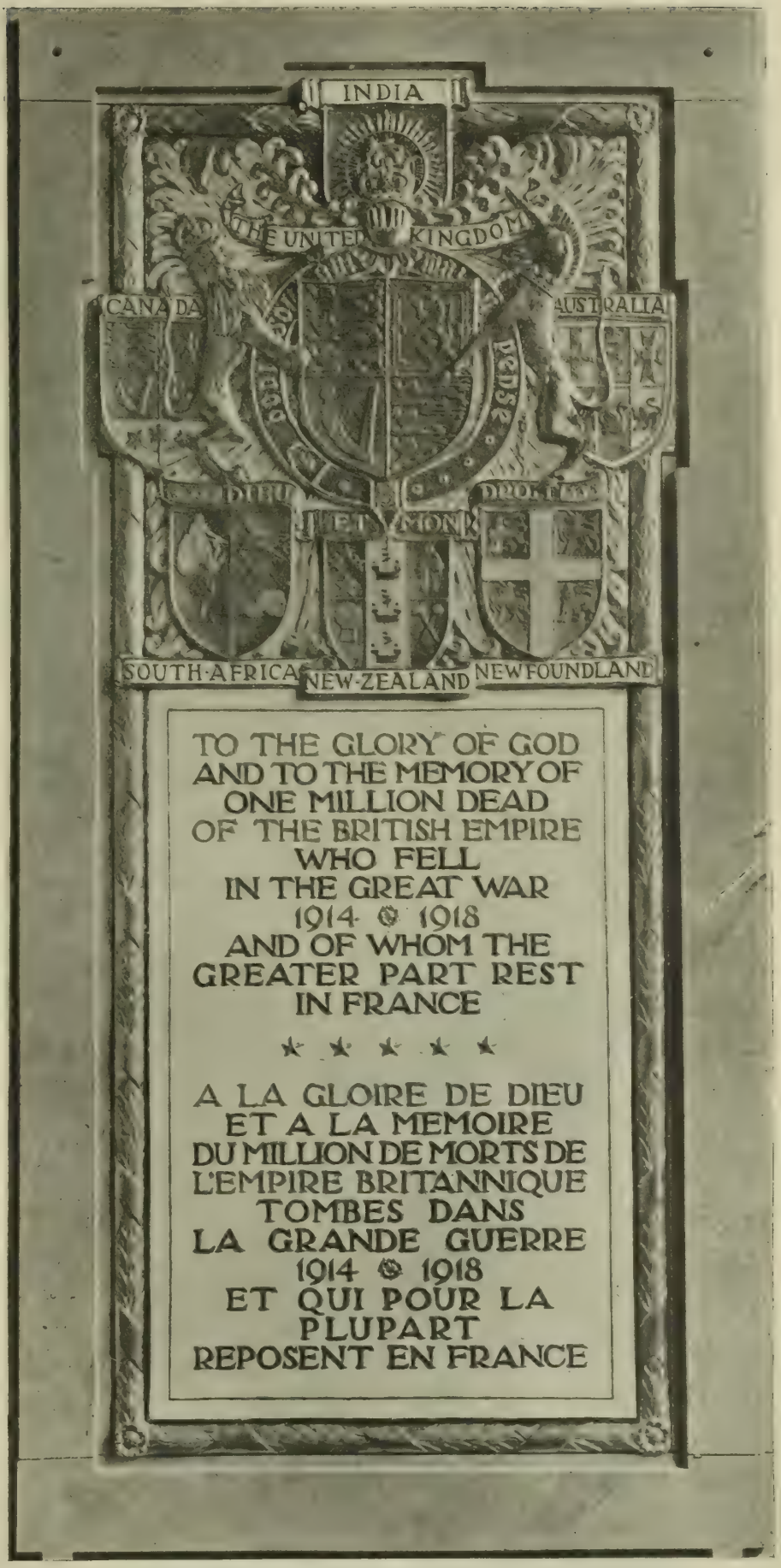
EXHIBITION NOTES

DRAWINGS OF WORKS BY SIR CHARLES BARRY AND JAMES BROOKS.

This summer's gathering of geometrical details and perspective, on view during the early half of July, at the Royal Institute of British Architects, Conduit-street, naturally attracted no little attention at the special meeting of members, on the 7th inst. The assemblage of these typical drawings may properly be described as not only historically informing, but because they furnish an essentially striking contrast to the current kind of contemporary draughtsmanship. The collection, though restricted to comparatively few exhibits, afforded many practical suggestions, chiefly perhaps by reason of the fundamental thoroughness thus displayed. The subjects chosen comprised some of the eminently successful buildings of two of the most capable and representative architects of the nineteenth century. No lengthy description of either Sir Charles Barry's Houses of Parliament, or James Brooks' well-designed brick churches is here needed. Everyone familiar with the Victorian Gothic revival is well acquainted with both these masters of Mediæval ideals and accomplished productions. The refined and delicately executed working drawings of Westminster Palace are beyond all praise. The buildings, commenced in 1839, were carried out from the plans of Sir Charles Barry (1795-1860) during the 'forties. The exquisite thoroughness of the several sections and elevations shown is rightly attributed to Welby Pugin (1812-1852), the joint architect with Barry, assisted by Talbot Bury (1811-1887), Benjamin Ferry (1810-1880), and others, who, no doubt, were engaged in delineating, with such fine lines, these wonderful details set out to so small a scale. Such performances of skill and patience supply an "eye-opener" to those who, in these days affecting a slipshod style, are seemingly advised by their teachers to cultivate a less workmanlike method, being content with roughly knocked off office drawings supposed to be up to date and stylish. The same care on the part of the draughtsmen employed by Barry and Pugin is exemplified by the selection of a later period in the century, but earlier Gothic style, of James Brooks (1826-1901). He was elected Royal Gold Medallist in 1895, and is here chiefly represented by his excellent design submitted in the first competition for Liverpool Cathedral, including the general drawings and several capable pen-and-ink perspectives by F. G. Knight, who formerly was with G. E. Street, R.A. Only a few of Brooks' East-End of London churches are included in this show. St. Chad's, Haggerston, is represented by an interior drawn by Mr. Maurice B. Adams, who was often employed by Brooks. Other churches are seen by sketches prepared by Brangwyn and F. C. Knight.

IMPERIAL MEMORIAL TABLET.

This memorial tablet to the memory of the million dead who fell in the Great War, which was unveiled by the Prince of Wales on Monday, was modelled in gesso relief by the artist, and is richly gilded and coloured, with the heraldic devices of the various Dominions surrounding the Arms of the United Kingdom, and with inscription below. The Arms of India are seen at the head of the Tablet, above the Royal Arms, with the motto: "Heaven's light our guide," and include the Star of India with the sun's rays behind. The arms of Canada, Australia, South Africa, New Zealand, Newfoundland, including all the varying devices of the quarterings, give variety of form and colour to the whole. The tablet is surrounded by a leaf and ribbon border, gilded and coloured. The dimensions of the tablet are 3 ft. by 6 ft. The Hopton wood frame was executed by Mr. W. Tomes, The Grove, Hammersmith.



Imperial Memorial Tablet for Notre Dame Cathedral, Paris.
Executed by Mr. Reginald Hallward.
(Col. H. P. Cart de Lafontaine, F.R.I.B.A., Architect.)

ROYAL INSTITUTE OF BRITISH ARCHITECTS

Amalgamation Approved.

A SPECIAL general meeting of the Royal Institute of British Architects was held at the rooms of the Institute on Monday to announce the result of the postcard referendum decided upon at the meeting held on June 17 and to confirm the resolutions passed at that meeting. The President, Mr. J. A. Gotch, presided.

The Hon. Secretary announced the result of the poll as follows:—

In favour of the Council's proposals	1,712
Against	267
Majority for	1,445

Five unsigned postcards were not allowed.

Mr. Gotch then formally moved the resolutions.

Professor Beresford Pite said he would make comment on one point only: that he was wholly in favour of unification, but it semed to him that the inclusion in the agreement of Clause 6 [When and so soon as this Agreement shall have become absolute the Royal Institute shall forthwith promote and use its utmost endeavours to carry through a Registration Bill until it becomes the Act of Parliament, and for this purpose forthwith, and before the Society goes into liquidation, to appoint a Registration Committee. The Society shall have the right to nominate one-half of the members of such committee] would defeat the very purpose at which they were aiming—the unification of the profession. The agreement proceeded on a statement in the preamble which read that "there are no longer any serious differences of opinion among architects with regard to registration." He ventured to suggest—he only suggested it in justification of his own objection—that that was not true; that there were still serious differences of opinion on the subject of registration. Those differences might be trivial. He represented them within the Institute.

They must remember that outside the Institute and the Society of Architects there were a large number of important men who ought to be included in any scheme of unification. There had always been certain men whose feelings had been rather averse to the organisation of the profession, and those men could never be disregarded. It had always been so in the history of the Institute. Thirty years ago the most distinguished architects in the profession were outside the Institute. They had not the document before them, but a most impressive memorial on the subject was presented in 1891 to the Institute. He would not go back to that, but the spirit which always attracted the artist to liberty was still in existence and was still active. The Institute could not shut its eyes to the fact that there was a body of very influential opinion which met to discuss architectural problems—the Art Workers' Guild—and of which they had taken no account at all. If they wanted to take account of them they would find that nearly all were strongly opposed to registration. The statement in the preamble was not the fact and they had better delete it. They would get unification if they did not tie it up with that which was bound to secure disunion and discord—registration.

Every effort to make the profession a close profession, to tie up the art of architecture to those who were registered by that Institute, was a false position for them to take up. He would endeavour to present that view when the time came. It would be interesting for the members of the Institute to look up their own records on the subject. They would find that in 1904 Sir Aston Webb expressed his deep repugnance to the idea. It would be wrong to rely on Sir Aston Webb's quoted opinion in his absence; but in 1904 Sir Aston said that the idea was repugnant to every artist. He would vote for every clause except Clause 6.

Major Corlette stated that they had met that afternoon only for the purpose of passing the resolutions *en bloc* or rejecting the entire scheme.

The resolutions were then put to the meeting and carried practically unanimously. A vote of thanks was then passed to the President, Mr. J. A. Gotch, and the proceedings terminated.



Oxford: Old Grammar Hall, Magdalen College.



Oxford: The Canterbury Quadrangle, St. John's.

WE take the following notes from the Minutes of the Council meeting held on June 23:—

ARCHITECTS AND BUILDERS.—The Practice Standing Committee was authorised to arrange for periodical meetings of an informal character between representative architects and builders to discuss matters of interest to both.

THE GLAZING OF WINDOWS IN ANCIENT BUILDINGS.—The Art Standing Committee was authorised to appoint two members to represent the R.I.B.A. at a conference summmoned by the Society for the Protection of Ancient Buildings to discuss the glazing of windows in ancient buildings, particularly with regard to the following points:—(1) The repair and protection of ancient glass; (2) to discuss and attempt to arrive at some general conclusion with regard to putting new stained glass into old windows.

THE BRITISH SCHOOL AT ROME.—Sir John Simpson, K.B.E., was re-appointed to represent the R.I.B.A. for a further period of three years on the Council of the British School at Rome.

DURATION OF SESSION.—Under the provisions of By-law 56 it was resolved that the session 1923–1924 be prolonged from June 30 until November 2.

ROYAL COMMISSION ON FIRE BRIGADES AND FIRE PREVENTION.—It was decided to notify the Home Office that the R.I.B.A. and its allied societies are in general agreement with the recommendations of the Royal Commission on Fire Brigades and Fire Prevention.

PROFESSIONAL CONDUCT.—Two members were censured for professional advertisement by means of circulars.

Cologne Cathedral Danger.

It is stated that certain parts of Cologne Cathedral are in danger of collapsing. It is also stated the cathedral has suffered severely from the recent weather. The cathedral architect has refused to be responsible for the building any longer. Cologne Cathedral stands on the site of a cathedral which was finished in 873 and later ruined by the Normans. Fire destroyed what remained of it in 1248. The present cathedral was begun a few years later, but was not completed until 1880.

OXFORD: AN IMPRESSION

By A. E. RICHARDSON.

It is usual in recording a description of Oxford to allow the ink to flow in opposition to the claims of other centres of learning. Hence it has happened that most authorities start off with high words and fulsome praise in order to establish an argument which a little reflection proves to be purely arbitrary.

Most people visiting a University accept the concrete impressions of collegiate life at face value and imagine the foundation to have taken place at a definite date, which can be looked up in guide books. Such unsophisticated views are wide of the issue, for it is a fact that neither Oxford nor Cambridge can name a founder; neither is it possible to state precisely when the colleges began to be used. In the development of communal centres, geography plays a dominant part, hence it was that the ford across the Thames between Mercia and Wessex was selected as a point of defence, and in course of time came to be recorded in the Anglo-Saxon chronicles. From the Domesday Book we conjure up an idea of the resistance offered to the Normans, and from the remains of the fortified works erected by Robert D'Oili can imagine the reprisals that followed. Here at once is the secret of the city—it is monarchial and loyal, and so it continued from the time when the Empress Maud was besieged there until in the struggle between King and Parliament it became the chief rallying point for the Cavaliers.

Having thus dealt with the salient points of the city's right to be, the next procedure is to hint of the time in the twelfth century when Theobaldus Stampensis taught there and provided the beginnings of study which led to the system of organisation recognised in the thirteenth century and the European reputation of the University a century later. For the rest, the buildings themselves present the most accurate chronicle; the assemblage of stones having caught the spirit of the ages—something abstract and disinterested that proclaims pedagogy to be a thing of minor import, something spiritual and indefinable that defies analysis and upsets all dogma written and spoken regarding the sublime and beautiful. Oxford inspires a retrospective mood. Viewed from the high places, where tower, dome and pinnacle challenge the neighbouring hills, the *mise en scène* is airy and expansive. It is a city well knit with greenery that parts it into sections and then as unexpectedly binds the parts. There is no incongruity, nothing pre-arranged; even the tall smoke stacks of industry have stepped into place as though fearful of disturbing the peace. In the early morning, the features of the city's silhouette are sharply defined and clear cut, having all the vividity of some remarkable vision, something not of too ancient lineage, but in sparkle and resource savouring of magic. Oxford does not awaken like other cities, she takes her time, her people have a way of avoiding abruptness—in part a legacy of other days. Her dreams are of the restful kind, she does not indulge in matutinal greetings that rise to a roar when the morning is yet young. On the contrary, it is the uprising of a city conscious of previous labour. At high noon, Oxford assumes the middle-aged flecking of silver-grey, the shadows are stronger, the crows' feet deeper. It is then that the ghosts of her master masons point to pinnacle and dome, it is then that the stone reflects the quality of the Cotswolds and the umbrageous vegetation plays its part of light, shade, and contrast. Perhaps it is the colour of Oxford that pleases most; it is in effect so unlike other cities, so subtle, yet so poignant, of a masculinity profound, yet of a delicacy and breeding to which ostentation is unknown. Evening closes, the shadows lengthen, the buildings take on a velvety blackness, until points of light mark the nearer houses, and so, as the day fades, it recalls in its solemn droning the haunting ground of fireflies. Even when the clouds, heavy laden, burst upon the Cotswolds, Oxford never wears that hang-dog look one associates with some places in a downpour. She is well roofed, and then it is that spire, tower and dome appear to defy the elements by thrusting and shielding.

I would not, even if the space were afforded me, attempt to give the history of the buildings; it would, I must confess, be interesting to discuss them in detail, to tag on the dates and the names of the architects, but the present object is to revisit Oxford, to gain new impressions such as are common to the generality of visitors, to discard for the moment the architect's view point, and to place, however inadequately, all Oxford on paper.

In addition to her other attributes the hospitality of the city is proverbial, she has the gift of promoting allegiance both to authority and to herself, she has retained the trick from mediæval times to this present. Thus it is that town and gown have grown up side by side, and though in point of thought both may agree to differ, the conservation of local amenities invariably proves a rallying ground. So we find industry flourishing with learning, and, as a corollary, marmalade and motor cars in high demand. To be a native of Oxford is almost as good in the eyes of a townsman as to be entered at a College, such is the pride of locale. During the long vacation Oxford becomes an appendage of the United States, just as at this time she has become a temporary meeting place for architects. Our American friends have a tender affection for the Mitre, and although the day is past when telegrams were sent from Stratford-on-Avon ordering lunch and the keys of the Colleges, Americans are still under the idea that Oxford can be done in a few hours. We will not grudge them their hasty peregrinations; no doubt they can gather impressions more favourable to their own towns, but Oxford remains in England.

To an architect Oxford is an articulate city; it is as essential to his mind and hand as elementary training in his work. What impresses most is the extraordinary vivacity of the buildings, the variety of ideas, and the direct statement of conditions. One cannot pass the sentinal tower of Magdalen without forswearing all predetermined ideas of studying only one phase, and that a pet one, of English building. No casual sightseeing suffices if one desires to understand the secret of this mother of Universities. The older colleges and churches reveal the truth that mediæval builders were prolific in ideas and daring in the tasks they undertook; there is evidence of collective reasoning as of individual enterprise. The wonder is that so much forethought should have been given to endow the city with buildings which have served and will continue to serve even the exacting conditions of progress.

The mediæval interest is continued in the work of the Revivalists, it survives in the buildings by Butterfield and Bodley, as it does in King James's Gothic and the delicate detailing from the pencil of Sir Thomas Jackson. The Italian influence is evidenced in the work of Inigo Jones, and the compromise between mediæval and classic is seen in the work of Sir Christopher Wren. The later work of Gibbs and Dean Aldrich shows how taste responded to the Burlingtonian coterie. Finally, on the classic side there is the Taylorian with its curious tabled Ionic caps, which latter Cockerell researched as the work of Ictinus. The story of mediæval life, as well as of the seventeenth and eighteenth centuries, is set forth on every side. There are the oaken screens and wainscotings of the halls, the fantastic and sober balustrades, the odd quips and conceits of masons and carpenters, who could work an order in great with scarcely more than a woodcut to guide them. It is obvious, although it has not yet been shown, that Oxford while gathering the talent of the countryside within her walls for the purpose of her buildings, in turn sent out the influences of the completed buildings, for in no other way does it seem possible to explain the Cotswold tradition or the building of the fine houses of the late seventeenth and eighteenth centuries in the neighbouring towns and villages. Is it not to be inferred that masons who had been apprenticed to masters in Oxford, in turn found employment outside the walls? It is a pleasant conjecture and one that may have a substratum of truth. Of the minor features one may refer to Oxford windows, which range from the great ones at Oriel to the bays of St. John's and the generous sashed windows of the Georgian fronts. It is in Oxford that the sashed window with bars worked with square blocks in true masonry fashion can be discovered.

This impression, written during Congress week, covers many years of casual observation; it has been prepared from a non-debatable standpoint; it is unprejudiced regarding taste, style or fashion, and seems rather to record characteristics which are other than architectural. Who, for example, some years since would have dared to have been pleased with Tom-Tower or Keble Chapel, or who would have seen any merit in the spiky twins of All Souls; but it is irrefutable that fashion of a past day has a way in time of taking its place, and mellowed by the settlement of eld in turn becomes above criticism.

My impression began above the city; it ends with a memory of the stone bridges of Addison's Walk and the embrasures of Magdalen rising sheer above the water of Broad Walk, Christ Church, of many cool lawns and paved courts; it carries recollections of quadrangles and façades, which appear to have happened, of spires and towers which have an affinity, although for family reasons many times removed. I have recollections of fine shops in Cornmarket-street, of the pictorial flourish of the Municipal buildings, and the Indian Institute, as well as glimpses of ineffable charm on the river and backwaters. Here, then, is an index, it is a partical one, to the life of the nation. Cambridge demands a different key. Throughout the world men of all ranks have some idea of the University cities; perhaps the claim of Oxford is the stronger. In Canada, Australia, New Zealand, South Africa and India Oxford stands for the very soul of culture. What myriads have an interest in the place, and how few can say with truth that they understand the intuition that inspired the original builders, who for the most part were of the countryside.

Architectural Association of Ireland.

On and after June 30, the address of this Association will be 8, Merrion-square N. Dublin.



Radcliffe Library, Oxford.

OXFORD VIEWS

There is unique fascination in views of an ancient town from a lofty and central position, and in the case of Oxford, than which there can be few towns better worth seeing from such moderate elevations as her own buildings afford, the choice of the point of view generally and naturally falls upon the gallery around the dome of the Radcliffe Camera. This position possesses so many and such obvious advantages in centrality and ease of access that it is easy to overlook its one grave disadvantage, in affording no view of the Camera itself. Those who wish to consider this stately masterpiece of Gibbs, in relation to its Gothic and pseudo-Gothic setting, and to admire the congruous beauty of an incongruous group, must mount elsewhere.

The opportunity presented itself, a few weeks ago, by means of the scaffolding and stagings which then surrounded the Twin Towers of All Souls College, of securing such a view, with others of considerable interest; and we are able, by the permission of the Warden of All Souls, and through the kindness of Mr. Richard Axtell, of Messrs. Symm & Co., Contractors for the repairs, to offer our readers a series of views taken from this unusual point of vantage.

The views are in the following order :—

(1). Westward.

The Radcliffe Camera, seen over the "Great Quad" of All Souls, with Hawksmoor's arcaded screen, and its central cupola in the foreground, flanked by the College Chapel on the left, with the tower and spire of St. Mary's, the University Church, rising beyond and above the latter; further on, in the middle distance, is a part of the front of Brasenose College and its Chapel, and beyond, and in the centre of the view, the tower and spire of All Saints' Church.

(2). North-Westward.

The Northern side of All Souls Great Quad, which is the well-known Codrington Library. The great painted sundial over the central bay is said to have been devised by Wren, and was formerly on the south wall of the Chapel in the front or entrance quadrangle of the College, as may be seen in Loggan's view of 1675. Beyond appears the Bodleian Library, whose green copper roofs show between and above the battlements, and whose well-known square tower, "Of the Five Orders," presents its unadorned sides to the spectator.

(3) North-Eastward.

New College, the south-west external angle of the old Quadrangle, and the Warden's Lodgings seen over the Warden's garden and across the high stone walls of New College-lane. On the left is the ancient college Tithe Barn, and the stone staircase giving admission to the garden from the Lodgings, by the passage whose archway over the lane just shows to the right of the Barn, behind whose stone tiled roof are seen the old stable roofs, also stone tiled, and the beautiful little bell tower on the north side of the cloister garth. In the centre, and to the right, rise the upper portion and roofs of the Chapel and Hall, and the Muniment Tower. This view shows clearly the original form of the buildings of the mediæval Quadrangle; as the fourteenth-century west gable coping stands forward from the return wall of the subsequent additions, and these, which are in ashlar, having been recently refaced show white in the photograph.

(4). North-Eastward.

New College, view showing Bell Tower and Warden's Lodgings.

(5). Eastward.

The western side of Queen's College, a long, three-storeyed range, with the fine Library at the northern end, left-hand in view, and the cupola-crowned bell turret of the Chapel rising above the roofs. Beyond are Magdalen Tower, and the nearer turret of Sir Thomas Jackson's University Schools; in the extreme distance are the tree-topped heights of Headington, whose obsolete quarries have supplied so much bad stone to Oxford.

(6). South by West.

On the left the western portion of St. Mary's Nave and Aisles; beyond, in the distance, the Cathedral tower and spire and the towers and roofs of Christ Church. In the centre of the view St. Mary's Passage and its gabled houses, further to the right the east end of Brasenose Chapel and a portion of the College, beyond these Sir Thomas Jackson's new tower and roofs of Brasenose; and immediately behind the former, Wren's belfry, or "Tom Tower," over the entrance gateway of Christchurch.

(7). South-Westward.

Brasenose College. On the left the north end of the Hall, and beyond, the west range of Sir Thomas Jackson's buildings; beyond these All Saints' Church, the design of which is attributed to Dean Aldrich, whose marked architectural sense and abilities have left other evidences at Oxford.



No. 4.—New College: View showing Bell Tower and Warden's Lodgings.

R.I.B.A. EXAMINATIONS

Intermediate.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London and Leeds from May 23–29. Of the 65 candidates who presented themselves, 26 passed and 39 were relegated. The successful candidates were as follows, the names being given in order of merit as placed by the examiners :—

W. J. Thrasher, Bristol.
W. G. Sinning, Beckenham.
H. T. Wykes, Wrexham.
F. C. Button, Folkestone.
H. J. Dicketts, Northfleet.
B. S. Tempest, Harrow.
G. S. Saunders, Leeds.
P. G. J. Carter, Caversham.
R. V. Walker, Woolwich.
F. L. J. Dolman, Putney Bridge-road.
T. W. Snailum, Wilts.
G. Garnett, Manchester
S. R. Driver, Headingley.
H. J. Reid, Leeds.
G. R. Acton, Worcester.
T. W. Applegarth, Teddington.
H. Brown, Blackpool.
F. Chippindale, Otley.
W. S. Corlett, Streatham Hill.
N. E. Davenport, Queen's Gate.
A. W. Glover, Manningham.
F. C. S. Harrison, Durham.
A. D. A. Haskins, Birmingham.
G. W. K. Pitter, Letchworth.
F. L. Randle, Smethwick.
S. E. Steward, Reading.

The Final and Special.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A. were held in London from June 12–19. Of the 35 candidates admitted (six of whom took Part I only, and one Part II only, having elected, in accordance with the regulations, to take the Examination in two parts), 13 passed (two in Part I only) and the remaining 22 were relegated. The successful candidates are as follows :—

C. K. Bhedwar, Hampstead.
S. L. Blackburne, London.
J. P. Blake, Hounslow.
C. H. Brightiff, Cricklewood.
A. A. V. Campbell, Brunswick-square.
S. S. Careless, Northwood.
R. S. Cobb, Grove Park.
C. G. W. Eve, South Nutfield.
A. G. Geeson, Leicester.
E. Reily, Belfast.
J. M. Wilson, Baghdad.
G. M. Bhuta, Highbury New Park (passed in Part I only).
P. L. Sharma, Highbury New Park (passed in Part I only).

Drawings by Sir Charles Barry and James Brooks.

An exhibition of original perspective and working drawings of the architectural works of James Brooks, including his competition drawings of Liverpool Cathedral, and of the Houses of Parliament by Sir Charles Barry which have recently come into the possession of the Institute, will be on view in the Gallery of the R.I.B.A., 9, Conduit-street, from July 7 to 16, between the hours of 10 and 6 p.m. (Saturday, 1 p.m.).



No. 2.—Northern Side of All Soul's Great Quad.



No. 3.—New College.

VIEWS OF OXFORD.



No. 5.—Western Side of Queen's College.



No. 6.—Western Portion of St. Mary's Nave and Aisles. Cathedral Tower in distance.

VIEWS OF OXFORD.

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ILLUSTRATIONS

Sir William Dunn School of Pathology, Oxford.

This illustration shows the drawing as exhibited at the Royal Academy. The building is for the University of Oxford, and will be situated upon the Parks' site adjoining South Parks-road. Messrs. Wooldridge & Simpson, of Oxford, have secured the general contract, and are about to commence the work.

Mr. E. P. Warren, F.S.A., F.R.I.B.A., is the architect.

Mediaeval Oxford.

The illustration of Mediæval Oxford which we give this week is from a drawing by the late H. W. Brewer, which was published in *The Builder* a good many years ago, together with an article by Brewer on the subject. The Oxford Conference of the Royal Institute of British Architects is an opportunity for giving this interesting impression of Oxford of the past, the value of which does not altogether depend on the complete accuracy of its presentment. A larger copy of the drawing and the descriptive article referred to above can be had on application at this office.

Oxford Views.

The Oxford views we give this week are taken from a point of view which is not often available, as we mention in a brief note of the views on p. 48.



Picture House, Oxford.

St. Edward's School Memorial, Oxford.

This building is the second instalment of the Memorial, the Calvary outside the Chapel having been dedicated in 1921. It adjoins the "New House" built in 1882 and continues the south side of the quadrangle for about 120 ft. The materials employed are sand-faced brick from Headington, with monks park stone for windows, parapets and weatherings.

There are two dormitories and a large day room (38 ft by 18 ft), with four sets of rooms for masters, and one for the matron, with linen and box rooms. There are also two class-rooms, a reading room and lecture room, the last two being 38 ft. by 18 ft.; and six music rooms are provided in a detached wing. Lavatories and washing rooms are provided on each of the four floors.

Messrs. Hinkins & Frewin, of Oxford, were contractors for the foundations (£1,055), and Messrs. Wooldridge & Simpson, of Oxford, for the main structure (£14,474), which has now reached wall-plate level.

The sub-contractors are:—Heating, Messrs. J. Jeffreys & Co., Ltd., London; electric lighting, Messrs. Hill, Upton & Co., Oxford; fireproof floors, Messrs. The Kleine Flooring Co., Holborn; staircase and ground flooring, Messrs. The Empire Stone Co.; steel casements, Mr. J. H. Pye, Moreton-in-Marsh; sanitary fittings, Messrs. The Leeds Fireclay Co., and Messrs. George Jennings, Ltd. The lift by Messrs. Medway, and the asphalte work by Messrs. Thomas Faldo & Co.

Mr. H. S. Rogers, F.S.A., of Oxford, is the architect. Quantities by Mr. E. R. Babbs, London.

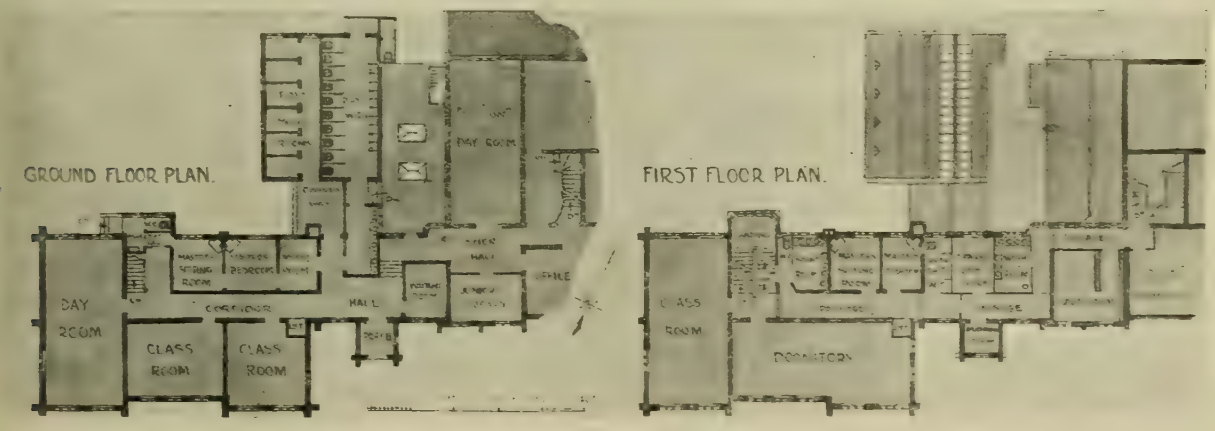
The Oxford Picture House.

This cinema, recently finished, at Magdalen-street, Oxford, has been carried out by Messrs. Frank Matcham & Co., in conjunction with Mr. J. C. Leed, of Oxford. It has a seating capacity of 950 on the ground floor, and 350 in the balcony.

The main entrance is of marble surrounded by a bronze illuminated fascia. The vestibule, 50 ft. long and 15 ft. wide, has a mosaic and marble floor, and walls treated in stucco. The main lounge, 46 ft. by 30 ft., is treated in rich French Renaissance; stairs lead to the tea rooms above. The inner foyer has stairs to the balcony and also main entrances to the stalls. The auditorium consists of a ground floor and balcony. The centre feature in each main wall of the auditorium is a p inting 30 ft. long by 17 ft. high, one depicting "Modern Sport," and the other "Early Learning." These were painted by Mr. G. Rushton, R.B.A. The projector room, &c., is situated over the balcony. A plan is given on p. 60.

The following is the list of contractors who carried out the work:—

Structure: Messrs. Hinkins & Frewen, Oxford; electric lighting: Messrs. Grierson, Ltd., London; heating and ventilation: Messrs. Norris & Dutton, London; fibrous plaster and decoration: Messrs. F. De Jong & Co., London; plumbing: Messrs. Stitson, White & Co., London; marble and mosaic: Messrs. Fenning & Co., London; draperies, upholstery and seating: Messrs. Goodalls, Manchester, and Messrs. Lazarus, London; wrought iron balustrades and staircases: Messrs. Abercrombie & Son, London, and Mr. Arthur R. Maxted, London.



St. Edward's School, Oxford: Proposed Memorial Buildings.

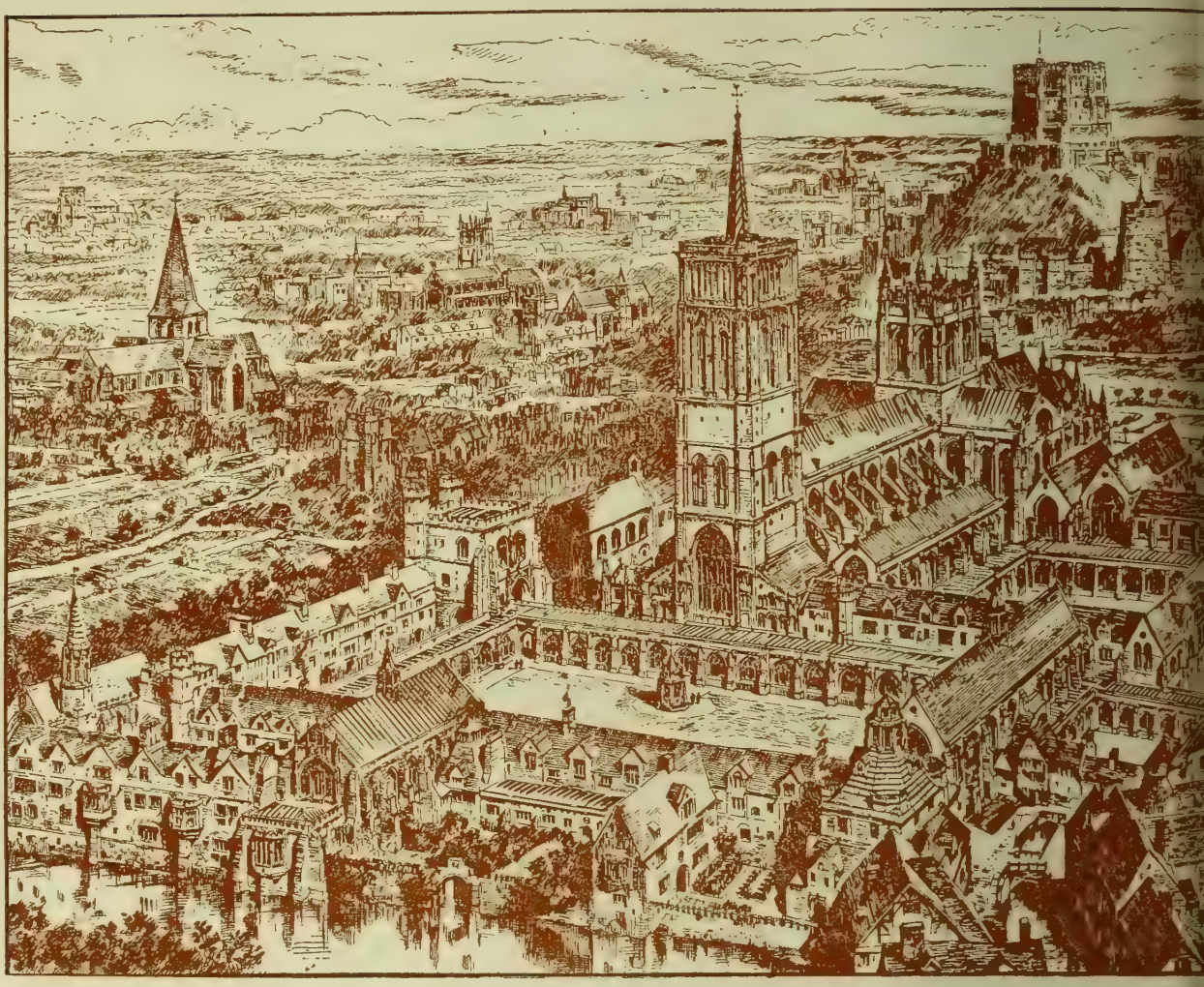
MR. HAROLD S. ROGERS, F.S.A., Architect.



St. Edward's School, Oxford : Proposed Memorial Buildings. Mr. Harold S. Rogers, F.S.A., Architect.



Oxford Views: No. 1.—Radcliffe Camera.



1. St. Giles Church.
2. Rewley Abbey (Cistercians).
3. Beaumont Palace.
4. Carmelite Church.
5. Gloucester College (Worcester).
6. St. Bernard's College (St. John's).
7. Holy Cross Church.
8. Augustinians (Wadham).
9. St. Mary Magdelene's Church.
10. Durham College (Trinity).
11. Castle.
12. St. George's Collegiate Church.
13. St. George's College.
14. St. Michael's, Northgate.
15. Our Lady's Chapel, Smithsgate.
16. New College.
17. St. Peter Le Bailey.
18. St. Martin (Carfax).
19. St. Peter-in-the-East.
20. All Saints Church.
21. St. Mary's Church.
22. All Souls' College.
23. St. Ebb's and Franciscan Monastery.
24. Merton.
25. St. Aldate's.
26. St. Frideswide's (Christchurch).
27. St. Michael's, South Gate.
28. Magdelene College.
29. Magdelene Bridge.
30. St. Clement's Church.
31. Millham Causeway and Bridge.
32. South Gate and Tower Hill.
33. Blackfriars (Dominicans).
34. Grandpont.



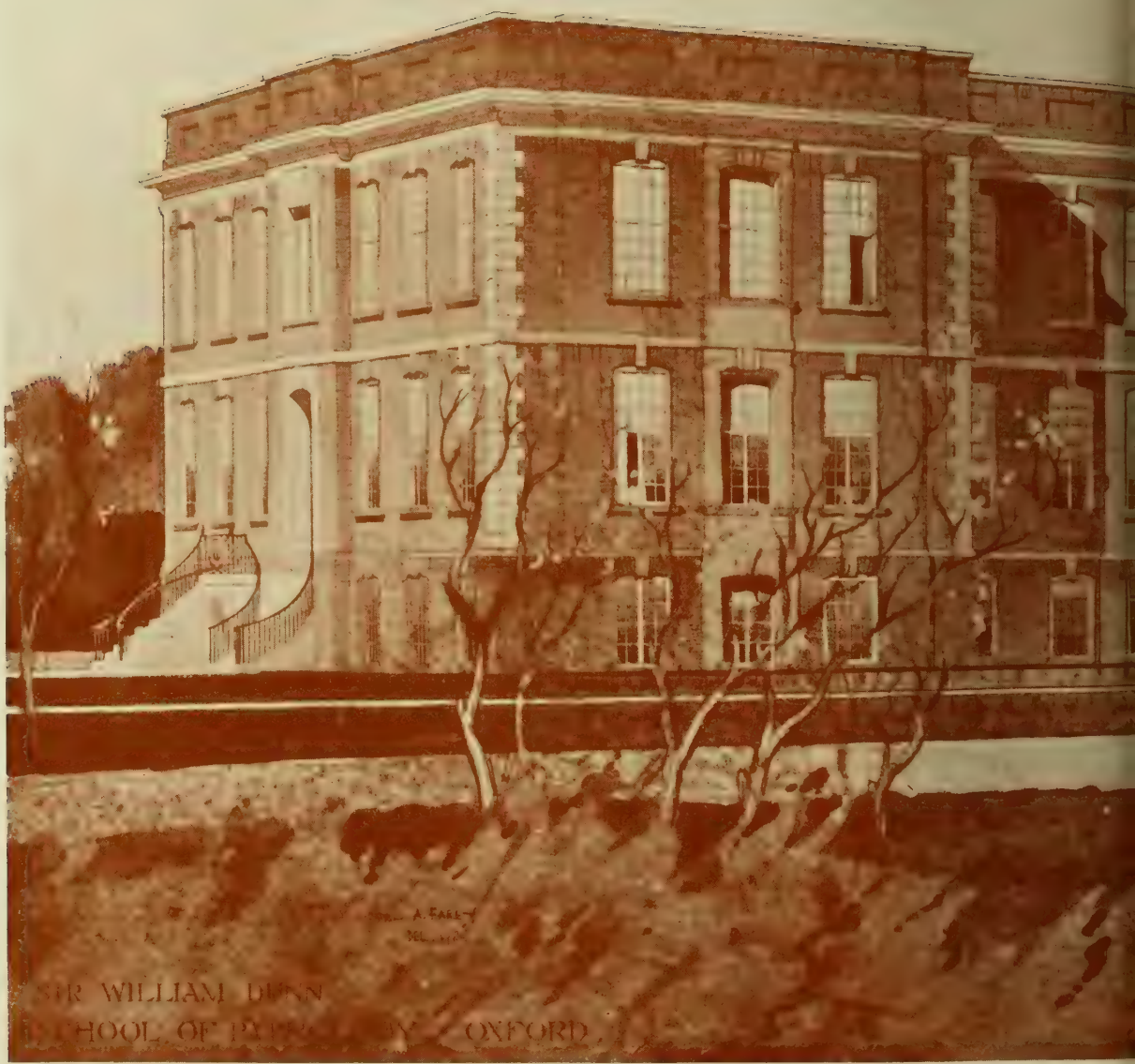
Mediæval Oxford. From





35. Preacher's Pool.
36. Trill Mill Stream.
37. West Gate.
38. Osney Abbey Church.
39. "Domus Dei."
40. The Great Gate.
41. The Great Cloister, "Ambitus Laicorum."
42. The South Cloister, "Ambitus
43. Refectory. [Sacerdotum."
44. Infirmary Cloister.
45. Infirmary and Chapel.
46. Lay Brothers' Dormitory (?)
47. Men's Guest House, "Diversorium Virorum." (?)
48. Women's Guest House, "Diversorium Feminarum."
49. Abbot's Palace and Guest Hall
50. Great Kitchen.
51. The Mill.
52. The "Kyll" (Malthouse'.
53. The "Canon's Building.'
54. The Bake-house.
55. Tannery.
56. Gardens.
57. Fish Ponds. (?)
58. Dove-cots. (?)
59. Mill-stream.
60. St. Thomas (St. Nicholas)
61. The Hamel.
62. Rewley Gate.
63. King's Mead.
64. South Osney Isle.

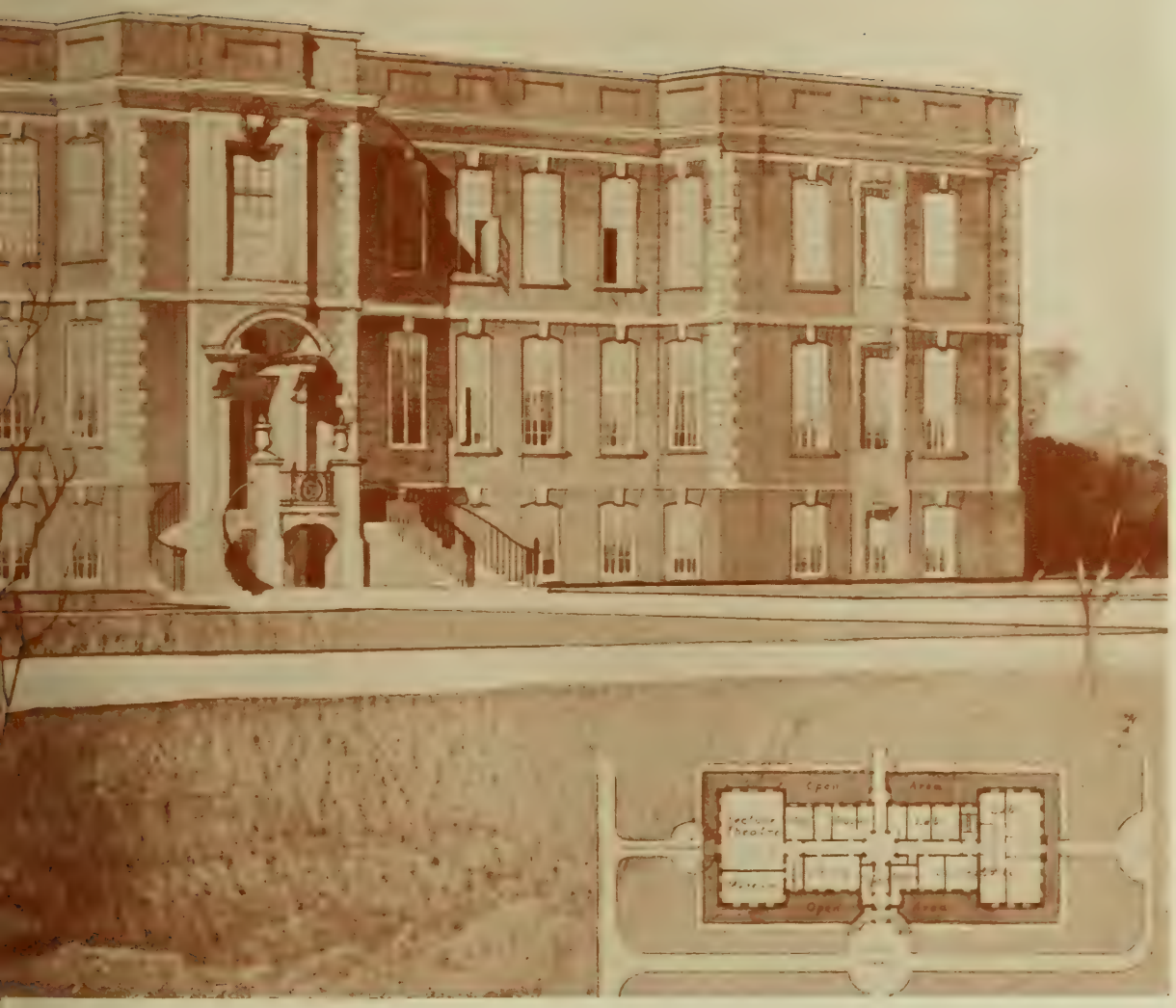
he late H. W. Brewer.



R.A. Exhibition, 1924

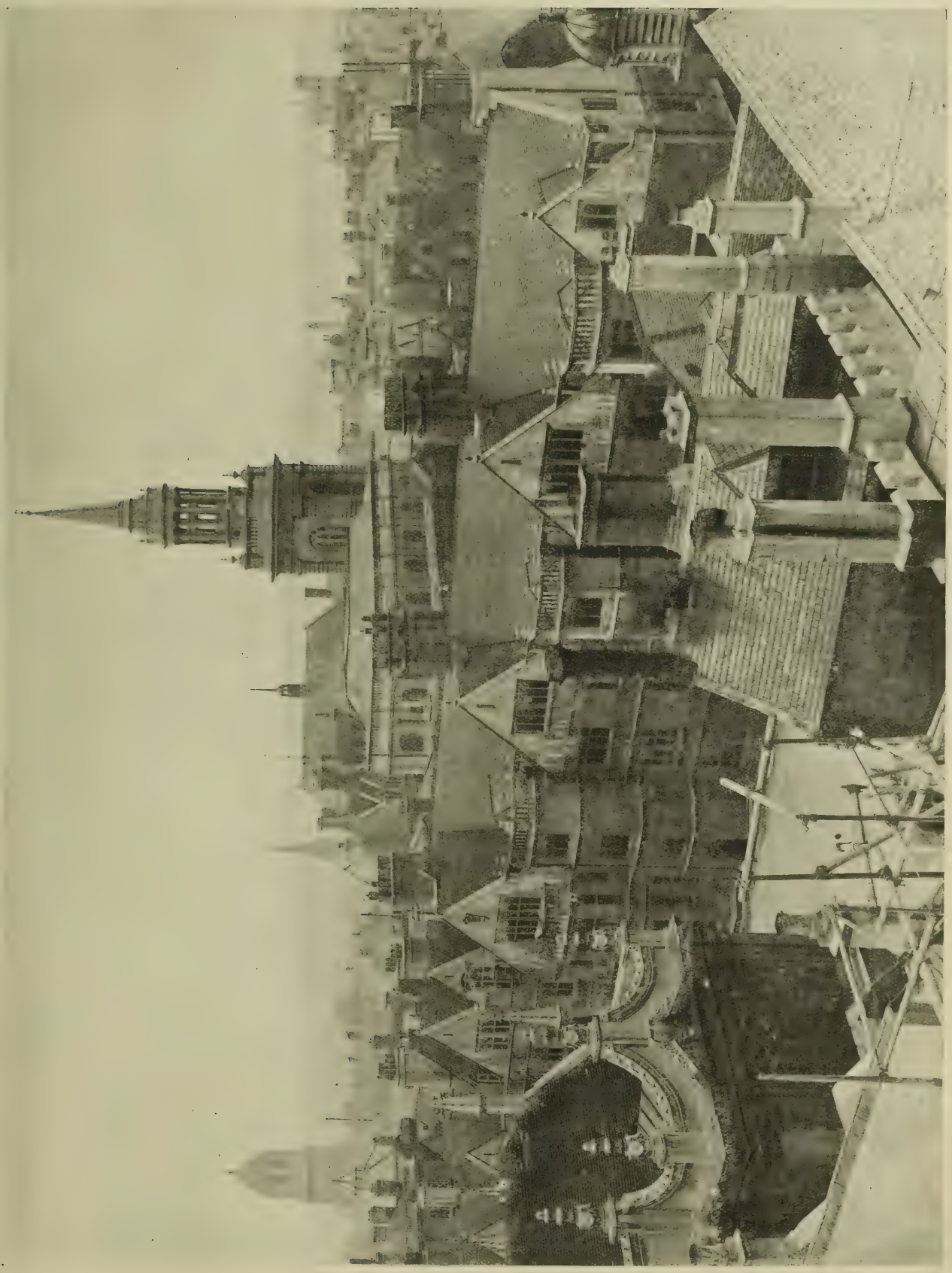
The "Sir Willi

Mr. E. P.



l of Pathology, Oxford.

A., Architect.



Oxford Views: No. 7.—Brasenose College.

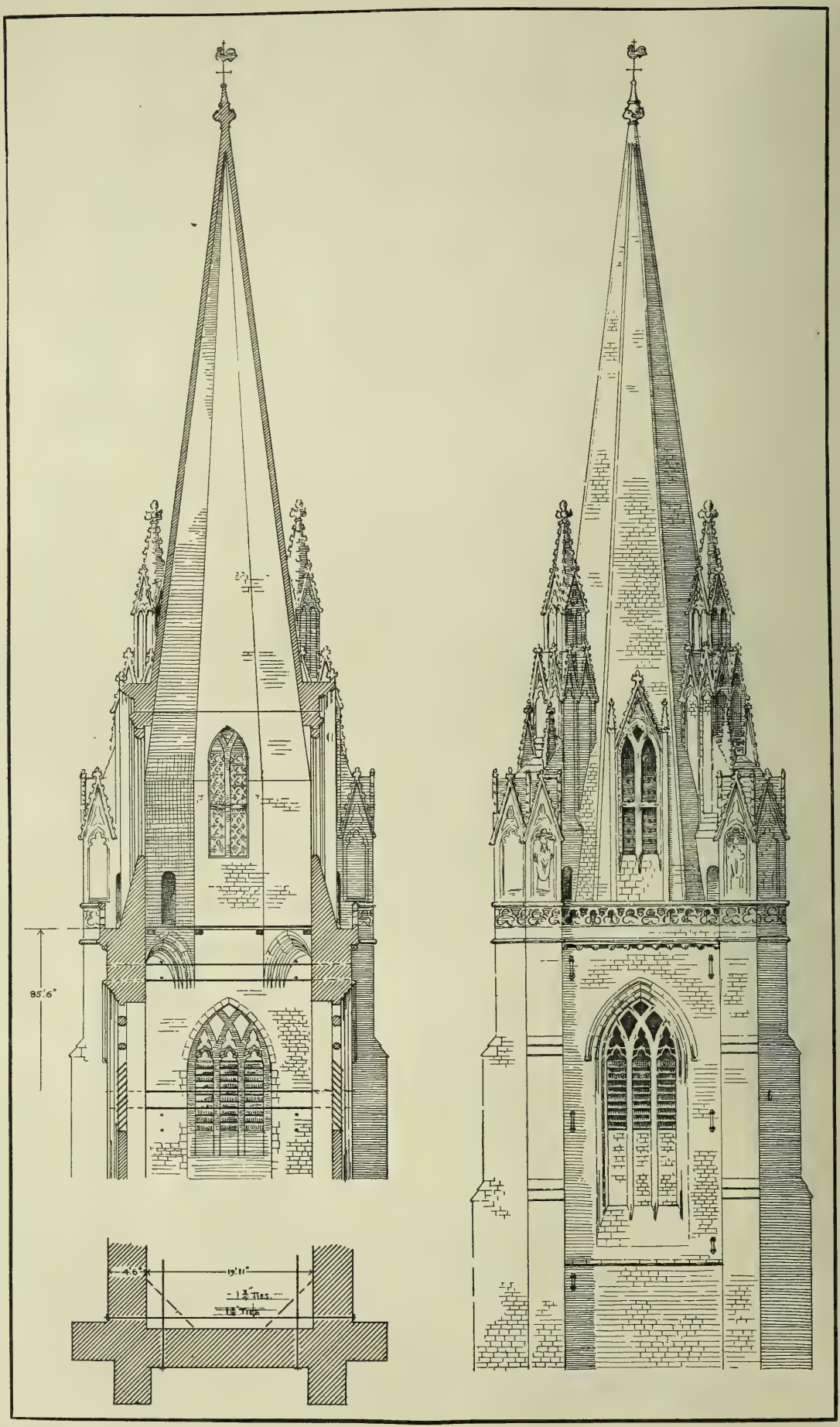


Fig. 7.—Tower of St. Mary the Virgin: Section. Fig. 8.—Tower of St. Mary the Virgin: Elevation.

The Towers and Spires of Oxford. (*See p.* 55.)

THE TOWERS AND SPIRES OF OXFORD

By SIDNEY TOY, F.S.A., A.R.I.B.A.

Oxford is happy in the possession of a great number of towers and spires of exceptional interest, both in respect to the historical periods they illustrate and to the boldness and virility of their construction. Practically every outstanding period of architectural development subsequent to the Norman Conquest is represented, from the towers of St. Michael's Church and of the Castle, both built shortly after the Conquest, to those of modern times. It is therefore necessary here to confine our attention to some of the most important of these structures. The tower of St. Michael's Church was probably built about 1071, but is a clear example of the survival of Saxon methods of construction. It has two tiers of belfry windows, each window being of two lights separated by a baluster shaft placed in mid-wall.

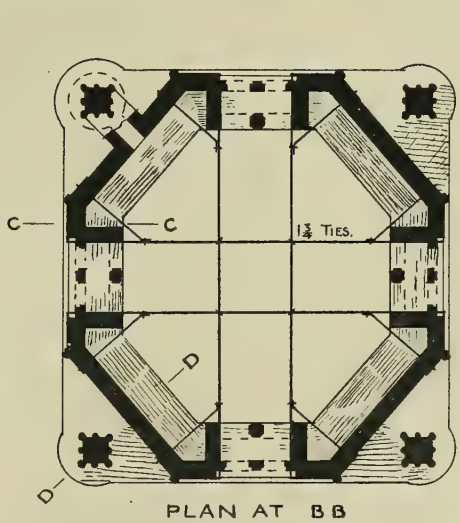
The tower of the Cathedral is built over the central crossing, and is of two distinct periods. The lower part, up to the first external string course, was built during the latter part of the twelfth century, and although it was clearly the intention of the builders to carry the tower to a much greater height, it must have remained as a low base, appearing just above the roof of the church, for some thirty years or more. The bell chamber and spire were added during the first part of the thirteenth century, and the whole of this work is carried out in the style of that period. The early part of the tower is of two stages. The first stage over the four arches of the crossing, two of which are round and two pointed, forms a low gallery open to the interior on each side by a central arcade of narrow arches. The second stage, the lantern proper, is decorated by lofty wall arcades on all sides, the extreme bays of which are pierced by round-headed windows. Each angle is buttressed externally by a large circular turret. As will be seen from the drawing, Fig. 2, the windows of the lantern flank the sides of the early roofs of the church, the weathered courses of which still remain on the external faces of the walls. The tower is oblong in plan, being nearly two feet wider from north to south than from east to west, and this form is maintained throughout its height, the difference in width being adjusted in the upper work by throwing the splays and squinches obliquely across the angles, Figs. 3 and 4.

The bell chamber is pierced on all sides by twin windows of two lights each, and embellished externally by a wall arcade, which is continuous round the circular turrets. With one exception these turrets are of smaller diameter than those upon which they stand, and the difference is adjusted by a conical batter immediately below the first string course. The exception is at the north-west angle where the newel stairs is continued to the base of the spire. But there are reasons for believing that when first constructed they were all of the same diameter, and that the newel stairs was not continued beyond the gallery round the bell chamber. There is a total change in construction at this level. Below this point the steps are built on a continuous spiral vault while above it each step is composed of a single stone built into the wall and affording support to that above; and although the latter method was known and practised in the thirteenth century, it is here met with in a more developed form than permits of its association with that period. Further, the head of the stairs is unskilfully contrived and bears the impress of later work, while the entrance to the spire from the stairhead has been cut through the wall and not built with it. Internally the bell chamber is delicately treated and embellished with keel-moulded shafts and carved capitals and corbels.

The construction of the spire is peculiar, and shows considerable originality in design. It will be seen on an examination of the plans and sections that the angles of the bell chamber are slightly splayed, the splay being increased by a shallow arch at the level of the window heads. Squinch arches are thrown across at the head of the walls, but these do not receive those sides of the octagonal spire passing across the angles of the tower, which is their usual function, but are merely bridges, the sides of the spire falling on the tower at these points in the same vertical plane as the splays above-mentioned (Fig. 6). Tall windows are pierced through the cardinal faces of the spire at its base. These have jambs, which, projecting inwards to the internal face of the tower wall and ascending until they intersect the inclined shell of the spire, receive and deflect the thrusts of the spire at a considerable height from its base, and assist in no small measure in its general support (Figs. 1 and 4). The spire windows have double tracery and are most ingeniously designed to form an effective abutment. The angles at the base are reinforced by low broaches and weighted by tall pinnacles. It is clear that the squinch arches here have little or no constructive value; they cannot even help to form a continuous gallery, since the gallery is completely blocked at each cardinal face by the jambs of the spire lights. But they do preserve an agreeable symmetry at the head of the tower, and mask a junction between the tower and spire which, but for their presence, would have an extremely awkward appearance. There can be little doubt but that the upper chamber was designed to form a lantern entirely open to the church, and that it remained a lantern until after the suppression of the monastery in the sixteenth century, when the bells from Oseney Abbey were placed in the tower, and the timber ceiling now between the first and second stages constructed.*

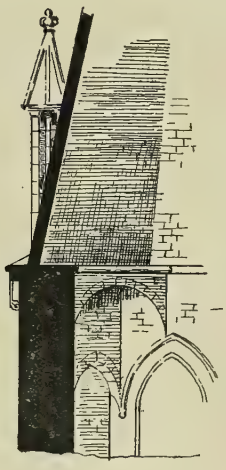
The tower and spire were restored on two occasions during the nineteenth century, about 1856, by Mr. J. Billing, and in 1872-76 by Sir Gilbert Scott. The upper part of the spire was then rebuilt, and its original stonework re-erected in an adjacent garden. The pinnacles were also rebuilt, and the windows, which had been partially blocked, opened out. Iron ties were also inserted at three different levels, the lower two consisting of 1¾ in. iron rods, passed through the galleries on all sides and, piercing opposite walls, secured to glands on the outside. The third system is at the base of the spire, and consists of 1¾ in. square

* Before 1874 this ceiling was situated below the first lantern, but was raised to its present position by Scott.



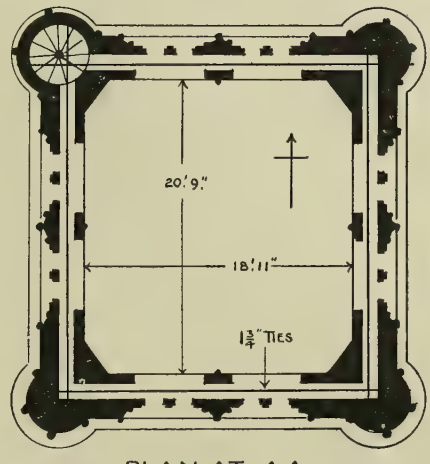
PLAN AT B B

Fig. 4.



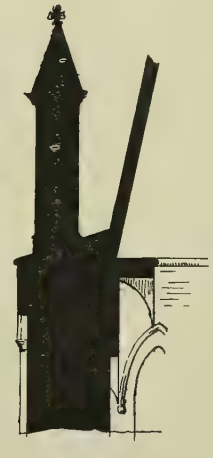
SECTION ON C.C

Fig. 5.



PLAN AT A A

Fig. 3.



SECTION ON D D.

Fig. 6.

Oxford Cathedral: The Centre Tower.

bars, which intersect at the centre and, passing through the spire lights, are secured as shown in Figs. 2 and 4. About 1880 the bells were removed to the tower over the hall staircase, built for their reception from the designs of the late Mr. Bodley. Though, perhaps, not one of the most imposing this spire over the crossing of Christ Church, Oxford, is one of the most interesting as it is one of the earliest in the country.

The tower of St. Mary the Virgin is built at the end of the north transept, and dates from about 1300. It is of two lofty stages, and is surmounted by a graceful spire, which attains to a height of about 186 feet. Internally the tower is about 20 ft. square, its walls are 4 ft. 6 in. thick, and are pierced on all sides by wide arches or windows in both stages. The adjustment of the octagonal spire to the square tower shows considerable development from the method employed at the tower of the Cathedral. Squinch arches of three orders are thrown across the angles of the tower and the oblique walls of the spire are built directly upon them, while all the internal walls are carried up vertically until a height is reached where the distance between the internal surface and inclined outer face is reduced to that of the thickness of the shell proper (Fig. 12). The angles are weighted by massive pinnacles rising directly from the buttresses of the tower, and formed by connecting the pinnacles above the buttresses to an oblong mass of masonry, which is carried back to and incorporated with the spire itself. This mass is reduced in depth by a weathered surface above the first gablets and is crowned by an upper pinnacle with finial; the whole being panelled and enriched by gablets and crockets (Figs. 7 to 13). In order to qualify the somewhat abrupt break occasioned by the weathered surfaces above referred to small finials are placed upon them (Fig. 8).

The whole of this portion of the design appears to be governed rather by æsthetic than scientific principles, the chief object being to obtain an agreeable outline at the junction of the tower and spire as seen diagonally, this being one of the most crucial problems in the design of spires. But the effect here is very seriously compromised by the cumbrous character of these solid pinnacles which are, as they appear to be, far too ponderous for their purpose. It is only necessary to compare the design at this point with the scientific and refined manner in which the same problem is solved in the spire of Salisbury Cathedral—where the tower is much larger—to realise the relative inferiority of the work here.† At the base of the spire are tall spire lights which assist materially in neutralising its thrusts and contribute in no small measure to its grace of outline. In the niches of the pinnacles immediately above the parapet are twelve statues, principally of saints and bishops. Before the last restoration of the tower nine of the original figures remained while of the other three two had been replaced and one partially renewed in 1852. It was found in 1893 that the statues rested in their niches merely by their own weight, since the iron fastenings by which they were secured to the masonry had been rendered ineffective by rust. They were in such a condition of decay that it was impracticable to insert new fastenings. Eleven of them were therefore advisedly removed and are now preserved in the Old Congregation House to the east of the tower. One of the original figures, however, that of an archbishop, at the south-east corner, it was found possible to retain in position, but the places of the others are now occupied by modern statues, the work of Sir George Frampton. In his rendering of the persons represented the sculptor was given perfect freedom in respect to the three figures of 1852, but in respect to the other eight, against his own and the architect's advice, he was restricted by the University to more or less servile copies of the originals—an undoubted mistake.

During the course of its history this structure has occasioned considerable anxiety and has been frequently repaired. In 1607 the upper parts of the pinnacles were rebuilt after having long remained truncated as the result of a storm. As then finished the gablets of the main oblong blocks, which doubtless had been destroyed, were not rebuilt, but the upper pinnacles placed directly upon their flat upper surfaces. By 1848 the pinnacles had become ruinous and they and the spire itself were thoroughly restored by Mr. C. Buckler in 1850-3. The upper portions of the pinnacles were then rebuilt to approximately their original design, and raised 11 ft. Three years later the fabric was examined by Sir Gilbert Scott who found that the piers and

† *Vide The Builder*, January 11, 1924.

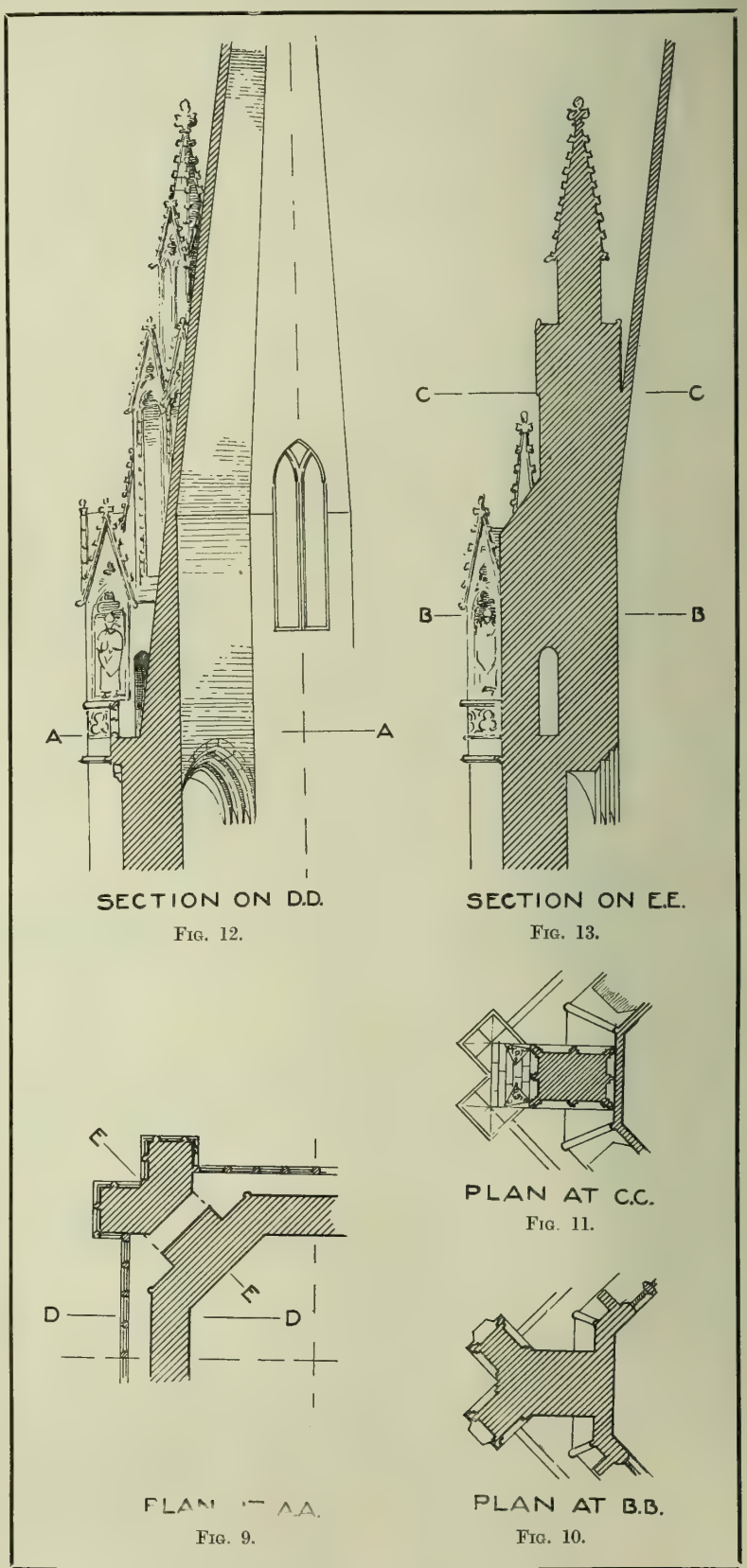


Fig. 12.

Fig. 13.

Fig. 11.

Fig. 9.

Fig. 10.

Tower of St. Mary the Virgin, Oxford.

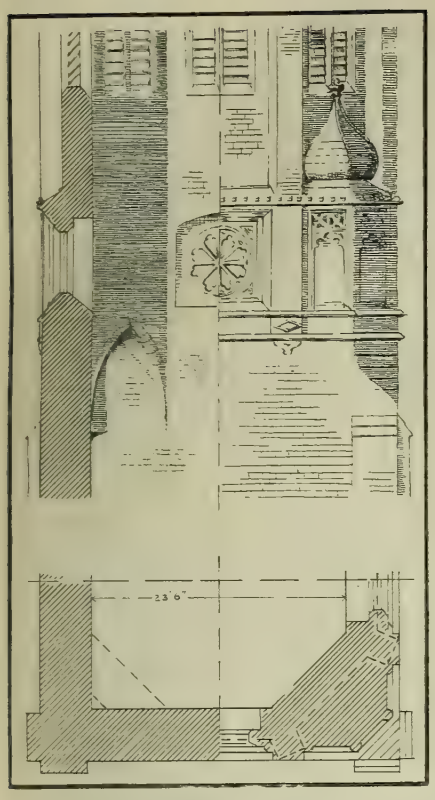


Fig. 14.

Tom Tower, Oxford.

Plan, Section and Elevation at Squinch

arches had failed and that the walls had become fissured on three sides. Repairs were then effected, the cracks cut into and bonded, and the tower secured by the existing system of iron ties, a double tie of 1¾ in. rods being placed on all sides at three different levels. In 1893-6 the structure was repaired by Sir Thomas Jackson, who found that the pinnacles had again become so thoroughly decayed, owing to the inferiority of the stone employed, that their practical rebuilding was necessary. He also rebuilt the upper 48 ft. of the spire.

The bell tower of Magdalen College is one of the most conspicuous, as it is one of the most beautiful towers of Oxford. It was begun in 1492 and completed in 1505, and contains a peal of ten bells. Internally it measures at the base 20 ft. 7 in. by 18 ft. 5 in., its walls are 5 ft. 6 in. thick, and it rises in five slightly diminishing stages to a height of 145 ft. at the top of the pinnacles. On the north-east is a wide newel staircase, the lower part of which—now disused owing to its unsafe condition—has a continuous handrail cut out in the stonework of the wall. This tower is a graceful and well-proportioned structure. Its lower stages are plain and pierced only by one small window on each side. All emphasis and decoration is reserved for the bell chamber, which is pierced on all sides by two lofty windows of three lights and surmounted by an openwork parapet with a sculptured band and cornice beneath. The angles are supported by octagonal buttresses, having the string courses at each stage broken round them. At the belfry stage there are also intermediate buttresses which are carried up between the windows and terminate, like those at the angles, in tall pinnacles. A ceremony inseparably connected with this tower is that performed at daybreak on the 1st of May in each year, when the choristers ascend the tower and chant a hymn in Latin to the Holy Trinity, this being followed by the ringing of the bells in full peal. The origin of this ceremony is obscure, but by the early part of the 19th century it had degenerated into most irregular use, secular tunes were sung, and the passers-by below occasionally received the attention of the choristers in the form of eggs and other missiles. But about 1844 the service was set in its present form, and has been since reverently observed.

Tom tower, built on the west side of the Tom quadrangle of Christ Church, is of two periods. The lower part, forming the gateway into the quadrangle, was built by Cardinal Wolsey in 1526, while the upper part was added by Wren in 1680. As left by Wolsey, though the flanking turrets on the west side were carried up to their present height, the main block was only built to a level just above the archway and not covered in. It was evidently Wolsey's intention to build an oriel window immediately over the archway at the west, for he had constructed its base, as shown in Loggan's print of 1673. This would have grouped well with the side turrets if they and the oriel itself were carried sufficiently high, as was doubtless intended. On the renewal of building in 1680 the original design for the upper part was abandoned entirely, the base of the oriel was swept away, and a deeply recessed window constructed in its place. Wren has been adversely criticised for this part of the work, but it must be remembered that the effect of the oriel would depend upon the height of the flanking turrets and upon the general design of the upper part of the tower. The design being altered, the rearrangement of the base was amply justified. Wren built the rich fan vaulting over the gateway and finished the tower with an octagonal lantern, covering both the lantern and the turrets with cupolas. The construction at the base of the lantern is shown in Fig. 14. The Bishop, Dr. Fell, desired that an observatory should be placed on the top of the tower, but Wren threw the weight of his advice against the scheme, and it was abandoned. Tom tower has been repaired repeatedly, and when examined in 1910 little of Wren's stonework was found to remain. The fan vaulting, however, with its fine series of shields, was intact. The structure has been recently restored by Mr. W. D. Caröe. Great Tom, brought from Oseney Abbey in 1546 and recast in 1680, hangs in the tower, and still tolls 101 times each night after the Colleges are closed at 9 p.m., 101 being the original number of students in the foundation.

BOOK REVIEWS

The Architect in Practice. By Harry Barnes, Vice-President of the R.I.B.A. With a Preface by J. A. Gotch, F.S.A., F.R.I.B.A. London: Ernest Benn, Ltd. Price 7s. 6d. net.

This book is written to fill a gap in the literature of the architectural profession, and the author has ably succeeded in the task he set himself to accomplish. We are surprised to read, and yet we do not doubt that the book is the first to deal, in a strictly practical way, with every phase of actual architectural practice, including training, office routine, professional etiquette, the relations between architects and their clients, the execution of commissions, and much other information indispensable to all practising members and students of the architectural profession. The work consists of an introduction followed by nineteen short chapters briefly and clearly describing the various duties and responsibilities of an architect in practice, and every young architect and many others would do well to read an author who is a guide, philosopher and friend. Not only is the practice of the architect described, but many of the difficulties, dangers and uncertainties confronting the young architect are pointed out with tact and discrimination. Many wise and helpful suggestions are made which cannot fail to be of use to those starting a practice, and we confidently recommend the book to our readers.

House Painting, Glazing, Paper Hanging, and Whitewashing. By A. H. Sabin, M.S., D.Sc. Third edition. 7s. 6d. net. (Chapman & Hall).

The author describes this as a book for the householder, and anyone who contemplates painting his own house will do well to read the work. In this edition some additional matter has been added to guide the amateur who wishes to mix his own paint. A number of formulas are given, showing the amount of stainers required for different coloured paints. Many hints are given as to the various methods of painting galvanised iron pipes, tin roofs, and newly-plastered walls and the use and care of brushes, which are nowadays an expensive item. The book being written for the American public, the various prices of paint are quoted in dollars. Papering to walls, whitewashing, and kalsomining are dealt with in a simple way. The book can be recommended to the amateur and craftsman.



Oxford: Wadham College.



View of Balcony.



View of Stage.

Picture House, Magdalen-street, Oxford.

Messrs. Frank Matcham & Co., and J. C. Leed, Architects.



The Lounge.



Tea Room.

Picture House, Magdalen-street, Oxford.

Messrs. Frank Matcham & Co., and J. C. Leed, Architects.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS CONFERENCE AT OXFORD

THE members of the R.I.B.A. Conference, which is being held this year in Oxford, assembled in that city on Wednesday, and were received in the evening by the Vice-Chancellor of the University in the Hall and garden of Wadham College.

On Thursday the members assembled for the inaugural meeting in the Sheldonian Theatre, Broad-street, when Mr. E. P. Warren, F.S.A., delivered a lecture entitled "An Historical Sketch of Oxford." After some preliminary observations, he said: Of the antiquity of Oxford it is impossible to speak with any precision. Its site: on a broad spit of gravel between two rivers, which, with their tributaries, made it at once so difficult of hostile, and so easy of friendly access. The fish, the wattles and the reeds afforded by those rivers, and the pasturage of the level meads watered by them, all contributed to render it the inevitable site in the first place of a primitive settlement, and later of a fortified town.

That it was an important town as towns went in the earliest times of which we have record, there is abundant evidence.

One of the first essentials in the position of an ancient town was its possibilities of defence. To the site of Oxford the many bifurcations; and the double, and, in places, triple, channels of the Cherwell on the East and South-East, and their junction with the broader stream of the Thames, which, in its course from the North-West, protected the Western and Southern sides. Thus only the North side remained to be protected by a ditch or moat, joining Thames to Cherwell. These features offered peculiar facilities of protection, and could be, as they were, increased by using the earth dug from the moat to form the ramparts of the town and the mound, which still remains as an evidence of primitive fortification, to protect the Western approach.

The position of Oxford, nearly in the centre of a line between the estuaries of Thames and Severn, and upon the line of junction of the primitive land routes from North to South, and East to West, added to its inevitable character as a stronghold and a mart. It offered relatively easy communication with the port of London and the sea, as well as with the fortresses of Windsor and Wallingford. Its primitive walls were probably mere palisades of stout timber, but against primitive weapons and forms of attack, these were sufficiently formidable, though, as we shall see, whatever security they offered did not avail against a determined enemy.

The most determined, and the most dreaded of enemies, were the Danes, to whom the Thames estuary offered a ready means of approach, not only to London, but as far as tidal water would carry them, say to Teddington, or, on flood tides considerably higher, and who on several occasions pushed high up the Thames, left their ships, and marched through the forests of the Chilterns to fall upon Oxford, which they ravaged and burned at least upon three successive occasions, in 979, 1002, and 1010.

The name of Oxford, Oxenford, or Oxnaford, as it was originally known to the Saxons, is sufficiently explanatory, as a ford for oxen, just as Hertford was the hartsford, or a ford for deer. Oxford, however, possessed three fords at least, and after a long summer drought probably more, in the days of the relatively shallow and rapidly running uncanalised rivers. It must have been a place of some importance as early as 912, as it was then coupled with London in the English Chronicle, in relation to the death of Ethelred, Ealdorman of the Mercians, and the succession of King Eadweard, who "took to himself Lundenburg and Oxnaford, and all the lands that were obedient thereto."

It was successively the central Southern frontier post of the Kingdom of Mercia, and the Northern of that of Wessex. It was frequently the meeting-place of the Gemot, and seems to have been the place of the coronation and death of the first Harold, if not his capital. The Gemot probably assembled upon the castle mound, as, when it could not be accommodated in a natural amphitheatre, like that of the Moot Hill near Salisbury, its meetings were customarily held on some sort of hill slope.

By the end of the tenth century, Oxford, rebuilt and, as the times went, strongly fortified, and possessing at its Western extremity, some sort of castle or fort upon the mound in the river loop before referred to, possessed churches, the dwellings of citizens of various degrees, and a market, and early in the eleventh century, had erected a stone tower which, by the middle of that century was, in all probability, its most conspicuously new, as it is now its most conspicuously ancient, feature, the tower of St. Michael's Church.

When, in the memorable year of 1066, that blessing in disguise, the Norman invasion, fell like a thunderbolt on Southern England, and within a few weeks of the battle of Hastings had obliterated the rivalries of Mercia and Wessex, had overwhelmed all opposition, capturing or more often making unopposed entry into fortified places, Oxford was a town of considerable wealth and importance, important enough, in any case, to receive very speedy attention from a Norman army, and to witness the determined entry of D'Oilgi's force, splashing across the fords of Cherwell and Thames, in jingling chain mail, and conical topped helmets, pennons fluttering, kite-shaped shields rattling, and long swords clanking ominously. Whether the castle on the mound, or the town with its bulwarks, or both, resisted for a while, there is no certain means of knowing. Some think that there was a short siege, others that submission was immediate. What is very certain is that the conquerors lost little time in taking accurate stock of their new possessions, in repairing the walls and bridges, and in setting to work, no doubt with forced local labour, to build a powerful fortress on the site of the Saxon stronghold and its mound.

With the establishment of the Normans, and the Domesday Survey, we at once get upon a firmer footing as to facts and dates, and, by the evidence of that invaluable compilation, we learn that very soon after the Conquest, there were at Oxford 243 houses paying "geld" or tax, and 478 unoccupied and ruinous, probably as the result of the recent fire, and, at any rate, unable to pay tax. The King had twenty "wall mansions" which were Earl Algar's in the time of King Edward, "paying" as it is stated "both then and now fourteen shillings less twopence; and one mansion paying sixpence, belonging to Shipton, another paying fourpence belonging to Bloxham, a third paying thirty pence, belonging to Risborough; and two others paying fourpence, belonging to Twyford in Buckinghamshire; one of these is unoccupied." They are called wall mansions because, "if there is need and the King command it, they shall repair the wall."

Further we learn that "All the burgesses of Oxeneford hold in common a pasture outside the wall that brings in six shillings and eightpence." This pasture is the noble Port Meadow which the burgesses still enjoy, and the income from which seems as modest as the house rents.

Another of the Conqueror's officers, Roger of Ivri—Robert d'Oilgi's brother in arms—held fifteen houses in Oxford and considerable other property. D'Oilgi began to build the Castle, the great "donjon" or Western tower of which still exists, alongside the Saxon mound within the lines of the old moat, and upon the bank of the mill stream. The old Mill, inventoried in Domesday Book, still exists and functions under a modernised form.

Other relics of d'Oigli's building activities are the very interesting and typical Norman crypt of the Church of St. George under the lee of this tower, and the remarkable vaulted Well Chamber on the mound built above the 70-foot shaft of the well.

Further remains of Norman work in Oxford are fairly plentiful, but less homogeneous.

The cathedral is a Norman church, though much amended, and overlaid by later work. In St. Peter's-in-the-East you have the remarkable and beautiful chancel, and most characteristic and interesting crypt. There is Norman work in Holywell church, notably the Chancel arch, and a Norman cellar or crypt (either name will serve—the choice is between Latin and Greek derivation) at Frewin Hall.

A couple of miles or less to the Eastward of the city is the wonderful little Norman church of Iffley, built in the second half of the twelfth century.

All these instances show the robust, round-arched Norman manner very characteristically.

The Normans were not, of course, the first builders of churches in and around Oxford. The evidence of the building itself seems to show that the tower of St. Michael's Church, was prior to their arrival. It was probably damaged by siege or the recent fire, and partial rebuilding, therefore, necessary. The names of Saxon and of Celtic Saints appear in the records of pre-Norman dedications, such as St. Werburgh, St. Mildred, St. Frideswide, and St. Budoc, and it is probable, if uncertain, that besides the nunnery of St. Frideswide, there existed various small religious houses before the Conquest, and that there were schools attached to these which formed the humble beginnings of the great place of learning that was to come. It is at any rate certain that the permanent establishment of the Normans and their soldiery was followed by those of religious orders from France. And this was only natural, for the Normans, albeit hard and dour, were devout, and their religion was a necessary part of their civilisation. Furthermore, they were astute enough to welcome military strongholds, large monasteries, which represented increased man power, in case of trouble. This reason may account for the later conversion of the nunnery of St. Frideswide into a Priory.

The various orders came in rigid succession, the first, apparently, being the Dominicans or Black Friars, to whom lands were given in the Jews' Quarter, these they subsequently sold, and re-established themselves in St. Ebba Parish, where they built a House, Church and Schools, of which I think there is little or no vestige but the names of Blackfriars-road and street.

Next came the Franciscans or Grey Friars, who were similarly established, and grew from the humblest beginning and the appropriate simplicity and poverty of their rule, to affluence as well as learning. They also built a large Convent, a Church and Schools. Later came the Benedictines, and the Carmelites or White Friars, all bringing Latin and French, and establishing schools.

The great Abbey of Osney, West of Oxford, was founded early in the twelfth century for Augustinian, and, the abbey church is reported to have been of great magnificence, and when Oxford ceased to belong to the immense diocess of Lincoln, the abbey became a cathedral and the abbot a bishop. Nothing of this Abbey remains to-day, and little of any of the other religious houses, such as Rewly Abbey, that surrounded Oxford, Their schools and influence of those schools, and the scholarship promoted amongst the various orders, greatly helped to establish the early repute of Oxford

as a place of learning allied to religion, a conjunction that was accepted as so obvious and natural, that in the early days of the University, its chief secular business, its meetings and disputations were carried on within the walls of the University Church of St. Mary the Virgin, before the building of the Divinity School, and the "Old" Schools in the Quadrangle beneath the Bodleian Library.

Learning at Oxford was, in the early days of the University, not well housed, but as time brought increased wealth and increased numbers, it brought with them an increased demand for appropriate buildings, and a natural desire for architectural dignity. So from uncertain and humble beginnings, through times of great hardship and difficulty, strife and disaster, through pestilence and famine, oppression and war, the little University in the little town between the rivers, has grown to world-wide fame and immense influence and prestige, and the town to a city celebrated for the beauty, the character and the interest of its buildings.

To understand Oxford of to-day, it is first necessary to understand the form and disposition of mediæval Oxford, the little walled town compressed with its fortifications, some of which happily survive. This, as you will see by old maps, presents the plan of an irregular oblong, rather sack-like in form, roughly speaking, some half-mile in length from East to West, and quarter-mile in width from North to South, and having a more or less square eastern end or base, and converging at the west end towards a nearly circular head, which is the Castle, with its enceinte and the moat formed by artificial extension of a river bend. Agas' and other old maps show the walls quite clearly, and you may still, and with ease and comfort, see a considerable length of the northern and eastern portions, which form the boundary of New College garden, where you will see a typical bastion, and may observe that the beautiful little bell tower of that College occupies the site of another bastion, and was, in fact, a defensive tower in the fortified line. The outer side of this wall is fully visible on the north side of New College, and at intervals behind the houses of Long Wall, where the Eastern side of the old city wall ran southward to the East Gate, at the end of High-street, and thence south-west and westward enclosing Merton College, where further portions of wall and bastion may still be seen, to enclose Corpus College and Christ Church, just west of which was the South Gate, and the bridge or Grand Pont, thence skirting the southern side of Pembroke College, to turn north-westward towards the Castle ditch and the Western City Gate; and north-eastward to the North Gate flanked by St. Michael's Church and the tower jocularly known as Bocardo, and so called, it is said from a difficult figure in logic, easier to get into than out of, now long demolished, and which had a somewhat dismal history as a jail or lock-up. Thence the wall ran eastward, along the southern side of Broad-street, crossing the site of the Sheldonian Theatre, and passing behind that of the old Clarendon Press building, where it is indicated by lines cut into the pavement, to continue to the Tower of New College before referred to, but pierced, just north of Hertford College and the Chapel of St. Catherine, by a small gate which was known as Smith Gate.

It will be seen that several of the old Colleges lie outside of the walls, Balliol, Trinity, St. Johns and Wadham to the North, Worcester—formerly Gloucester Hall—to the North-West, and Magdalen to the East, six in all, but all, excepting perhaps St. Johns and Wadham, built during a period when city walls were still of importance. It was necessary then that the extra mural Mediæval College should be something of a fortress in itself.

The thirteenth century had seen much new work in the Cathedral, and most of St. Giles' church, with its very unusual, four gabled south aisle and lancet windows, built before the end of its first quarter. The middle of the century added the handsome arcaded belfry stage to the Cathedral tower, and the short octagonal spire, and columnar angle pinnacles. Towards its end, and in a manner changing rapidly to what we know as the Decorated or Early Fourteenth-Century manner, came the beautiful choir of Merton College Chapel, and the elaborate shrine of St. Frideswide in the Cathedral. The fourteenth century had added much that still remains at Oxford, including the rebuilding of the old city wall, much of which is still to be seen. But Oxford, like so many other English towns, suffered in its building activities and its crafts the deadly arrest of the Black Death, which paralysed them for a score or so of years after 1348, and you will find little work dating from that period of gloom and depopulation.

The fifteenth century, busy and active, added immensely to the buildings of Oxford, much that has disappeared, and much that most happily remains. This period, indeed, set a fashion of College architecture in Oxford that prevailed in essentials into the seventeenth century. The fifteenth saw the transepts and fine tower of Merton completed, Balliol hall and library built, All Souls Font Quadrangle and Chapel, the Divinity School, and at Magdalen St. John's Quadrangle, the Founder's and Muniment towers, the Chapel, hall and cloisters, and finally, at its very termination, the admirable bell tower begun at the close of the century and completed in the early years of the sixteenth, a fitting culmination to a splendid group.

The sixteenth century saw Wolsey's ambitious and magnificent conversion of a monastic "house" into his Cardinal's College, now Christ Church, the building of the noble dining hall. The Great Quadrangle, which contains the Canon's dwellings, and the various offices of the College, and forms a splendid vestibule of approach to the Cathedral, the long and finely-proportioned front, with the great central gateway, and the flanking and angle turrets along St. Aldate's, the gate tower of which remained unfinished till Wren added, late in the next century, the belfry that houses "Great Tom." This century was, later, too much disturbed by the Reformation and religious and political troubles, until its fourth quarter, for much building; but what it did build was mostly in conservative "Perpendicular" Gothic, a manner it carried on, albeit with some semi-classical embellishments, well into, as we have seen a little beyond the seventeenth century.

Of early seventeenth-century architecture, of Elizabethan and Jacobean work, Oxford is full in its University, Collegiate and Domestic buildings. To the later seventeenth and early eighteenth centuries, Wren and his followers contributed many buildings which, after two centuries or more, are characteristic features of the Oxford of to-day.

I do not attempt to describe these buildings; they are before you, and you will see them for yourselves, under the conduct, if you so desire it, of the initiated ladies and gentlemen who have volunteered for the service.

In England, and especially in Oxford, the native local style of building lingered long after the partial adoption of a foreign manner, known as that of the Renaissance, and derived from the French, the Flemings and the Germans, who were copying the Italians, who were copying, more or less, the remains of Roman buildings and Greek statuary, which they were rediscovering.

The acceptation in this country was, for a long time, slow and half-hearted, and, throughout England, and more particularly in the West, there are many curious and interesting instances of survivals of and reversions to the native manner of Gothic architecture, but none, as far as I am aware, more marked than in Oxford, which has been called "the home of lost causes," and has certainly been so in regard to native Gothic architecture, when that was already a lost cause elsewhere.

To cite three well-known instances, you have the deliberately Gothic College, founded, endowed and built, I think, about 1610, by Nicholas and Dorothy Wadham. This College was destined, curiously, a little later to become the academic cradle of our greatest "Renaissance Architect," Sir Christopher Wren, who, however, had his moments of reversion to Gothic types.

You then have two remarkable anachronisms in manner. The elaborate porch, actually Gothic in its general conception, but most deliberately and determinedly classic in detail and intention, added in 1637 to the Gothic University Church of St. Mary the Virgin, by the gift of Archbishop Laud's chaplain, Dr. Morgan Owen, and by a designer of uncertain identity, thought by some to be Nicholas Stone, an attribution to which I personally incline. Three years later the beautiful fan-vaulted staircase of Christ Church Hall, deliberately Gothic in all constructive essentials and in general effect, but bearing indications of its actual period in its roof bosses and minor details.

There is, however, a still more startling instance of anachronism, of which I have only become definitely aware quite lately, in the buildings forming the east and west sides of the Middle Quadrangle at Oriel. These, with their mullioned windows, their doorways, string courses, and hood moulds, and their coped and curvilinear gablets, all in the pronounced manner of the early seventeenth century, or, as we call it, Jacobean Gothic, date from the early years of the eighteenth century—1719 and 1723. You will see, therefore, that the student of architecture in Oxford must be well instructed as to dates, or walk warily in regard to attributed periods. He needs local as well as general historical knowledge.

The remainder of Mr. Warren's paper will be given in our next issue, together with a Report of the Conference proceedings.

Housing in Amsterdam.

The Report of the Housing Department for 1922, contains interesting details regarding this work. Although in 1920 only 737 new dwellings were built, in 1921, 3,178 were erected, and in 1922, 6,384. The population of Amsterdam is about 700,000. Rather more than half of the houses built during 1922 were built by private builders, most of them receiving Government subsidies. It is estimated that there was still a deficiency of 16,537 houses at the end of 1922. There has been a considerable reduction in recent years in the number of basement dwellings, the figures for 1922 being 1,246 dwellings of this type as against 2,707 in 1909.

Thames Bridges.

The Council, on May 20, invited the City Corporation to join the Council in an inquiry into the existing and future provision of means of road transit across the Thames, and to inquire into the whole question of the adequacy, condition, &c., of existing bridges and the necessity (if any) for additional means of transit across the Thames within the administrative county of London, and to formulate a general policy on the subject.

The City Corporation has replied that the Court of Common Council, in view of an undertaking given to the Minister of Transport that the Corporation would defer further deliberation upon the St. Paul's Bridge Scheme until it should have received the consideration of the proposed Traffic Committee to be set up under the London Traffic Bill when it becomes an Act, do not consider that it would be possible for the Corporation to take part in the inquiry proposed by the London County Council until the question of St. Paul's Bridge has been considered by such committee, but at the same time desire that the London County Council should renew its invitation after such consideration has taken place.

The General Purposes Committee of the Council state they are sure the Council will be pleased to have the valuable assistance of the City Corporation as soon as the Corporation considers itself free to accept the Council's invitation. They feel, however, that so far as the Council is concerned, the question of cross-river transit is so urgently in need of settlement that there must be no delay in considering it in all its bearings. They propose, therefore, that the Council should set up at once a Special Committee with the same reference as that of the proposed Commission of Inquiry. They trust the Corporation will subsequently, be able to participate in the Inquiry.

UNIVERSITY OF LIVERPOOL

THE EARL OF CRAWFORD AND BALCARRES recently opened the annual exhibition of architectural drawings by the students of the School of Architecture of the University of Liverpool. Mr. H. A. Cole, chairman of the Libraries, Museums, and Arts Committee, presided, and was supported by Dr. Adami (Vice-Chancellor of the University), Mr. Hugh R. Rathbone, M.P., Mr. C. Sydney Jones, M.P., Alderman John Lea, and Professor C. H. Reilly.

Professor Reilly, in an opening statement, said the Liverpool School of Architecture, which was the oldest in the country, had deliberately set itself to envisage architecture as a great civic art. His ambition was that the school should some day have a group of professors and develop on the lines of the Academie des Beaux-Arts.

Lord Crawford, in the course of his remarks, said the Liverpool School of Architecture, in its personnel, was not a purely Liverpool or Lancashire institution. No fewer than two-thirds of its students came from distant parts, many from their overseas Dominions and Colonies. Popular interest in architecture was growing steadily and consistently, and, if well guided, would grow intelligently. Every private or business structure—even the chimney-stack—should share the dignity of their great public buildings, and thus contribute towards the improvement and ennoblement of their cities. The public was demanding more and more from its architects.

After expressing the hope that the people of Liverpool realised what an asset they possessed in the School of Architecture, his lordship said he believed that was almost the only school in the country which had its own department of town-planning and civic design.

Mr. Hugh R. Rathbone, M.P., proposed a vote of thanks to Lord Crawford, which was seconded by Alderman John Lea.

We give below a list of the awards:—

Degree of B.Arch.

FIFTH EXAMINATION.—Honours in Architectural Design—Class I: D. G. Bridgwater, H. S. Silcock. Class II: C. T. Bloodworth, J. H. L. Owen. Honours in Architectural Construction.—Class I: R. W. Donaldson, A. L. Gabr, R. H. Turner. Ordinary: E. H. Ashburner, W. V. Jenkins, J. H. Miller.

FOURTH EXAMINATION.—Honours in Architectural Design: F. N. Astbury, H. S. Silcock, T. T. Wills. Honours in Architectural Construction: C. C. Shaw. Ordinary: H. A. Peters, H. G. Phillips.

THIRD EXAMINATION.—A. Aspland, Norah Dunphy, H. G. C. Spencely.

SECOND EXAMINATION.—E. F. Davies, G. A. V. Hall, R. G. Heal, May Hutchinson, K. R. Mackenzie, M. Mokhtar, G. A. Ridge, M. Z. el Tawil, Olwen Vaughan.

FIRST EXAMINATION.—S. J. Docking, W. A. Eden, G. C. Hough.

FINAL EXAMINATION.—(Old Regulations): A. O. Chatterley.

Diploma in Architecture.

FIFTH EXAMINATION.—Distinction in Architectural Design—Class I: F. X. Velarde.

FOURTH EXAMINATION.—Distinction in Architectural Design: Frances T. Silcock, H. Thearle, Maud A. M. Wall. Ordinary: H. B. Evans, G. E. S. Hereward.

THIRD EXAMINATION.—G. A. Butling, J. Heald, M. Roushdy, A. C. Todd, L. G. Zwinger.

SECOND EXAMINATION.—A. C. Cotton, W. H. G. Dobie, D. Hall, T. C. Haynes, O. G. Lewis, I. D. MacGillivray, J. B. Maxwell, J. G. Metcalfe, Majorie M. Mocatta, C. E. Moore, H. B. Stout, B. A. Sumner.

FIRST EXAMINATION.—H. Bramhill, P. J. Doran, A. Owen, H. H. Powell.

Certificate in Architectural Design.

A. G. Jenson.

Scholarships and Prizes.

Holt Travelling Scholarship (£50, 3rd year): G. A. Butling.

Honan Travelling Scholarship (£50): H. Thearle.

R.I.B.A. Jarvis Travelling Scholarships (£50 each): F. N. Astbury, C. C. Shaw.

Holland and Hannen & Cubitts' Prizes for Working Drawings: (1st Prize, £15), A. L. Gabr; (2nd Prize, £10), J. H. Miller and R. H. Turner.

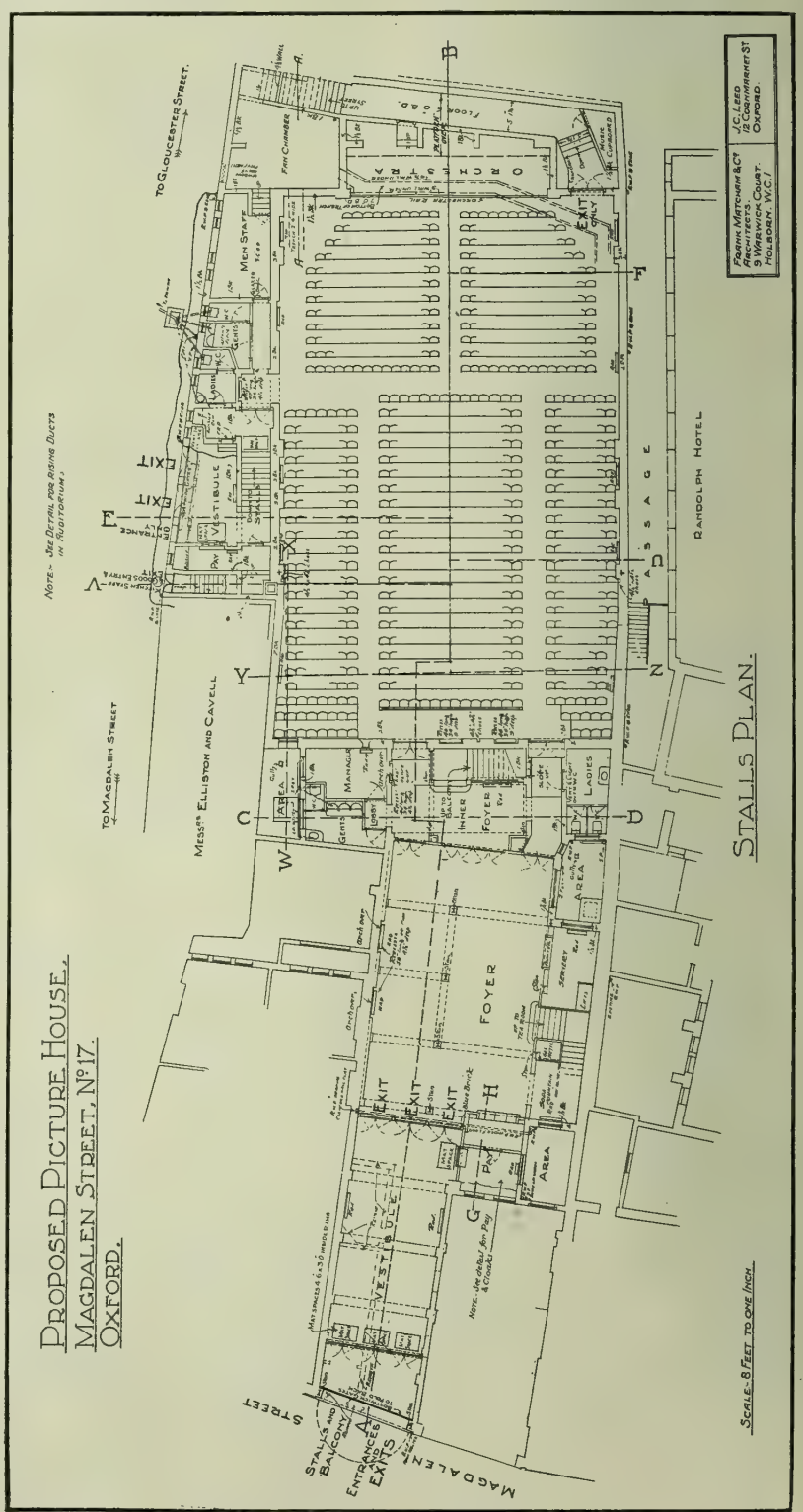
White Star Prize for the Decoration of Part of a Liner (£10): F. X. Velarde.

John Rankin Prizes for Sketch Designs (£12 each): Fifth year, F. X. Velarde; fourth year, H. Thearle.

Lever Prizes in Architecture, 3rd year: (1st Prize, £15), H. G. Spencely; (2nd Prize, £10), J. Heald.

Lever Prizes in Civic Design: (1st Prize, £15), T. H. Forshaw; (2nd Prize, £10), F. N. Astbury.

Technical Journals Essay Prize: (£5), H. S. Silcock.



Picture House, Magdalen-street, Oxford.

MESSRS. FRANK MATCHAM & CO., AND J. C. LEED, Architects.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Building Trades Dispute.

SIR,—As a practising architect I am, of course, indirectly interested financially in this dispute, but I am more concerned with the welfare of the industry as a whole than with the financial position of individuals. The publication of the Interim Report of the Foster Committee, and the welcome given to that report in the press generally at the time, seemed to justify the optimism of those who thought the building industry would be the first of our great industries to introduce that reconstruction which the country had been promised during the war period. The scrapping of the Foster Committee Report caused much disappointment to many in the industry and many others interested, because it set back the hands of the clock, and killed the good will which had been created by the trials of war and fostered by the Report.

When it was announced that the Minister of Health had arrived at agreement with the building industry, it was once more felt that employers and operatives must have returned to the better frame of mind engendered by common risk, and that once more there was some hope that the obvious truth would be recognised that the interests of capital and labour are identical and profits depend upon good will, trust, and maximum output.

It was, therefore, with surprise that the public received the news that a deadlock had arisen; and with relief that we learnt that a settlement had been arrived at on June 20. Although many doubts were raised as to the wisdom of the Minister's agreement with the industry, it was widely felt that it was worth some risk to attain agreement between employers and operatives in one of our great national industries, and the public appeared ready to accept the assurances that all would be well with housing, and peace would reign in the building trade.

It is of the greatest importance that the general public should form a clear conception of the real position. A false impression, honestly believed, may, and probably will, have exactly the same effect as if it were the truth; further, in every strike or lock-out, the side which carries public opinion with it will, and must, eventually win. It behoves members of the public, then, to watch the enquiry closely and to express their opinions strongly upon the result.

I, of course, do not pretend to know whether the Employers' Federation is justified or not in calling for a lock-out, but I am quite sure the general feeling is against it. What could the operatives' representatives have done, or what did they leave undone, in order to have settled the Liverpool dispute? It must be obvious that it was—and is—more in their interest even than that of the employers, to settle the unofficial strike, which was a greater menace to their influence than to the employers. In the public mind the impression appears to me to be that the employers have repudiated a bargain and have committed the very fault for which they blame others. As I have said before, the important consideration is, *does the public so think?* Not is it justified in thinking?

I know the working man too well to overlook his faults, and I know how unreasonable he can be, but he is not alone in this. Some employers are more unreasonable than the worst of their employees. I know some who still hope to kill trade unions. In refusing the extension of time for the lock-out and rejecting the suggestion of an enquiry, the operatives have shifted public sympathy from their side to the other for the time being, and it is probably true to say that both sides are equally condemned by public opinion, which is once more full of doubt with regard to the Government policy of trust in an industry so divided where unity is essential.

Capital and labour are as necessary to each other as light and air to both. The interests of employer and employee are identical. Organisation on both sides is essential. The honouring of agreements is as vital as good will. All classes, as all individuals, have faults as well as virtues, and in all negotiations there must be forbearance and "give and take" in a generous spirit. In this world—as it is hoped in the next—we must progress.

The industrial history of this country is not pleasant reading, but is more read by working men than by employers. Progress must mean some form of reconstruction of our industrial system, and blaming men for their folly will lead us nowhere; what we want is insistent, consistent, diplomatic education with regard to the facts as they exist, and constructive statesmanship to provide a future which will give men hope and prevent the fatal habit of always looking backward instead of forward.

It was because of the admission of the need for reconstruction that the Foster Committee Report seemed to promise good things for the building industry, and if one could only retire the "Diehard" employer, and the revolutionary employee, we might yet see the light. These are not only my personal views, which are unimportant, but those of many others, and amongst them some builders.

JOHN E. YERBURY.



Oxford: The Taylorian Museum.

Housing Costs.

SIR,—With reference to our letter regarding a suggested method for obtaining houses *versus* the Government proposals, which appeared in your issue of June 13, we now beg to reply to one or two of the criticisms in your issue of June 20.

"Did we include sewers and roads in the £500?" Yes; because we have recently accomplished it within this figure. "Do we propose building on leasehold land?" No; freehold; but in the value a long leasehold makes no difference.

There is a criticism bearing on the price of the land. Some local authorities have offered *to give the land*, in order to assist in obtaining the houses.

The cost of maintenance and management may vary according to how the houses are built, and whether or not a builder's clerk or a commission agent collects the rents. In "Repairs," *re* actual houses we have in mind, the cost is not £7 10s., and the management is within the figure we stated.

We have built cottages on the financial basis mentioned, and there has been no difficulty in getting the 12s. 6d. per week. If non-parlour houses were built, the rents would be 10s. 6d. per week.

In calculating outgoings, the annual sinking fund to repay the mortgage is an annual saving of actual cash, for at the end of the period the house is paid for by it, and this should not be overlooked. But whether there is some small variance, higher or lower, in the calculations, the fundamental principle, we suggest, is unaffected.

The Government proposal is for an annual subsidy, equal to a one-sum payment of £160 or more, and, for the great number of houses proposed, it means a colossal sum which our impoverished country cannot afford. We are not only architects, but citizens, and this mounting up of national capital expenditure affects us both ways. At one time, the thought of the weight of the present financial burden led to a proposed national levy to lessen the outgoings. The same minds now bring forward a scheme to add to the burden another thousand millions.

Let architects remember that the greater the taxation the greater the cost of everything, with consequent loss of ability to successfully compete in the world's trade; and the less profitable trade that is done, the smaller necessarily must be the amount available for building. Under such circumstances, it is our duty to speak and act when this hill of expenditure is becoming a mountain. In connection with housing, we are beginning at the wrong end. We all agree in the need, but not in the method. The Government—that is the country—can obtain money at a rate of interest that the ordinary individual cannot obtain it at, and can lend the money at this lower rate without cost to itself on good security, and at the same time can give the one great assistance for the erection of the houses which he needs, namely, cheaper money.

The principle we advocate is that the houses can be obtained by lending the money instead of giving it; thus helping trade instead of handicapping it. We named 4 per cent. If 3½ is necessary there is still no loss.

The cost of a parlour house, &c., is given at £500; but it ought not to cost as much, and certainly would not if each man were allowed to work his best. This applies not only to the bricklayer, but to the brick-maker, and so on throughout the building trade in materials and labour. In America, amongst other things, labour takes a wider view, looking upon building operations in a different spirit to that obtaining here. There they can see further ahead, apparently, the principle being that the quicker a place is built and utilised, the sooner the owner gets a return on his capital on land, building and business therein, and the greater

inducement for someone else to follow his successful example. To a great extent from this cause come big wages and employment. In this country the wrong principle predominates. "Slack off" and do not encourage labour-saving mechanism, so that more men must be employed at the moment, seems to be the order of things, and this naturally results in a want of confidence in the man who might build, but is thus warned against so doing. Hence, to a great extent, lower wages than in America. There are other reasons, but this is the main one. And the result of this slackness is undermining England's prosperity and England's future.

In avoiding this abnormal and crushing housing outlay by other and more reasonable ways, we shall be doing something towards the national welfare. Before it is too late, could not the Royal Institute go to the root of the matter and report upon the subject as to what is possible towards saving (by the alternative of lending) this vast outlay of our national resources? It is worth while even in the minor interest of the profession and its business end, and much more worth while from a national point of view.

Chas. Heathcote & Sons.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

*** *We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—Ed.

21 Oz. Glass.

Sir,—Can you tell me the difference in price per house when 21 oz. British glass is used instead of 15 oz.? The former glass will give, I understand, a practically flawless window.

M. T.

Treatment of New Walls.

Sir,—In regard to treatment of walls in new buildings, if the walls have not had time to dry out and surfaces have been treated to lime putty finish, for what period should they be left before it can be taken that drying is complete, and that the soda, &c., has worked out?

A. G.

Party Walls.

Sir,—A 9 in. party wall divides "A's" garden from that of "B." The wall has been thrust out of perpendicular into "A's" property, apparently by a tree growing close to the wall in "B's" property.

The wall is now in a dangerous condition and notice has been given by the local authority to have it rebuilt. By whom should the expense be borne?

"F. J. P."

Garage Doors.

[Reply to "Building."]

Sir,—In reply to your correspondent, I know of a very excellent apparatus in the form of top suspended doors, sliding sideways and drawn round along the side walls on quadrants at top and quadrant grooves at bottom. I should be pleased to let him have particulars if he is interested, as I am sure such an arrangement will meet all his objections. The price is extremely reasonable.

Architect.

[We have received further replies to "Building" and "Insulation," whose queries appeared in our issues of July 4 and June 27 respectively. They have been forwarded to our correspondents.]

THE WEEK IN PARLIAMENT

Westminster, *Wednesday.*

Size of Subsidised Houses.

Mr. T. Thomson asked the Minister of Health if he was aware that since the introduction of his Housing Bill the representatives of over 300 local authorities, representing the chief cities and towns in the country, assembled in conferences at Newcastle-on-Tyne, Manchester, Sheffield, London, Bristol, and Cardiff, had in all cases unanimously passed resolutions protesting against the subsidy being limited to the small type of houses named in his Bill; and, in view of this unanimous feeling in favour of a larger house, would he take powers which would enable him to grant the subsidy to houses of an additional 100 superficial feet on the recommendation of the local authorities concerned?

Mr. Wheatley said he could not accept the suggestion that local authorities were unanimously in favour of an extension of the subsidy to larger houses, and he did not propose to ask the House to review the decision which it had already taken in regard to the size of the house.

Mr. Masterman asked the Minister whether he was prepared to submit additional Resolutions in Committee which would enable the House, if it so desired, to give power to the local authorities to build cottages of larger floor space than that now restricted by the Housing Resolution during the next 15 years if any of them so desired and to provide the owner-occupier with similar assistance to that now proposed to be offered to the local authorities for houses limited for letting purposes?

Mr. Wheatley said he had carefully considered these suggestions, and in view of all the circumstances could see no reason that would justify him in submitting another money resolution.

Bricklayers and Piece Work.

Mr. Wheatley, in reply to Mr. Hannon, said he was unable to say what number of bricks could be laid in a day by a bricklayer working piecework. It would be appreciated that the number of bricks laid would vary considerably with the class of work on which the bricklayer might be engaged. There were no records available which would enable him to give reliable figures as to average number of bricks laid per man on Government Housing Schemes.

Sir W. Davison: Does not the Right Hon. Gentleman know very well that in the work required in connection with the small Government houses it is only at the chimneys and the corners where there is any difficulty at all, and that it is perfectly plain sailing otherwise?

Mr. Wheatley: I am also aware that there are some men who could not lay the bricks for these houses.

Bricklayers' Wages.

Mr. E. Simon asked the Minister of Health whether he was aware that builders building subsidy houses in Manchester were paying up to 4d. an hour above the standard rate for bricklayers, with the result that the contractors who were building for the Corporation and paying the standard rate were getting so few bricklayers that one important contract would, at the present rate, take over 20 years to complete; and whether he would introduce legislation to prevent exploitation of this kind?

Mr. Wheatley said he was not aware of the rates of wages paid by the particular builders referred to, but if the scheme he had laid before the House was adopted he believed that the industry would be able to make such arrangements as would ensure a sufficient supply of labour for the local authorities' housing schemes.

Building Guilds.

Mr. Whiteley asked the Minister of Health whether he was prepared to meet representatives of the buildings guilds, prior to the present Housing Bill becoming law, with a view to securing their co-operation in the building of working-class houses?

Mr. Wheatley said that there had already been some discussion with representatives of the guilds and he had undertaken when the Housing Bill became law to consider the question of guild contracts in consultation with local authorities and the Industrial Committee which he proposed to set up.

Sir K. Wood: Is the Right Hon. Gentleman aware that all building guilds which have hitherto embarked on housing schemes have gone into compulsory liquidation?

Mr. Wheatley: I am not so familiar with their history as to enable me to agree with that statement. If that be so, it will be taken into account in the consideration of the matter.

Wooden Houses.

Mr. Mills asked the Minister of Health whether in view of the urgent and pressing need for houses and the proved success of wooden structures as a temporary measure, he would consider the possiblity of their immediate construction and allocation from a central factory for each area?

Mr. Wheatley said he was aware that wooden houses might be constructed in such a manner and with such quality of timber as would result in great durability and he was prepared to consider any proposals that might be made to him by local authorities for the erection of such houses. He did not, however, see his way to adopt the method of supplying them proposed.

Dwelling-houses or Factories?

In reply to Mr. P. Harris, who asked whether he was aware that in Bethnal Green owners of houses were getting possession of dwelling-houses and in spite of the housing shortage were converting them into factories; and whether he would consider legislation to prevent this?

Mr. Wheatley said he was aware that this had been done in certain cases, and he should be glad to consider any detailed information which may be brought to his notice. He had no hope of being able to deal with the matter this session.

Acquisition of Land.

Mr. Wheatley informed Mr. Ayles that he was not aware that local authorities generally had experienced difficulties in acquiring land for housing purposes. Local authorities already had power to acquire land for housing purposes notwithstanding that the land was not immediately required for those purposes and provision was made in the Housing Acts for the compulsory acquisition of land in cases where it was not possible to acquire it by agreement at a reasonable price.

An "Agricultural Parish."

Mr. E. Brown asked whether the civil or ecclesiastical area was taken as defining an agricultural parish under the Housing (Financial Provisions) Bill?

Mr. Wheatley said that it was proposed that the civil parish should be taken as the area for this purpose.

Office of Works Houses.

Mr. D. G. Somerville asked the First Commissioner of Works how many houses with a rent under £50 were owned by his department?

Mr. Jowett said that the number of such houses was 9,357, of which 106 are vacant, 82 being available for immediate reletting and the remaining 22 would also be relet if no satisfactory offers were received. His department was legally bound to endeavour to sell the houses on its housing estates, but any vacant house that could not be sold within a period not in any case exceeding eight weeks was immediately relet.

The Channel Tunnel.

The Prime Minister, replying to a number of questions, said that the question of the Channel Tunnel had been considered by the Committee of Imperial Defence. The Committee were unanimously of opinion that the advantages of the Tunnel were not commensurate with the disadvantages from a defence point of view, and the Government had no alternative but to accept the advice of the Committee.

NATIONAL FEDERATION OF HOUSE BUILDERS

We take the following extracts from a memorandum on the Housing (Financial Provisions) Bill, June, 1924, issued by the National Federation of House Builders:

"The Committee of the National Federation of House Builders, having examined the Housing (Financial Provisions) Bill now before Parliament, desires to draw attention to the effect which the Bill, if it becomes law in its present form, will have upon the future provision of houses for the working classes of the country.

"The Committee realises with regret that financial assistance is still necessary to encourage the erection of houses of a small type; and is convinced that stability to the trade can only be secured by the adoption of a fixed housing policy spread over a number of years. The assistance should be given with due regard to the effect it must have upon the eventual economic position of the housing industry, and it should also be designed to encourage the investment of private capital in house property. The assistance, again, should be afforded both to the poorer sections of the working classes and to those who can find a small amount of ready capital and are prepared to solve their own housing problem by investing their savings in a house for their own occupation.

"The Housing (Financial Provisions) Bill contains the concrete proposals of the Government for the future assistance of housing, and the Committee of the National Federation of House Builders regrets that the policy which has been so clearly outlined by the Prime Minister and the Minister of Health is not effected in the Bill, as it has been submitted to Parliament. The Committee desires to draw attention to important points on which the Bill fails to carry out the expressed intentions of the Government, and, in consequence, will do irreparable injury to the housing conditions of the country if it becomes law in its present form.

"1. *The restoration of confidence.*—The Housing, &c., Act, 1923 (Chamberlain Act) provided that the local authority should satisfy the Minister of Health that the housing needs of their area could more appropriately be met by the provision of houses by the authority themselves before they obtained his sanction to their own schemes. This resulted in the encouragement of private enterprise in most districts, and two-thirds of the houses built and building under the Act are private enterprise schemes. This clause is repealed by the new Bill, and Socialistic local councils will have a free hand to refuse assistance to private enterprise and to build houses themselves at double the cost to the public.

"2. *Assistance for houses for sale to the owner occupier.*—Although we have the assurance of the Minister of Health that the Bill "leaves intact the provisions of the 1923 Act, which gave a subsidy to private enterprise in building houses for sale," the clauses dealing with this particular point are ambiguous in the extreme, and if it is the intention of Parliament to continue this most valuable phase of the Government's housing activities, it should be made clear in the wording of the Bill. The future interpretation of the law will be based not on the expressed intentions of Ministers but upon the actual terms of the Act; this was proved by the famous Lumsden judgment, which changed the whole aspect of the land value clauses of the 1909-10 Finance Act, and led to their repeal, after doing enormous damage to the housing conditions of the people.

"Again, if it is the intention of the Government to extend the subsidy to private enterprise beyond the date fixed for its termination by the 1923 Act (October 1, 1925) it is by no means clear that the Bill carries this into effect. The Minister of Health has not stated that the subsidy is to be extended, as in the case of houses for letting, to October 1, 1939, and it would be manifestly unfair if the subsidy to one class of working people were to be withdrawn in 1925 while another class received assistance for a further period of 14 years.

"3. *The size of the houses.*—Although it is acknowledged that "not ten per cent. of the Addison houses are inhabited by the class of people whose needs must be solved" (Prime Minister, February 12, 1924) the Bill does not make any special stipulations for the erection by the local authorities of smaller houses than the 950 ft. house. The 950 ft. houses are not suitable for the lower paid working classes either in rents, which are too high, or in style, which is unsuitable, for they are generally built in pairs at about 12 to the acre. Unless some pressure is brought by Parliament on local authorities to build smaller types of houses in rows or terraces at 16 or 20 to the acre, there can be no amelioration of the housing conditions in the slums and the semi-slums of our large cities, and the inevitable effect will be that the poorer sections of the working classes will continue to be rated and taxed so that their better paid fellow workmen can be provided with houses at uneconomic rents. Although upwards of 200,000 houses were built under the Addison schemes at a heavy cost to the general public practically nothing has been done for those poorest wage earners who are least able to help themselves. The housing requirements of that section of the better-paid working classes who require the 950 ft. houses have been and are efficiently met by the Government houses already erected, and the subsidy to the owner occupier. On June 4 last, 141,065 houses had been approved by the Ministry of Health for assistance under the 1923 Act in the ten months since the Act was passed, and practically all of these houses are suitable only for the thrifty and better paid working classes. In the opinion of the Federation the whole activities of the local authorities in their own schemes should be directed to the relief of the poorest section of the working classes. If this is done every section of the working classes will receive fair and equitable help in their housing requirements.

"The Committee of the National Federation of House Builders desires to put forward the following suggestions as important principles which should be enforced if it is hoped to secure the most rapid production of houses from all available sources, and if the State-aided housing is not to destroy all private enterprise in the great business of housing the people.

"1. That the total subsidy which is to be applied by the local authorities in building houses to let to tenants should be available to the private builder who is prepared to build similar houses to be let at similar rents.

"2. The local authorities should fix a minimum rent for their houses at a figure which will show an economic return on the capital employed after allowing for the annual grant.

"The object of these suggestions is to render it possible for private capital to be attracted to housing, and for investors to return to housing as a favourite investment. House property is still one of the most stable of investments, and, as before the war, an annual sum of upwards of twenty millions sterling was found by the people themselves in building houses to be let to tenants, it is believed that, given a fair opportunity, large sums can be again secured in the same service.

"3. That the building schemes of local authorities for houses for letting should be limited to the provision of smaller types of houses built in rows or terraces at 16 or 20 to the acre, and that those requiring the larger types should be encouraged to buy for their own occupation.

"In some towns the houses built under previous schemes have been let to classes of tenants who are able to purchase their own houses, and who would do so if the local authorities' houses had not been available, while the schemes have provided practically no relief to the overcrowding in the poorer districts. It is suggested that the houses most required by those incapable of solving their own problems are houses of about 800 ft. floor area, and that by building in rows at about 16 or 20 to the acre the most economical and suitable type of construction can be achieved. By building the 800 ft. house at 20 to the acre, less than one-fourth of the land is built upon, and ample light and air is secured.

"4. That the subsidy to persons building or purchasing a new house for their own occupation not exceeding 950 ft. floor area should be continued and fixed at £100 in all cases, and that loans be made by the State or local authority to enable any person to purchase his house by finding ten per cent. of a fair purchase price, less the amount of the subsidy if the house does not exceed 950 ft.

"Every house built and sold to the owner-occupier is as much a contribution to the solution of the national problem as a house to be let."

NATIONAL HOUSING AND TOWN-PLANNING COUNCIL

We take the following from the fortnightly record of this Council:—

With the passing of the second reading of the Housing Bill and the decision to consider the measure in "Committee of the whole House," an issue of great importance presents itself for the consideration of Members of Parliament and the public generally. This issue relates to the measurements of the two-and-a-half million houses to be built under the Bill submitted to Parliament by Mr. Wheatley.

The Financial Resolution which was passed by the House of Commons before Whitsuntide governs the financial proposals of the Bill. Under this resolution it is provided that the measurements shall be those prescribed in the Act of 1923. The measurements thus referred to are given in sub-section (2) of Clause 1 of the Act (1923), as follows: 1. (2) The houses in respect of which contributions may be given under this section shall be either; (*a*) a two-storied house with a minimum of six hundred and-twenty and a maximum of nine hundred and fifty superficial ft.; or (*b*) a structurally separate and self-contained flat or a one-storied house with a minimum of five hundred and fifty and a maximum of eight hundred and eighty superficial ft.; such measurements being calculated in accordance with rules made by the Minister.

Provided that, if the local authority in any particular case satisfies the Minister that, having regard to special circumstances existing in their area, there is a need for houses of smaller dimensions, the minimum measurement may be reduced, as respects such limited number of houses for that area, and subject to such conditions as the Minister my determine, in the case of a two-storied house to five hundred-and-seventy, and in the case of a flat or a one-storied house, to five hundred superficial ft.

At the outset it should be noted that on cause being shown, the Minister of Health is empowered to allow the further reduction of the minimum measurement of a flat or one-storied house to 500 superficial ft., and further that the full subsidy of £6 per house for twenty years under the Act of 1923 is given in the case of these houses of reduced measurement. The same provision will moreover—unless amendments are carried—apply also to the new Housing Policy.

In other words, £9 per house for forty (40) years can be given by the Government in aid of the building of homes—if they deserve the name—with a minimum measurement of 530 super ft., with a possible further reduction to 500 super ft. Looked at from this point of view, there can be no doubt that a colossal blunder will be committed if the Bill is passed. Stated in another way, it is quite possible to add another 150 super ft. to the space of a house without greatly increasing the cost.

THE BUILDING TRADE

THE BUILDING TRADES DISPUTE

As announced in our columns last week, the Minister of Labour, having failed to bring about a settlement of this dispute, decided recently to appoint a Court of Inquiry to inquire into the causes and circumstances of the dispute. The employers thereupon resolved to postpone the lock-out notices for a week, but the men's leaders determined upon a stoppage of work last Saturday. Instead of a lock-out there is, therefore, a strike.

The Court of Inquiry consists of the Right Hon. Lord Buckmaster (Chairman), Mr. F. A. Hargreaves, J.P., Mr. Arthur Pugh. The secretaries to the Court are Mr. G. H. Ince and Mr. H. C. Emmerson, Ministry of Labour, Montagu House, Whitehall, S.W.1.

The terms of reference to the Court were:—

> To inquire into the causes and circumstances of the dispute in the building industry and to report on the facts in connection therewith, particularly with reference to the position in respect of hours in Scotland, London, and other areas, and to the strike in the Liverpool district.

The Court, it was stated, if not able to complete its investigation in the course of this week, might issue an interim report, in the light of which the parties would be able to reconsider the position. The employers stipulated that they should be at liberty to inform the public, by means of publication of the documents in the case, that it was consideration for the public interest—on which the Minister had based his plea for the avoidance of a conflict—that had induced them, without reciprocal engagements by the operatives, to defer the lock-out.

The operatives' disputes committee met and decided that work should not continue after Saturday last unless an advance of wages was conceded.

The offer made by the employers was in the following terms:—

> Upon the appointment of a Court of Inquiry, and in order to preserve a state of peace during the same, the employers will suspend their notices pending the report of such Court, provided that the operatives on strike at Liverpool and other places return to work immediately, and that the National Federation of Operatives suspend their other hostile actions against constitutional agreements pending the issue of such report.

The operatives' reply, communicated to the Minister, was:—

> Having seriously considered the statement and suggestion of the Minister of Labour, the National Disputes Committee decided that the Minister be informed that the National Federation of Building Trades Employers must unconditionally and unreservedly withdraw the lock-out notice decided by resolution of June 20, to become operative on July 5, preliminary to joint negotiations, failing which we are unable to discontinue our present activities to make arrangements with all those who are willing to carry on building trade operations.
>
> We insist that an advance of wages must become immediately operative, together with adequate provision for a guaranteed week. Finally, we feel that the employers' representatives must get fuller power from their organisation before they will be able to negotiate a settlement.
>
> With regard to the proposed public inquiry, the suggestion will be reported to a conference of the full executive councils which will meet in London early next week.

The employers' offer submitted to the Minister, with its attendant qualifications and conditions attached thereto, is made impossible of acceptance. The hostile attitude of the employers through the medium of the Press and by printed circular has created an atmosphere which tends to prevent calm consideration of the issues involved.

Further, we have no guarantee that the employers are able efficiently to discipline their members, who in many instances are to-day violating agreements entered into. The operatives still stand for the full honouring of agreements.

The employers' final intimation to the Minister of Labour was:—

> This National Allied Employers' Disputes Committee has carefully considered the reply of the Operatives' Disputes Committee to its well-meant and fair proposal, made solely in view of the request of the Minister of Labour that an endeavour should be made in the public interest to avert conflict throughout the building industry of Great Britain, and regrets to note that the tenor of the operatives' reply is hostile to that object.
>
> The Committee resolves that, in view of the Minister's definite statement that he intends to set up a Court of Inquiry immediately, and use all his influence to ensure the findings of that Court being published in eight days (July 10), and that the employers have freedom to publish the details of these interviews, the employers will postpone the posting of the notices till Friday, July 11, and to take effect on July 12, 1924.

In the course of a statement issued later the employers said:—

> The negotiating body for the employers represents the whole of their organisation throughout the country, including the subtrades, and nothing could give them fuller powers than they already possess. . . While realising that it is not within the power of the Ministry to put a term to the length of the inquiry, yet, in view of the fact that 5,000 men in the Liverpool area alone are on strike, and that there are strikes in other areas, and also in view of the concessions made by the employers in the public interest, the employers earnestly hope that an interim report, if not the report in its entirety, may be issued at such a time as will enable the postponed lock-out notices to be necessary.

The Disputes Committee of the operatives' federation made the following announcement:

> Notwithstanding the decision of the employers to postpone their lock-out notices from July 5 to July 12 under the guise of a public inquiry, which inquiry, when held, can decide nothing, we hereby resolve that we are unable to allow such a substitute to interfere with our previous position—namely, that on and from July 5 an increase of the hourly rate must take place, together with provision for a guaranteed week, failing which labour must be withdrawn.

Mr. R. Coppock, secretary of the operatives' federation, in a statement said that the Court of Inquiry could not effect a settlement, because the position had entirely changed.

> National negotiations are at an end, he said. Our members will now negotiate with the employers locally or regionally on the basis of the existing rates and a definite allowance for any loss of time for which the operatives are not responsible. We have proof that hundreds of employers are paying varying rates other than those nationally agreed upon, and the Employers' National Federation has taken no disciplinary measures against them. For the employers to talk now of the necessity for us to take disciplinary action is, therefore, preposterous.

When the Court of Inquiry opened last week the operatives were not represented. The Court therefore adjourned and acquainted the Ministry of Labour of the circumstance In the afternoon Mr. T. Barron, the president of the operatives' federation, stated there had been no intentional discourtesy. He and the secretary had been detained at a joint meeting of the executive councils of the trade unions and had arrived at the Court ten minutes after it had adjourned.

The full Disputes Committee of the operatives' federation was present in the afternoon but only to hear a formal protest made by Mr. Barron, on behalf of the joint executives, against the Court's terms of reference. The matters "particularly" mentioned were not, they said, in dispute, but had been settled. The question into which the Court should inquire was, they submitted, the repudiation of an agreement by the employers. Mr Barron complained that the reference bore no relation to the actual causes of the dispute and he stated that this fact debarred the operatives from taking part in the inquiry.

Lord Buckmaster, the chairman, put it beyond question that the Court had been set up to inquire into "every cause and every circumstance" of the dispute. The terms of reference were wide enough to permit the operatives to raise any grievance. The Court would have to report as to the matters particularly mentioned, and if it appeared that there was no dispute in relation to them, the report would be to that effect. He assured the operatives that (1) any grievance they brought forward would be fully investigated; and (2) that they could formulate in writing particular points on which they desired the Court's decision, and these would be given careful consideration. The employers followed with an assurance that they were in no way responsible for the terms of reference.

At a further meeting of the Court the operatives said they would be able to communicate the decision of the executive councils of their unions. The meeting was held and deputed Messrs. T. Barron, G. Hicks, A. G. Cameron, H. McPherson, W. Pickles, S. Taylor, and R. Coppock (the secretary) to represent the federation at the inquiry.

In regard to the strike, the position, it is stated, is that the men are officially demanding the immediate payment of a halfpenny an hour in addition to the rates at present in force, and compensation to the extent of half wages in respect of time lost through causes over which they have no control. There is, we understand, reason to believe that the men will be authorised to remain at work, in some areas at all events, if only the higher wage is paid. The demand will be presented to the employers, federated and non-federated.

A further meeting of the Federation of Building Trades Employers carried a resolution reaffirming the decision of June 20, which insisted on conformation to existing agreements as a condition of the resumption of negotiations with the operatives, but adding "except such negotiations as might tend directly to the healing of local breaches."

There are between 600,000 and 700,000 men in the industry, and their orders are, it appears, that they may remain at work when an advance of wages is given in accordance with the recent agreement, and a "guaranteed week" is conceded. The operatives believe that many employers will concede these terms, an idea that is rejected by the employers' representatives. At all events, the strike is a partial one so far, but there are no reliable figures to show how many men are out of work. The men's officials announce that municipal building will not be affected. Municipal employers are governed by a "fair wages" clause. At the first meeting of the Court of Inquiry Lord Buckmaster made an effort to prevent a stoppage of work, but unsuccessfully, the operatives stating that it was now too late and that things had gone too far.

Mr. Nicholls complained that the Operatives' Federation could not make their men keep an award or the decisions of the Wages and Conditions Council, and instanced this question of the 46½ hour week as an example. The burden of his case was the inability of the men's organisations to secure obedience to agreements, and his two chief examples were the Liverpool case and the hours question.

At the continuation of the Court of Inquiry on Monday Mr. R. B. Moss, on behalf of the Liverpool Building Trade Employers' Association, said he was authorised to state on behalf of his association that they would, to the fullest possible extent, earnestly co-operate to bring about a settlement of the unfortunate dispute. They would agree at any time to a conference of all interested parties. Whether there was a strike or a lock-out, both sides had in the end to rely on a round-table conference.

The Chairman remarked that was absolutely true, and the only difference was that if they had a conference at the end of a strike or lock-out one party came before the conference saying they were crushed by a force exerted on the other side. Strikes settled the justice of nothing. They only settled how long one side or the other was prepared to suffer. Proceeding, Mr. Moss said it had been contended that Liverpool had given away 4d. in a traitorous manner. He traced the history of the Liverpool Association and what led up to its expulsion from the federation. Two years ago representations were made to the association by both employers and operatives, and they again became members of the North-Western Federation and automatically members of the National Federation. Liverpool's contention was that if the meeting was arranged under a certain rule they would have committed themselves to local settlements.

Lord Buckmaster said the whole difficulty was Liverpool. If Liverpool were settled the whole thing would be settled. At the present moment Liverpool was in an acute state of reaction, and not prepared to settle. Surely Liverpool operatives must make up their minds to one of two things—they must either remain within the operatives' association or come outside.

After further discussion, Lord Buckmaster decided that the Court under its statutory powers would request leaders of the men in Liverpool, including Mr. Charles Wilson and Mr. Fyles, to attend the Court.

Mr. Thomas Ferguson (Scottish National Federation of Employers, and Scottish Allied Building Trade Employers), called by Mr. Nicholls and replying to Mr. Coppock, said that the employers in Scotland had not agreed to a 44-hour week. They had undertaken sympathetically to consider the proposal. Mr. Nicholls then said the position in Scotland was as acute as in Liverpool. It looked as if it was impossible of solution, but by joint efforts and by strengthening the national movements on both sides they had been able to effect a satisfactory settlement.

Mr. Holloway (managing director of Messrs. Holloway Bros., builders, and president of the London Master Builders' Association) stated that in 1920 a 44-hour week was instituted in the building trade. The employers did not regard that as final, and it was one of the points in dispute last year. By the award made by Sir Hugh Fraser, accepted by both sides, and embodied in the national agreement, a working week of 46½ hours was fixed for the summer time. The great majority of the men refused to work the 46½ hours. There was a good deal of passive resistance, and when the employers kept the works open until 5.30 in the evening the men left at 5 o'clock. The employers were anxious not to precipitate trouble and they acted with great forbearance and patience, and they wanted to have the matter referred to the Regional Joint Committee to sift the evidence. The men were supported in their refusal to carry out the award by the officials of their unions and advertisements were issued in the trade union papers urging the men not to work the 46½ hours which had been fixed.

Mr. Nicholls said that fewer hours were worked now than in 1913, and there was also a shortage of skilled men in the trade. The cost of output had no relation to the value. There had been an increase of 70 per cent.

Lord Buckmaster said they quite understood that if longer hours were worked the cost of building would be less, but how were they going to get the men to do it? It depended on the good will of the men who were working, and how could that good will be established and maintained?

Mr. Nicholls said that in 1914 the cost of plain, rough brickwork was from £3 10s. to £3 15s. per rod, while to-day it was from £9 15s. to £10 10s. The higher the wages the less the output.

Lord Buckmaster: Do you say that there has been a deliberate restriction of output?

Mr. Nicholls: Yes.

Lord Buckmaster: Then a man working 44 hours a week willingly does less work than if he is working 46½ hours unwillingly?

Mr. Nicholls said that the view taken by the men was that it was their duty to spin out the work, as by doing so they would create work for others and so decrease unemployment. It was no idle attitude that the employers had taken up, that the terms of this award must be obeyed. They were forced to do it as the provision of houses for the people was retarded owing to the enormous cost of building—a cost that was not warranted.

The case for the employers was then closed.

On behalf of the operatives, Mr. Coppock, who said he represented the views of 14 unions, opened the case for the workers. He said the cause of the unrest was entirely due to the desire of the employers to operate the law of supply and demand during the period that the industry was extremely slack, and they suggested the deletion of a clause in the agreement that dealt with the law of supply and demand. Now that the law of supply and demand was operating in their favour, continued Mr. Coppock, the employers did not desire to take any notice of its operation. They had accepted the situation for a period of three years when labour was not in demand; now that labour was in demand they were alleging breaches in the constitution of their organisation.

When the Court of Inquiry re-assembled on Tuesday, Mr. R. Coppock (on behalf of the men), said that the actual position at Liverpool to-day was that the men were getting exactly what they would have got if the sliding scale had been put into operation in its entirety.

The President, during a discussion, offered the suggestion that the two parties should come together with a view of arriving at a settlement of the dispute. Both the representatives of the employers and the men agreed to this course being taken.

Mr. Nicholls, in his final address, said if they gave the extra penny it would mean the expenditure of over six millions a year and add to the rent of the workers' houses by between 5½d. and 6d. per week.

In concluding the conference, Lord Buckmaster said that he had been impressed with the constant expression of good feeling shown by both sides. He reiterated his appeal to the parties to come together.

We take the following extracts, in connection with this dispute, from a document issued by the London Master Builders' Association:

> With regard to the dispute, it is apparent that the bulk of the operatives are quite ignorant that the employers' final offer made on May 14 last clearly stated that it was subject to a termination of the deliberate breaches by the operatives of the national working rule agreement, and specifically mentioned the refusal of the men to work the extended summer working hours, the embargo on overtime and the refusal of the operatives in different parts of the country to honour the national agreement.
>
> This ignorance has undoubtedly arisen because the ballot papers issued to the men by their unions did not contain any reference whatever to this essential condition in the employers' offer.
>
> Apart from sectional strikes, the members of this association are seriously concerned with regard to the question of the summer working hours and overtime.
>
> In regard to the former the agreed working rule (based on the award of Sir Hugh Fraser) provides for a 46½ hour week during summer time. Whilst the employers are loyally honouring the national agreement, sections of the operatives have refused to work the longer summer hours.
>
> Since the demand for "another 2d." arose the operatives have employed every means to retard progress, and to foment trouble in the industry. Their action in regard to overtime is a noteworthy example. The rules provide for overtime, and there are restrictions very properly introduced to prevent systematic overtime during periods of severe unemployment. In the masonry and plastering trades particularly very serious delays are being caused in the completion of important works. It is admitted by the unions every mason is in employment, but they refuse to admit any urgency or allow their operatives in this or any other trade to work overtime. Clients are being made to suffer in consequence of this action quite as much as the employers. Contracts are taking longer to execute than they should and building owners are sustaining heavy losses. Despite the fact that these circumstances have been very strongly represented, the unions refuse to alter their attitude, which is totally opposed to the spirit of the national rules.
>
> It cannot be emphasised too strongly that the London employers are supporting the national lock-out solely with the object of preserving the sanctity of agreements, as although the breaches in London are at present restricted to non-observance of the national rules relating to working hours and overtime there can be no doubt that if the men in any locality are allowed to achieve their object of obtaining enhanced rates of wages by resorting to strikes such lawless action will spread throughout the country.
>
> The experience of contractors during the past six months is almost unanimous to the effect that output is being restricted, and they are constantly confronted with interference and tyranny from the responsible officials and delegates of the unions.
>
> N.B.—The operatives in London and other parts of the country have now demanded, as terms of settlement, an advance of 2d. per hour, a 44-hour week throughout the year, and payment for time lost through stress of weather.

We have received from Messrs. Bovis a short account, which we give below, of their opinion of the present situation:—

> Although during the past few months Messrs. Bovis Ltd. have resigned from the Employers' Federation, they have decided to support that body pending further information on the matters in dispute.
>
> Referring to these, they express the view that the employers are attaching far too much importance to the slightly extended number of hours, instead of attacking the more serious problem of the output which the men are giving whilst they are at work.
>
> The arrangements which their company suggest in respect of this, would operate to the advantage of the industry, and at the same time afford the men the security they demand.
>
> The firm has some sympathy with the demand of the men in respect of the loss of "wet time" at present suffered by them.
>
> Their suggestion to overcome this is the formation of a scheme whereby the very small amount of a fraction of a penny per day per man, and an equal allocation by the employer would provide sufficient to pay a full week's wages to all operatives in inclement weather.

COPPER AND BRASS FOR DOMESTIC WATER SERVICES

THERE is no doubt that the popular conception of copper as a material of construction is directed exclusively towards those cases where money is no object. For water services, in particular, we should all fit out our castles in the air with copper pipes and tanks, but for the everyday job we have not dared to consider the project, and the bar has been entirely one of imagined cost. If we could be sure of a material that will not corrode, will not dissolve poison into the water, is strong enough to resist the expansion of freezing water, and will recover after the frost, is sufficiently "sightly" to run exposed without ugly casings and inconvenient diversions into cupboards and corners, and is at the same time no more costly over the more generally used materials than can be justified by the saving in maintenance, then we should certainly find such a material in daily and universal use. If copper can supply these requirements, then it must be our ignorance and the natural corollary thereof—our prejudice—that has barred the way to such a desirable practice, and the way to dispel it is by propaganda. The Copper and Brass Extended Uses Council has undertaken the task in a very able manner that bids us welcome their little brochure on "The Use of Copper and Brass for Domestic Water Services." This little book is frankly admitted as in the interests of several of the associations of non-ferrous metal manufacturers, and is very tastefully presented and printed, with clear illustrations in the form of working drawings and data. It carries us through the line of argument that points out the many advantages that copper holds over other materials in the installation of domestic water services. Most of these advantages are generally known and accepted, but the matter of relative cost is dealt with so openly in the actual figures of experience set down in a way that is a direct challenge to the sceptic, that the average reader can hardly fail to accept them and their findings. We are given the relative percentage costs upon that of a small municipal house, between iron, lead and copper as 7.2, 9.4 and 9.6 respectively, and still more favourable comparisons in work of larger scope. Apply these figures to a £600 house and we find an all-copper installation costing only about £14 more than one all in galvanised iron, and only slightly more than one all in lead. We look forward to the opportunity of testing the project in actual practice, and we congratulate the body concerned upon the able and conclusive way in which they have presented their case.

LEAD PAINTS

Messrs. White & Leonard, solicitors, writing with reference to the Lead Paints (Protection against Poisoning) Bill, which came on for second reading in the House of Commons on June 20, inform us that strenuous opposition from both the Liberal and Conservative side was offered to the part of the Bill which proposes prohibition (*i.e.*, the prohibition of the use of white lead for interior painting), while there was general acceptance of the part which provides for regulations and particularly regulations to prohibit the dry rubbing down of paint. The Under-Secretary for Home Affairs sought to represent that there would be a breach of honour and a betrayal if the House did not ratify the Geneva Convention, but the Home Secretary had to disavow this as merely a flight of Welsh eloquence. The letter continues: "It was obvious that if it were pressed to a division the Bill was likely to be defeated, and so not only the opposed Prohibition part, but also the generally-accepted Regulation part, would have been killed. The Home Secretary therefore gave an undertaking that if the second reading were allowed and the Prohibition part were knocked out in Committee, he would not withdraw the Bill, but allow it to become one for Regulations only; and this was agreed without a division."

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
E. Glam. (Mon. Vall.)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/8½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 74.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk re advertised in this number. Certain conditions beyond those given in the following information re imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any nder; that a fair wages clause shall be observed; that no allowance will be made for tenders: and iat deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names those willing to submit tenders, may be sent in; the name and address at the end is the person from whom place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

JULY 14.—**Abertillery.**—PAINTING.—For the painting Cwmtillery Boys' and Girls' Schools, Blaentillery ixed and Infants' Schools, and Aberbeeg Mixed and fants' Schools and Schoolmaster's House, for the .D.C. Mr. A. Gordon Jones, surveyor, King-street, bertillery.

JULY 14.—**Ardrossan.**—PAINTING.—For painting arish Church and Hall. Mr. T. Guthrie, Clerk to the ustees, Ardrossan.

JULY 14.—**Ashton-under-Lyne.**—LAUNDRY.—For the construction of the laundry, for the B.G. Mr. G. J. bbs, 7, Lune-street, Preston. Deposit £5.

JULY 14.—**Cardiff.**—GYMNASIUM AND HANDICRAFT OCK.—Tenders (based on firm prices for materials, d subject only to variations owing to fluctuations wages), for the erection of a gymnasium and handi- aft block at the Canton Municipal Secondary Schools, rdiff, for the Cardiff Education Committee. Mr. T. erson Frank, Architect to the Committee, City Hall, rdiff. Deposit £2 2s.

JULY 14.—**Chelmsford.**—PAINTING.—For painting ternal iron and wood-work of 172 cottages, for the D.C. Mr. J. Dewhurst, Surveyor, Council Offices, elmsford.

JULY 14.—**Chester.**—ALTERATIONS.—For alterations convert Bishop Graham's Memorial School into a aternity and child welfare centre, for the T.C. Mr. C. eenwood, City Engineer, Chester. Deposit £1 1s.

JULY 14.—**Dewsbury.**—PAINTING.—For the painter's d decorator's work required in connection with erations to Moorlands Hall, for the T.C. Borough rveyor, Town Hall, Dewsbury.

JULY 14.—**Edinburgh.**—ADDITIONS.—For additional droom accommodation for nurses at East Pilton ospital. Mr. James A. Williamson, City Architect, ty Chambers, Edinburgh.

JULY 14.—**Edinburgh.**—ALTERATIONS.—For struc- ral alterations and electric installation at Davie- reet School. Mr. John Stewart, Executive Officer, ducation Offices, Edinburgh.

JULY 14.—**Elton.**—PAINTING.—For painting the onservative Club. Steward, The Club, Elton, Bury, ancs.

JULY 14.—**Glamorgan.**—VARIOUS WORKS.—) Jersey Marine School, new railings for school e; (2) Kenfig-hill School, levelling, &c.; (3) Coed- anc Council School, Skewen, manual instruction om; (4) Pontardawe Secondary School, new physics boratory; (5) Kingsbridge Council School, near owerton, additions to offices; (6) Penllergaer ouncil School, new windows and removal of gallery. r. T. Mansel Franklen, Secretary of Education Com- ittee, Glamorgan County Hall, Cardiff.

JULY 14.—**Hebburn.**—PAINTING.—For painting, &c., the Roman Catholic School, caretaker's house, &c., ebburn. Mr. H. Paterson, Surveyor's Office, Argyle- reet, Hebburn.

JULY 14.—**Hemel Hempstead.**—BUILDING WORKS D ALTERATIONS.—Erection of new vagrant wards d alterations to existing buildings, at the Hemel empstead Poor Law Institution for the Guardians of e Union. Clerk to the Guardians, 1, The Broadway, emel Hempstead. Deposit £1 1s.

JULY 14.—**Hornchurch, Essex.**—DEPOT BUILDINGS. Erection of lorry sheds, workshops, and cart sheds, cluding roads, fences, drains, &c., and for repairing d painting existing buildings and cottage at the epot, Rainham-road, for Romford R.D.C. Mr. J. Grant, Surveyor to the Council, 16a, South- eet, Romford.

JULY 14.— **Kingston-on-Thames.**— FARM BUILD- GS.—Erection of a range of farm buildings (about 70 ft. super. area) with yard, &c., and for an addition an existing building, both at Leigh Place Farm, ar Reigate, for the Surrey Agricultural Committee. . C. R. Harding (Major), County Land Agent, County all Annexe, Kingston-on-Thames. Deposit £1 1s.

JULY 14.—**Kirkcudbright.**—RECONSTRUCTION.—For onstruction of Academy. Mr. J. Morrison, Offices of ucation Authority, Castle Douglas.

JULY 14.—**Monmouthshire.**—PAINTING.—For the nting and colouring of about 37 elementary schools the county of Monmouth. Mr. John Bain, architect, unty Hall, Newport.

JULY 14.—**Portishead.**—COTTAGES.—Erection of 10 tages at South-road, Portishead, for the Urban trict Council. Mr. F. H. Smith, Surveyor to the uncil, Council Offices, Portishead. Deposit £1 1s.

JULY 14.—**Port Talbot.**—PAINTING.—For painting the Isolation Hospital, Pantymoch, for the T.C. alth Department, Port Talbot.

JULY 14.—**Preston.**—LODGE.—For the rebuilding lodge at the Isolation Hospital, Deepdale-road, the T.C. Borough Surveyor, Town Hall, Preston.

JULY 14.—**Radcliffe.**—PAINTING.—For painting New usalem Church, Radcliffe. Mr. Jas. E. Davenport, Suthers-street, Radcliffe.

JULY 14.—**Skipton.**—PAINTING.—For painting works Grammar School. Headmaster at School.

JULY 14.—**Southend-on-Sea.**—PAINTING.—For clean- and painting at the Westcliff Police Station. Mr. H. Dyer, Borough Engineer, Municipal Buildings, thend-on-Sea. Deposit £1.

JULY 14.—**Stalybridge.**—FOUNDATIONS.—For the excavating and concrete work required in the foundations of new power station, Stalybridge. Messrs. W. H. George & Son, architects, 7, Warrington-street, Ashton-under-Lyne. Deposit £1 1s.

JULY 14.—**Stonebroom.**—SCHOOL.—For the erection of a new Council School for about 600 children, at Stonebroom. Mr. George H. Widdows, County Offices, St. Mary's-gate, Derby. Deposit £1 1s.

JULY 14.—**Tanfield Lea.**—INSTITUTE.—For erection of Memorial Institute, Tanfield Lea, Durham. Mr. H. A. Curry, architect, Front-street, Stanley. Deposit £1.

JULY 14.—**Walsall.**—PAINTING.—For painting and tarring 8,000 yds. of iron fencing, for the T.C. Mr. J. Taylor, Borough Engineer, Council House, Walsall.

JULY 14.—**Wath-upon-Dearne.**—HOUSES.—Erection of 60 houses for the U.D.C. Messrs. Tennant & Smith, architects, Ropergate Chambers, Pontefract. Deposit £2.

JULY 14.—**Wetherby.**—HOUSES.—For the erection of four houses at Tockwith, for the R.D.C. Mr. H. Smith, Clerk, Council Offices, Wetherby.

JULY 14.—**York.**—MESS ROOM.—For the erection of a pay and mess room in Rougier-street, for the T.C. Mr. F. W. Spurr, City Engineer, Guildhall, York.

JULY 15.—**Aberayron (near).**—HOUSE.—For erecting a house at Myrollau (Card.). Mr. E. Llewelyn Lewis, architect, Lampeter.

JULY 15.—**Aldershot.**—PAINTING, &C.—For painting at West End and Roman Catholic Schools, and providing new sanitary fittings at the latter schools, for the T.C. Mr. J. Neeve, Borough Surveyor, Aldershot.

JULY 15.—**Bangor (Ireland).**—HOUSES.—For erection of 44 houses, for the U.D.C. Surveyor, Town Hall, Bangor, Ireland.

JULY 15.—**Barnsley.**—BUNGALOW.—For the erection of a bungalow at Lundwood, near Barnsley. Messrs. R. & W. Dixon, Eastgate, Barnsley.

JULY 15.—**Bournemouth.**—ALTERATIONS.—For alterations, &c., in connection with conversion of "Woodcote" to secondary school, for the T.C. Borough Engineer, Bournemouth. Deposit £1 1s.

JULY 15.—**Cowbridge.**—HOUSES.—Erection of fifty houses, for the R.D.C. Mr. E. Loveluck, architect, 12, Dunraven-place, Bridgend.

JULY 15.—**Edinburgh.**—CAR SHED.—For new car shed at Westfield, Gorgie, for the T.C. Mr. James A. Williamson, City Architect, City Chambers, Edinburgh.

JULY 15.—**Forfar.**—HOUSES.—For erection of three blocks, containing six dwelling-houses, three rooms, at Lilybank, for the T.C. Mr. T. R. Soutar, architect, Forfar. Deposit £1 1s.

JULY 15.—**Ivybridge.**—HALL.—For erecting a Masonic hall and lodge at Ivybridge. Mr. W. Harvey, "Puttapool." Cornwood, near Ivybridge.

JULY 15.—**Leeds.**—PAINTING.—For painting exteriors of houses on housing estates, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

JULY 15.—**Llanharran (Glam.).**— VARIOUS.—For carrying out, for the Cowbridge R.D.C., works as follows: (*a*) The erection of 50 houses at the Llanharran site; (*b*) the construction of roads and sewers in connection therewith. Mr. E. Loveluck, architect, 12, Dunraven-place, Bridgend.

JULY 15.—**Manchester.**—PAINTING.—For painting the exterior of the Reference Library, Piccadilly, for the T.C. City Architect, Town Hall, Manchester. Deposit 10s. 6d.

JULY 15.—**Mirfield.**—ADDITIONS.—For provision of assistant master's common room at Mirfield Grammar School. Education Department, County Hall, Wakefield.

JULY 15.—**Morley.**—PAINTING.—For painting interior of Morley Hall Maternity Home, for the T.C. Mr. F. Turner, Borough Engineer, Morley.

JULY 15.—**Mountain Ash.**—PAINTING.—For painting, &c., internally (*a*) Trerobart Boys' School; (*b*) Trerobart Girls' School, for the U.D.C. Mr. W. H. Williams, M.S.A. Town Hall, Mountain Ash.

JULY 15.—**Otley.**—ADAPTATION.—For adaptation of room at Westgate Council School. Education Dept., County Hall, Wakefield.

JULY 15.—**Richmond (Surrey).**—ALTERATIONS, &C.—For the construction of a new roof, providing new entrance doors and executing painting works at the Conservatory in the Terrace Gardens, for the T.C. Borough Surveyor, Town Hall, Richmond, Surrey. Deposit 10s. 6d.

JULY 16.—**Bedlington.**—SCHOOL.—For erecting a new secondary school at Bedlington to accommodate 300 scholars, for the Northumberland C.C. Mr. C. Williams, Director of Education, The Moot Hall, Newcastle-upon-Tyne. Deposit £2 2s.

JULY 16.—**Ely.**—VARIOUS WORKS.—Erection of block of w.c.s, summer house, and other sanitary work at the Institution of the Board of Guardians. Mr. W. McKelvie, architect, Ely.

JULY 16.—**Huddersfield.**—PAINTING.—For painting various schools, for the T.C. Mr. H. Sutcliffe, Borough Architect, Huddersfield.

JULY 16.—**Leeds.**—PAINTING.—For painting exterior of municipal buildings and interior of Cookridge-street Baths, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

JULY 16.—**Littleport.**—PAINTING.—For painting of Sandall's Bridge, for the Ouse Drainage Board. Engineer to the Board, 90, Hills-road, Cambridge.

JULY 16.—**London.**—CLEANING, PAINTING, &c.—Separate tenders for cleaning and painting and repairs at (*a*) Head Office, Victoria Embankment, E.C.4; (*b*) Sheffield House, Sheffield-street, W.C.2, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 in respect of each work.

JULY 16.—**London, N.W.1.**—BUILDING WORKS.—Building works required to be executed at the St. Pancras Hospital, 4, King's-road, N.W.1, for the Guardians of the Parish of St. Pancras. Mr. B. Chapman, Clerk to the Guardians, Town Hall, Pancras-road, London, N.W.1.

JULY 16.—**Newcastle-on-Tyne.**—PAINTING.—For the re-painting externally of 198 houses on the Walker Housing Estate, for the T.C. Housing Architect, 18, Cloth Market, Newcastle.

JULY 16.—**Newcastle-on-Tyne.**—TELEPHONE STATION.—For the erection of a Telephone Repeater Station, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary, H.M.O.W.).

JULY 16.—**Plymouth.**—PAINTING.—For painting of Cattedown-road, York-street, Johnson-terrace and Morice Town-road Schools, for the T.C. Borough Engineer, Plymouth.

JULY 16.—**Rhondda.**—PAINTING.—For painting and colouring of the following schools during the summer vacation, for the Rhondda U.D.C.: Pentre Secondary, Porth Secondary, Pentre Elementary (Boys', Girls' and Infants' departments), Ynyshir Elementary, all departments, and Hendrefadog, all departments. Mr. Jacob Rees, architect, Hillside, Pentre (Rhondda). Deposit £1 1s.

JULY 16.—**Richmond (Surrey).**—PAINTING.—For painting, paperhanging and distempering at the workmen's dwellings, in Manor-grove, North Sheen, and Victoria-place, Richmond, for the T.C. Borough Surveyor, Town Hall, Richmond. Deposit 10s. 6d.

JULY 16.—**Sheffield.**—HOUSES.—For the erection of 70 houses on the Gleadless Common Estate, for the T.C. Mr. F. E. P. Edwards, City Architect, Town Hall, Sheffield. Deposit £2.

JULY 16.—**Stockton-on-Tees.**—HOUSES.—For the erection of 100 semi-detached houses on the Blue Hall Estate, Norton, for the T.C. Deputy Borough Engineer, 37a, High-street, Norton.

JULY 16.—**Tooting, S.W.17.**—FIREPROOF FLOORING.—Providing and laying a fireproof floor to a ward pavilion at Tooting Bec Mental Hospital extensions, Church-lane, Tooting, S.W.17, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4, and at the Engineer-in-Chief's Dept., Sheffield House, Sheffield-street, W.C.2.

JULY 16.—**Various Places.**—BUILDING, CLEANING, AND PAINTING.—(1) Building new single wards at Colindale Hospital, Hendon, N.W.9; (2) cleaning and painting works and repairs at various hospitals, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 in respect of each work.

JULY 16.—**Wakefield.**—HOUSES.—Erection of 12 houses at Sharlston, for the R.D.C. Messrs. Massie & Holdsworth, architects, Wood-street, Wakefield.

JULY 16.—**West Riding.**—PAINTING.—For painting and general renovations at the undermentioned schools:—Edlington, Warmsworth, Bentley Toll Bar, Bentley New Village, Woodlands, Highfields; also for repairs to buildings at Edlington and Warmsworth Council Schools. Mr. L. J. Blackburn, Education Offices, 20, Christ Church-road, Doncaster.

JULY 17.—**Acton.**—HOUSES.—Erection of four houses at Acton. Mr. A. H. Middleton, architect, 3, Richmond-road, Wanstead, Essex.

JULY 17.—**Chorley, Lancs.**—POST OFFICE.—For the erection of a Post Office for the Commissioners of H.M. Office of Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary, H.M. Office of Works).

JULY 17.—**Coaltown of Wemyss.**—INSTITUTE.—For the erection of a welfare institute at Coaltown of Wemyss, Fife, for the Miners' Welfare Fund. Mr. Stewart Tod, architect, East Wemyss.

JULY 17.—**Glamorgan.**—NEW BRIDGE, &C.—For carrying out, for the Glamorgan C.C., the following works: Contract 1—Taking down present masonry bridge and erecting a new steel bridge over the River Rhymney, and forming approaches thereto, at Ystradmynach. Contract 2—Widening the Pontardawe and Ystalyfera main road at junction with Church-road, Godrergraig. Contract 3—Widening the Pontardawe and Ystalyfera main road between Ynysmudw and Godrergraig. Glamorgan County Hall, Cardiff.

JULY 18.—**Calverley-with-Farsley.**—PAINTING.—For painting, colour-washing, &c., the Calverley Council School, and the Farsley West street and Frances-street Council Schools. Mr. E. H. Steel, Penny Bank Chambers, Shipley.

JULY 18.—**Durham.**—HOUSES.—For the erection of 14 "A" type houses at Ushaw Moor, for the R.D.C. Mr. Geo. Gregson, surveyor, 38, Saddler-street, Durham. Deposit £3.

JULY 18.—**Glasgow.**—CENTRE.—Erection of a Child Welfare Centre at Bridgeton. Office of Public Works, 64, Cochrane-street, Glasgow.

JULY 18.—**Honiton.**—HOUSES.—For the erection of ten houses, for the T.C. Messrs. A. J. Redfern & J. W. Jones, surveyors, Honiton.

JULY 18.—**Kingsbury, N.W.9.**—HOUSES.—Construction of 24 houses at Buck-lane, Kingsbury, N.W.9, for the Kingsbury U.D.C. Mr. R. C. N. Newport, Surveyor to the Council, Council Offices, Kingsbury-road, The Hyde, N.W.9. Deposit £3 3s.

JULY 18.—**Kirkburton.**—POINTING.—For pointing and laying setts at Wesleyan Chapel. Caretaker, Kirkburton, Huddersfield.

JULY 18.—**Leeds.**—PAINTING.—For inside painting at the Superintendent's House, Central Home, Street-lane, Roundhay, for the Board of Guardians. Mr. James H. Ford, Clerk to Poor Law Offices, South Parade, Leeds.

JULY 18.—**Leeds.**—PAINTING.—For the painting, &c., of the kitchen, and the papering, &c., of the Entrance Hall, of the Administrative Block of the Hospital of the Calverley Joint Hospital Board. Mr. Wm. R. Wilson, Clerk, 12, Park-square, Leeds.

JULY 18.—**Milnsbridge.**—BUNGALOWS.—For erection of a pair of bungalows. Mr. J. Ainley, architect, Huddersfield.

JULY 18.—**Nenagh.**—HOUSES.—For the erection of eight houses, for the U.D.C. Mr. Sean T. O'Neill, Clerk, Nenagh.

JULY 18.—**Preston.**—ALTERATIONS.—For alterations at the Cattle Market Hotel, for the T.C. Borough Surveyor, Town Hall, Preston.

JULY 18.—**South Walsham.**—ADAPTATIONS.—For adaptations and repairs to Manor Farm House, South Walsham, for the Norfolk C.C. Mr. V. Playle, County Land Agent, Shire House, Norwich.

JULY 18.—**Union Quay.**—REBUILDING.—For the restoration of Union Quay, ex-R.J.C. Barracks. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin. Deposit £1.

JULY 19.—**Dewsbury.**—HOUSE.—For erection of house, Healds-road, Dewsbury. Messrs. Holtom & Fox, architects, Corporation-street, Dewsbury.

JULY 19.—**Erpingham.**—COTTAGES.—For the erection of a pair of cottages in the parish of Trimingham, together with well, for the R.D.C. Mr. A. R. Tuddenham, Surveyor, St. Peter's-road, Sheringham.

JULY 19.—**Erpingham.**—PAINTING.—For painting cottages in Runton, Aylmerton and Southrepps, for the R.D.C. Mr. A. R. Tuddenham, Surveyor, St. Peter's-road, Sheringham.

JULY 19.—**Essexford.**—RECONSTRUCTION.—For re-erection of station buildings, for the Great Northern Railway Co. of Ireland. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

JULY 19.—**Netherthong.**—DECORATIONS.—For the re-decoration of the nave of the church. Rev. H. N. Hind, Netherthong Vicarage, Thongsbridge, near Huddersfield.

JULY 19.—**Southampton.**—BRIDGES.—(*a*) Reconstruction of Titchfield (south-east) County Bridge, situated about ¼ mile from Titchfield, with 5 ft. diameter concrete tubes; (*b*) widening of Pudbrook Bridge, situated about ½ mile west of Botley, consisting of extending the existing 10 ft. span brick arch by 5 ft.; (*c*) widening and reconstruction of Waltham Chase Bridge, situated about 1 mile south of Bishop's Waltham, with 3 ft. 6 in. diameter concrete tubes, &c. Mr. W. J. Taylor, County Surveyor, The Castle, Winchester. Deposit £1 1s. each contract.

JULY 19.—**Wigan.**—PAINTING.—For the painting of the outside ironwork and woodwork of buildings at the Poor Law Institution, for the B.G. Matron, the Institution.

JULY 21.—**Ashington.**—ROOFING, &C.—For new roofing over platforms and alterations to station buildings at Ashington, for the London & North Eastern Railway Co. Mr. Stephen Wilkinson, Architect, N.E. Area, Irving House, Westgate-road, Newcastle-on-Tyne.

JULY 21.—**Chelmsford.**—PAINTING.—For painting Admiral's Park water tower, for the T.C. Borough Engineer, Chelmsford.

JULY 21.—**Cork.**—ADDITION.—For building an addition to offices, let to Messrs. Guinness & Co., at Cork Station, for the Great Southern and Western Rly. Co. Chief Engineer, Inchicore, Dublin. Deposit £1 1s.

JULY 21.—**Leeds.**—PAINTING.—For painting Market Hall shops, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

JULY 21.—**Longford.**—HOUSES.—For the erection of six houses, for the U.D.C. Town Clerk, Court House, Longford. Deposit £2 2s.

JULY 21.—**Rowley Regis.**—PAINTING, &C.—For painting at various schools, for the U.D.C. Mr. F. T. Wilson, Secretary, Education Committee, Rowley Regis.

JULY 21.—**Stockport.**—OFFICES.—Erection of a new office block, corner of Heaton-lane and Wellington-road North, for the T.C. Mr. Herbert Hamer, Borough Surveyor, Stockport.

JULY 21.—**Warrington.**—DWELLINGS.—For the erection of three firemen's dwellings in Cambria-place, for the T.C. Mr. A. M. Ker, Borough Engineer, Warrington.

JULY 22.—**Bromley.**—COTTAGES.—Erection of four blocks of two cottages on the Housing Estate at Bromley Common, for the Town Council of Bromley. Contractors may tender for the erection of the four blocks, or for two, four or six cottages. Mr. Fred. H. Norman, Town Clerk, Borough of Bromley, Municipal Offices, Bromley, Kent. Deposit £2 2s.

JULY 22.—**Denholme.**—PAVILION.—For the erection of a tennis pavilion in Foster Park, for the U.D.C. Surveyor, Council Offices, Denholme.

JULY 22.—**Leeds.**—PAINTING.—For painting in various parks, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

JULY 22.—**Mountain Ash.**—HOUSES.—For erecting, for the U.D.C., on their housing site at Penrhiwceiber, 26 houses in seven blocks. Mr. W. H. Williams, Architect, Town Hall, Mountain Ash.

JULY 22.—**Nottingham.**—PAINTING.—For painting various properties, for the T.C. Estates Surveyor, Guildhall, Nottingham. Deposit £1 1s. for each of four contracts.

JULY 22.—**Nottingham.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Arkwright, Nottingham, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

JULY 23.—**Berks.**—COTTAGES.—Erection of eight cottages at Broadmoor Asylum, Berks, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

JULY 23.—**Birkenhead.**—HOUSES.—For the erection of 193 subsidy houses in concrete or brickwork, on the Derby Park Estate, for the T.C. Mr. Chas. Brownridge, Borough Engineer, Town Hall, Birkenhead. Deposit £2 2s.

JULY 23.—**Dover.**—PAINTING.—For painting and decorating works at the elementary schools during the summer holidays, for the T.C. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House, Dover.

JULY 23.—**Dublin.**—CATTLE ENCLOSURE.—For provision of cattle enclosure at Sheriff-street Goods Station, for the Great Northern Railway (Ireland) Co. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

★JULY 23.—**Hackney, E.8.**—MAISONETTES.—Erection of 48 maisonettes in a terrace of 24 buildings on the south side of Fletching-road between Wattisfield-road and Chatsworth-road, for the Council of the Metropolitan Borough of Hackney. Borough Engineer and Surveyor, Borough Engineer's and Surveyor's Office, Town Hall, Mare-street, Hackney, E.8. Deposit £2 2s.

JULY 23.—**Hemsworth.**—HOUSES.—Erection of 166 concrete houses at Westfield-lane, South Elmsall, and construction of new roads, sewers, surface water drains, &c., for the R.D.C. Mr. W. T. Lynam, Architect, Council Offices, Rotherham-road, Hemsworth, near Pontefract.

★JULY 23.—**Liverpool.**—HOUSES.—Erection and completion of blocks of flats on the Larkhill and Springwood Estates, designed by the undermentioned architects for the Housing Committee of the City of Liverpool. Conditions of contract may be seen at the offices of the respective architects:—Scheme 1, Messrs. Gray & Evans, 21, Harrington-street (24 Flats); Scheme 2, Mr. Gilbert Fraser, 67, Lord-street (25 Flats); Scheme 3, Mr. B. T. Lister, 17B, The Temple, Dale-street (24 Flats); Scheme 4, Messrs. Morter & Dobie, 36, The Temple, Dale-street (24 Flats); Scheme 5, Messrs. R. Owen & Sons, 3, Crosshall-street (24 Flats); Scheme 6, Messrs. Shepheard & Bower, Liberty Buildings, School-lane (24 Flats); Scheme 7, Messrs. Quiggin & Gee, 24, North John-street (24 Flats).

JULY 24.—**Bournemouth.**—FOUNDATIONS.—Foundations contract of the new pavilion in the Pleasure Gardens, Bournemouth, for the County Borough of Bournemouth. Mr. Herbert Ashling, Town Clerk, Town Hall, Bournemouth. Deposit £1 1s.

JULY 24.—**Darton.**—PAINTING.—For the painting of 250 houses. Messrs. Fountain & Burnley, Ltd., Woolley Colliery, near Barnsley.

JULY 24.—**Dover.**—PAINTING.—For painting works at the Isolation Hospital and at the Town Hall, for the T.C. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House, Dover.

JULY 24.—**Royston.**—HOUSES.—Erection of four houses and making of roads and sewers, for the U.D.C. Messrs. Dyson, Cawthorne & Coles, architects, Barnsley.

★JULY 24.—**Winchester.**—ADDITIONAL INFIRMARY WARDS.—Erection of additional Infirmary wards and the extension of the Nurses' Quarters at the Winchester Union, for the Guardians. Mr. B. D. Cancellor, architect, Queen Anne Chambers, Winchester. Deposit £3 3s.

★JULY 25.—**Guildford.**—HOUSES.—Erection of one pair of parlour and two pairs of non-parlour houses on the Merrow Housing Site, for the Guildford R.D.C. Mr. John Austee, Council Offices, Commercial-road, Guildford. Deposit £2 2s.

JULY 25.—**Holmfirth.**—HOUSE, &C.—For erection of porter's house and a home for district nurse in connection with Holme Valley Memorial Hospital. Mr. P. N. Brown, architect, Hollowgate, Holmfirth.

JULY 25.—**Rothwell.**—ADDITIONS.—For additions at Isolation Hospital, for the Rothwell, Methley, and Hunslet Joint Isolation Hospital Committee. Messrs. W. E. Richardson & Wm. Whitehead, joint architects, Rothwell.

JULY 25.—**Wood Green, N.22.**—PAVILION.—Erection of a pavilion in the Albert-road Recreation Ground, for the Wood Green U.D.C. Engineer and Surveyor to the Council, Town Hall, Wood Green, N.22. Deposit £1 1s. (payable to the Treasurer).

JULY 26.—**Llanddarog.**—VESTRY ROOM.—Erection of vestry room at Capel Newydd, Llanddarog. Mr. G. Davies, architect, Harddfan, Upple Tumble, Llanelly.

JULY 26.—**Mountain Ash.**—HOUSES.—For the erection of 26 houses at Penrhiwceiber, for the U.D.C. Mr. W. H. Williams, Architect, Town Hall, Mountain Ash.

★JULY 28.—**Bournemouth.**—CONCRETE PIER HEAD. Reconstruction in reinforced concrete of Boscombe Pier Head, for the Council of the County Borough of Bournemouth. Borough Engineer, Mr. F. P. Dolamore, Town Hall, Bournemouth. Deposit £1 1s.

JULY 28.—**Chorley.**—HOUSES.—For the erection of 40 houses on the Highfield Estate, for the T.C. Borough Surveyor, Chorley. Deposit £2 2s.

★JULY 29.—**London, E.**—ALTERATIONS.—Alterations to the East Ham Telephone Exchange for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

JULY 31.—**Glasgow.**—HOUSES.—Erection of 380 houses at Hamiltonhill, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow.

AUGUST 8.—**Woking.**—HOUSES.—For the erection of 28 pairs of cottages, for the U.D.C. Mr. G. J. Woolridge, Surveyor, Council Offices, Woking.

NO DATE.—**Heckmondwike.**—HOUSES.—Erection of 12 houses, for the U.D.C. Mr. F. W. Littlewood, Surveyor, Council Offices, Heckmondwike. Deposit £1 1s.

NO DATE.—**Hemsworth.**—CINEMA.—For erection of new cinema, Fitzwilliam, near Hemsworth. Messrs. Garside & Pennington, architects, Pontefract. Deposit £1 1s.

NO DATE.—**Knaresborough.**—HOUSES.—Erection of 20 houses, with roads, sewers, &c., for the U.D.C. Messrs. Gibson & Hill, architects, 5, Prospect-crescent, Harrogate.

NO DATE.—**Rhyl.**—ADDITIONS.—For additions to the Conservative Club. Messrs. Packer & Crampton, architects, 30, Hoghton-street, Southport.

★NO DATE.—**Southampton.**—SECONDARY SCHOOL.—Erection of Taunton's Secondary School buildings at Highfield, Southampton, for the Corporation of the County Borough of Southampton. Messrs. Gutteridge & Gutteridge, architects, 9, Portland-street, Southampton. Deposit £5 5s.

FURNITURE, MATERIALS, etc.

JULY 14.—**Guildford.**—MATERIALS.—For the supply of various materials for eight months, for the T.C. Borough Surveyor, Guildford.

JULY 14.—**Wakefield.**—MATERIALS.—Supply of granite setts to the West Riding County Council, West Riding Surveyor, County Hall, Wakefield.

JULY 15.—**Wellington (Salop).**—MATERIALS.—Supply of 1,000 tons of slag or granite macadam, to the U.D.C. Mr. G. H. Connor, surveyor, Wellington.

JULY 16.—**Manchester.**—MATERIALS.—Supply of 200 tons of crushed brick or stone, 1½ in. and down, for concrete; also 300 tons of granite for roads, for the Board of Guardians. Mr. J. Macdonald, Clerk, Union Offices, All Saints', Manchester.

JULY 17.—**Preston.**—MATERIALS.—For the supply of 1,300 tons 4 in. by 4 in. by 4 in. granite cubes, including 10 tons 4 in. by 4 in. by 6 in. binders, for the T.C. Borough Surveyor, Town Hall, Preston.

NO DATE.—**Dundee.**—GRATES, &C.—For supplying interiors and grates at Dudhope Housing Scheme, also for supplying and fixing wrought-iron railings at Dudhope tenement houses. City Architect, Dundee.

ENGINEERING, IRON AND STEEL

JULY 14.—**Keighley.**—FOOTBRIDGE.—For construction of steel footbridge at Lower Laithe Reservoir, for the T.C. Mr. M. R. Barnett, Engineer, Town Hall, Keighley.

JULY 14.—**Keighley.**—IRON STANDARDS, &C.—Supply of cast and wrought iron standards, tube hand railing, &c., at Lower Laithe reservoir, for the T.C. Mr. M. R. Barnett, Engineer, Town Hall, Keighley.

JULY 14.—**Keighley.**—STEEL JOISTS.—For supply of rolled steel joists and other steelwork for Bracken Bank Reservoir Works, for the T.C. Mr. M. R. Barnett, Engineer, Town Hall, Keighley.

JULY 14.—**S. Africa.**—STEEL ROOFING.—For supply of a structural steel umbrella roof, for the S. African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-street. Ref. AX/1042.

JULY 15.—**Burnley.**—LIFT.—For an electric passenger lift at the Town Hall, for the C.B. The Borough Engineer and Surveyor, Town Hall, Burnley.

JULY 15.—**Egypt.**—WATER FILTERS.—For the installation of water filters, pipe lines, &c., at Assouan for the Egyptian Ministry of the Interior, Dept. of Overseas Trade, 35, Old Queen-street, S.W. Ref. AX/1043.

JULY 15.—**Fiddown.**—BRIDGE.—For the reconstruction of the destroyed portion of the road bridge over the River Suir, at Fiddown, for the Great Southern and Western Railway Co. Chief Engineer, Inchicore, Dublin.

JULY 16.—**Aberdeen.**—RESERVOIR.—For the construction of a concrete covered service reservoir of capacity of 7 million gallons at Airy Hall, near Aberdeen, for the T.C. Mr. George Mitchell, Water Engineer, 41½ Union-street, Aberdeen. Deposit £5.

JULY 18.—**London.**—MATERIALS, &C.—Supply to the South Indian Railway Company of (1) Helical and volute springs; (2) well curbs and caissons for Ferok and Kallayi Bridges. Company's Offices, 9, Petty France, S.W.1. Charges, 2s. 6d. for (1) and £1 for (2).

JULY 19.—**Glasgow.**—RAILS, &C.—Supply of 50 tons of new rails and chairs, points and crossings, for Darnarnock Gasworks. General Manager, Gas Department, 30, John-street, Glasgow.

JULY 21.—**Fort William.**—PIER.—For construction of a reinforced concrete pier and approach viaduct and works at Fort William, for the British Aluminium Co. Messrs. S. S. Meik & Buchanan, 16, Victoria-street, S.W. Deposit £5.

JULY 23.—**South Shields.**—STEELWORK.—For the constructional steelwork in connection with the extension of the car-sheds at Dean-road, for the T.C. Mr. S. G. Stanton, Borough Engineer, Town Hall, South Shields.

JULY 26.—**Llangollen.**—RESERVOIR.—For construction of small country reservoir and laying water main at Garth and Fron-Cysllte, for the R.D.C. Messrs. Berrington, Son & Watney, Wolverhampton. Deposit £5 5s.

AUGUST 12.—**Portsmouth.**—QUAY WALL.—For the construction and maintenance in repair for twelve months of a new quay wall, for the T.C. Mr. Arthur W. Ward, Borough Engineer, Town Hall, Portsmouth. Deposit £3.

SEPTEMBER 1.—**Lochaber.**—AQUEDUCT.—For the construction of an aqueduct between Loch Treig and Fort William, Inverness-shire, including fifteen miles of pressure tunnel with intake shafts and other works for the North British Aluminium Co. Messrs. S. Meik & Buchanan, 16, Victoria-street, Westminster, S.W.1. Deposit £5.

ROAD, SANITARY, AND WATER WORKS.

JULY 14.—**Chelmsford.**—SEWER.—For the construction of about 170 yds. 6 in. sewer, in the main road at Oxney Green, Writtle, for the R.D.C. James Dewhurst, engineer, Waterloo-lane, Chelmsford.

JULY 14.—**Colne.**—SEWER.—For construction of reinforced concrete sewer, &c., for the T.C. Borough Surveyor, Town Hall, Colne. Deposit £1.

JULY 14.—**Edinburgh.**—ROADS.—For the construction of Section J-K, Newbridge to Edinburgh, Contract No. 7, of a new road from Glasgow to Edinburgh, for the T.C. Mr. D. A. Donald, 249, George-street, Glasgow. Deposit £3 3s.

JULY 14.—**Gelligaer.**—SEWERS.—For the construction of about eleven miles of 15 in. 12 in. and 9 in. diameter glazed stoneware and cast-iron pipe sewers, &c., for the U.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £7 7s.

JULY 14.—**Leeds.**—ASPHALTING.—For the asphalting work at the West Riding Mental Hospital, Menston, near Leeds. Mr. W. E. H. Burton, architect, West Riding Mental Hospitals Board Offices, Wakefield.

JULY 14.—**Romford.**—ROADS.—For making up 850 yards of roads at Hornchurch, for the R.D.C. Surveyor, 16A, South-street, Romford.

JULY 14.—**Romford.**—SEWER.—For construction of sewerage work at Harold Wood, for the R.D.C. Mr. W. J. Grant, Surveyor, 16A, South-street, Romford.

JULY 14.—**Rugby.**—WATER MAINS.—For providing and laying 3,124 lin. yds. of 4 in. and 3 in. cast-iron water mains, &c., on the estates of the Rugby Freehold Land Society, for the R.D.C. Mr. J. E. Weeks, Surveyor, Hillmorton Paddox, Rugby. Deposit £3 3s.

JULY 14.—**Wath-upon-Dearne.**—SANITARY.—For the conversion of privies into water closets, and the construction of new water closets at 100 houses, for the U.D.C. Mr. F. J. Allott, Sanitary Inspector, Town Hall, Wath-upon-Dearne.

JULY 14.—**York.**—ROADS.—For road and sewer work at Salisbury-road, for the T.C. Mr. F. W. Spurr, City Engineer, Guildhall, York. Deposit £2 2s.

JULY 15.—**Benfieldside.**—PAVING.—For sett paving, flagging, &c., on the Lanchester Shotley Bridge main road, for the U.D.C. Mr. T. Knox, Surveyor, Council Offices, Blackhill, Co. Durham.

JULY 15.—**Brentford.**—ROADS.—For surfacing sections of Ealing-road, for the U.D.C. Mr. W. J. W. Westlake, Surveyor, Clifden House, Brentford.

JULY 15.—**Ealing.**—ROADS.—For making up Midhurst and St. Aidan's-roads, for the B.C. Mr. W. R. Hicks, Borough Engineer, Town Hall, Ealing. Deposit 10s. 6d. each road.

JULY 15.—**London, W.C.1.**—CONVENIENCE.—Construction of an underground convenience for men and women in Cross-street, Leather-lane, E.C.1, for the Metropolitan Borough Council of Holborn, Mr. E. F. Spurrell, Borough Surveyor, Council Offices, 193–197, High Holborn, W.C.1.

JULY 15.—**Wolverhampton.**—TAR PAVING.—Repairs to school playgrounds, tar paving and rock asphalte, for the Wolverhampton Education Committee. Director of Education, North-street, Wolverhampton.

JULY 16.—**Guildford.**—ROADS.—For the reconstruction of an existing highway with reinforced concrete, for the T.C. Mr. W. G. Cross, Borough Engineer, Municipal Offices, Guildford. Deposit £2 2s.

JULY 16.—**Hove.**—ROADS.—For making-up roadway in Glendor-road, for the T.C. Borough Surveyor, Town Hall, Hove.

JULY 16.—**Leyland.**—ROADS.—For making-up Herbert-street, Newsome-street, part John-street, and the streets on the north and south side of the Public Hall buildings, for the U.D.C. Mr. M. H. Wilkinson, Surveyor, Public Hall Buildings, Leyland. Deposit £1.

JULY 16.—**Limavady.**—SEWAGE WORKS.—For carrying out sewerage scheme, for the U.D.C. Mr. J. Douglas, Clerk, Town Hall, Limavady, Ireland.

JULY 16.—**South Molton.**—DRAINAGE.—For supplying and laying 1,367 ft. run of 4-in. stoneware glazed pipe, for the R.D.C. Mr. W. S. Gardner, Chittlehampton.

JULY 16.—**Southport.**—ROADS.—For making up Belgrave-place and Sunnyside, for the T.C. Mr. A. E. Jackson, Borough Engineer, Southport. Deposit £2 2s.

JULY 16.—**Southport.**—ROADS.—For making up Osborne-road and Belvedere-road, for the T.C. Mr. A. E. Jackson, Borough Engineer, Southport. Deposit £2 2s.

JULY 19.—**Carnforth.**—SEWER.—For construction of 120 yards of 9 in. and 80 yards of 6 in. stoneware sewers, for the U.D.C. Surveyor, Carnforth.

JULY 19.—**Porthcawl.**—ROADS.—Construction of 1,200 yards lineal of new road between the Esplanade, Porthcawl, and Newton-road, also between The Moorlands School and the Globe Inn, Newton, for the U.D.C. Mr. T. L. Oliver, Council Offices, Porthcawl. Deposit £3 3s. for each of two contracts.

JULY 21.—**Grimsby.**—ROADS.—For the reconstruction and widening of Laceby-road, for the T.C. Borough Engineer, 170, Victoria-street, Grimsby. Deposit £2 2s.

JULY 21.—**Richmond.**—WATER MAIN.—For laying 750 yards of 9 in. and 340 yards of 7 in. diameter cast-iron pipes, &c., for the T.C. Mr. H. P. Williamson, Water Engineer, Riverside, Surrey. Deposit £2.

JULY 21.—**Workington.**—ROADS, &C.—For construction of roads and sewers in connection with Salterbeck housing scheme, for the T.C. Mr. H. B. Williams, Borough Engineer, Workington. Deposit £3 3s.

JULY 22.—**Abercynon (Glam).**—ROADS, &C.—For construction, for the Mountain Ash U.D.C., of roads and surface water drains at the housing site. Mr. W. G. Thomas, Town Hall, Mountain Ash.

JULY 22.—**Manchester.**—ROADS.—(1) Widening Blackley New-road to 60 ft. wide, and new arch bridge over the River Irk; (2) continuation of Withington-road, Chorlton, 50 ft. wide, and widening of existing girder bridge over L. & N.E. Railway, for the T.C. City Engineer, Town Hall, Manchester. Deposit £3 3s each contract.

JULY 22.—**Southall-Norwood.**—ROADS.—For making up Gladstone-road, for the U.D.C. Mr. J. B. Thompson, Surveyor, Town Hall, Southall.

★JULY 23.—**Edmonton, N.18.**—DRAINAGE WORK.—Work connecting two cottages, known as Spring-court Cottages, 129 and 131, The Ridgeway, Enfield, with the newly-laid Council sewer, for the Edmonton Union. Guardians' architect, Mr. J. C. S. Mummery, 34, Bloomsbury-square, W.C.1.

JULY 23.—**Erith.**—ROADS.—For reconstruction of carriageway, footpath, &c., of the widened bridge in Bexley-road, for the U.D.C. Surveyor, Erith. Deposit £1.

JULY 25.—**Brentford.**—ROADS.—Construction of a further section of about three furlongs of the Great West-road at Brentford, for the Middlesex C.C. Mr. A. Dryland, County Engineer, Middlesex Guildhall, Westminster, S.W. Deposit £21.

JULY 26.—**Bedwas and Machen.**—SEWER.—For the construction of a reinforced concrete pipe sewer, 150 yds. lin. in length, for the U.D.C. Mr. Idris Leyshon, surveyor, Bedwas.

JULY 26.—**Dewsbury.**—SEWAGE.—For construction of equalising tanks and other works in connection with sewage disposal works, for the T.C. Messrs. J. Diggle & Sons, 14, Brown-street, Manchester. Deposit £2 2s.

JULY 26.—**Glass Houghton.**—ROAD.—For the improvement of the Leeds and Barnsdale (Hook Moor Branch) main road at Glass Houghton, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

JULY 26.—**Llangollen.**—WATER WORKS.—For the construction of a small concrete reservoir, the provision and laying of mains, for the R.D.C. Messrs. Berrington, Son & Watney, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

JULY 28.—**London.**—SEWER (BRICK AND CONCRETE).—Construction of a 4 ft. diameter sewer in brick and concrete, of a total length of about 200 ft., with weir chamber and tumbling bay, Bell Wharf outlet, Shadwell, in the Metropolitan Borough of Stepney, in the Administrative County of London. Chief Engineer, L.C.C. Old County Hall, Spring Gardens, S.W.1. Deposit £5.

JULY 28.—**Pontefract.**—ROADS.—Street works in The Mount, for the T.C. Borough Surveyor, Pontefract.

AUGUST 5.—**Glasgow.**—ROADS, &C.—For the construction of roads and sewers at Low Balornock, Springburn, for the T.C. Director of Housing, Govan Town Hall.

Competitions.

(See Competition News, page 44.)

Auction Sales, Tenders, etc.

JULY 15.—**London, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of Mr. H. H. Elliott, at Arch No. 95, London-street, plant and stock of a packing-case manufacturer. Auctioneers, Newington Green, Islington, London, N.16.

JULY 15 AND 16.—**London, N.1.**—Messrs. Charles R. Davis & Co. will sell, at the premises, No. 3, Barnsbury Park, Liverpool-road, N.1, *re* Geo. Slade & Co., Ltd. (in voluntary liquidation), by order of the Liquidators, woodworkers', builders', and contractors' extensive and valuable woodworking machinery, motive power, plant, stock-in-trade, and office furniture. Auctioneers, 285, Borough High-street, London, S.E.1.

JULY 16.—**Horley (Surrey).**—Mr. C. E. Clark will sell, without reserve, at Market Field, Horley, Surrey (near "King's Head" Hotel), timbers and builder's effects. Auctioneer, Beddington House, near Croydon, Surrey.

JULY 19.—**Bucks.**—Mr. G. Francis Duck will sell, unless previously disposed of, three wooded building sites, South Park, Gerrard's Cross, suitable for country residences. Freehold; main drainage. Auctioneers, Gerrard's Cross.

JULY 22.—**Deptford Green, S.E.**—Messrs. Fuller, Horsey, Sons & Cassell will sell, by order of the Directors of A. Lloyd & Sons, Ltd., wood-box and packing-case making machinery and stock, on the premises, at 11 o'clock. Auctioneers, 11, Billiter-square, E.C.3.

★JULY 22.—**East Suffolk.**—Messrs. Garrod, Turner & Son will sell, by direction of the Board of Guardians of Bosmere and Claydon Union, at the Crown and Anchor Hotel, Ipswich, extensive freehold premises, with floor area of 48,000 ft., late Basham Workhouse, 37 acres in all, the greater part with possession. Electric light and power plant. Auctioneers, Ipswich.

★JULY 22 AND 23.—**Ilford, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Corporation of the City of London, upon the depots situate in Lonsdale-avenue, Cranbrook-road, Ilford, surplus building plant and stock of the Ilford Estate. Auctioneers, Newington Green, Islington, London, N.16.

★JULY 29.—**Holborn, W.C.**—Messrs. J. T. Skelding & Co. will sell, without reserve, *re* Charles B. Luck, Rowland B. Wood, and Percy A. Watson, trading as "Luckwood," under a deed of assignment, by order of the Trustee, W. H. Cork, Esq., F.L.A.A., on the premises, Nos. 44–46, Eagle-street, Holborn, W.C.1, the extensive well-assorted and up-to-date stock-in-trade of wholesale builders' merchants, sanitary glazed ware, plumbers' goods, fixtures, fittings, and office furniture. Auctioneers, 48, Gresham-street, Guildhall, London, E.C.2.

★JULY 29.—**Limehouse, London, E.**—Messrs. Joseph Hibbard & Sons will sell (unless previously sold by private treaty), upon the premises, Gun-lane Saw Mills, Grenade-street, at a nominal reserve, by order of the Liquidator, Mr. C. H. Bull, F.C.A., *re* Clark, Williams & Co., Ltd., in liquidation, valuable and well-situated freehold store yard, mill and offices, known as Gun-lane Saw Mills, Grenade-street, vacant possession upon completion; also the brick-built freehold foundry adjoining. Auctioneers, Gun-lane Saw Mills, Grenade-street, Limehouse, E.

★JULY 29.—**Limehouse, London, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Liquidator, Mr. C. H. Bull, F.C.A., *re* Clark, Williams & Co., Ltd., in liquidation (immediately following the sale of the freehold premises), upon the premises, Gun-lane Saw Mills, Grenade-street (close to Limehouse Church), salvage and other saw mill machinery, timber, ironmongery, and stores of ships' joiners, &c. Auctioneers, 15, Newington Green, Islington, London, N.16.

JULY 29.—**Surrey.**—Messrs. Hampton & Sons will sell, by order of trustees, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1, four plots of freehold building land ranging from nearly 3½ acres to over 5 acres each, extensive frontage to Sandy-lane, at Longcross, near Chertsey, Surrey. Auctioneers, 20, St. James's-square, S.W.1.

★NO DATE.—**Sussex.**—Messrs. Knight, Frank & Rutley (Preliminary Announcement) will offer for sale during the summer (unless previously disposed of privately) by direction of the Dennis Estates, Ltd. freehold seaside building property adjoining the town of Littlehampton, Sussex, comprising the Climping Estate. Auctioneers, 20, Hanover-square, London, W.1.

Public Appointments.

★JULY 14.—**Warwick.**—Temporary Architectural Assistant required for a period of about 12 months, with experience in connection with Elementary and Secondary Schools will be an advantage. Mr. A. C. Bunch, F.R.I.B.A., County Architect, County of Warwick, 27, Binswood-avenue, Leamington.

JULY 15.—**Nuneaton.**—Building Inspector and General Assistant required in the Borough Surveyor's Office. Mr. R. C. Moon, A.M.Inst.C.E., Borough Engineer, Municipal Offices, Nuneaton.

★JULY 15.—**Walthamstow.**—Painter Clerk of Works required by the Education Committee for a period of five weeks. Mr. S. W. Burnell, Director of Education, Education Committee Offices, 263, High-street, Walthamstow, E.17.

JULY 16.—**Neath.**—Architectural Assistant and Temporary Architectural Assistant required by Glamorgan C.C. Mr. W. James Nash, F.R.I.B.A., County Architect, Metropolitan Chambers, Neath, Glam.

★JULY 16.—**Southport.**—Temporary Architectural Assistant in Borough Engineer's Department required by the County Borough Council of Southport. Mr. A. E. Jackson, M.Inst.C.E., Borough Engineer, Town Hall, Southport, with copies of not more than three recent testimonials, endorsed "Temporary Architectural Assistant."

★JULY 18.—**Norfolk.**—Competent Builder's Clerk and Accountant required for the Buildings Department of the Small Holdings Committee of the Norfolk County Council. Mr. Victor Playle, County Land Agent, The Shirehouse, Norwich, with copies of two recent testimonials.

SEPTEMBER.—**London, S.E.1.**—(*a*) Lecturer in architecture and building; (*b*) instructor in brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week. Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1.

★NO DATE.—**Clacton-on-Sea.**—Temporary Engineering Assistant required by the U.D.C. Mr. G. T. Lewis, Clerk to the Council, Council Offices, Clacton-on-Sea.

★NO DATE.—**Hong Kong.**—Overseers (two) required by the Government of Hong Kong, for the Public Works Department, for three years' service, with possible permanency, to supervise work in connection with the maintenance, repairs, and minor extensions to Government buildings. Apply at once, by letter, stating age, qualifications and experience, to the Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1, quoting M–12921.

★NO DATE.—**Hong Kong.**—Assistants (three) required by the Government of Hong Kong for service in the Architectural Office of the Public Works Department, for a period of three years, with possible permanency. Apply at once, by letter, stating age, qualifications and experience, to the Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1, quoting M–12919.

★NO DATE.—**Kingston-upon-Thames.**—Instructors in theoretical carpentry and joinery (two evenings per week) and building theory of construction (one evening per week) required by the Borough Council of Kingston-upon-Thames. The Principal, Science and Art School and Technical Institute, Kingston Hall-road, Kingston-upon-Thames.

Sir Alfred Yarrow's Offer Rejected.

The Improvements Committee of the Westminster City Council report as follows:—

"Sir Alfred Yarrow has submitted to us a model and drawing showing the proposal from which it would appear that the proposed elevated crossing would have a length of about 680 ft. and a width of about 21 ft. 6 in., and would extend from the eastern end of the Wellington Monument island site, opposite Apsley House, to a point 100 yds. westward along Knightsbridge. Mr. Bassom, Chief of the Traffic Branch of the Metropolitan Police, attended our meeting. We have given the proposal our careful consideration and in view of the interference with private property, the partial obscuration of the entrance to Hyde Park, and general objections likely to be raised from an æsthetic point of view, as well as other difficulties, we are unable to recommend that Sir Alfred Yarrow's offer be accepted. The Works Committee on June 17 concurred in the views of the Improvements Committee.

PROPOSED NEW BUILDINGS & OTHER WORKS

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ACCRINGTON.—The B.S. has been requested to submit an estimate of the cost of providing an additional entrance to Haworth Park from Manchester-road. Plans have been approved of a house in Laund-road for Councillor Constantine, a house in Claremont-road for Mr. W. Ramsbottom, bungalows in Mosshall-road for Mr. J. W. Dean, and a semi-detahced house in Claremont-road for Messrs. Tasker & Greenwood.

ALNWICK.—Plans have been prepared for a new wing at the Alnwick Infirmary, at an estimated cost of £1,500 to £1,600.—The M.H. has approved of the houses proposed to be erected in the U.D.C. area by private enterprise.

ASHTON-UNDER-LYNE.—The proposed alterations and extensions to the Littlemoss C.E. School came before the members of the District E.C.; it was decided to forward them to the B.E. It was stated that the land had been given by the owner for the extension as well as sufficient on which to build a church, and the cost of the alterations and extensions has been raised.

AUDENSHAW.—The Wilshaw Chemical Co. have acquired a house and land at Haughton-road as a site for extensions to their works.

AYR.—The Dean of Guild Court has passed the following plans: Ayr T.C., to erect 66 houses in St. George's-road, estimated cost £14,000; Quintin Clark, builder, three shops, at Tam's Brig; A. Dunlop, 28, St. Leonard's-road, bungalow in Robsland-avenue; William Clarke, builder, bungalow in Clarke-avenue; J. & D. Meikle, builders, house at Bellvale-avenue; Q. Clark, double cottage in Bellesleyhill-avenue.

BANGOR.—The T.C. are proposing to adapt the old buildings of the Snowden Flake Flour Mills, Dean-street, as an electrical engineering laboratory. They have also been recommended to increase the hostel accommodation for provision for additional students to the College.—The C.C. are recommended to purchase nearly 10 acres of land from the Penrhyn Estates for £2,720 for a new cemetery, and to apply for sanction from the M.H. to borrow £5,300, the estimated total cost of the land and lay-out.

BILLINGE.—Plans have been approved for erection of two houses in Orrell-road and house in Upholland-road.

BIRKENHEAD.—Proposals are to be considered by the T.C. for the erection of a new art gallery, on a site opposite the Central Station. The cost, including new roads and alterations to the existing thoroughfare, is estimated at about £90,000.——The Warehouse Committee of the Mersey Docks and Harbour Board are proposing to erect a warehouse with wooden floors.

BIRMINGHAM.—The Franciscan Fathers at the Monastery, Olton, are proposing to erect a church on an adjoining site, estimated to cost £10,000.

BLACKBURN.—The application of Canon Sinker, R.D., for permission to erect a stained glass window in the Church of England Chapel at the cemetery has been granted by the Corporation, subject to the work being carried out to the satisfaction of the Borough Engineer. The Borough Engineer has prepared a plan for the lay-out of the Parish Church Yard, which has been referred to a Corporation Sub-Committee.

BLACKPOOL.—The E.C. are proposing relaying the floor of the Secondary School with wood blocks, and are to decorate and paint various schools in the districts. Tenders are to be invited. The Talbot Central Agency is proposing to erect houses on a site at St. Anne's-on-Sea.

BOLTON.—The Committee of the Rumworth and Hulton Labour Club are proposing to considerably extend their premises, estimated to cost £400.

BOURNEMOUTH.—Plans passed by T.C.: Conversion into flats, "Belle Vue," Beaufort-road Mr. S. Adams; two houses, Southbourne-Overcliffedrive, Messrs. Bunning & Patrick; house, Grove-road, Mrs. Fane; house, St. Ledger's-road, Mr. C. V. Miller; house, Highfield-road, Mr. S. Hawkins; two houses, Harewood-avenue, Messrs. Midgley & Hardy, Ltd.; house, 5, Branksome Wood-road, Mr. J. Small; house, St. Luke's-road, Mr. A. Barnes; house, Boscombe Cliff-avenue, Mrs. H. D. Jackson; two houses, Beaufort nad Burleigh-roads, Messrs. H. B. & E. Mudge; conversion into flats, 7, Grand-avenue, Mr. Wyatt; house, Ravine-road, Mr. R. J. M. Nabney; house, Charminster-avenue, Mr. B. E. Crowe; three houses, Castlemain-avenue and Inverleigh-road, Mr. T. O. Barrett; house and garage, Ravine-road, Messrs. E. M. Drewitt & Co.; house, Southill-road, Mr. E. T. Payne; two houses, Harewood-avenue, Messrs. H. B. & E. Mudge; house, 21, Bishop-road, Mr. B. Godfrey; house, St. Luke's-road, Mr. C. H. Belbin; house, St. Luke's-road, Mr. A. Barnes; house, Eldon-road, Mr. J. H. Roberts; two houses, Withermoor and Sedgeley-roads, Mr. A. E. Hoare; house, Inverleigh-road, Mrs. Hewitt; house Kemp-road, Mrs. Ferrer; conversion into two flats, "Westdene," Pinecliffe-avenue, Mrs. F. McLaughlin; house, Portland-road, Mr. J. Dommett; house, Norton-road, Mr. Weston; house and garage, Queen Park avenue, Mr. F. J. Finlinson; house, Kimberley-road, Mr. Hayes; house, Pickford-road, Mr. Westcott; two houses and garages, Cecil Hill, Miss M. Saunders; house, Carbery-avenue, Dr. A. H. B. Hartford; house and garage, corner of Namu and Mansfield-roads, Messrs. Burt & Son; house, Elmes-road, Mr. A. E. Rockett; bungalow, Westfield-road, Mr. E. Broughton; bungalow, corner of Charminster and Strouden-roads, Mr. Carpenter; house, King George-avenue, Mr. F. E. Billett; two houses, Bloomfield-avenue, Mr. G. Cooke; house, Portland-road, Mr. F. Jeans; house, Albemarle-road, Mr. T. R. Stevens; bungalow, Southbourne Overcliffe-drive, Messrs. Whiting & Edmunds; house, Tennyson-road, Messrs. Way & Marshall; bungalow, Rowena-road, Mr. G. Street; house, Danesbury-avenue, Mr. E. Walker; house, corner of Boscombe Overcliffe-drive and Ravine-road, Mr. R. J. M. Nabney; house, De Lisle-road, Mr. Franks; house, Pickford-road, Mr. G. Jones; two houses, Rowena-road, Mr. T. Sutcliffe; bungalow, Danesbury-avenue, Mr. A. E. Spruce; rebuilding of premises, 134, 136 and 138, Old Christchurch-road, The Bournemouth Gas and Water Co.; house, Danesbury-avenue, Mr. S. Thomas; house, Castlemain-avenue, Mr. E. G. Stay; two houses, Tuckton-road, Mr. W. A. Crosby; house, Eldon-road, Mr. W. H. Light; house, Dingle-road, Mr. J. Newbury; two houses, Watcombe-road, Mr. C. B. Philpot; three houses, St. Luke's-road, Mr. W. Moore; house, Clarence Park-road, Mr. A. R. Barnes; house, St. Luke's-road, Mr. C. H. Belbin; two houses, Southbourne Overcliffe-drive, Messrs. Midgeley & Hardy; two pairs of semi-detached houses, Southbourne Overcliffe-drive, Messrs. Midgeley & Hardy; house, De Lisle-road, Mr. Edgeley; three shops and two flats, corner Holdenhurst and Richmond Park-roads, Mr. S. Gidlow; three houses, Grange-road, Messrs. Golton Bros.

BRADFORD.—In connection with the construction of Scar House reservoir, it is now proposed to enlarge the capacity by raising the tap water level, at an additional cost of £90,000.

BRECON.—The County War Memorial Committee is to proceed with the erection of a new County Hospital, on a site near Brecon.

BRIDGEND. — The U.D.C. is to present to the Glamorgan C.C. alternative schemes of a 40 and 50 ft. widening of the Tondu-road, by the joint action of the two authorities.—Plans passed by U.D.C. are as follows: Two houses at Brynteg, for Messrs. Wardlow & McDonald, Bridgend; house for Mr. Rhys Williams, at Grove-road; house, at West-road, for Mr. O. Walters Rees, Bridgend; bungalow at Llangynydd-road, for Mr. William Johnson, Bridgend.

BURNLEY.—The R.D.C. have received sanction from the M.H. to borrow £5,000 for the purpose of grants under the Housing Act. A memorial, to take the form of an oak panelling round the sanctuary, with a carved and canopied sedilian, is to be placed in St. Margaret's Church, estimated to cost £300.—Plans passed by T.C.: Warehouse, Barnes-street, for R. Parkinson & Sons.——With a view to the erection of further houses the Corporation are ascertaining the needs of the township.

BURY.—The Bury and District Joint Board are proposing to erect a motor garage and petrol shed at the Florence Nightingale Hospital. Plans have been approved for the erection of two shops in Stanley-street for Mr. J. Clegg. The Tramways Committee recommended that an "Umbrella" shelter be erected in the centre of the Market Place.

CARDIGANSHIRE.—The B.G. proposes to alter and extend the accommodation at the Altso Castle Institution, at an estimated cost of £4,000.—The County Small Holdings Committee will shortly invite tenders for work required to be done at Gelmast.

CASTLEFORD.—A scheme is to be prepared, in connection with the Miners' Welfare Committee, for the provision of a technical and mining institute for Castleford and Normanton.

CHEADLE.—The D.C. have under consideration the construction of a new road from Wilmslow-road to Highgrove-road. The surveyor has been instructed to prepare plans and estimates for making-up Bird Hall-lane. An improvement is to be made to the road frontage of the "Waggon and Horses" Hotel.

CHELMSFORD.—Plans passed by T.C.: House Broomfield-road, for Mr. A. C. King; house, Galleywood-road, for Mr. J. Yarrow; house, Cedar-avenue, for Mrs. S. S. Josling; house, Galleywood-road, for Mr. J. C. Urquhart; bungalow, Wood-street, for Mr. H. W. Hockley; house, Galleywood-road, for Mr. W. Underwood; 15 houses in two blocks of six and one of three, in Marconi-road, for Mr. W. Digby; pair of houses, Writtle-road, for Mr. V. G. Crittall; house, Bishops-road, for Mr. G. C. Newcombe.

CLEVELEYS.—Plans passed by D.C.: Detached villa off Queen's-walk, for Mr. Wilson; two semi-detached houses, South-drive, for Mr. J. Eyre; house and shop, Victoria-road, for Mr. P. Foulkes; two shops and a house, Victoria-road, for Mr. Fox; pair semi-detached houses, Queen's-walk, for Mr. T. Clark.

COLNE.—The Corporation Water Works Committee are proposing to erect a new filter house at the Laneshaw Reservoir. Tenders are to be invited immediately. Plans have been approved for a bungalow on the Bott House Estate for Mr. H. J. Hay; plan for proposed street sections on the Bott House Estate for Messrs. Normanton & Ormerod; amended plan of three houses in Parker-street, for Mr. R. Fothergill. Sanction has been received by the T.C. from the M.H. to borrow £2,000 for prospective expenditure on new water mains. Extensive repairs are to be undertaken at the gasworks, estimated to cost £1,500.

CRICCIETH.—The T.C. have approved a sewerage scheme estimated to cost £4,700.

CROMPTON.—The T.C. are proposing to acquire suitable buildings for a school clinic, or to build new premises. It is proposed to acquire land at Nook for a playground, and to rail off the Salts-street plot.

DARTFORD.—Plans approved: Six houses, Havelock-road, for Mr. H. C. Wright; house, Wayville-road, for Miss Newnham; house, stable and slaughter-house, Norman-road, for Messrs. Harrison, Barber & Co., Ltd.

DENABY.—Arrangements are now complete for the reconstruction of the Pasture Bridge over the South Yorkshire Canal between Denaby and Mexborough.

DEWSBURY.—The stables in Earlsheaton-Park are to be converted into lavatories and shelters, at an estimated cost of £1,000. A scheme of alterations is to be carried out at the Library to permit of the open-access system being put in vogue, at an estimated cost of £400. The M.H. and M.T. have agreed to a grant of £12,037 being made towards the cost of widening Huddersfield-road from Quarry-road to the Ravensthorpe Railway Station.——Plans passed: Sports pavilion at Oxford-road, for Mr. Hy. Cullingworth; shop premises, Northgate, for Messrs. G. H. & F. Hill; new Workingmen's Club at Edge-lane, for the Edge-lane W.M.C., Thornhill; house at Combs-road, for Mrs. Shirtcliffe; warehouse at Watergate, for Messrs. William Barraclough & Co.; lock-up shop, Staincliffe-road, for Mrs. E. Sykes; and house at Caledonian-road, for Mrs. A. Child.

DUBLIN.—Plans passed by T.C.: Prospect-road, Glasnevin, engineering shop, Mr. Cahill; Donore-avenue, S.C.R. church, Rev. Father Hayes, P.P.; West-road, four houses, St. Barnabas' Public Utility Society; Seafield-road, eight houses, Messrs. O'Scannill and others; South Earl-street and Wilson's-terrace, 18 cottages, Mr. J. Cross.

DUNDEE.—Plans and sections of proposed new buildings, &c., in Dundee have been lodged at the office of the City Engineer: Arbroath-road and Ferry-road, houses, &c., for J. & E. Shepherd; Coupar Angus-road, washhouse, &c., for Joseph Murray; Lammerton-terrace, rear of, bungalow, for Charles Gray; Loons-road, sub-station for Corporation Electricity Supply Dept.; Oxford-street and Cambridge-street, house, for W. M. Patrick; Oxford-street, sub-station for the Corporation Electricity Supply Dept.

EDINBURGH.—Plans passed by Dean of Guild Court: Davidson Memorial U.F. Church, to complete existing tower and erect spire on the church at Evre-place; J. Gavine, four bungalows at Alnwickhill-road, Liberton; T. J. Walls, bungalow at Caroline-terrace, Corstorphine; J. B. Alexander, four self-contained houses at Liberton; Edinburgh Academy, school offices, at Henderson-row; R. W. Pentland, erection of two additional stories to premises in rear of 28, Frederick-street.

EPSOM.—Plans passed by R.D.C.: Bungalow, Barnett Wood-lane, Ashtead, for Mr. C. Davies; cottage and class-room at The Mead, Ashtead, for Mrs. Bell; house on Warren House, Ashtead, for Mr. H. Escritt; laying out of streets, and construction of sewers, &c., on West Farm Estate, Ashtead, for Mr. G. Baker; bungalow on No. 2 road, Great Bookham, for Mrs. J. H. Morse; bungalow on Lower-road, Great Bookham, for Dr. E. F. C. Dowding; house near The Park, for Mr. H. Akhurst; house at The Park, for Mr. S. T. Matthews; bungalow, Guildford-road, Great Bookham, for Mr. W. Francis; bungalow, Eastwick-drive, Great Bookham, for Mr. A. L. King; house, Middle-road, Fetcham, for Mr. R. W. Stevenson; bungalow for Mrs. Hamilton at Headley.

ETON.—Plans passed by R.D.C.: Stoke Poges, house, New-road, for Sir Almroth Wright; Dorney, house, Dorney Reach, for Mr. A. F. Pollard; Gerrards Cross, house, Bulstrode Way, for Mr. J. G. Dodwin; house, Oche Hill-avenue, for Mr. H. Dickson; Farnham Royal, house, Beaconsfield-road, for Mr. A. Hales; Wraysbury, bungalow, Mr. T. G. Walker; Burnham, boiler-house at the Trading Estate for Channel Chemical Co., Ltd.; Denham, bungalow on the Higher Denham Estate, for Mr. R. Bradbery; Gerrards Cross, house on Woodhill Estate, for Mr. C. P. Lovell; Horton, bungalow, for Mr. F. G. Beaton; Wexham, bungalow, Church-lane, for Mr. F. Piggott; Iver, bungalow, Langley-road, for Mr. T. L. Glanville; Gerrards Cross, house on Woodhill Estate, for Mr. J. E. Rogers; Wexham, pair of cottages, for Mr. C. M. Woodbridge; Denham, bungalow, New-road, for Mr. F. J. Redding; Langley Marish, bungalow, Shaggy Calf-lane, for Mr. E. Sargeant; two bungalows, for Mr. H. D. Bowyer; Gerrards Cross, house, Marsham Waye, for Mr. P. Turner; Wraysbury, bungalow, Staines-road, for Mr. N. J. Holland; Horton, two bungalows, Coppermill-road, for Messrs. Ball Bros.; Datchet, bungalow, Horton-road, for Mr. A. E. Scott; Iver, house, Uxbridge-road, for Mr. A. N. Hazelhurst; Burnham, bungalow, for Mr. A. Hall; Farnham Royal, bungalow, for Mrs. A. Smith; Iver, house, in Love-lane, for Mr. H. Islip; Denham, bungalow, Oxford-road, for Mrs. A. S. Adams.

FAILSWORTH.—The managers of the Minor-street schools are making application to the District E.C. at Ashton-under-Lyne for additional accommodation in the Senior Mixed department.

FALLOWFIELD.—Foundation stones have been laid in connection with the erection of a new Baptist Chapel in Wilbraham-road, estimated to cost £6,000. The contractors are Messrs. W. Thorpe & Son, Cornbrook, Manchester.

GLAMORGAN.—The Pontardulais Mechanics' Institute is to erect a public hall, at an estimated cost of £6,000. The site has been chosen and the Llandeilo and Talybont Council has accepted the Institute's offer to take over, free of cost, the building when completed and maintain it.—The Gower R.D.C. has received sanction to borrow £2,000 for road resurfacing work. The Council has decided to make up the road leading to Pennard Golf Clubhouse, at an estimated cost of £600; the club is to bear part of the cost.—The County E.C. has notified the Llandeilo-Talybont Council that it intends to erect a new school for 100 scholars at Pontilliw.—The Gellygaer U.D.C. has been notified that the Miners' Welfare Committee has made grant of £1,500 for lay-out of recreation grounds at Bedlinog.—The Penarth U.D.C. has decided to press for sanction to erect 44 terrace type houses.

GOOLE.—A scheme of extensions, to cost £10,935, has been prepared by the Governors of the Secondary School.

See also our List of Contracts, Competitions, etc.

GUILDFORD.—Plans passed by T.C.: House, Wodeland-avenue, by Messrs. Hodgson, Lunn & Co., for Mr. T. Westlake; bungalow, Wodeland-avenue, by Mr. Frank Leeks, for Mr. Frank Leeks; bungalow, off Aldershot-road, by Mr. George Sharp, for Mr. George Sharp; bungalow, Grange-road, by Mr. C. Nichlen, for Mr. W. Penfold; house, Pit Farm-road, by Mr. J. M. Rutter, for Messrs. J. M. Rutter & Co.; pair of semi-detached houses, Josephs-road, by Mr. Thos. Dyer; house, Stoke-road, by Mr. W. Sheppard, for Mr. C. A. Pullen; house, London-road, by Messrs. Norris & Shattock, for Miss Bunting; house, Weston-road, by Messrs. Hodgson, Lunn & Co.; house, Aldershot-road, by Messrs. Hodgson, Lunn & Co., for Mr. L. Trussler.

HARROGATE.—The managers of the Technical School are to provide accommodation for an engineering laboratory, at a cost of £350.

HASLINGDEN.—The M.H. have sanctioned the purchase of the Rising Bridge and Fields-road housing estates by the T.C.

HASTINGS.—Plans passed by T.C.: House and shop, Old London-road, for Mrs. Henson, per Mr. P. H. Oxley, architect; bungalow, Bexhill-road, Mr. H. V. Nicholson, per Mr. H. Stroud, architect; conversion into flats of No. 18, Pevensey-road, Mrs. Grierson-Lowe, per Mr. P. H. Oxley, architect; house, Filsham-road, Mr. John Cuthbert, per Mr. A. R. Henderson, architect; house, Filsham-road, Mr. H. B. Sales, per Messrs. Callow & Callow, architects; house, Trinity Villas, Cambridge-road, Mr. H. J. Stickells, per Mr. J. Hunt, architect.

HATFIELD.—The Colliery Co. are erecting 116 houses at Dunscroft in addition to the second instalment of 500 houses which are to be erected on the Park Estate.

HAYES.—Plans passed by U.D.C.: Twelve houses, Yeading-lane, for Messrs. S. A. & G. Neal; bungalow, Uxbridge-road, Mr. A. H. Fawn; rebuilding "The Angel" public-house, Uxbridge-road, Messrs. Fuller, Smith & Turner; bungalow, Uxbridge-road, Mr. T. Danby; extension of sewer, Uxbridge-road, White Hart Building Estate: house, Uxbridge-road, Mr. A. J. Harding; bungalow, Yeading-lane, Mr. E. Curtiss.

HEBDEN BRIDGE.—The U.D.C. has decided to erect another 12 houses at Eaves Bottom.

HEYWOOD.—The Phœnix Brewery Co., Ltd., propose to convert the old "Woolpack Inn" into two houses, and also erect two houses.

HODDESDON.—Plans passed by U.D.C.: Mr. H. A. Trotter, pair of houses in High-street; Mr. F. Postlethwaite, house, Hertford-road; Mr. Maurice Smith, 10 pairs of houses in Hertford-road.

HULL.—Houses approved for subsidy: R. W. Trigg, 10 houses, Aisne-street; T. R. Barnett, six houses, Desmond-avenue Estate; H. Spruit, five houses, Newcomen-street; W. H. Wright, four houses, Westcott-street; A. Robertson, house, New-road Anlaby-road; E. Pickering, seven houses, Portobello-street; A. N. Whincup, 16 houses, Faraday and Kelvin-streets; G. T. Spruit, nine houses, Newcomen-street; H. Spruit, house, Newcomen-street; R. W. Trigg, 15 houses, Perth-street; A. Harrison, two houses, Aberdeen-street; J. E. Wray, 10 houses, Lee-street.

ILKLEY.—The U.D.C. has appointed a committee to consider the cost of building a public swimming bath and other baths at Ilkley.

KIRKHAM.—At a meeting of the Kirkham Church Memorial House Committee consideration was given to the question of the proposed extensions, and contracts were let for the carrying out of the work.

KNUTSFORD.—The D.C. are proposing to adapt the Women's Quarters at the prison for housing purposes. The Surveyor has been instructed to obtain tenders for the necessary alterations and renovations.

LANCASTER.—Plans passed: Bungalow, Heaton-road, for J. Creighton.

LEEDS.—Subsidies granted: T. E. Ellison, six houses, Lancaster-grove, Victoria Park, Bramley; W. C. Rodgers, four houses, Talbot-grove, Street-lane; Norman Teal, house, Town-street, Middleton; Dr. Marion Mackenzie, house, Cumberland-road, Headingley; Mrs. M. L. Webb, bungalow, Vancouver-place, Chapel Allerton Hall Estate.

LEVENSHULME.—The Manchester E.C. are proposing to convert the Alma Park Municipal School into a District Central School and also to establish a handicraft and domestic centre. The estimated cost being £5,246.

LEYLAND.—The district surveyor has prepared plans for the making-up of Herbert-street, Newsome-street, part of John-street, and the streets on the north and south sides of the Public Hall buildings. Tenders are to be invited.

LIMEHURST.—The D.C. are considering repaving the main road form Bardsley to Waterloo, and the formation of a modern footpath.

LIVERPOOL.—The L.M.S. Railway Co. are considering the reconstruction of the South-road entrance to Waterloo Station, with probably an addition of shops and offices and improvement of the staircase. The Housing Committee recommend that the City Engineer be authorised to erect 100 houses on the Edge-lane-drive Estate, at a cost not exceeding £520 per house. New tramcar works are being constructed on land in Edge-lane. The area of the land is about 15 acres, of which approximately 7¾ acres will be covered by the works buildings and offices, and about 1 1-5 acres on the site by the car depot. The parishioners of St. Polycarp's Church, Netherfield-road, Everton, are to reconstruct the parochial school premises, at a cost of £1,000. ——The district surveyor has prepared plans for the making-up of Herbert-street.——A new permanent building is to be erected for St. Michael's R.C. Church, Blundellsands, on a site that has been secured.

LLANDYSSUL.—The Council is to erect a bridge at Trebedw Henllan. The Council has passed plans as follows: Two cottages for Mr. Tom Jones, Myrtle-grove; villa for Mr. Evan Evans, Pontywelly; house for Mr. E. Evans, Newcastle Emlyn.

LLANELLY.—The E.C. is to build two new central schools. A new school is to be erected in Queen Mary's-walk and one at Llanerch. The present Park-street boys' school is to be converted and will be used for infants.

LONDON (LAMBETH).—H. Payne Wyatt, buildings, 132–163, Waterloo-road; P. A. Hamilton, buildings, 163 and 165, Upper Kennington-lane.

LUTTERWORTH.—Plans have been passed by the R.D.C. for a house at Gorse-lane, Shearsby, a house at Frolesworth for Mr. Harrison, and a house in Dunton-lane, Broughton, Astley, for Mr. Warden.

LYTHAM.—A site of 1½ acres at the Preston end of Lytham Promenade, near the old Custom House, has been acquired for the Preston Borough Police Children's Convalescent Home. A substantial brick building is to be built, and used as a convalescent home for children.

MALDENS AND COOMBE.—At the U.D.C. the surveyor outlined the district proposals in relation to roadways to be constructed under the District Town-Planning scheme, and also as regards density, zoning, building lines, &c., which the committee approved. Plans passed: Twenty-four houses, Albert-road, for Mr. S. E. Parkes; eight houses, Blake-lane, for Mr. R. Lewis; house, Coombe-lane, for Mr. J. Lomax; cottage, Acacia-grove, for Mr. A. Eborall; house, Coombe Bank Estate, for Mr. E. Morris; house, Thetford-road, for Messrs. Robertson & Morgan; house, Sandal-road, for Messrs. Limpus & Son; and electricity sub-station, Malden-road, for the Wimbledon B.C.

MANCHESTER.—The Board of Management of the Babies' Hospital, Slade-lane, Levenshulme, are proposing to erect a new wing to the existing building.—Plans passed by the Manchester Corporation: Thrope & Collier, for Godfrey & Sons, four houses, Carlton Range, Gorton; L. Ledger, for H. J. Ogden, store and office, rear of 11, Cumberland-street, Deansgate; C. Heathcote & Sons, for Mark Foy, Ltd., warehouse and offices, Little Lever-street and Houldsworth-street; H. H. Allen, for Hon. R. H. Cawley, house to Bowker Vale Works, Crumpsall; E. Dawson, for Sherloff Bros., revised plan of warehouse, High-street; F. Butterworth, for self, revised plan of two houses in Polefield-road; J. Gourlay, for self, revised plan of house, Crumpsall-lane; Whitelegg & Bowler, for H. Vollman & Son, Ltd., redeposition of plans and sections of warehouse, Hilton-street, Newton-street, and Little Lever-street.—Plans passed: Alterations, 67, Brook-street, Chorlton-upon-Medlock; alterations, 26, Fairfield-street; alterations to Hanover Mills, Euxton-street, London-road; additions to premises, Higher Ardwick; additions to works, Colliery-street, Clayton; conversion of house into shop and house, 325 and 327, Bradford-road; 20 houses, Albert-road and Belgrave-road, Crumpsall; two houses, Barrow Hill-road, Cheetham; two houses, Park-road, Crumpsall; two houses, Polefield-road, Blackley; four houses, Rectory-road and Parsonage-street, Crumpsall; nine houses, Glen-avenue, Goodman-street and Cobden-street, Blackley; 16 houses, Clevedon-street and Vernon-street, Moston; two houses Polefield-road, Blackley; house, Burnage Hall-road, Burnage; two houses Clifton Avenue, Burnage; two houses, Neston-avenue and Leighton-road, Withington; two houses, Veronica-road, Didsbury; two houses, Kingsway, Rusholme; five houses, Wilmslow-road and Park-field-road, Didsbury; house, St. Brannock's-road, Chorlton-cum-Hardy; two houses, Egerton-road South, Chorlton-cum-Hardy; three lock-up shops, Platt-lane, Withington; two houses, Manley-road and Blenheim-avenue, Withington; conversion of portion of "Wellington Hotel," Nicholas Croft, into offices; offices and testing laboratory to works, Ashton New-road, Clayton; pump house, &c., to Ashenhurst Dye Works, Blackley New-road, Blackley; house, Moston-lane, Moston; shop and workrooms, Little Lever-street, Faraday-street and Stevenson-place; three houses, Errwood road and Crompton road, Levenshulme; house, Pine-road and Parkfield-road, Didsbury; warehouse, New Wakefield-street, Oxford-street; four houses, Manley-road, Withington; house, Withington-road, Withington; corn store, Coupland-street and Greenheys-lane, Chorlton-upon-Medlock; store room to mill, Worsley-street, Hulme; house, St. Werburgh's-road, Chorlton-cum-Hardy.

MARSDEN.—The U.D.C. are to erect 36 houses at Mount-road, for owner-occupiers.

MONMOUTHSHIRE.—The Chepstow U.D.C. has passed plans as follows: House at Larkfield, for each of the following: F. W. Hammond, F. E. Millward, and R. E. Watson; bungalow at Bayfield, for Mr. Scott. The Chepstow R.D.C. has received M.H. sanction to extend its housing scheme by erection of 12 additional houses. The Council has passed plan for a bungalow at Pwllmeyric, for Mr. J. F. Parkman.—The Llantarnam U.D.C. has received sanction to erect an additional 25 houses. The Council will contribute £300 toward the cost of fencing, &c., the Clomendy road, to be undertaken by Messrs. Guest, Keen & Nettlefolds, Ltd. colliery proprietors.

NELSON.—The Borough Brick Co., Ltd., are proposing the erection of an electrical sub-station in Railway-street.

NEWBURN.—The U.D.C. has arrived at an agreement with the L.N.E. Rly. Co. and the Newcastle Corporation for the construction of a subway under the railway at Lemington.

OLDHAM.—The Parochial Church Council of Christ Church, Friezland, are proposing extensive repairs to the roof of the edifice. A site has been secured by the congregation of Eagle-street Wesleyan Mission for the erection of a new church. The members of Busk Wesleyan Church propose extensive extensions to their premises.——Plans passed: A. Redfern & Son, four houses, Burlington-avenue; A Savage, lock-up shop, &c., Huddersfield-road, Waterhead.

OXFORD.—Plans passed by T.C.: A. L. Alexander, house, Belbroughton-road; Upton Hill & Co., two lock-up shops and shop and business premises, George-street; Mrs. Mullaly, house, Linton-road; E. D. Perkin, house, Lonsdale-road; Miss Shepherd, house, Belbroughton-road; The Town & County Wine Co., Ltd., mineral water factory, Sidney-street; A. E. Carter, house, Botley-road; Messrs. Hinkins & Frewin, two houses, Hamilton-road; Messrs. Humphreys, Ltd., grand stand, Rugby Football Club, Iffley-road; University of Oxford, second portion of the buildings in connection with the School of Pathology; The Governors of Lady Margaret Hall, block of buildings as students' quarters east end of Norham-gardens; J. Gray, house, Catherine-street.

PEMBROKESHIRE.—The Pembroke T.C. has received sanction to expend £2,800 on laying out recreation grounds at Pembroke Dock. The Council has instructed the preparation of plans for two pavilions and lavatory accommodation in connection with the scheme.

PENARTH.—The Council is empowered to borrow £12,300 for strengthening and reconstructing the present landing stage and subsidiary works and £3,400 for other constructional works.

PETERBOROUGH.—The T.C. is seeking sanction to a loan of £800 for the erection of a welfare centre at Brook-street. A loan of £7,392 has been sanctioned for the erection of 16 houses at Grange-road. The engineer has submitted a preliminary estimate of the cost of the reconstruction of Thorpe-road, Oundle-road, and London-road, such estimate amounting to £36,000.—The Council is negotiating for the purchase of the Glebeland for housing purposes.—Plans recommended: House, Fairfield-road, for Mr. Cox; house, Mayors-walk, for Mr. C. Ball; house, Grange-road, for Mr. G. H. Bird; two villas at Park-road, for Mrs. C. Howitt; four houses at Stone-lane, for Mr. E. Langsley; villa at Park-road, for Miss Torey; four houses at Fairfield-road, for Messrs. Corner & Campion; house at Eastfield, for Dr. J. Walker; covering in yard at Wentworth-street, for Mr. Birdett.

PONTEFRACT.—Plans passed by T.C.: House in Micklegate, for Mrs. Leach; bungalow in Mayor's-walk, for Miss E. M. Marshall; two houses in Friarwood, for Mrs. Westerman; house at Monkhill, for Messrs. W. R. Wilkinson & Co.; conversion of stable into cottages in Micklegate, for Messrs. W. J. Robson & Co.; and petrol filling station in Wakefield-road, for Messrs. Hill Bros. & Sons. The B.S. has been instructed to prepare plans for erection of 60 houses on the allotment field in Lovelane. The M.H. has sanctioned loan of £694 for laying of new sewers in The Mount and Halfpenny-lane.

PORTISHEAD.—Plans passed: Pair of semi-detached villas in Woodhall-avenue for Messrs. Perkins & Day, and a house in St. Mary's-road for Mrs. Pearce.

POULTON.—The following plans were approved: E. Ellison, for pair of houses in Curzon-road; H. Atkinson, for bungalow in Victoria-road; J. Cookson, for house in Blackpool-road; Poulton le Fylde Auction Mart Co., Ltd., for lay-out of estate off Tithebarn-street. Messrs. Bentley Bros., and Mrs. F. E. Fisher, for pair of houses in Poulton-road West; Messrs. D. T. Brown & Co., for boiler house adjoining premises occupied by them.——An inquiry has been held into the Poulton, Hardhorn and Carleton Burial Board's application to borrow £6,500 for the purpose of the cemetery at Poulton.

PRESTON.—The B.G. have received sanction from the M.H. for extension to the Day Room at the Ribchester Institution, application is to be made to borrow the amount of the expenditure. The Parks and Baths Committee are proposing to form paths round Ribchester Park, at a cost of £300, and to erect a shelter in Deepdale Park.

RADCLIFFE.—The Parochial Church Council of the New Jerusalem Church, Stand-lane, are proposing to paint and decorate the interior and exterior of the church premises.

REIGATE.—Plans passed by R.D.C.: Bungalows at Betchworth, for Messrs. R. Heath and Denis Cox; bungalow at Chaldon, for Mr. J. J. Loe; house, Chipstead, for Mr. J. J. Shaw; bungalows at Horley for Miss E. A. Burton and Mr. J. Wille; house, at Horley, for Mr. H. H. Ross; cottage at Kingswood, for Mr. C. E. Bartholomew; two bungalows at Merstham, for Mr. J. C. Barling; pair of cottages at Walton-on-the-Hill, for Mr. H. B. Wetherell; 12 houses at Walton-on-the-Hill, for Mr. Birt Davies.

ROCHDALE.—Plans passed by T.C.: L. Fletcher, 16 houses, Viking-street; East & Cocker, two bungalows, Linnet Hill; Ed. Butterworth, house, Oldham-road; Turner Bros. Asbestos Co., Ltd., ambulance room, Spotland Mills; U.M.C., Baillie-street circuit, minister's house, Edenfield-road; Jas. Blomley, two houses, Philip-street.——The B.G. are proposing renovations and redecorations to their premises, tenders are to be invited. Plans of four houses to be built in Edenfield-road were approved.

ROCK.—Plan passed: Bungalow at Church-road, for Mrs. A. E. Hughes.

ROMNEY MARSH.—Plans passed by R.D.C.: Bungalow at Dymchurch, for Mrs. Else; bungalow at Five Vents, for Mr. G. Wimble; bungalow for Miss Wright, and house at Snargate, for Mr. J. Huggett.

ROSYTH.—Dunfermline Dean of Guild Court has granted warrant to the Garden City (Rosyth) Building Co., Ltd., to erect seven blocks of four houses in each block on a site on the east side of Queensferry-road, from Park-road to Woodside-avenue, Rosyth. Dunfermline Co-operative Society, Ltd., were granted warrant to proceed with the erection of a building on a site at the junction of Queen Anne-street and Randolph-street, Dunfermline. The building is to include a suite of shops with large hall and relative offices above.

SADDLEWORTH.—The Council propose to erect four non-parlour houses on the Delph Barn site. Tenders are to be invited. The architect is Mr. A. J. Howcroft, of Oldham.

SALTBURN.—A site has been obtained by the R.C. congregation where it is proposed to erect a new church and presbytery.

SCALBY.—The U.D.C. has passed plans for houses on Mills-lane for Messrs. Dixon & Buttery.

SCARBOROUGH.—Plans passed: Block of houses in connection with the Cross-street and Dumple-street Improvement scheme. The B.S. is to prepare plans for extension to Olympia Café.

SEDGEFIELD.—Plans passed by R.D.C.: Bungalow, Darlington-road, Ferryhill, Mr. J. Bell; two houses, Darlington-road, Ferryhill, Mr. W. Young; aged

miners' homes at West Cornforth; and bungalow at Ferryhill Station, Mr. A. F. Jeffery.

SELBY.—Efforts are being made by the U.D.C. to secure the construction of a new bridge across the canal. The M.H. has sanctioned a loan of £9,220 for the erection of 20 houses. A scheme for a new road from Flaxley-road to Wistow-road has been approved by the M.T. Land is to be acquired for the extension of the National Schools.

SLEAFORD.—Messrs. Dale, Bewley & Buttler have presented to the U.D.C. details of a scheme for assisting private enterprise in the erection of houses of the value of about £500 by advances by the Committee to working men up to 90 per cent. of the value. The scheme has been referred to the Housing Committee for consideration.—Negotiations are proceeding for the acquisition of land in Drove-lane for a housing scheme.

SOMERSET.—The C.C. E.C. has decided to proceed with the erection of new schools at Abbotts Leigh and at Clevedon, each for 280 scholars.

SOUTH SHIELDS.—Plans passed by T.C.: J. H. Morton & Sons, for the Hedworth Lodge of Freemasons, Masonic Hall, Dean-road; Carruthers & Salt, two bungalows, Central-avenue.

SOUTHPORT.—The Highways Committee of the B.C. are inviting tenders for levelling, paving, metalling, and making good Belgrave-place and Sunnyside, off Belgrave-road, Birkdale, 325 lin. yds; Osborne-road and Belvidere-road, Ainsdale, 252 lin. yds.

SOUTHWICK.—The U.D.C. are to erect 30 houses by private enterprise. Sanction has been obtained from M.H. The surveyor has been instructed to prepare plans for 90 more.

SPALDING.—The U.D.C. are making application for sanction for a loan of £70,000 for the purpose of constructing new sewage works.

SPENBOROUGH.—Plans passed: House and shop at Norristhorpe-lane, Liversedge, for Messrs. G. C. & H. A. Hoyle.

STALYBRIDGE.—The T.C. has approved plans involving the demolition of condemned cottages and alterations and improvements to the "Old Fleece Hotel," belonging to John Smith's Tadcaster Brewery Co., Ltd.

STOCKTON.—The T.C. proposes to abolish the slum area on the riverside, the intention being to provide on the site a municipal lodging house, a workingmen's club, 28 houses, two open spaces, sites for building of an industrial character, and a street from Hunter's-lane to Bishop-street. To provide for the re-housing of residents in the area, it is proposed by the Housing Committee to erect 164 houses. These, it is recommended, should be built at St. Ann's Hill, Portrock.—The Housing Committee is considering the advisability of utilising 9 acres of Grangefield Farm site for the erection of a portion of the 300 houses the Corporation is to build, in addition to those for rehousing.

STRETFORD.—Plans passed by U.D.C.: Eight houses, Talbot-road, for Messrs. Geo. H. Brown & Son; two houses, Edge-lane, for Mr. Arthur G. Langshaw; eight houses, Gorse-lane (subsidy), for Messrs. Geo. H. Brown & Son; shop, Moss-road, for Manchester & Salford Equitable Co-operative Society, Ltd.——The D.C. have instructed Mr. P. Howard, architect, of Manchester, to prepare plans, together with the elevations and sections, and draw up specifications for the erection of a new school at Gorse Hill, for submission to the B.E.

SUTTON COLDFIELD.—Plans passed by T.C.: Four houses, Boldmere-road, for Mr. A. P. Johnson; four houses, Chester-road, for Mrs. Durban; house, Chester-road, for Mr. F. H. Andrews; house, Chester-road, for Mr. S. Morris; house, College-road, for Mr. D. G. Mackintosh; house, Four Oaks-road, for Mr. M. E. Steeley; house, Four Oaks-road, for Miss Glover; house, Four Oaks-road, for Mrs. Glover; house, Four Oaks-road, for Mr. F. Retallack; house, Green-lanes, for Mr. J. B. Willetts; bungalow, Jordan-road, for Mrs. E. M. Richmond; house, Ladywood-road, for Mr. W. J. Gold; house, Ladywood-road, for Mr. C. Macbeth; house, Mere Green-road, for Mr. H. E. Williams; bungalow, Rectory-road, for Mr. J. Pickering; pavilion, off Tamworth-road, for Congregational Recreation Club; bungalow, Vesey-road, for Mrs. Eldred; two bungalows, While-road, for Mr. G. H. Lawley; house, While-road, for Misses Kane and Lloyd; eight houses, Walmley-road, for Mr. A. P. Johnson.

SWANSEA.—Plans passed by T.C.: Two houses, Eversley-road, for Messrs. T. & G. Spragg; bungalow, The Mayals, for Mr. A. Puddicombe; two houses, new road off Newton-road, for Messrs. W. & T. Beynon; conversion into flats, 133 and 135, Bryn-road, for Mr. H. Roberts; two houses, West Cross-lane, for Mr. A. V. Hopkins; house and shop, Pleasant-street, Morriston, for Mr. D. Francis; house, Cecil-street, for Mrs. E. D. Hammett, house, West Cross-lane, for Mr. W. J. Saunders; two houses, Rivers-lane, West Cross, for Messrs. D. & B. Rees; house, Mumbles-road, Blackpill, for Mrs. Nordoff; bonded store, Church-street, for the Swansea United Breweries Co.; masonic hall, St. Helen's-road, for the Masonic Hall Co.; two houses, Caswell-road, for Mr. Edwin Davies; house, Wayn-Wen-road, for Mr. E. Waters; two houses, Sketty-road, for Mr. Rees Jones; bungalow, Tycoch Estate, for Mr. R. Schenk; house, Tycoch Estate, for Mr. J. P. Row; house, Tycoch Estate, for Mr. A. J. Downer; house, Tycoch Estate, for Mrs. A. G. Downer; house, Tydraw-road, for Mr. Jos. Jones; house, Tydraw-road, for Mrs. Eliz. Davies; two houses, Tycoch Estate, for Mr. Chas. Evans; four houses, new road off West Cross-lane, for Mr. Hy. Beynon; two houses, Tycoch Estate, for Mr. F. A. Morris; house, Rivers-lane, West Cross-lane, for Mr. W. J. Ferrer; house, Rivers-lane, West Cross, for Mr. B. Rees; two houses, Cecil-street, for Mr. J. O. Watkins; three houses, Clare-street, Manselton, for Mr. John Jewell; bungalow, Whitestone-lane, for Mr. Dd. Davies; two houses, Middle-road, for Mr. J. Ll. Davies; two houses, Middle-road, for Mr. Emrys Thomas; two houses, Riversdale-road, Norton, for Mr. A. B. Beer.

SWINTON BRIDGE.—Two schools are to be enlarged, each by 50 places, at a cost of £1,200 each.

TADCASTER.—Plans passed: Two houses in Station-road, Scholes, for Messrs. J. H. Stockdale and A. Todd; house in Owlett Hall-lane, Kippax, for Mr. E. Hough; two houses in Carlton-terrace, Allerton Bywater, for Messrs. H. & F. Miller; two houses in Carlton-terrace, Allerton Bywater, for Messrs. H. Rhodes and J. Rushton; house, Carlton-avenue, Allerton Bywater, for Mr. Arundel Thompson; two houses in Barwick and Scholes-road, for Mr. Wm. Smith; and a bungalow, Station-road, for Mr. C. Steel.

THORNE.—An inquiry has been held by the M.H. into an application by the R.D.C. for powers to borrow £28,000 for works for the disposal of sewage at Hatfield.—A secondary school is to be erected at an estimated cost of £25,000.

THORNTON.—The D.C. are to apply to the M.H. for approval for subsidies for a further 30 houses.

THURCROFT.—Accommodation for 500 children is to be provided, at a cost of £11,000.

TODMORDEN.—An engineering laboratory is to be provided at the technical school, at a cost of £700.

TROWBRIDGE.—Plans passed by U.D.C.: Bungalow, Bradley-road, Mr. C. H. Goater, for Mr. A. Wiltshire; bungalow, Bradley-road, Mr. Goater, for Mr. S. J. Wood. The U.D.C. proposes to invite tenders for repairs and decorations to the Council Chamber. It has been decided to complete the housing scheme on the Gloucester-road Estate. The Surveyor is to prepare a sewerage scheme for the Silver-street farm estate, which is now being rapidly built upon. It is proposed to obtain a loan of about £5,000 for road and footpath renovating.

WAKEFIELD.—The West Riding C.C. E.C. propose to build new elementary schools at the following places:—At Armthorpe, with accommodation for 1,000 scholars, at an estimated cost of £23,000; at Bentley-with-Arksey, for 300 scholars, at an estimated cost of £7,000; at Castleford, Temple-street, for 350 scholars, estimated cost £7,000; at Glasshoughton, on the Airedale Estate, for 550 scholars, at an estimated cost of £13,000; at Hirst Courtney, and Temple Hirst, for 100 scholars, at an estimated cost of £2,500; at Saddleworth, for 250 scholars, at an estimated cost of £5,500; at South Hiendley, for 450 scholars, at an estimated cost of £5,200; at Swinton Bridge, Roman-terrace Council, for 50 scholars, at an estimated cost of £1,200; at Thurcroft, for 500 scholars, at an estimated cost of £11,000; at Woodsetts, for 200 scholars, at an estimated cost of £5,000; and at Saddleworth Uppermill, for 120 scholars, at an estimated cost of £4,800.

WARRINGTON.—Plans passed by T.C.: Three houses, Orford-avenue, for Messrs. W. & A. Ashton. Old buildings near the bridge are to be demolished to provide a site for the war memorial. The Council is considering the lay-out of the site of the Old Bridge Inn. The borough surveyor has prepared plans showing the course of the proposed road from Manchester-road to the River Mersey at Howley. It is proposed to erect three houses for the fire brigade on land in Cambria-place.

WATERFOOT.—An enquiry is to be held by the B.E. into the proposal to convert Lumb C.E. School into a juniors school and transfer the senior scholars to a contemplated new school at Edgeside.

WEST RIDING.—The C.C. has prepared a scheme, to cost £88,774, for new office accommodation, stores and garage, at Wakefield.

WHARFEDALE.—The M.H. has held an inquiry into the R.D.C. application to borrow £15,000 for the purpose of carrying out improvements to the sewage disposal works.

WHITBY.—Plans for sewage disposal work by Messrs. Radford & Son, Nottingham, costing about £26,000, have been submitted to the M.H. for approval.

WHITWOOD.—A scheme for the widening of the main road from the Four Lane Ends to Cutsyke. The plans have been submitted to the W.R.D.C. for their approval.

WIMBLEDON.—Plans passed by B.C.: Mr. A. W. T. Richards, four houses, Worple-road; Mr. F. H. Skeens, 31 houses, Durnsford-road; Mr. W. H. Bateman, house, Wimbledon Hill-road; Messrs. W. H. Whitehead & Co., house, Mount Ararat-road; Mr. J. Bowen, for electricity sub-station and four lock-up garages, Grove Road-mews; Mr. J. Browne, five houses, corner of Albany-road with Gap-road; Mr. E. J. Shelmerdine, rebuilding mess-room at Wimbledon Laundry, Cranbrook-road.

WINCHESTER.—A new church is to be erected by the R.C. congregation on a prominent site.

WOLVERHAMPTON.—Plans passed by T.C.: F. W. Holland, two houses, McBean-road; H. Patton, two houses, Compton-road; T. Mackie & Son, two houses, Richmond-avenue; M. K. Wells, house, Bruford-road; G. J. Peck, house, Claremont-road; A. J. Stevens & Co. (1914), Ltd., enamelling and polishing shop, Graiseley Hill; W. Withers, 24 houses, Fowler-street, &c.; W. Rowley, house, Goldthorn Hill-road; R. & G. Knowles, Ltd., joinery works, Hickman-avenue; M. Burton, Ltd., shop premises, Dudley-street; W. Nicholls, shop, Dunstall-road; A. J. Stevens & Co. (1914), Ltd., additions to works, Lower Walsall-street.

WOODFORD.—The U.D.C. proposes to establish a depot and store yard on land at the sewage works.—Plans passed: Houses and new road, South Woodford; house, Monkham's-drive.

WREXHAM.—Further additions and improvements are to be made to the new hospital which include a pathological laboratory, a laundry, an operating theatre, a mortuary, and alterations to two adjoining buildings, estimated to cost about £11,000.

YORK.—The York Sites Sub-Committee propose to provide lavatory accommodation at Nunthorpe Secondary School, at a cost of £1,250.

Fire.

Damage estimated at between £70,000 and £80,000 was caused by a fire which broke out early recently in the premises of Messrs. Albert E. Mallandain, Ltd., printers and manufacturers of corrugated paper, Clerkenwell, London.

NEW BUILDINGS IN LONDON

St. Marylebone.—EXTENSION.—The St. Marylebone Borough Council is carrying out an extension of the boiler house at its electricity generating station, Richmond-street, Marylebone. The building is a steel-framed structure with the permanent end next the Regent's Canal filled in with brickwork faced with "New Heather" bricks. The contractors for the main concrete and building work are Messrs. Ashby & Horner, Ltd. The steelwork is provided and erected by Messrs. Sanders & Forster, Ltd. The boilers and their steel chimneys and the crane are being installed by Messrs. Babcock & Wilcox; the pipe work by the Brightside Co., the ash-handling plant by the Underfeed Stoker Co., Ltd., and their sub-contractors (Messrs. Peter Lind & Co.); and the cooling towers, &c,. by the Clyne Engineering Co. A further extension on the eastern side of the station is being erected for the Administrative Section. This building is also a steel-framed structure, with brick enclosing walls. The general contractor is Mr. A. E. Symes. The steelwork is being supplied and erected by Messrs. Smith, Walker, Ltd. The Borough Council's electrical engineer (Mr. C. H. Smyth) and his chief assistant (Mr. F. B. Leonard) are dealing with the engineering and equipment work; and Mr. H. T. A. Chidgey, M.S.A., is responsible for the building operations.

Park Royal.—HOSPITAL.—The Park Royal Hospital, Willesden, is now being erected. The building is of the usual construction, stock and red brick facings, and slate roof. The steelwork has been sublet to Messrs. Measure Bros. (1910), Ltd. Messrs. F. R. Hipperson, Ltd., of Trowse, Norwich, are the builders. Messrs. Saxon, Snell & Phillips are the architects; and the quantities are by Messrs. Northcroft, Neighbour & Nicholson.

New Labour Guild.

The Amalgamated Union of Building Trade Workers has for some time had under consideration a direct Labour Guild by which it is proposed workers will, through their own organisation, contract for the building of houses. It is on the lines of the mediæval guilds, and is intended to have the effect of eliminating the profits of the middleman. The Liverpool Housing Committee already propose to build twenty-four houses at Woolton by direct labour, and negotiations are on foot between the Committee and the newly formed Guild for the contract.

A Concrete Exhibit at Wembley.

The Concrete Utilities Bureau, of 35, Great St. Helens, London, E.C.3, has a stand at Wembley containing an extensive collection of exhibits illustrating the application of concrete to what may be called its minor uses. The architect for the stand —which is No. 25 in the Horticultural section—was Mr. Clough William-Ellis. The stand is 140 ft. long and 40 ft. wide, and is practically an all-concrete structure in the classic style ornamented by plaques designed by Mr. Gilbert Bayes, the sculptor. Externally the concrete is untouched. Internally the walls exhibit some dozen or so panels illustrating the various artistic methods of surface treatment. In front of the pavilion is a section of concrete road. On the eleventh day after placing the concrete it sustained, undamaged, traffic amounting to 1,000 tons.

The office—which is really part of the building—is of cast stone made to imitate Ham stone. Another example of this character is a screen consisting of three arches. This is made to represent grey Doulting stone. Visitors to the stand will see examples of the use of concrete in many interests—architects and builders, the estate and farm, the railway, public authorities, the home and garden and others. In addition to the stand itself are shown examples of concrete building systems, tiles, windows, walling and cast stone.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.
Kettons, at King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	3 8 3
Best Stourbridge Fire brick:—	
2½ in.	8 11 0
3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	22 0 0
Headers	21 10 0
Quoins, Bullnose and 4½in. Flats	28 10 0
D'ble Str'tch'rs	30 10 0
D'ble Headers	27 10 0
One Side and two Ends	31 10 0
Two Sides and one End	32 10 0
Splays and Squints	30 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. „	2 6	4 in. „	3 6

	s. d.	
Thames Ballast	10 6	per yard, delivered 2 miles radius Paddington.
Pit Sand	14 9	„ „
Thames Sand	15 6	„ „
Best Washed Sand	15 6	„ „
½ in. Shingle for Ferro-Concrete	14 0	„ „
¾ in.	15 0	„ „
¾ in. Broken Brick „	10 6	„ „
Van Breeze	7 6	„ „

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/– alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
„ „ Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
„ „ White	3 12 6
„ Fine	5 12 0
Sirapite, Coarse	3 9 0
„ Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube — s. 2, d. 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube — 2, 11½

PORTLAND STONE—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube — 4, 4
Do. do. delivered on road wagons at above stations, per ft. cube — 4, 5
White basebed, 3d. per ft. cube extra.
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.
Delivered at any Goods Station, London.

	s. d.
Small random blocks, up to 10 ft. cube. Per ft. cube	7/–
Random blocks from 10 ft. and over „	17/–
Sawn two sides „	27/–
Sawn three or four sides „	32/–

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 3
6 in. rubbed two sides, ditto „	5 9
3 in. sawn two sides slabs (random sizes) „	2 1½
2 in. to 2½ in. sawn one side slabs (random sizes) „	1 5½
1½ in. to 2 in. ditto, ditto „	1 3

HARD YORK—
Delivered at any Goods Station London.

	s. d.
Scappled random blocks. Per Ft. Cube	5 6
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 4½
	6 0½
6 in. rubbed two sides ditto „	2 10
4 in. sawn two sides slabs (random sizes) „	2 5
3 in. ditto. ditto „	7 11
2 in. self-faced random flags. Per Yard Super	

ARTIFICIAL STONE.

Delivered in London Area in full van loads.

	s. d.
Plain per ft. cube	6 6
Moulded „ „	7 9
Cills „ „	8 3

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
1 × 11	£34 0	3 × 6	£24 10
1 × 9	32 0	3 × 11	30 0
1 × 8	26 0	2 × 11	30 0
1 × 7	26 0	3 × 9	26 0
1 × 8	25 10	2½ × 9	27 0
1 × 7	25 10	3 × 4½	25 0
1½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/–	1¼	33/6
¾	24/–	1½	37/6
1	26/–		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/–

MATCHINGS (BEST).

Inches	per sq.
⅝	17/6
¾	21/–
1	26/–

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle			0 2 8
Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2 6
¾ in. do.	0 1 6	to	0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6
Cuba Mahogany	0 3 0	to	0 3 6
Teak (Rangoon, Moulmein or Java), per load	45 0 0	to	50 0 0
American Whitewood planks, per ft. cube	0 14 0	to	0 16 0
Best Scotch Glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
£4 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
Ditto hand made ditto	5 12 6
Ornamental ditto	5 17 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Hip and valley tiles (per dozen) Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work „	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	⅝ in. to ½ in.	13 10 0
⅜ in.	14 10 0	⅝ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28¾ %	35 %	45 %
Steam	22½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0¾	3¾d.
4 in.	1/4	1/1¾	3¾d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7¾	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2¾	3½d.
3½ in.	1/6½	1/2¾	3¾d.
4 in.	1/7¾	1/4	3¾d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1¾	1/8
2½ in. „	1/9½	1/4	2/0½
3 in. „	2/1½	1/8	2/5½
3½ in. „	2/6½	1/11½	2/10½
4 in. „	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. „	3 6½	2 5½	3 3½
3 in. „	4 2½	2 8	4 0½
3½ in. „	4 7	3 3½	4 8½
4 in. „	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. „ „	6 3	6 8	11 4
5 in. „ „	7 6	11 6	18 2
6 in. „ „	8 10	14 4	23 5

IRON—	Per ton in London. £ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	„	15 10 0
Staffordshire "Marked Bars"	17 0 0	„	18 0 0
Mild Steel Bars	12 10 0	„	13 10 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..	14 0 0
Hoop iron, basis price	16 10 0	..	17 10 0
Galvanised „	31 0 0	..	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	15 0 0	..	16 0 0
„ „ „ 24 g.	16 0 0	..	17 0 0
„ „ „ 26 g.	18 0 0	..	19 0 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..	22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..	24 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3in. to 6 in.	20 10 0	..	22 0 0

(under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Shee English, 4 lb. and up	43 0 0
Pipe in coils	43 10 0
Soil Pipe	46 10 0
Compo pipe	49 10 0

NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills per ton	30 0 0	..	—
Do., ex country, carriage forward per ton	31 0 0	..	—

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/	45/–	76/–	153/–	246/–	510/– per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/–	92/–	174/–	300/–	588/– per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/–	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/–	14/–	23/–	30/–	42/– per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/–	29/–	36/–	63/– per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/–	12/–	20/–	24/–	31/– per doz.

NEW RIVER PATTERN CROYDON BALL VALVES. S.F

½ in.	¾ in.	1 in.	1¼ in,	1½ in.
35/–	56/–	98/–	162/–	228/– per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/–	41/–	56/–	101/– per doz
8 lbs. S. traps	35/–	45/–	66/–	126/– „

COPPER—	£ s. d.	
Strong Sheet per lb.	0 2 3	.. —
Thin „ „	0 2 4	.. —
Copper nails „	0 2 3	.. —
Copper wire „	0 2 4	.. —
TIN—English Ingots „	0 2 2	.. —
SOLDER—Plumbers' „	0 1 1	.. —
Tinmen's „	0 1 3	.. —
Blowpipe „	0 1 4	.. —

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes per gallon	0 3 7
„ „ „ in barrels „	0 3 9
„ „ „ in drums „	0 4 0
Boiled „ „ in barrels „	0 4 0
„ „ „ in drums „	0 4 3
Turpentine in barrels „	0 5 9
„ in drums (10 gall.) „	0 6 0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	57 0 0

GENUINE WHITE LEAD PAINT—
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered — 80, 5, 0
Red Lead, Dry (packages extra) per ton — 52, 0, 0
Best Linseed Oil Putty per cwt. — 0, 16, 0
Filocol per cwt. — 0, 15, 6
Size, XD Quality ...fkn. — 0, 3, 6

(*Concluded on next page.*)

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds	10½d.
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d.,21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d.,21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Oxford Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best Ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak.....	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	10	0
Best Black Japan		0	10	6
Oak and Mahogany Stain (water).....		0	12	0
Brunswick Black.....		0	7	6
Berlin Black		0	14	6
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine.....		0	9	0
Cuirass Black Enamel.....		0	7	0

Builder's Estate.

Mr. William Pryor, of 1, Gresham-road, Cambridge, lately chairman of William Pryor & Co., Ltd., wholesale ironmongers and builders' merchants, London—gross, £101,182.

The death occurred recently at Ashburton, Devon, in his 88th year, of Mr. John Hannibal Foaden, for many years a builder and contractor in the district.

THE SCOTTISH BUILDER

A GREAT ABERDEEN ARCHITECT

THE spring *Quarterly* of the Incorporation of Architects contains, in its opening paper, by Mr. T. H. Huges, A.R.I.B.A., in a series which will deal with great Scottish Architects of the Past, an account of the life of James Gibbs.

Gibbs was born at Footdee, in 1682, according to a manuscript document, was the son of a merchant, and studied at the Grammar School and Marischal College, where he graduated M.A. It was not merely a taste for drawing, but also a sound knowledge of mathematics, and perhaps inspired by report of Wren's fame, that made him turn to architecture. He studied first in Holland, and later, under the patronage of the Earl of Mar, in Italy, under Carlo Fontana and the painter Garoli. On his return in 1709, he settled in London, where he had the patronage of the Earl of Mar and the Duke of Argyll, and the friendship of Wren. He was made one of the surveyors to the Commission for the Building of Fifty Churches, and this brought him, in 1714, his first commission—the Church of St. Mary-le-Strand. His next important public work was the designing of St. Martin's-in-the-Fields, the steeple of which "has a beauty comparable to the best of Wren's." Various other London churches followed, and among the work which quickly began to flow in upon him were commissions for many noblemen's houses, notably "Ditchley," in Oxfordshire; and Sudbrook Park, Petersham; and several pavilions for the gardens of Viscount Cobham's famous house at Stow.

Gibbs was particularly successful in his designs for smaller houses where no unnecessary architectural features were indulged in, and many of them have a great charm. One such small house is Balveny House, Banff, which is illustrated in "Vitruvius Scoticus," and there attributed, by William Adam, to James Gibbs.

Gibbs prepared numerous designs for garden temples and summer houses, which were considered in the eighteenth century to be essential to the gardens of every large country house. For Viscount Cobham's famous gardens at Stow, Gibbs designed several pavilions, though he was not the architect for the house.

NEW BUILDINGS IN SCOTLAND.

Coatbridge.—HOUSES.—The T.C. has receiv approval from the Board of Health to er 224 houses at Whifflet, under the slum clearar scheme.

Port Glasgow.—HOUSES.—Colonel J. Arthur, architect, states that he has prepar plans for new houses to be erected in accordar with the Board of Health regulations as appl to Port Glasgow, in connection with the cent improvement scheme, to replace the hous proposed to be demolished. The estimated co as reported by the town treasurer, for t demolition of the existing houses and the erecti of new houses, is £75,000.

Dundee.—HOUSES.—The Corporation Hous Committee has a proposal under considerat for the erection of 200 concrete block house

Renfrew.—OFFICES.—The Dean of Gu Court has passed plans for new offices a Council Chambers for the Parish Council.

Edinburgh.—CINEMA.—The Dean of Gu Court has passed the following plans: T Lyceum Cinema, Ltd., for the erection of new picture house at the corner of Slatefo road and Robertson-avenue; seven self-c tained houses at Colinton-road; a house Barnton-avenue, Davidson Mains; a villa Alnwick-road; and a house of Jeffrey-aven Shieldhall.

Ailsa Craig.—SCHOOL.—The Ayrshire E will consider the question of providing a sch and teacher's residence on the island of Ai Craig, in the near future.

Oban.—OFFICES.—The Argyllshire E.C. pointed a committee to consider the quest of providing new council offices.

Greenock.—EXTENSION.—A proposal is foot to extend the Greenock Eye Infirmary a efforts are being made to raise £12,000 the purpose.

Aberdeen.—HOUSES.—The T.C. has pas the following plans: Two houses, Deemou road, for the Northern Garden Suburbs, Lt bungalow, Westburn-drive extension, for Mess Williamson & Bell, architects; and bungalo Westburn-drive extension, for Mr. Forbes Rae, granite merchant.

Galashiels.—PREMISES.—The Trustees of t Galashiels Savings Bank have settled on bui ing new premises in Bridge-place, at a cost £4,000. Messrs. J. & J. Hall, architects, Ga shiels.

Glasgow.—VARIOUS.—The Dean of Gu Court has passed the following plans: Ten pavilion at Belvedere Hospital and day nurse and clinic at Sister-street and George-stre Mile End; Glasgow Corporation Electric Department, sub-station at Norham-stree David Mason, Dalziel-drive, Pollokshields, vi in Dumbreck Priory, off Dumbreck-road; t Glasgow E.C., reconstruction of latrines various schools; J. A. Taggart & Co., Ltd., Bath-street, 12 shops in Crossloan-road, W Corporation of Glasgow (Blind Persons Act), n roof at Blind Asylum, Castle-street; and Jo H. Nicol, St. Vincent-street, an hotel a restaurant, at Wigton-street, Port Dundas.

Widening of Princes-street.

Among other matters which came before t Court of Common Council at Guildhall recent were the proposed widening of Princes-street a an invitation from the London County Coun that the City Corporation should join in inquiry into the existing and future provisi of means of road transit across the Thames London.

The Improvements and Finance Committe recommended that the notices to treat to acqui the ground needed for the widening of Princ street to 60-ft. throughout should be forthw served and that a resolution of May 31, 19 agreeing to such widening, subject to the Lond County Council contributing one-half the n cost, should be varied in accordance.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Plasterers' Labourers.
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½	
Airdrie	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Alexandria	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½	
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½	
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½	
Blairgowrie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—	
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Coatbridge	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dumbarton	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Dumfries	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½	
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½	
Falkirk	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½	
Hamilton	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Hawick	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2	
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½	
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2	
Kilmarnock	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Kirkcaldy	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
Leith	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Motherwell	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 68

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2: 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1½"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/8	1/9	2/0
Deal shelves and bearers	"	1/5	1/7	1/10
Add if cross tongued	"	2d.	2d	2d.

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	"	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/4
Sash fasteners	11½d.	Mortice locks	5/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	17	0
Plain compound girders	"	20	0
Do. stanchions	"	23	0
In roof work	"	28	0

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do.	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	59	0
Do. Do. in flats	"	57	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft run.	0	6
Soldered seam	" "	1	6
Copper nailing	"	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2	
Do. service	"	1/8	2/2	2/7	3/10		
Do. soil	"						7/6
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64 -		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	2
Do. Do. Sirapite	" "	2	4
Do. Do. Keen's	" "	3	3
Add sawn lathing	" "	1	5
Add metal lathing	" "	2	3
Portland cement screed	" "	1	10
Do. plain face	" "	3	0
Mouldings in plaster	per l girth	0	1¾
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8
26 oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
½ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece	2/- to 4/-	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

PATENTS

APPLICATIONS PUBLISHED.*

210,983.—A. Shaw & Co., Ltd., and C. E. Rose: Cabinet handles.
211,004.—Contractors Machinery Co., Ltd., and A. M. Hey: Hoists for building purposes.
211,017.—H. S. Standen: Door holders.
211,042.—J. Lucas: Paint spraying.
211,046.—H. G. Williamson: Domestic boilers.
211,050.—L. A. Van Abbott and W. F. Knebelkamp: Theatre seats.
211,076.—J. H. James: Bolts for doors.
210,121.—W. J. Drummond: Safety suspending gear for lifts.
210,135.—E. Wager: Door handles.
210,153.—W. L. H. Roberts: Manufacture of lime.
210,154.—W. L. H. Roberts: Portland cement compositions.
210,155.—A. Reyrolle & Co., Ltd., and H. F. Secretan: Electric wall plugs.
210,167.—Lamberts, Ltd., and H. Merrett: Plug-cocks or plug-valves.
210,171.—C. P. Sandberg and R. B. Holt: Construction of roads or paths.
210,176.—R. Armitage and T. P. Peters: Means for supplying disinfectant to flushing-water.
210,201.—R. G. Crittall and J. L. Musgrave: Heating and cooling of buildings.
210,202.—J. L. Musgrave and R. G. Crittall: Heating and cooling of reinforced concrete columns, walls, floors, and ceilings of a building.
210,205.—J. Marrett: Folding tables.
210,208.—S. E. Saunders: Panelling.
210,250.—R. A. Blakeborough (Larner-Johnson Valve and Engineering Co.): Valves for controlling the flow of liquids.
210,252.—S. I. M. L. Oates: Door knobs and other door fittings combined with bells.
210,261.—R. W. Hunter and A. R. Robson: Table for kitchen use.
192,378.—H. H. Robertson Co.: Building material.
210,269.—E. Done: Tongued or grooved or like jointed boarding.
210,272.—J. Matthews: Taps or valves.
210,281.—J. A. McKay: Dams and dykes.
210,295.—Cammell, Laird & Co., Ltd., and A. S. Bailey: Doors.
210,297.—British Reinforced Concrete Engineering Co., Ltd., and E. B. Hall: Metal reinforcements for concrete road foundations.
210,342.—J. H. Lamont: Joint and coupling for pipes.
210,343.—C. L. V. Zimmer and E. Frankl: Process for the manufacture of artificial asphalt-limestone.
210,350.—H. A. St. Clair: Ladders.
210,366.—L. G. Patrouilleau: Process for the manufacture of bauxite cements free from metallic impurities.
210,373.—H. A. Lamplugh: Seats.
211,195.—E. Griffiths: Systems in which hot-water is heated and circulated for supply and warming.
211,265.—E. S. Daniels: Wood boxes and packing-cases.
211,266.—Imperial Tobacco Co. of Great Britain and Ireland), Ltd., H. L. Cockraine, and M. G. Fry: Staples or holding-devices.
211,271.—J. B. Butler: Disinfecting-apparatus for water-closet pans and gullies.
211,287.—J. H. Adlam: Hot-water heating-installations.
211,299.—J. W. Tyler: Locks for doors.
211,311.—W. G. Cook: Apparatus for introducing disinfectants into flushing cisterns.
211,331.—W. Bevan: Sash fastener.
211,333.—H. McKinnon: Manufacture of concrete or breeze slabs.
211,337.—A. Cooksley: Mortising machines.
211,338.—E. Hurden and A. P. Hurden: Flooring, tiling, and similar coverings.
211,345.—G. H. Cozens and F. H. Secord: Combination locks.
211,350.—N. Simpson: Flushing cisterns.
211,358.—E. Philpots: Gully traps.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

TRADE NEWS

Bennett's patent bed grip and end-tongued system wood block flooring is being laid by the Zeta Wood Flooring (1910) Co., Ltd., in the new Westminster Bank, Threadneedle-street, and at the Wolseley Motor Works, Chelsea.

Mr. Ernest G. Blake, 8, Beaumont-road, Windsor, is preparing a survey dealing with building matters. He will be glad if those firms who manufacture roof coverings of any description will send particulars of their products to him for inclusion in the text.

Messrs. Bryce, White & Co., Ltd., inform us that their new Southampton branch is now well stocked with doors, mouldings, &c., for immediate delivery. This information will, no doubt, be of assistance to our readers in the South of England who are in immediate need of doors, &c.

Mr. Frederick Parker, of Viaduct Works, Catherine-street Extension, Leicester, has published some very complete catalogues on road-making machinery, dealing with concrete mixing, stone drying, stone breaking, granulating, crushing, elevating, conveying and screening. Copies will be sent post free on application.

The Allied Arts and Crafts Guild, of 4, Brook-street, Birmingham, has been entrusted with the re-construction and decoration of Messrs. Owen Owen's premises at London-road, Liverpool. The ground floor is to be re-constructed on "Doric" lines, the first floor "Ionic," and a special feature will be made of the restaurant on the second floor, the main restaurant is in the "Renaissance," and the smoking room in the "Jacobean" period.

Messrs. Wood Russell & Co. send us several detailed leaflets dealing with "Sentry" boilers. They mention in particular their latest product, the "Sentry Minor" No. 0. It is designed to operate with a hot water storage of 25 or 30 gallons, and has a maximum output of three 20 gallon hot baths at 100 deg. Fahr. per hour, the normal fuel consumption on continuous day and night working being approximately one ton of small broken coke for four months' work, say, 4d. per 24 hours for a perpetual supply of hot water for bath, sink, lavatory basins, &c. A towel rail or a small radiator can be heated also if required.

On Tuesday, May 27, a party of advanced students from the Architectural Association paid a visit of inspection to the Homerton paint, colour and varnish factories of Messrs. Lewis Berger & Sons, Ltd. After being received by the management they were conducted on a tour of the most interesting features which the modern plant of this 164 years old firm could show. They saw fine dry colours in the making, varnish running and maturing, and paints and enamels being made by machinery. At the conclusion of the tour the party witnessed the application by practical painters of the products whose manufacture they had just watched, and were interested in the results produced with "Matone" flat oil paint, "Exilac" white enamel, "Matroil" japan-bound washable water paint, and "Pompeian" two-coat high-gloss paint.

TO PUBLIC HOUSING AUTHORITIES, ARCHITECTS, BUILDERS, WATER ENGINEERS and others interested. An important Treatise on the use of Copper and Brass in Domestic Water Services has been published by the Copper and Brass Extended Uses Council, and copies may be had from the Secretary, Graham Squiers, F.C.A., King's Court, Colmore Row, Birmingham.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
*** Denotes *accepted*. † Denotes *provisionally accepted*.**
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ABINGDON.—For construction of a road and laying down sewers in connection with the housing scheme extension at Boxhill, for the Borough. Mr. E. V. Hall Engineer, Municipal Offices, Abbey House:—
†J. Wheeler, Abingdon £2,776 15 2

BASINGSTOKE.—For treatment of roofs of housing estate, for T.C.:—
‡Messrs. John William & Co. £576 10

BIRKENHEAD.—For erection of the War Memorial on a site fronting the Town Hall, for the Corporation estimated to cost £5,000, to design prepared by Prof. L. B. Budden, of the Liverpool University:—
*Joseph Davies, Hamilton-lane.

BOSTON.—For erection of two pairs of cottages at Amber Hill, for R.D.C.:—
*E. W. Dawson, Boston .... £810 per pair.

BOSTON.—For supply of gravel and shingle, and of concrete kerbs, for the R.D.C.:—
*Pindar & Sons.
*The Yorkshire Henebique Contracting Co., Ltd.

BOURNEMOUTH.—For making-up six roads, for the T.C.:—
*M. Loader £2,218 2 1

BOURNEMOUTH.—For extensions, &c., at Police Station, for the T.C.:—
*Turl & Sons £7,025 17 9

BURNLEY.—For supply and fixing of railings in connection with Church-street improvement, for the T.C.:—
*T. Ashworth & Co. £355

BURNLEY.—For providing additional office accommodation at Town Hall, for the T.C.:—
*B. Smith & Sons—*Masons' work*.... £244 15

CARLISLE.—For the demolition of the farmhouse known as Coledale Farm, and also a house and shop under a separate tenancy, and remodelling the existing outbuildings, comprising stables, &c., belonging to Coledale Hall, to form a new farmhouse, in connection with the Newtown-road improvement, for the City Council:—
*G. Simpson & Son £1,198 8 4

DARTFORD.—For erecting 28 houses, for U.D.C.:—
‡Walter Dyer, Ltd. ..... £495 each

DEVIZES.—For erection of eight houses, for the R.D.C. Mr. T. V. Trumper, Surveyor:—
For two pairs of cottages at Stanton St. Bernard—
L. Maslen & Sons, Devizes £1,800
†W. Huntley & Son, Marlborough.... 1,586
For two pairs cottages at West Lavington—
L. Maslen & Sons, Devizes 1,910
W. Hopkins & Sons, Devizes 1,783
G. J. Holloway, Devizes 1,725
†T. Slade, Devizes 1,700

DINGLE.—For construction of sewerage and water supply system, for the T.C. Mr. P. H. McCarthy engineer, 26, Lower Leeson-street, Dublin:—
P. Dillon, Limerick £24,967
Fleming Bros., Dublin 19,067
W. Nally & Co., Dublin 17,512
*T. J. Moran & Co., Cork 17,399
Engineer's estimate 17,492

DONCASTER.—For the widening and improvement of Hall Flat-lane, Springwell-lane, and Ashfield-road for the T.C.:—
*Edcaster, Ltd. £4,334 13 7

DUMBARTON.—For alterations and restoration of Glencairn House, High-street, for the Gas Committee. Mr. Wm. A. Macartney, Burgh Engineer, Municipal Buildings. Quantities by Messrs. Colin Young & Smith, of Glasgow:—
Joiner—
*George Prentice, Clydebank.. £1,635 1 6
Mason—
*George Prentice, Clydebank.. 1,754 0 3
Plumber—
*David Sinclair, Dumbarton.. 202 9 7
Plasterer—
*Robt. Devlin, Dumbarton .. 158 2 8
Slater—
*Robt. Devlin, Dumbarton .. 223 3 7

DUNFERMLINE.—For duplication of Glensherup water main, for the T.C. Messrs. Crouch & Hogg engineers, 17, Lynedoch-street, Glasgow:—
J. Ritchie, Dunfermline..... £13,742 8 4

ELLAND.—For the widening of Hullen Edge-road above the Elland War Memorial, for the U.D.C.:—
*D. Rawson, Elland.

ELLESMERE PORT AND WHITBY.—For making up Picton-avenue, for the U.D.C.:—
*J. W. Flather £335 5 1

ESSEX.—For (*a*) resurfacing 32,000 sq. yds. Writtle-road, and (*b*) 17,000 yds. of Epping New-road for the C.C.:—
Per yd.
*(*a*) Associated Asphalte Co. ..... 8s. 9d.
*(*b*) Neuchatel Asphalte Co. ..... 8s. 9d.
(With free maintenance for five years.)

FRATING.—For widening bridge, for the Essex C.C. :—
*A. J. Arnold £1,025 4

GAINSBOROUGH.—For erection of 16 houses in Burns-street, for the U.D.C. :—
*A. J. Elins, Gainsborough.

GLASGOW.—For construction of additional lavatory accommodation at City Hall, for the T.C. :—
*G. Munro £280 4 10

GLASGOW.—For alterations to Kelvinside sub-station, for the T.C. :—
Brickwork—
*W. Taylor & Son £4,668 10 3

HAROLD COURT.—Erection of sanitary annexe at Sanatorium, for the Essex C.C. :—
*A. Holmes, Chelmsford £120

HINDLEY.—For painting inside and outside of the Hospital, Sandy-lane, for the Council. Mr. O. P. Abbott, Surveyor, Council Offices :—
*W. Cowley, Hindley.

HULL.—For additional latrines at (*a*) Charterhouse-lane Infants' School; and (*b*) T. B. Holmes' Infants' School, for the T.C. :—
*(*a*) F. Bilton £111 11
*(*b*) G. Houlton & Son 388 10

HULL.—For street works and sewers on East Hull Housing site, for the T.C. :—
*G. Boyce, Hessle £7,764 18 2

HULL.—For the erection of new Art Gallery in City-square, for the Corporation :—
*G. H. Ranton & Sons, Hull..... £60,000

ILKESTON.—For painting schools, for the T.C. :—
*W. H. S. Rushton—Gladstone-street Boys £348
*W. Bee—Gladstone-street Infants.... 186
*L. Buxton—Chaucer-street 470

KENDAL.—For supply of stone setts to the T.C. :—
*Ord & Madison, Ltd. ..... 48s. 9d. per ton.

LEEDS.—For supply of special cast-iron pipes for Moortown Reservoir, for the T.C. :—
*Stanton Ironworks Co..... £146 3 3

LEEDS.—For works in connection with the alteration and restoration of Killingbeck Old Hall for the purpose of providing accommodation for the domestic staff, for the T.C. :—
*M. Haley—*Structural alterations* .. £1,983 19
*Dearden Bros.—*Painting interior and exterior* 265 10

LEEDS.—For supply of cast-iron pipes for bacteria beds at Thorpe Stapleton, for the T.C. :—
*Stanton Coal & Iron Co. £1,206 13 5

LEEDS.—For painting exterior of Kirkgate General Market, for the T.C. :—
*J. Robb £608 0 5

LEEDS.—For painting buildings at Roundhay, for the T.C. :—
*J. Robb £191 9 10

LIVERPOOL.—For erection of 12 tenement dwellings on Burnet-street and Calvin-street site, for the T.C. :—
*Travis & Co. £7,487

LIVERPOOL.—For the erection of 31 parlour-type houses on Spring Wood Estate, for the T.C. :—
*J. Jones & Sons..... per house £525

LIVERPOOL.—For erection of electric sub-station buildings, for the T.C. :—
*J. Williams (Liverpoof), Ltd.—
Claremont-road station £1,200
Endbutt-lane station..... 1,766

LIVERPOOL.—For general repairs and painting at City Hospital South, for the T.C. :—
*A. F. McDonald & Co. £195

LIVERPOOL.—For alterations and additions a Durning-road Fire Station, for the T.C. :—
*Rimmer Bros. £1,343

LIVERPOOL.—For erection of a sub-station at Hatton-lane, Wavertree, and Allerton-road, Mossley Hill. Mr. W. Moon, Town Clerk, Municipal Buildings :—
Hatton-lane—
John Williams (Liverpool), Ltd., Liverpool..... £1,824
Allerton-road—
Bragg & Collins, Liverpool 1,591

LIVERPOOL.—For painting and repairs to St. George's Hall, &c., for the T.C. :—
*A. R. Jones £775

LIVERPOOL.—For repairs to farm buildings Spring Hill Farm, for the T.C. :—
*S. Hayes £152 10

LIVERPOOL.—For circulating water pipes at Lister-drive Electric Power Station, for the T.C. :—
*Aiton & Co., Derby £2,190

LIVERPOOL.—For structural steel and iron work for No. 3 Station, Lister-drive Electric Power Station, for the T.C. :—
*Redpath, Brown & Co. £24,000

LIVERPOOL.—For additional engine bed at Lark-lane sub-station, for the T.C. :—
J. Henshaw & Son £263

LIVERPOOL.—For three shelters for Bowring Park Golf Links, for the T.C. :—
*C. & G. L. Desoer £129

LIVERPOOL.—Supply and erection of rustic shelter at Sefton Park, for the T.C. :—
*E. Clive Porteous, Ltd..... £200

LIVERPOOL.—For repairs and painting at City Hospital North, for the T.C. :—
*Crowther & Bailey £175

LONDON.—For supply of 6,000 ft. super. of York paving stone, for the Greenwich B.C. :—
*Brotherton, Ratcliffe & Co... £7 13 6 per 100 ft. super.

LONDON.—For decorative repairs at Town Hall, for the Greenwich B.C. :—
Wm. Bickerton £702 0
A. W. Pelling 588 6
J. Hocking & Co. 549 10
Wm. Bailey 538 0
Harry Groves & Sons 522 0
J. J. Forrest 505 0
*Wm. Mills & Sons, Ltd. 497 0

LONDON.—For the erection of sub-station building at Bow Brewery, for the Poplar B.C. :—
*C. Yates & Co. £497

LONDON.—For renovation of clock tower at Newington Butts, for the Southwark B.C. :—
*E. J. & A. T. Bradford..... £600

LONDON.—For provision of lavatory accommodation at Rommany-road depot, for the Lambeth B.C. :—
P. G. Houghton £255 17
Bridge & Co. 215 0
Waking & Sons..... 210 0
Walters & Blake, Ltd. 205 12
H. D. Harding 205 10
Bradshaw & Bradshaw 191 15
T. H. Mansfield & Son 189 0
*James Potterton & Sons 165 0

LONDON.—For external decoration, St. Louis and Redan-terrace Housing Estates, for the Lambeth B.C. :—
H. J. Edwards £1,800 0 0
P. G. Houghton 1,155 15 0
R. J. Garnett 1,060 0 0
E. J. Ferguson 950 0 0
A. S. Young & Co. 788 15 0
Thorley & Matthews, Ltd. .. 765 10 0
Edward E. Merrell 745 2 6
J. D. Knowles & Son 703 0 0
Kennedy & Keeble 683 11 6
H. D. Harding 570 0 0
P. W. Thripp 564 10 0
W. A. King & Sons 545 0 0
Bridge & Co. 488 0 0
Norfolk Decorators, Ltd. 485 0 0
*James Potterton & Sons 479 8 0

LONDON.—For additions at Old Kent-road Fire Station, for the L.C.C. :—
*W. J. Dixon & Son, Bermondsey.. £212 0
J. & C. Bowyer, Ltd. 214 0
H. King & Son 228 10
Sims & Russell 232 0
Alfred Logan 239 0
John Marsland & Sons, Ltd..... 278 0
Samuel Blow, Ltd. 280 0
Castle Bros., Ltd..... 297 0

LONDON.—For erection of offices and showrooms, for the Electricity Department of the Hackney B.C. :—
J. Schofield..... £42,344 9 2
W. Gladding & Co. 39,924 0 0
G. B. Farrar & Co..... 39,756 0 0
Rice & Son 39,687 0 0
H. C. Haswill 39,111 0 0
F. G. Minters 37,972 0 0
Harris & Wardrop 37,624 0 0
Foster & Dicksee, Ltd. 37,300 0 0
Patman & Fotheringham, Ltd. 36,663 0 0
*J. Jarvis & Sons, Ltd. 36,072 0 0

LUTON.—For additions to the Institution for the Board of Guardians. Mr. W. Austin, Clerk, 7, George-street West :—
A. Cole £519 0
C. Wood & Sons, ... 428 16
A. W. Butt 398 0
Luton Building Co. 384 0
*H. Lacey & Sons 367 10
(All of Luton.)

MALDENS AND COOMBE.—For Kingston-road improvement, for the U.D.C. :—
‡No. 1—J. Mowlem & Co., Ltd. £4,833 18 7
‡No. 2—J. Wainwright & Co., Ltd. 521 2 0
‡No. 3—The Limmer and Trinidad Lake Asphalte Co., Ltd. 678 1 8

MANCHESTER.—Approved sub-contractors in connection with the erection of a public washhouse at New Islington Baths, for the Corporation :—
Excavator, Bricklayer and Concretor—
*Allman & Co., Fallowfield.
Plasterer and Painter—
*C. E. Chamberlain, Gorton.
Plumber and Glazier—
*R. Crabtree, Manchester.
Stonemason—
*W. Radcliffe & Sons, Longsight.
Carpenter, Joiner, Iron and Steel-work—
*W. Richardson & Co., Gorton.

MANCHESTER.—Reflooring cooking-room, South-hall-street School :—
*J. F. Ebner, London.

MANCHESTER.—For repaving certain roads at the City Abattoirs and Central Meat Market :—
*J. A. McCullough, Manchester.

MANCHESTER.—Reconstruction of sanitary accommodation at various schools, for the E.C. :—
Armitage-street Boys' School, Bangor-street School, Burgess-street School, Duke-street School—
*Turton & Son, Manchester.
Embden-street School, Vine-street School—
*Roberts Bros., Manchester.
Holland-street School, Nelson-street School—
*Gatley & Higson, Manchester.

MANCHESTER.—Equipment for Cheetham Central School, for the E.C. :—
School Furniture—
*Kingfisher, Ltd., West Bromwich.
Laundry and Cookery—
*J. Heywood, Ltd., Manchester.
Laboratory—
*Bradford & Co., Manchester.

MANCHESTER.—For construction and erection of concrete grantry, for gas main :—
*Mosson & Hellawell, Manchester.

MANCHESTER.—For rebuilding the boundary wall to All Saints' Church, for the Improvements Committee :—
*W. Major & Co., Manchester..... £237

MANCHESTER.—For work in connection with the erection of new bus garage at Parrs Wood, Didsbury, for the Tramways Committee :—
General Contractors—
*J. H. Billinge & Co., Manchester.
Steelwork—
*Lamborne & Co., Ltd., Openshaw.

NEWPORT, SALOP.—For erection of a secondary school, for the Salop C.C. Mr. George H. Bailey, architect, 1, College Hill, Shrewsbury. Quantities by the architect :—
*A. H. Woodhouse, Hanwood, near Shrewsbury..... £12,793

NORTHAMPTON.—Forty-four houses at Far Cotton Estate, for T.C :—
*Thomas Wilson—
6 houses £2,715
4 ,, ... 1,830
*G. R. King—
2 houses 800
4 ,, ... 1,710
4 ,, ... 1,710
*Walker & Perrett—
6 houses 2,394
4 ,, ... 1,580
4 ,, ... 1,574
4 ,, ... 1,580
6 ,, ... 2,368

NORTHAMPTON.—Repairs to Coton Lodge Farm, for T.C. :—
*F. Billing £208 12

OLD FLETTON.—For erection of 50 houses for the U.D.C. Mr. H. W. Hawkins, Surveyor; quantities by Mr. H. W. Hawkins :—

	Pair Parlour Type.	Four Non-Parlour Type.
Sir Wm. Prescott & Sons, Ltd., Huntingdon	£997 10	£1,741 10
C. H. Cruise, Holbeach ..	942 0	1,680 11
J. Guttridge & Sons, Peterborough.....	906 0	1,543 0
R. S. Jellings, Peterborough.....	874 0	1,548 0
T. Measures, Peterborough	867 0	1,535 0
*J. Cracknell, Ltd., Peterborough.....	817 0	1,427 0

PONTEFRACT.—For the reconstruction of Spital Hardwick-lane, for the T.C. :—
*John Robinson, Croft £6,405 3 2

PORTSMOUTH.—For exits at Albert-road School, for E.C. :—
J. Cockerell £190 0
‡Light Bros., & Flowers..... 189 2

PORTSMOUTH.—Plumbing for six months, for E.C. :—
‡E. J. Baker £201 10 9

ROCK.—For construction of Bayton School back culvert and Arch of Mill Cottage bridge, at Cleobury Mortimer, for the R.D.C. :—
*W. A. Andrew & Son..... £7,100
*W. A. Andrew & Son..... 4,180

SEDGFIELD.—For making-up private streets, for the R.D.C. :—
Back Eldon-terrace, Chilton—
*Fordyce Bros., Middlesbrough £991 19211
Ferryhill—
*Fordyce Bros. 2,369 7 4
West Cornforth—
*G. W. Lazenby, Ferryhill 1,965 1 8

SHEFFIELD.—For the whole of the Rock asphalter work required in connection with the construction of new bridges over Broughton-lane, Sheffield, for the L. & N.E.R. Coy. :—
*Tunstall's Seyssel & Limmer Rock Asphalte Co., Ltd., Leeds.
Main Contractors—*John W. Wilson & Sons, Birmingham.

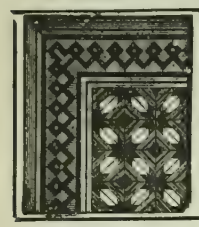
SHEFFIELD.—Supply of 500 4 in. metal pipes to Water Committee, for the T.C. :—
*Staveley Coal & Iron Co. £532 0 6

SHEFFIELD.—For the erection of 198 houses on Manor Estate, for the T.C. :—
*Reeves, Charlesworth, Ltd. .. £88,748 15 1

SHEFFIELD.—Erection of four houses on Fitzgerald-road, for the T.C. :—
*G. Longden & Son £2,920

SOMERSET.—For the adaptation of the Old Mansion, for the C.C. :—
*Stansdell & Son, Taunton .. £11,117 13 2

STRETFORD.—For the erection of a further 50 houses on the Seymour-grove site, for the U.D.C. :—
*Grimshaw & Thomas, Ltd., Stretford..£24,297


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CARPENTERS RD.
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STRETFORD.—For private street works in Warwick-road, for the U.D.C. :—
*Bethell & Sons £2,653 12 11

STRETFORD.—For reconstruction of greenhouses at Longford Hall, for the U.D.C. :—
*Grimshaw & Thomas £237

TILBURY.—For completion of 208 houses, for the U.D.C. :—
*Boot & Son £88,430

TOTNES.—For alterations to the casual wards and erection of a steam house, &c., for the Guardians. Mr. W. F. Tollit, architect, 6, Bridgtown :—
T. Brook, Totnes £1,142
*W. Reeves & Son, Totnes 989

TOTTINGTON.—For work in connection with the renovation of Affetside School, for the E.C. :—
*Peter Holt, Tottington.

WALLASEY.—For painting at schools, for the T.C. :—
*John Bellis—
Vaughan-road Council School (internal painting) £550
Poulton Council School (internal painting) 500

WAYLAND.—For erection of four houses at Attleborough, for the R.D.C. :—
G. R. Barnard £1,475 5
A. J. Harrison 1,427 0
*H. Smith 1,350 0

WELLINGTON.—For repairs and improvements to the Wesleyan Church and School. Mr. A. Jenkins, architect, Wellington, Salop :—
General Repairs—
*R. & J. Millington, Oakengates £335 0
Renovations—
*G. H. York & Co., Wellington 312 7

WESTHAMPNETT.—For the erection of six houses at Walberton, for the R.D.C. :—
*A. Crane & Son, Worthing £2,900

WHITWOOD.—For construction of various buildings required in connection with the new sewerage extensions near the King William Hotel, Cutsyke, for the U.D.C. :—
*J. L. Rodgers & Sons, Castleford.

WILLESDEN.—Repairs of the clinic, High-road, for the U.D.C. :—
‡White & Anstey..... £351 18

WIMBLEDON.—For erection of two sub-stations for the B.C. :—
*D. R. Reid, New Malden .... £480 14 6 & 369 3 9

WORCESTER.—For construction of three bridges for the T.C. :—
Baldry, Yerburgh & Hutchinson, Ltd. £13,095
W. T. Nichols, Gloucester 12,058
J. J. Blackburn, Manchester 12,020
Purdie, Lumsden & Co., Newcastle-on-Tyne 11,700
Yorks. Hennebique, Ltd., Leeds 11,383
Thos. Rowbotnam, Birmingham 10,977
*Hobrough & Co., Gloucester 9,936

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THE BUILDER

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THE OLD AND THE NEW

THE Oxford Conference of the Royal Institute of British Architects is over, and we are thinking of the future and next year's meeting. The exceptional success of the meeting was due in a measure to the brilliant weather, a good attendance of members from all parts of the country (though there were not as many present as should have been) the varied and interesting programme which was arranged by the Berks, Bucks, and Oxon Architectural Association, in conjunction with the Institute, and the hospitality given to the Conference everywhere. But these were only contributory, though important causes, for that which will make the Oxford Conference long remembered by those who were fortunate enough to take part in it, and especially those who had not visited this unique city before, if there be such, was Oxford itself. There are some things which cannot be described; or they may be described and the elusive something which is inherent in them, but which is seen only as a personal revelation, will remain unsaid. Oxford is not one city; there is at least a duality about it, and whatever the townsman may think and however just his legitimate pride in the growth and prosperity of the commercial life of his city, the colleges and the intellectual life which moves in and around them stand apart. The commercial life flows in and out as it does in other cities, but the colleges stand as they have for centuries as separate communities with a communal life of their own, and as they will possibly continue for centuries to come. What that life is some fortunate members of the Conference were able in some slight way to realise during their stay in the rooms of some of the colleges; but it was felt by the Conference as a whole during the visits to the beautiful chapels and halls, quadrangles and gardens, which give such a distinctive and impressive charm to so many of the colleges. Who could have failed to be impressed by the spirit of the ages, the mediæval atmosphere which pervades these establishments, or by the consciousness that many of our country's greatest sons, who have lived to make our country's history, have lived and worked in these buildings? There can surely be no need to debate the respective claims of Oxford or Cambridge to a greatness greater than their own, or to consider which is the most perfect of so many perfect establishments. Those who saw Wadham College and grounds in the night of the reception there knew, as they sauntered in the beautiful gardens in the half light and noticed the soft and impressive appearance of the chapel and cloister and the subtle light from the hall, that nothing more enchanting would meet their eyes, though the reception in the hall and gardens of Magdalen College had not then taken place, nor the visits to Christ Church, New, Merton, All Souls, and many other buildings; and the beautiful gardens of Worcester College, the many chapels, halls and libraries, containing in their magnificent architectural shells so many treasures of the past, the paved courts, façades, spires and towers, green lawns and meadows—who could adequately describe all this, which makes of Oxford the glorious city it is? or the continuity of English life and customs which are held within its college walls? This heritage of the past, of which the city is so proud? Of the noble buildings, which are a triumph of English architecture?

The pride of Oxford in her city we can all understand, for in it we share; but we shall not do justice to such a wonderful city if our admiration springs from nothing more than an intellectual appreciation of the arts which are embodied in, or the setting of, these buildings? What was it that inspired the mediæval builders and craftsmen and gave them the ideas with which to carry out their work? We do not know, unless we believe they worked with a spiritual inspiration which made their buildings what they are. We know that with them building was made to perform its function and was based upon an ascertained law, but we must believe that above this there was a spiritual quality about their work, and which was part of a religious age, when men designed in beauty and built in truth and when every craftsman took pleasure in his work and tried to impress it with sincerity and meaning.

But we must not conclude that in this more materialistic age these spiritual influences and this sincerity in work are altogether absent in our own achievements. Great works are still being erected to the glory of God and as a manifestation of man's spiritual beliefs; and if there seems to be much in our daily life and work which appears to be antagonistic to the spiritual side of our nature, we know that, fortunately, some of the noblest works of man are still being erected in this spirit and with this aspiration. We saw in such a city as Oxford the great works of a past age, when a city devoted itself to the care of the mind and the soul, and side by side with the erection of scholastic and religious buildings it could yet carry on an active commercial existence; but we may take heart that in a progressive modern city in which commerce takes a leading part, a great building is being consecrated this week, which owes much, if not all, to man's spiritual aspirations, and which is at the same time as inspiring and beautiful, though not so mellowed with age and sublimated by history as the works of the past. In this building we see that man has still the skill to produce great art when called upon to do so, and what the genius of our race has accomplished again and again in our history we see realised in this noble building. Liverpool Cathedral is without doubt one of the greatest works of the century, and whether it will be the greatest time alone will show; and while we can congratulate all those craftsmen and others who have been associated in the erection of the building, it is for the architect we feel a special admiration, coupled with the hope that he may live to see the completion of his great work. Great as the building is as an architectural achievement, the history of its inception and design will always be something of a romance in the popular mind, and to the architectural student a stimulus and encouragement. Just as the beautiful old buildings at Oxford add to the pleasure of our time and afford us an invaluable link with the past, so may this great essay in church building at Liverpool carry on a message to far distant years of the beliefs and artistic capacities of the present day.

NOTES

Liverpool Cathedral.

An event such as the consecration of Liverpool Cathedral will of necessity be regarded with a large variety of thought. To many it may be a matter of comparative indifference amongst the varied and divergent claims of modern life, but to the profession and the building trade, whose interests we do our best to represent, the opening of this great cathedral church must be of a far-reaching significance. To some of us it may not seem strange that, notwithstanding the clever writing which has aimed to prove that Gothic art was dead and could never live again, in any real way, we yet see reared in our midst a great English Gothic church which, as we stand under its lofty vaults, yields nothing in impressiveness and architectural charm to few buildings in the whole world. We do not believe that the instinctive love of Gothic art in this country is yet dead, and we have never felt sure that the genius of Bentley was devoted to its highest and best in the Westminster Cathedral, fine as it is. Bently's Gothic was a living art, and we have often wished that its expression in such a building as the Church of the Holy Rood at Watford had found such a great possibility as was afforded at Westminster. We may well hesitate to pronounce a judgment in the name of posterity, but so far as we can judge for ourselves we can congratulate our countrymen in possessing such a fine example of design and craftsmanship in stone, wood and metal as the new Liverpool Cathedral. To its creator, George Gilbert Scott, we are quite sure the work has brought its own great reward, and we must now hope that in due course he may see the whole scheme of design complete.

Appreciation.

We have devoted a good deal of space to reflect as far as possible in one issue the outstanding values of Liverpool Cathedral. Such a great building cannot, of course, be fairly dealt with in a single issue of any paper, and more especially we feel that the beautiful craftsmanship in metal and wood and stone can only be fully realised by an inspection of the building itself. In addition to the appreciation by Professor Richardson in this issue, our readers will note with interest that by Mr. E. Bertram Kirby, O.B.E., F.R.I.B.A., in the current issue of the Institute *Journal*, accompanied by some good illustrations, and we may here note that this number is a further happy instance of the increased value which we have found during some time past in the *Journal* of the Institute.



Photo: Stewart Bale.

Liverpool Cathedral: View of East End.
Mr. G. Gilbert Scott, R.A., Architect.

Thames Bridges.

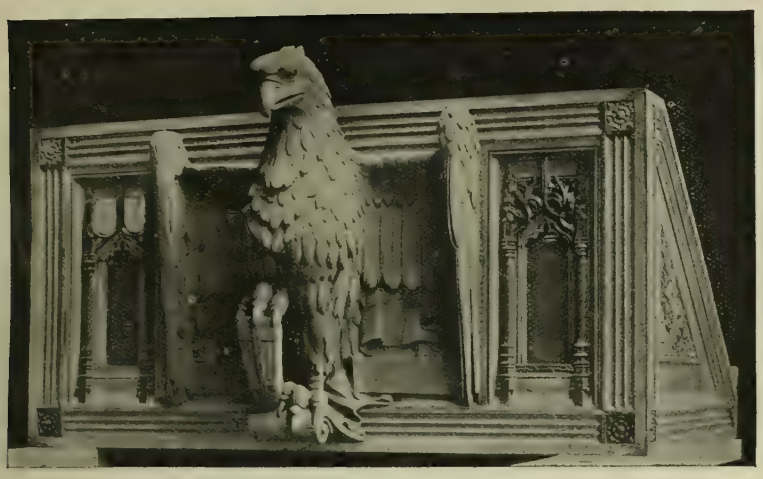
We are glad to learn that the London County Council has appointed a special committee to formulate a policy on the subject of bridges, and especially that three of the twelve members of the committee are Major Harry Barnes, Mr. Andrew T. Taylor, and Sir Howell Williams. That the question needs to be considered as a whole, most well-informed people are agreed, and it is a hopeful sign that such a committee has been appointed and that the question of Waterloo Bridge is to be referred to them.

Waterloo Bridge.

In this connection, we note with pleasure the letter by Professor W. R. Lethaby, which appeared in the *Times* of Wednesday. Professor Lethaby writes: "It has been discussed whether the 'Æsthetic appearance' of Waterloo Bridge would be injured by widening or other alterations. The argument may confuse us into forgetting that the bridge is a great London monument just as it is. Putting aside the Abbey, the Tower, and the Guildhall as survivals from the middle ages, Waterloo Bridge is the most representative monument after St. Paul's Cathedral. These two buildings more than any others symbolize the Metropolitan City of the Empire, and should be regarded as sacred works of art to be maintained as they were built."

Housing: A Suggested Royal Commission.

Sir Arthur Griffith-Boscawen contributes an interesting article to the *Times* of Wednesday on the housing question, and we heartily endorse his opinion that we need more light on the subject before we commit ourselves to the Government's scheme. He says: "One hesitates to suggest a Royal Commission, which is the usual device employed by embarrassed governments to shunt awkward questions. But I feel sure that we require further light on such questions as these: (1) How can private enterprise, as we knew it before the war, be brought back into the business? (2) could the plan adopted in some American cities of freeing new houses from rates for a term of years be applied with good results here? (3) have we thoroughly explored labour-saving devices and new methods



Liverpool Cathedral: Lectern. Mr. G. Gilbert Scott, R.A., Architect.

of construction and new materials? (4) can we not make greater use of public utility societies and amend the Small Dwellings Acquisition Act, so as to make it really operative? and (5) how are foreign countries, who are faced with the same problem, endeavouring to solve it? We want, not temporary makeshifts which may tend to make the ultimate solution more difficult, but the establishment of a permanent policy."

The Thames Conservancy. Those fortunate enough to accompany the river trip from Oxford to Dorchester in connection with the architectural conference at Oxford, must have been struck by the excellence of the new cottages for the lock-keepers, and must have felt grateful to the Thames Conservancy for the pleasure of seeing such good work. The River Thames is a national heritage and its beauty (and, we must add, sometimes its ugliness), is dependent as much upon the surrounding architecture as upon the natural beauty of the landscape. The enforced halts every two or three miles at the locks where the gardens and cottages are well laid out and designed add to the pleasures of the journey. The Conservancy is to be congratulated upon its own cottages, and it is a pity that it has not a controlling voice in all the new houses that line the banks of the River.

International Congress on Architectural Education. An important exhibit at this Congress will be the work of schools of architecture. About 50 schools in Great Britain, the British Dominions and foreign countries will participate, and in view of the large number of exhibits it has been found necessary to obtain the use of Devonshire House and Grosvenor House in addition to the galleries of the R.I.B.A. The exhibition will be a remarkable example of the work done in schools of architecture all over the world and should prove of very great interest to all architects. In Devonshire House, Piccadilly, there will be exhibits from the schools in Great Britain and the British Dominions, together with a selection of drawings prepared by R.I.B.A. prize-winners; while in Grosvenor House the work of schools abroad will be shown. The R.I.B.A. galleries will contain a selection of work done at the British and French schools and the American Academy at Rome, and there will also be an exhibition of educational books and equipment. The exhibition will be open from July 28 to August 2, inclusive, from 11 a.m. to 9 p.m. daily.

The Building Trade Dispute. We report on p. 105 the developments which have taken place in the building trade dispute since our last issue. Lord Buckmaster's report, embodying the recommendations of the Court of Inquiry over which he presided, will probably be issued this week, and it is thought that the Minister of Labour will endeavour to use the Report as a basis for peace negotiations. We are glad the employers have denied the statements attributed to Mr. G. Hicks, on behalf of the operatives, that "the employers have plundered the public to the extent of £300,000 by adding to their contracts on and from May 1 the equivalent of ½d. an hour increase in wages, which has not been paid to the workers." It would not be an easy matter for the employer to do any such thing, even had they desired to do so.



The Sheldonian, Oxford.

From a Sketch by Lt.-Col. H. P. Cart de Lafontaine, A.R.I.B.A.

GENERAL NEWS

Centenary of University College.

The hundredth anniversary of the foundation of University College, London, will be celebrated in 1926. Materials (records, reminiscences, pictures, photographs, &c.) are being collected with a view to the production of a history of the college as a part of the centenary celebrations. The volume will include a chapter on the school of architecture. Members and friends of the college are invited to send such materials as they can contribute, which will, in due course, be returned.

New Wharf on the Thames.

Messrs. Harrisons (London), Ltd., have decided to reconstruct their existing timber wharf at Purfleet, in reinforced concrete. The new wharf, it is stated, will be one of the most important on the River Thames, being about 1,000 ft. long, with a depth of water of about 40 ft.; while the distance from the coping to firm bottom is about 60 ft. Mr. R. W. Strozer, M.I. Mech.E., specialist in reinforced concrete, is the engineer for the scheme.

The late E. Swinfen Harris.

The death of Edward Swinfen Harris, F.R.I.B.A., took place recently at his residence, Stony Stratford, Bucks.

Mr. Harris was born in 1841 at Stony Stratford, and was the son of a local solicitor.

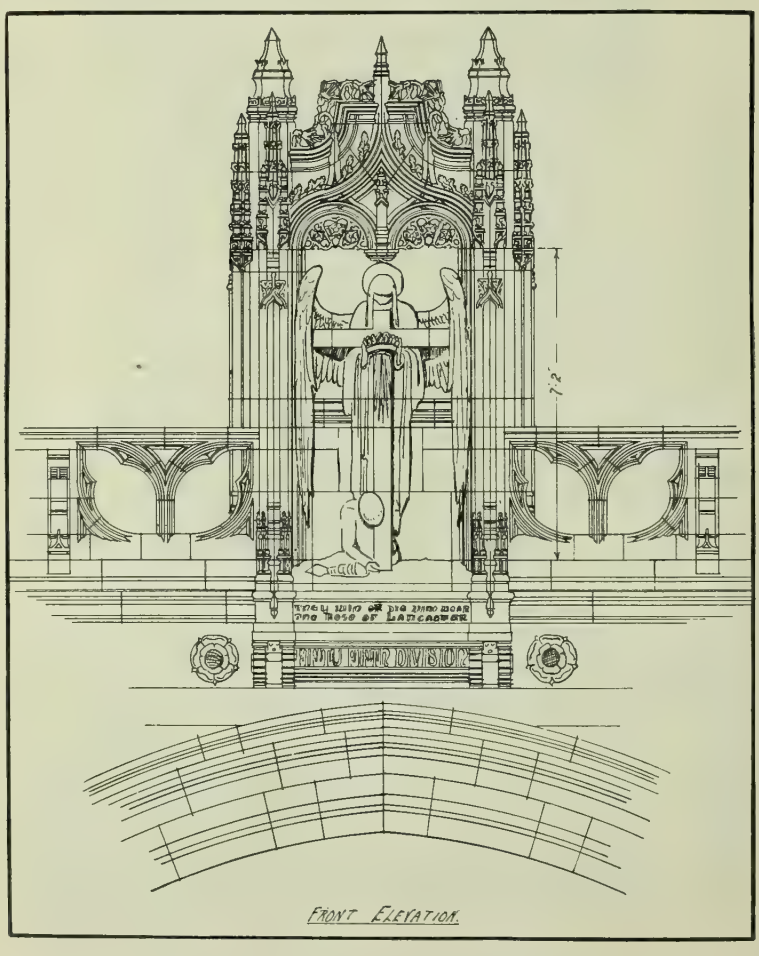
At the commencement of his career he shared London offices with the late Mr. Clement Dowling and Mr. F. Richard Farrow, F.R.I.B.A.

His work consisted chiefly of churches and domestic work in Buckingham, Oxford, Bedford, and Dorset. Among his works were a mansion and vicarage at Maids Moreton, houses in Buckingham and Stony Stratford, additions to Tickford Abbey, and two houses at Newport Pagnell. Mr. Harris will be remembered as a frequent correspondent in our colums.



Photo: Burrell & Hardman.

Mr. G. Gilbert Scott, R.A., Architect of Liverpool Cathedral.



Liverpool Cathedral: Memorial to the Fifty-Fifth Division.

Mr. G. Gilbert Scott, R.A., Architect.

COMPETITION NEWS

Cambrai and Soissons.

Designs for a memorial to the Missing. Application should be made to the Secretary (Works), Imperial War Graves Commission, 82, Baker-street, W.1.

Public Baths, Newton-in-Makerfield.

The Council has appointed Mr. Arnold Thornely, F.R.I.B.A., assessor in this competition. Applications not later than July 25. Sending-in day, September 30. Conditions can be seen at this office.

Aldershot War Memorial.

The conditions of this competition are not in accordance with the Regulations of the R.I.B.A., and Members are advised to take no part in it.

Masonic Memorial.

Designs for rebuilding Freemasons' Hall, Great Queen-street, Kingsway. The competition to be conducted in two stages. Each of the architects submitting a design in the final competition will receive an honorarium of £500. Assessors, Sir Edwin Lutyens, Mr. Walter Cave, Mr. A. Burnett Brown. On receipt of one guinea competitors will receive conditions of the competition, which has the approval of the R.I.B.A., together with block plan of site.

Applications marked "M. M. M. Competition" must be received by The Grand Secretary, Freemasons' Hall, Great Queen-street, London, not later than August 23.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Ross-Smith Memorial (Sept. 30; Feb. 21). Harrogate Infirmary (Sept. 30; May 30). Hamilton War Memorial (Sept. 1; May 30). Glasgow High School Memorial (Sept. 30; June 13). Masonic Memorial (Aug. 22; June 13). Bexhill Entertainment Hall (Sept. 1; May 30).

LIVERPOOL CATHEDRAL

By A. E. RICHARDSON.

No evidence more striking of the modernist tendency is conceivable than that shown in the intellectual achievement of Giles Gilbert Scott at Liverpool. It seems scarcely possible that one man could have had the direction of such an assemblage of material in the short span of twenty years, and could have embodied the fresh daring of youth and the flowering of manhood into a fragment of a stupendous building which, like Wren, he may yet live to complete. The term fragment is not employed in a derogatory sense, for the completed portion has a vastness in itself that is awe-inspiring. To eyes accustomed to antiquity and slow growth it may appear strange that a city like Liverpool should be fit to receive a cathedral which will inevitably take its place with the masterpieces of the world. Yet the miracle has begun and is continuing; nay, it is not too much to say, has been aided by advantages of site and setting; for not only will the city be able to boast of its fane but will be proud of the homely dignity of the precincts which came into existence, for a different purpose, over a century since. The English have a peculiar way of arriving at success through a series of mistakes. It is a national trait; they are the first to acknowledge their blunders, nothing daunted to set about mending them; hence the extraordinary vitality attending national works. Here, in the midst of Liverpool's teeming activities, where commerce may be said to rule, has been waging a conflict of architectural opinion for a hundred years. There have been minor skirmishes between Gothicists and Classicists with a decisive victory for the latter when Cockerell finished St. George's Hall for the invalid Elwes. There have been reverberations of the Classic theme, not always on the ascending scale, and now at last has arisen the first portion of a building of metropolitan import which, partly freed from the conventions of style, expresses as no other building in this country does the true articulation of the art. How, then, has this miracle been accomplished? Not by the precepts of academies; not by the dogma of schools. On the contrary, it presents the sum total of Victorian effort in the direction of insular tracts and concentration. It has resulted from traditions handed on from father to son and grandson; but it needed the physical strength and mental daring of youth to give it life; it called for ecclesiastical support that dared to maintain belief against a materialism that unchecked presaged decay for the moral fibres of a people.

I came to Liverpool to gather impressions of the work as a pilgrim, not as an architect or a critic seeking for explanations of plan or secrets of structure, or as one prepared to find some minor detail which did not accord with academic ritual. My way was along Watling-street, not exactly a cathedral route, although St. Albans, Lichfield, and Chester stand athwart the road. In the late afternoon from the Cheshire shore the silhouette of Liverpool did not offer the dominant building one had been expecting. It was with difficulty that the completed choir could be picked out above the delicate verticals along the water's edge and the masses of drab walls and horizontals that follow the contours for miles. There was less trouble in noticing the bizarre towers of commerce and a thrill when the gay colouring and refined upper works of a liner threw the background into greyer obscurity. Then, without warning, the choir of the new cathedral took its place above the wrack of smoke, a simple mass with twin points at the extremity, and the long lines of the Lady Chapel anchoring it down to the roofy steppings. Such will be the impression the building will make on those who arrive in the Mersey from abroad.

A totally different impression is gained when the building is approached from the heart of the city. Here one sees it as some mighty fragment of a work projected ages since which will take centuries to complete. The old cemetery, partly formed in a disused quarry with its natural trees, exotic tombstones, monuments, and meandering walks, as well as the interminable length plain iron railing, completes the illusion. The building takes on the character as well as the repose of a structure that has been in possession of the site from time immemorial; one, moreover, that makes the eighteenth-century houses appear as recent intruders and only there on sufferance. It is not a little curious this turning of the tables, this founding of a ready-made but not the less entrancing cathedral close. The choice of site was a stroke of genius: one of wise selection and congruity. Below is the Mersey, an arm of the sea, with its choir invisible of sea chanters with deep Gregorian voices, and beyond rise the close-packed streets of Birkenhead and the tiny windmill on Bidston Hill. At closer quarters the distant impression of the mass gives place to feelings of admiration and respect; one is almost terrified by the scale; individuals seem tiny. One experiences the same sensation as one does in Rome, such is the telling artistry of the design: the seeming nonchalance with which the great masses have been arranged to fit the natural shaping of the site: the ingenuity shown in dealing with the levels, and the pure abandon and delight of the composition and adjustment of the parts. It is an achievement that is primarily intellectual, but it has its foil on the emotional side not effected by an overlay of intricate detail but by an interpenetration of structural parts which have an intrinsic decorative value. There is no evidence of false scale or of design and intent. The external aspect of the Lady Chapel, small by comparison with the gigantic choir and situated many feet below, is at one with the main fabric to which it is attached by bold buttresses that terminate in the sub-motif of a gabled arcade with porch below, the latter a species of rotula which holds the separate buildings in unison. Beyond this is the mass of the south transept rising sheer in its strength with plain surfaces and construction revealed.

From the north the conventional scenery is eloquent; no mere description can convey an idea of the innate mastery of form combined with direct statement that makes up the termination of this work which, even if it were never completed, would still be a masterpiece of building. It is from this side that the lines of the Lady Chapel are the most forceful and serve at their best to ensure repose to the huge masses of the choir, and it is from this end that the spectator gains the most vivid impression of the purpose of the plan and the manner in which the walls have been made to speak in a vertical direction. The fact that a free interpretation of English Gothic has been taken for minor details enhances the character, the very modern aspect of the building, and aids the freedom and fancy of its form. As one changes one's viewpoint, so the perfection of scale and the maintenance of the dominant theme is borne in the mind. There is present that ever-changing diversity never absent in the old work, from which one never tires but always returns expectant; that element of wonder without which a work of art is never complete. The compelling note is scale, but there are rare delicacies of galleries and arcades to point the moral, there are signs of articulate construction to cheer and uplift. As one views the building it seems to grow and develop a thousand new points of interest and to reduce one to a very low opinion of one's stature morally and intellectually. The building, strange as it may appear, does not look new, yet it is modernity itself; already the stone is weathering, the accents are softening, the tracery and the cusping taking on that indefinable delicacy allowed by the passing of years.

So much for the external aspect. My pen is incapable of dealing with the design at greater length. It refuses to run to technical descriptions which the architect alone knows. Late in the evening a considerate verger opened a door that led into the choir, where a group of clerics were rehearsing for the ceremony of the building's consecration, and the promise of the exterior was more than fulfilled from the glories of the perspective that met my eyes. Here was all the soaring ambition of pier and vault rising higher than the vaulting of Westminster. A perfection of masonry holding the shadows and as yet unattuned to music and the human voice. A vastness that seemed impossible, an intricacy of detail where no detail seemed permissible, a play of geometrical form that appealed to the instincts of the heart and the imagination, at once reducing the mind to insignificance and causing one again to marvel that one man should have achieved so much. It is a work of structure, not of decoration; a building that shows a consummate regard for anatomy and ultimate artistry; a work emancipated from tricks and deliberate effort, free and soaring; inheriting all that the past can offer in quality and yet expressing the fact that the soul of man in spite of mundane affairs still seeks for the unattainable.

It would be an anti-climax to give a detailed account of the Lady Chapel other than to say that it is a cathedral in miniature, or to dwell on the construction of the Chapter House, the gift of Liverpool Freemasons. The architect has dealt with the question of modern tracery with refreshing zest; he has achieved new geometry in the design of the vaulting and semi-domes. His fancy has led his pencil into a variety of forms in the design of minor features which may not please the archæologist or the pedant but which in themselves will last to sustain endeavour of a similar nature. Then must be remembered the masons, sculptors, craftsmen, the clerk of works, and foremen, who have supported the chief builder; who in turn have aimed at perfection and have obeyed without question the directing genius of the author. Before me lies the road to London. I shall pass many fair churches, but the memory of the new cathedral will not fade. It is stupendous, compelling—the most notable achievement of the age!

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

"Coleshill," Berks.

SIR,—In reference to the unusual choice of aspect for this house, viz., east and west for the main fronts, it is interesting to find the architect, whether Inigo Jones or Roger Pratt, after making such a complete break with Jacobean tradition in plan and design, adopting the aspects recommended by Dr. Andrew Boorde, in his "Compendyous Regyment, or a Dyetary of Helth," published in 1542. There he recommends east and west for the chief prospects, especially north-east, south-east, and south-west; never south, for the south wind "doth corrupte and doth make evyll vapoures."

As to the architects of "Coleshill," since my return from the Conference, I have referred to Gotch ("The English Home"), who, on page 56 says the architect must have been either Jones or Webb. In the appendix, page 396, he says that "there is no doubt that Roger Pratt had something to do with 'Coleshill.'"

Personally, I should like it to be settled beyond doubt that Inigo Jones was the architect. I fear that now I shall never get a job like "Coleshill" to carry out, so I may never know whether I could really do anything nearly so good. There need be no disgrace in that, if it took a genius like Jones to do it; but there *would* be if a comparative amateur like Pratt had done it. Either there would be something lacking in myself, or in our modern methods of training.

So this controversy, Jones or Pratt, has also a bearing on architectural education and our present-day methods of carrying out building works, and opens interesting avenues of conjecture for our exploration.

V. G. S.

Top- and Side-lighted Picture Galleries.

SIR,—The claim made by a correspondent in a recent issue of the *Builder* that the number of top-lighted galleries on a given area can be doubled by making the ground floor rooms now lighted by windows, also top-lighted, is too absurd for serious consideration.

The point can be easily tested; the present Manchester Art Gallery, designed by Sir Charles Barry, is an oblong 170 ft. in length by 80 ft. in width. There is an entrance staircase hall about 50 ft. square. The whole of the remaining first floor area consists of top-lighted picture galleries. On the ground floor there are side-lighted rooms, precisely corresponding in size with those on the first floor, absolutely useless for the display of pictures.

The claim made in *The Builder* is that by making use of some New Zealand idea, the number of top-lighted galleries on this site can be doubled. I suggest they cannot be increased by a square inch. It would be wasting valuable space in *The Builder* to enlarge on the point. The side-lighted ground floor rooms will continue to be useless for the display of pictures, notwithstanding what it is alleged has been effected elsewhere. What applies to the existing Manchester Art Gallery applies equally to any new building.

T. SINGTON.

Barry or Pugin?

SIR,—Owing to the generous courtesy of the Royal Institute of British Architects in admitting the public to their exhibition of drawings of the Houses of Parliament, I was able to see and delight in examples of design in purely English Gothic. But to my amazement and disgust, I found them attributed to the classic Sir Charles Barry. If meant as a joke by gentlemen with their tongue in their cheeks, doubtless it is harmless enough. For it is hard to believe that the feeling for Gothic design has so completely departed that we can for one moment imagine that the classic Barry could design anything so thoroughly English and profoundly Gothic.

I am no archæologist, and care not a rap for the so-called evidences of authorship, such as Barry's own signature. For the evidence is in the thing itself, written all over in nearly every stone of the building. Any discerning and sympathetic soul can see our beloved Welby Pugin as the true and only possible creator.

For the sake of the young and for future generations I feel constrained to protest against this hoary falsehood.

C. F. A. VOYSEY.

Housing Scheme of the Government.

SIR,—Your leader of June 20 suggests that, in dealing with the housing question, "the short view in legislation would give the most beneficial results to the nation," because development, during the next one hundred years, or even changed social and economic conditions during the next fifteen years, may make our programme obsolete. But, except to advise that "we concern ourselves more with the things of the moment and less with posterity," you do not give any indication of what legislation should aim at in taking the short view, or what the short view means.

Long before the Armistice, I—then a temporary civil servant in the housing department of the Ministry of Munitions—advocated the legislative short view, and put a scheme before the Minister, under which I suggested the conversion of all the temporary housing schemes into cottages and workmen's dwellings; but I fear the time has passed in which the short legislative view was best; we must now take a long view, whether we like it or not.

For many years I have tried to insist upon the fact that housing and rating reform must go together; but I am but a voice crying in the wilderness, and few will listen. Rating reform will be a long process, but by extension of grants in aid of rates, rent might be relieved, say, two-fifths of the present all too heavy burden of rates. The scheme I have advocated, in addition to reform to lessen rate charge, provides for the State to supply the capital to public utility societies (and other approved concerns or persons), on the basis of borrowing on housing bonds, repayable capital and interest in forty years, and lending at a lower rate, repayable capital and interest in sixty years.

For every £100 raised, the State would lose 1½ per cent., equal to £1 16s. 4d. per annum (including interest) for forty years, and would receive, for the next twenty years after its own payments had ceased, £3 4s. 8d. for every £100. That is, by taking the long view (seventy-five years), the State loss would be a mere fraction of the enormous loss shown under the Government scheme. By lending at a loss of 1½ per cent., I estimate the State would lose £680,000,000 in the first forty-seven years, to gain £580,000,000 during the following twenty-eight years. The net loss in seventy-five years being £100,000,000 on the 2,625,000 houses proposed. Under Mr. Wheatley's scheme from 1924 to 1980 the State and local authorities lose over £1,300,000,000.

In addition to a saving of £1,200,000,000 during the next seventy-five years, my suggestion has the advantage of finding capital for building, which is lacking in the proposals of the Government, which, while giving a guarantee of a subsidy on rent, does nothing to create the house to be rented. Cheap capital is the best incentive to the housing enthusiast, who, without it, cannot take advantage of the subsidy. A further advantage is that the provision of cheap capital would enable the housing reformer to be independent of rings and combines, since he would manufacture and import what he required, unless the market prices of material were fair and reasonable.

A serious weakness in Mr. Wheatley's scheme seems to me to be the fact that it depends entirely upon the goodwill of the industry employed, which acknowledges that its interest in other activities is infinitely greater than in housing; whereas with plenty of cheap capital, housing enterprise would flourish without such dependence upon the big contracting firms who govern the building industry.

Housing cannot be divorced from politics. I offer a political programme to all parties by which housing, rating and poor law reforms are achieved, and unemployment reduced by at least 25 per cent., and at the same time more than £1,200,000,000 saved to the taxpayer and ratepayer. The Government propose to give to rentpayers £13 10s. per annum on 2,625,000 houses, at a cost of £1,376,000,000. I propose that the Government should lend capital to build 2,625,000 houses at a cost of £100,000,000 in seventy-five years by the creation of bonds and loans. As an illustration of the idea, the following figures will be enough to show the principle, without troubling you with figures of compound interest for seventy-five years. Instead of a subsidy on rents, I would make it possible to build houses to let at economic rents within the means of the wage earner, by the provision of cheap capital, lower rate charges, cheaper building material, and better output.

	£ s. d.
£400 Bonds created by State borrowing at 4 per cent., capital and interest repaid in 40 years at £5 1s. per cent.	20 4 0
£400 Loan to Public Utility Society at 2½ per cent., capital and interest repaid in 60 years at £3 4s. 8d. per cent.	12 18 8
Difference being State loss for 40 years £1 14s. 4d. per cent.	7 5 4
Loss in 40 years per house (average loan £400)	294 13 4
Less gain of £12 18s. 8d. for 20 years after State liability has ceased	258 13 4
During period of 60 years, nett loss per house	36 0 0

Equal to 12s. per annum loss instead of Mr. Wheatley's £13 10s. for 40 years.

COMPARATIVE FIGURES.

	Mr. Wheatley's Scheme. £ s. d.	My Scheme. £ s. d.
Cost per house per annum	13 10 0	12 0
Capital loss per house	540 0 0	36 0 0
Total loss on 2,625,000 Houses	£1,400,000,000	£100,000,000

COMPARATIVE RENTAL VALUES OF HOUSE TO COST £500.

GOVERNMENT SCHEME.

	£ s. d.
Interest on cost at 6 per cent.	30 0 0
Sinking Fund at ¼ per cent.	2 10 0
Rates 25 per cent. gross rent	10 10 0
Maintenance 15 per cent.	6 6 0
Management 5 per cent.	2 2 0
	51 8 0
Less Subsidy—Exchequer + Rates for 40 years	13 10 0
Subsidised rental	37 18 0
Weekly rental	14 6
Total loss Subsidy for 40 years	13 10 0

A free gift to one section of rentpayers at expense of whole community.

MY PROPOSALS.

	£ s. d.	£ s. d.
Interest and repayment of capital in 60 years at 2½ per cent.		16 3 4
Rates 15 per cent. gross rent		6 6 0
Maintenance		6 6 0
Management		2 2 0
		30 17 4
Economic rental		30 17 4
Weekly rental		11 10
£9 1s. 8d. for 40 years	£363 6 8	
Less (£16 3s. 4d. for 20 years)	323 6 8	10 8
	£40 0 0	

Spread over 75 years. An inducement to enterprise.

JOHN E. YERBURY.

THE OXFORD CONFERENCE

AN IMPRESSION.

The Oxford Conference, favoured by brilliant weather could hardly fail, Oxford being what Oxford is, to ensure a great attendance, and though there were rival attractions at Lord's and elsewhere, the attendance was about as much as the hospitalities of the Colleges and the resources of the various hostelries could cope with.

A very large number of members of the R.I.B.A. and its Allied Societies, with a good many accompanying ladies, had assembled in time to flock through the hospitable gates of Wadham before sunset on Wednesday evening, and to put in a punctual appearance at the Vice-Chancellor's kindly and hospitable reception. After an hour's informal *conversazione* in the delightful Hall, in which the conversation indeed formed at times an interruption to the Vice-Chancellor's interesting explanations of the striking historical portraits of Wadham worthies, past Wardens, and royal visitors, the guests, forsaking even the presentments of Christopher Wren and Admiral Blake, made with one accord for the coolness of the Warden's twilit garden. There on the well-kept lawn and under the superb old yew trees they stood in groups, mainly black-clad, but relieved by the glow of cigarettes, the glimmer of badges, the contrasting colours of ladies' dresses, and the occasional hoods of Doctors and Masters of Arts. The members of the R.I.B.A. and their allies appeared to be in no way disconcerted by their general lack of academic dress, though their President made an imposingly academic figure in his M.A. robes embellished by the well-known badge and chain of office. The twilight died away till it ceased to reveal the tender grey of the walls of chapel and hall, beautiful, harmonious and dignified in their seventeenth-century retention of Gothic, with traceried windows illumined, as the guests departed and made their way out into the quiet streets to seek the hostelries of their choice, or the colleges where many of the unaccompanied gentlemen had found most hospitable quarters. So ended the first of the three delightful and most sociable evenings that formed the conspicuous relaxation of a Conference marked by the display of much energy in exposition, in sight-seeing, and in peregrinations.

The Conference, indeed, began formally upon the morrow, when the Vice-Chancellor in full robes and preceded by his bedell bearing the imposing gilt mace, punctually entered Wren's Sheldonian Theatre at 10.30 to take his accustomed seat in the great carved, high-arched, central chair, beneath Streater's queerly painted ceiling.

The company left the theatre about 12 o'clock and dispersed. The more energetic at once began their own inspection of Oxford, while those in search of information or prompted by curiosity invaded the charming headquarters of the Conference in "The High," where Mr. MacAlister and his staff were established in fine be-panelled and be-limneyed Jacobean rooms lent to the Conference by University College.

At 1 o'clock the bulk of the party repaired to Magdalen for luncheon in the stately Hall of that College, where Mr. Gotch took the chair at the high table on the dais, below the splendours of linenfold panelling and ancient coloured carvings, between Sir Herbert Warren (President of the College) and Lady Warren. After luncheon the President proposed a cordial vote of thanks to Sir Herbert and the members of his College for allowing the use of their splendid hall, and expressed the pleasure given to the members of the Conference by this permission. Some fifty members, as the total number exceeded the capacity of Magdalen Hall, lunched in Hawksmoor's hall at Queen's College, where Major Barnes presided.

When this contingent had rejoined the main body in the cloisters at Magdalen, the whole were subjected, with Sir Herbert and Lady Warren in their midst, to the discipline of the usual group photograph, the result of which was published in our last week's Oxford issue and is also included in the present issue.

The afternoon was occupied by visits, independent or under the conduct of carefully-chosen guides, to several of the most important Colleges and to some of the University buildings, notably to Magdalen, New, Merton, Christ Church, University, Oriel, Corpus, and All Souls, where Mr. E. P. Warren presided over the Wren drawings in the magnificent Codrington Library.

At five o'clock the various groups and parties reassembled at the Town Hall to be received and entertained by the Deputy Mayor, for the Corporation of Oxford, who had provided a most welcome tea of a generous character, which was highly appreciated by warm and slightly fatigued conferenciers.

A superb evening, with a young moon well up by 8.30 when the members began to reassemble in Magdalen Hall for the reception by the Berks, Bucks and Oxon Association, gave promise of full success for the second night. After a reception by Mr. Warren, as President of that Association, and by Mr. Gotch for the R.I.B.A., while a string band played in the fine Jacobean music gallery overhead, the whole company, including Sir Herbert Warren, resplendent in his red doctorial robes, Lady Warren, and several other Oxonian guests, descended to the cloisters, where chairs and seats had been arranged on the turf-covered garth, over which Chinese lanterns were festooned, while the band, which had preceded the party, was re-established under the archway of the superb Founder's Tower, and long tables of refreshments were disposed in the North Cloister.

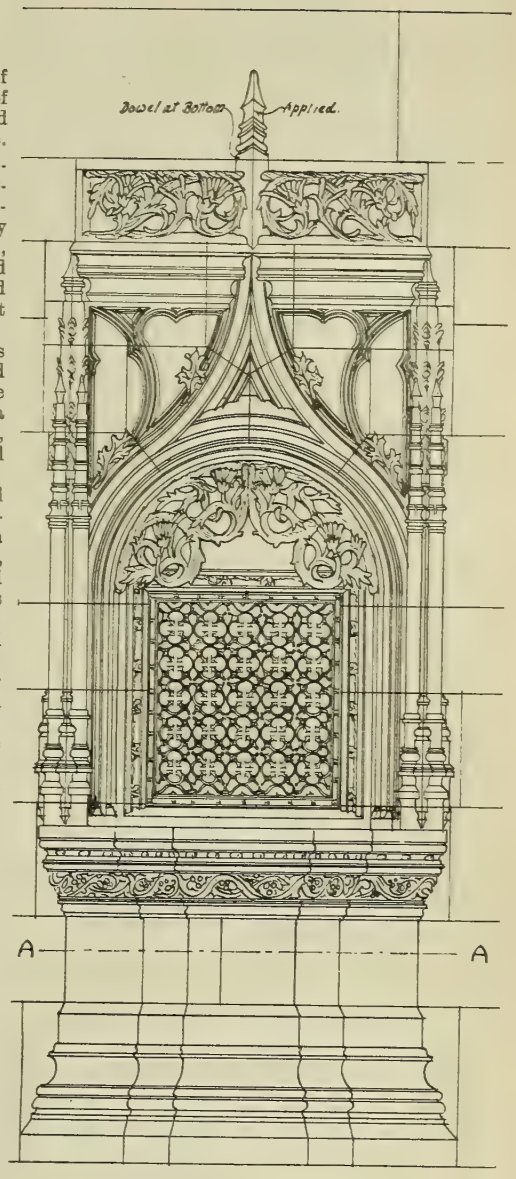
Many of the more energetic guests forsook for a while the charms of this extemporised salon, and the seductions of long wicker chairs and ices and strolled over the bridge into Addison's walk, and up to the old iron gates of the Grove, where the dainty little fallow deer came softly and shyly up from the twilight under the gigantic elms to peer at the strangers. But the cloisters drew these adventurers back, with the soft glamour of red globes, under the perfect blue sky where the young moon rode bravely over the square grey tower with its fretted crown of pinnacles and pierced parapet, and over the soft buffs and browns of the stone tiled roofs, while the discreet suggestion of Gilbert and Sullivan's well-known airs from the string band under the archway formed a pleasant undercurrent to the chatter of the groups dispersed over the immemorial Oxford lawn, or clustered round the genial red-robed presence of the College President. The whole assembly under the perfect summer night and in such a setting made an impression of intimate friendliness and restful enjoyment which will not be easily forgotten.

Friday arrived with blazing sunshine, and excursions by road to Faringdon, Coleshill, Fairford and Burford, and by river to Abingdon, and thence to Dorchester. The "sea" trip proved the more popular and Salters' boat was crowded, but the land trip drew some forty guests, who were perhaps especially delighted by the fine old house at Coleshill, new to most of them, and thrown open to the party by the kindness of the absent chatelaine, the Hon. Mrs. Pleydell Bouverie, who had prepared delightful refreshments for the body to enhance the mental and visual attractions of her house and its noble chambers. But the marvellous glass of Fairford and the beautiful church, and the remarkable town of Burford, would have made the fortune of any such trip on such a summer day. The evening brought the banquet in the magnificent hall of Christ Church, which provided a fine spectacle in itself, and a culminating sense of festive enjoyment which was heightened by the charming and persuasive geniality of the distinguished members of the University who were the guests of the Conference, and which found vocal expression in the most amusing and eloquent speech of that accomplished orator the Rev. L. R. Phelps, Provost of Oriel College.

This feast indeed confirmed the impression of the previous day of the charming friendliness and delightful courtesy shown at every contact by the members of the University to those of the Conference, and made of this visit to Oxford, in glorious weather, an occasion the memory of which will long remain.

The sunshine and the glamour of Oxford detained a considerable body of Conference members over Saturday, and a large party visited the Castle and its great Norman Tower, its crypt, and the Mound and Well Chamber, under the guidance of the President of the Berks, Bucks and Oxon A.A. and of the Chairman of the Oxford Society of Architects, while others visited the Library of Worcester and the Inigo Jones drawings, or the Bodleian Library where Bodley's Librarian, Dr. Cowley, showed them some of the principal treasures. Others yielded to the attractions of the Cherwell or the Upper River, and pleasantly disported themselves in punts.

And so ended the Oxford Conference of 1924.



Front Elevation.

Liverpool Cathedral: Recess for Donors' Book.

Mr. G. Gilbert Scott, R.A., Architect.

THE LIVERPOOL SCHOOL OF ARCHITECTURE EXHIBITIO

By HAROLD A. DOD.

In opening the annual exhibition of work of the students of the Liverpool School of Architecture, the Earl of Crawford and Balcarres expressed the opinion that popular interest in architecture was growing steadily and consistently, and if well guided would grow intelligently.

Now there can be little doubt that this enlivenment of public interest is due, in large measure, to such exhibitions as this. The first business is to attract the public, and then instruct them. However, to impress the man in the street to the point of getting him to take an intelligent interest in architecture is, one fears, a lengthy business; but Lord Crawford found that he could confidently express the hope that, at any rate, in twenty-five years' time we should regain what people were apt to forget we once possessed, something like a primacy in architecture.

This opinion, coming from so distinguished a source, and in spite of the great strides made recently on the Continent and in America, is well worthy of note. The British architectural student is only too apt to look outside his own country for the best modern work, whether to Stockholm or elsewhere.

If this hope of Lord Crawford's is to be in any way fulfilled it must be by the work of such schools as that at Liverpool, working along definite traditional lines; in their case, the great classical tradition as presented by the works of the great architects of the Renaissance. It is to be feared that the influence of those schools whose scope is not so defined, will not be as great as might be expected.

At first glance the standard of this year's work appears higher than that of the preceding twelve months; a great deal of hard work has obviously been demanded from the students in each of the five years of the course.

The exhibits of the work of the first and second year students show considerable promise and a great degree of care on the part of those responsible for this early stage of training. One must mention here the great value of the isometric projection in helping the young student to think "in the solid," to read plan and elevation as one. Among the second year work the rendered drawing, by Mr. R. S. Head, of a portion of the Temple of Mars, Ultor, deserves notice. It is, however, in the third year that we can look for great developments. After the restrictions of the early years the student is not slow to take advantage of the freedom of this stage.

The schemes submitted under the title "Design for an Orangery," are full of character. Those by Mr. Butling and Miss Dunphy are particularly happy compositions.

The Lever prize competed for this year was won by Mr. Spencely, the subject being a Yacht Club House. Mr. Spencely's plan appears admirable; the elevation is not so good, seeming to lack a feeling of balance, a defect disguised by the very light rendering of the shadows.

The one hour sketches show great skill in the handling of architectural masses without much attention to detail.

The fourth year has produced on the whole the best work in the Exhibition; one looks forward to some very good results from this group in their fifth year. The chief subject exhibited is shown in the designs for "An island recreation centre"; the situation, size and contours of the island being given on a sketch plan. The skill with which the group of buildings called for in the programme was placed island is worthy of great praise. There doubt that the plan adopted by two out three schemes is the correct solution, keep the highest point of land behind the point of the scheme as seen from the ma opposite. Furthermore, the grouping buildings into one mass is much better the extended scheme, the island bein small for more than one point of in The scheme submitted by Mr. Shaw excellent piece of work, well drawn an rendered.

The fifth year work does not appe vigorous as that of the preceding year. scheme for a group of public baths is reminiscent of that submitted in a recent competition, with the addition of large d boxes opening from a corridor outside th hall, a departure of doubtful value fro usual plans.

The best individual piece of work i year is undoubtedly the "Fine Arts Exhi Building in South America," by Mr. B water. It forms a good study in that difficult style—Spanish Renaissance. The c are good, the main dome would probab improved by being finished in mosaic, the smaller domes around it.

Amongst the six hours sketch design standard of which is higher than that more considered works, are a number in c notably the sketch for a public clock b Maxwell, and the water gate by Mr. Cot

The working drawings section maintai high standard of efficiency. A student ca of turning out such complete working would be invaluable in most offices. country has suffered a great deal of loss th the incapacity of architects to detail their in a proper manner. It is gratifying to se considerable time is spent in this study that instruction of the most efficient k given to the students.

The set of working drawings submitt the Holland and Hannen and Cubitt have well earned the award.

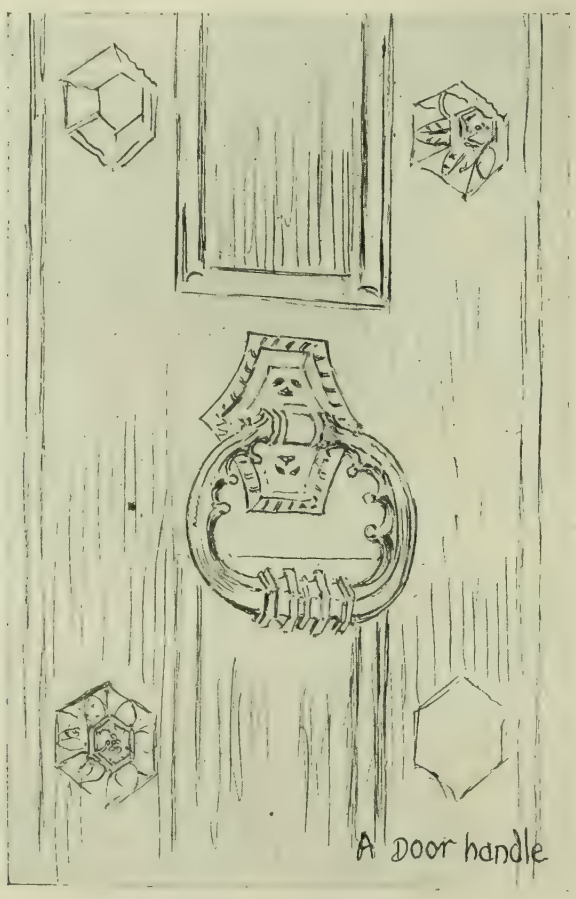
The White Star Line competition decorative scheme for the interior of a lin won by Mr. F. X. Velarde. His scheme gives a sense of height in a saloon which customary aboard ship, is only about high in the centre and about 8 ft. at the si

The subject for this year's Final in the prize competition did not produce any work from the school. The subject, a School Chapel, failed to inspire the ent The solutions submitted are, for the most rather tame designs of the Palladian Or

The vacation sketches, particularly b Thearle, the winner of the Honan Schol a competition promoted under the au of the Liverpool Architectural Society, f very pleasing group, being in the main ve coloured, if not so well drawn.

The Town-Planning section puts in son work, chiefly concerned with village comm centres, and kindred schemes of a pr order. The day of big things in town pl seems to be some way off. The centres large cities are the despair of the town pl who has been driven by force of circums to the outskirts. In this departmen Jenson submitted some very careful wo

Both the staff and students are to b gratulated on an excellent exhibition cont much interesting work full of promise o possibilities in architecture.



Liverpool Cathedral: a Door Handle.
MR. G. GILBERT SCOTT, R.A., Architect.

Northern Architectural Club.

The members of the Northern Archit Association Club recently visited Wemble during their tour of the British Empire E tion made a special point of studying the buildings, and the general lay-out of th exhibition.



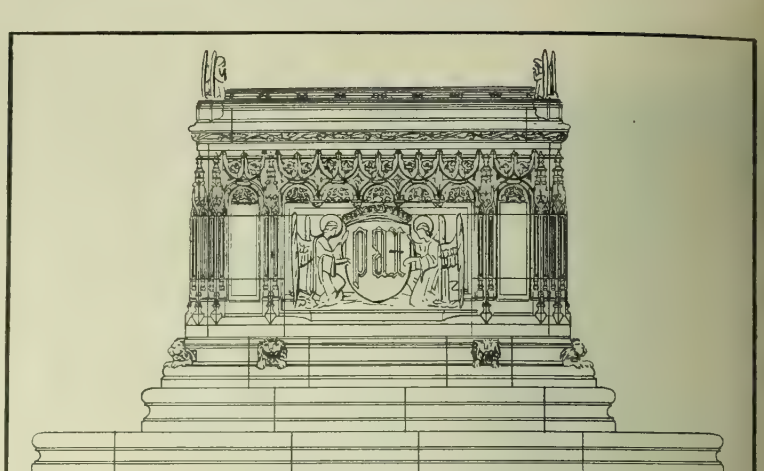
Photo: Stewart Bale.

Liverpool Cathedral: South-East Transept.

MR. G. GILBERT SCOTT, R.A., Architect.

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Liverpool Cathedral: Cenotaph in War Memorial Chapel.
MR. G. GILBERT SCOTT, R.A., Architect.

ILLUSTRATIONS

Liverpool Cathedral.

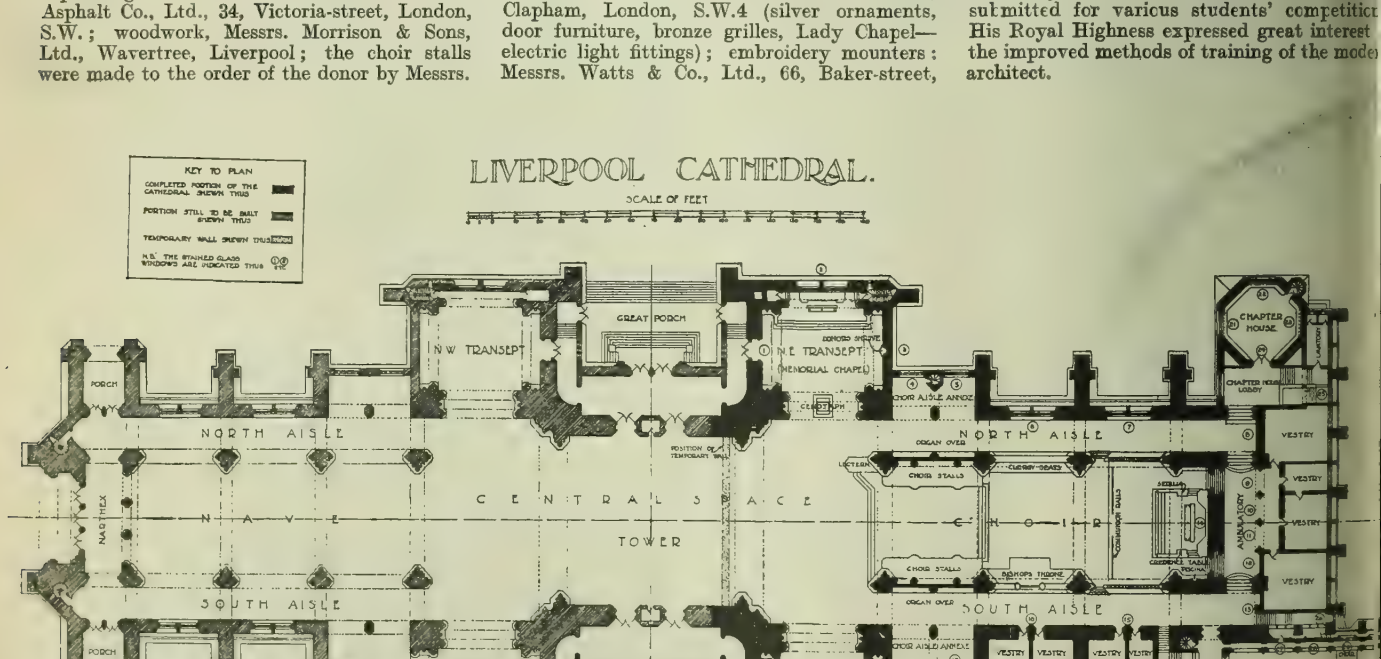
List of contractors, &c.:—For the building and foundations: Messrs. Morrison & Sons, Ltd., Wavertree, Liverpool; heating, ventilating and fire protection: Messrs. G. N. Haden & Sons, Ltd., Trowbridge; marble flooring and terrazzo work: Messrs. John Stubbs & Sons, Crown-street, Liverpool; marble work other than flooring: Messrs. Farmer & Brindley, Ltd., 63, Westminster Bridge-road, London; electric lighting installation: Messrs. John Hunter & Co., Rodney-street, Liverpool, subcontractors to Messrs. J. Hunter & Co., The British Thomson-Houston Co., and Messrs. Osler & Co., 230, Broad-street, Birmingham; asphalting: The Limmer & Trinidad Lake Asphalt Co., Ltd., 34, Victoria-street, London, S.W.; woodwork, Messrs. Morrison & Sons, Ltd., Wavertree, Liverpool; the choir stalls were made to the order of the donor by Messrs. Waring & Gillow, Ltd., Bold-street, Liverpool; organ builders, Messrs. Henry Willis & Sons, and Lewis & Co., Ltd., 234, Ferndale-road, London, S.W.9; bell founders, Messrs. Mears & Stainbank, 32–34, Whitechapel-road, London, E.1; stained glass makers, Messrs. Powell & Sons (Whitefriars), Ltd., Wigmore-street, London, W.1 (the whole of the stained glass in the choir, transepts, aisles and Lady Chapel), Messrs. Morris & Co., 17, George-street, Hanover-square, London, W.1 (chapter house windows), Messrs. Burlison & Grylls, 36, Great Ormond-street, London, W.C.1 (ambulatory windows), Messrs. C. E. Kempe & Co., Ltd., 28, Nottingham-place, London, W.1 (chapter house staircase windows); metal workers: Bromsgrove Guild, Bromsgrove, Worcester (bronze choir gates, reading desk on lectern), W. Gilbert, 62, Weamen-street, Birmingham (Communion rails and bronze work on memorial reredos and cenotaph), Messrs. W. Bainbridge Reynolds, Ltd., Manor House Metal Works, 7B, Old Town, Clapham, London, S.W.4 (silver ornaments, door furniture, bronze grilles, Lady Chapel—electric light fittings); embroidery mounters: Messrs. Watts & Co., Ltd., 66, Baker-street, London, W.1; gilder and decorator: G. Tos 58, Beauchamp-place, Brompton-road, Londo S.W.

R.I.B.A. Oxford Conference.

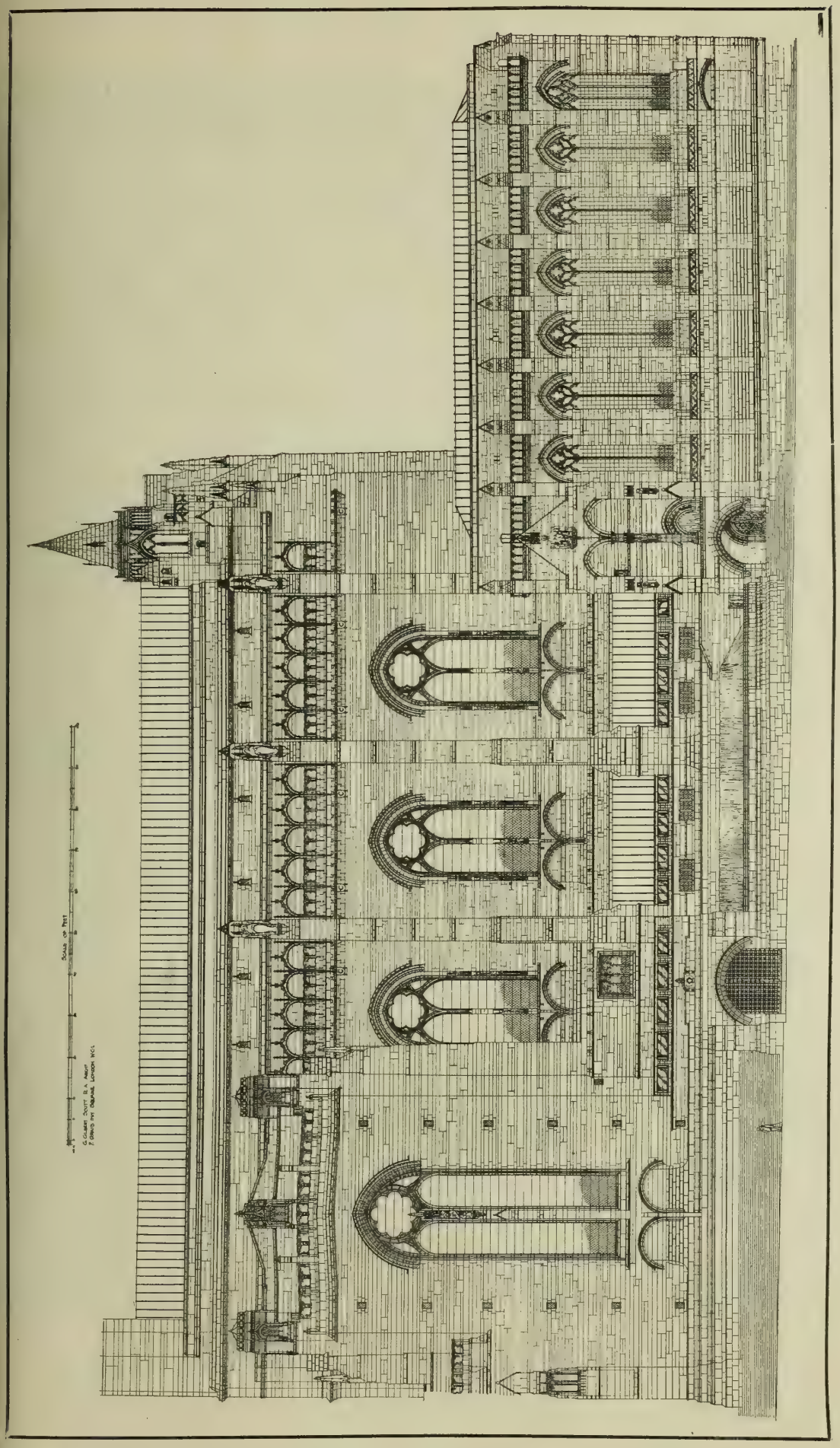
We give this week a group photograph of th members of the Oxford Conference, which w regret we were able to give only in the Oxfo edition of our issue of July 11.

The Architectural Association.

H.R.H. the Duke of Connaught visited th Architectural Association Schools on July 8 and on arrival was received by Mr. H. S. Gco hart-Rendel (President of the Association) ar Messrs. J. Alan Slater and Gilbert H. Jenki (Vice-President and Hon. Treasurer), Mr. Robe Atkinson (Director of Education), and M Howard Robertson (Principal). His Roy Highness spent an hour examining the works various years, and an exhibition of drawir submitted for various students' competitio His Royal Highness expressed great interest the improved methods of training of the mode architect.



Liverpool Cathedral: Plan. MR. G. GILBERT SCOTT, R.A., Architect.



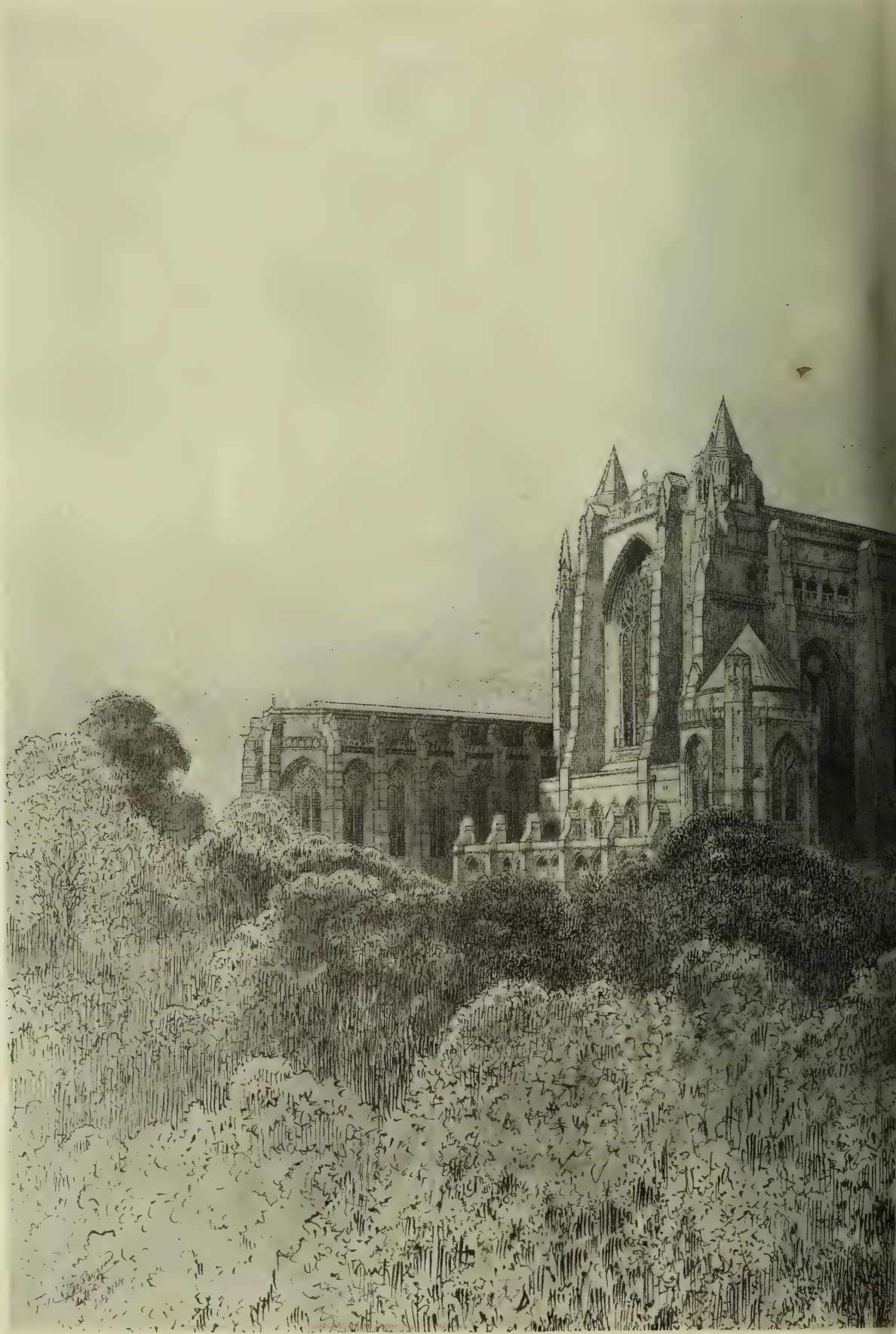
Liverpool Cathedral: Eastern Portion.
Mr. G. Gilbert Scott, R.A., Architect.



Photo: Stewart Bale.

Liverpool Cathedral: The Choir, looking East.

MR. G. GILBERT SCOTT, R.A., Architect.



LIVERPOOL CATHEDR

VIEW OF THE C



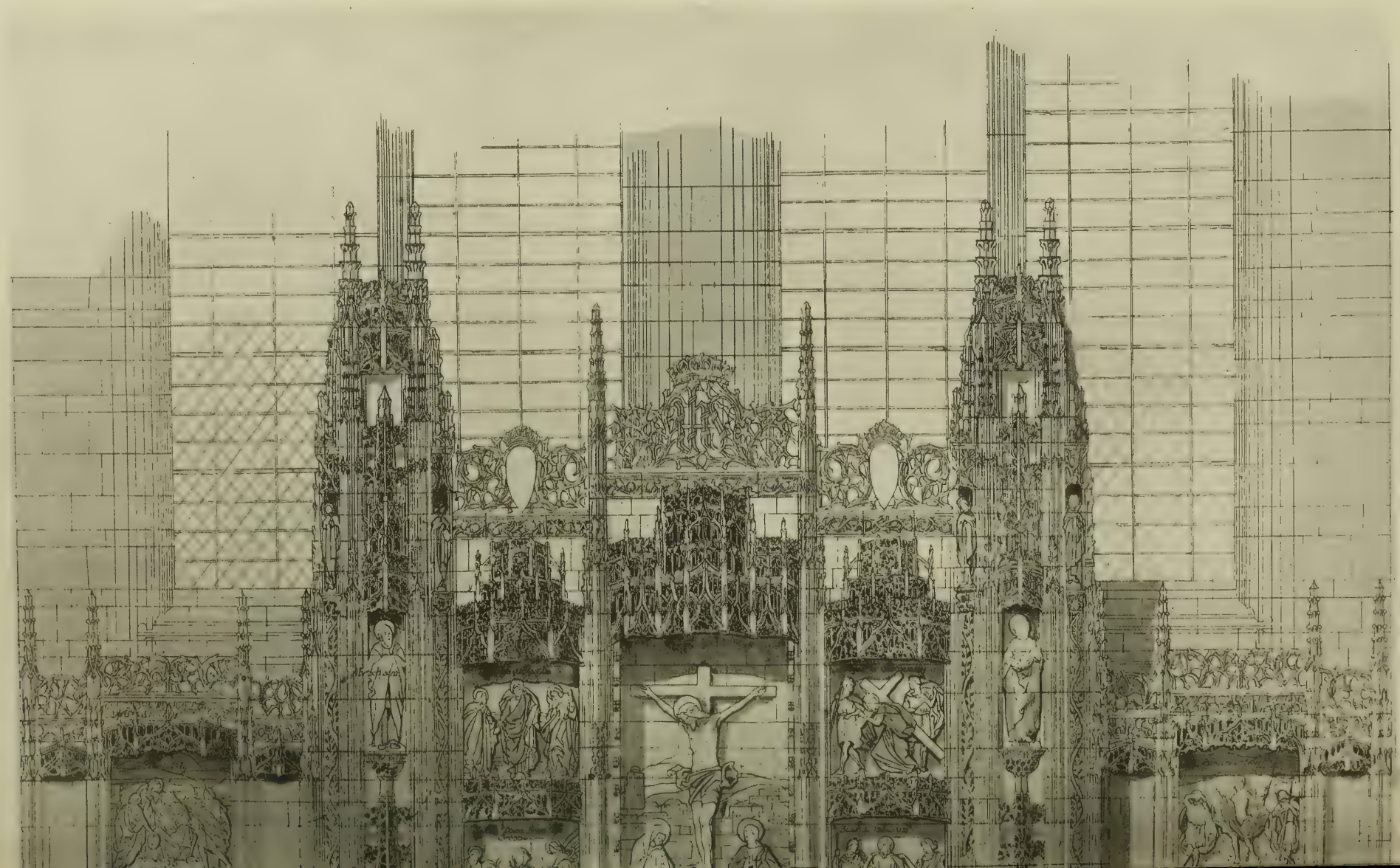
COTT, R.A., ARCHITECT.

RAFFLES DAVISON.



Liverpool Cathedral: Reredos.

Mr. G. Gilbert Scott. R.A., Architect.







The R.I.

Group photograph ta





at Oxford.

e of Magdalen College.

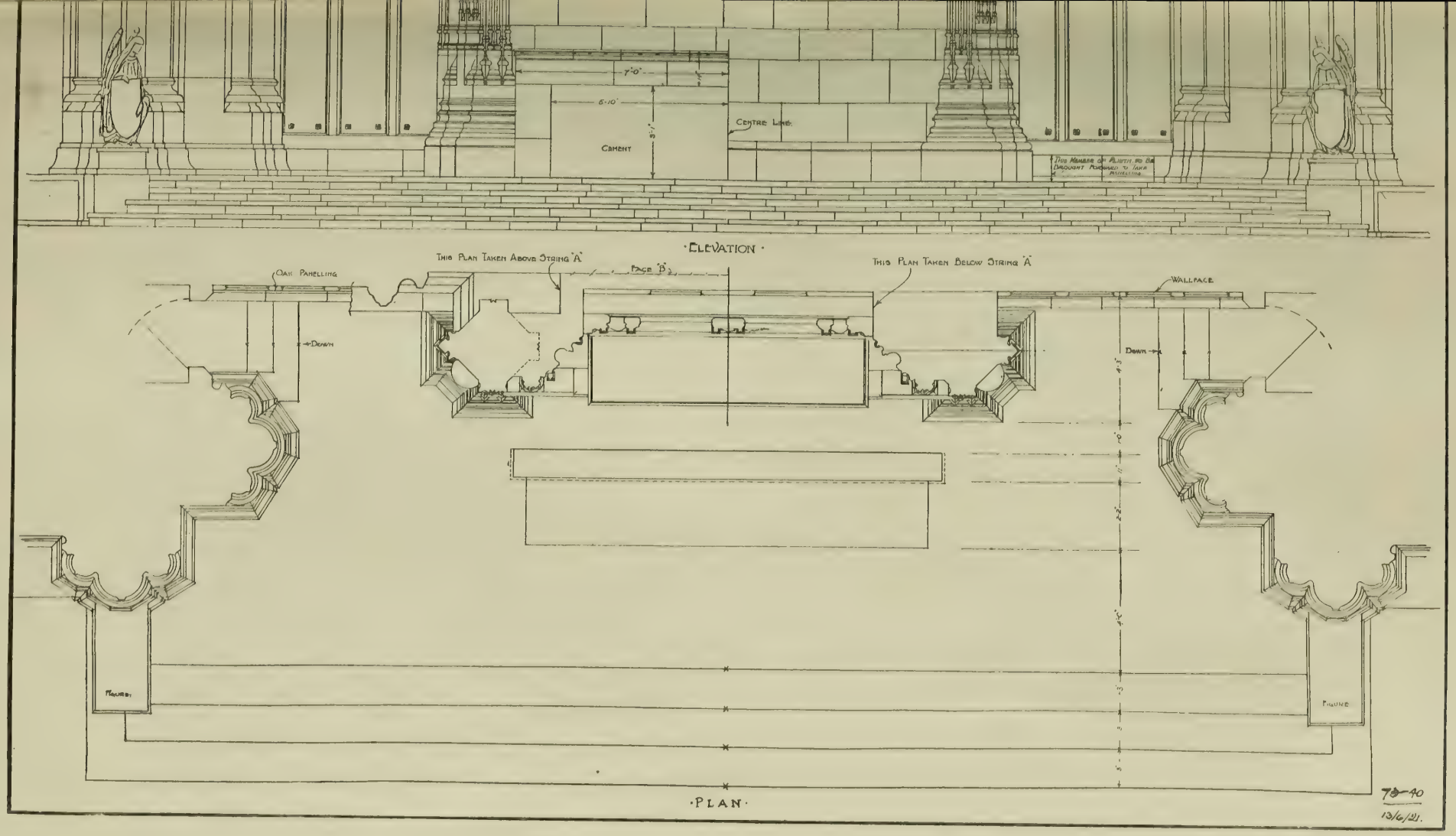
LIVERPOOL CATHEDRAL.

Memorial Chapel Reredos.

Scale ½ inch to 1 foot.

G. Gilbert Scott, A.R.A. Archt.
7, Gray's Inn Square, W.C.1.





Mr. G. Gilbert Scott, R.A., Architect.



Photo: Stewart Bale.

Liverpool Cathedral: Reredos, from North Choir Aisle.

Mr. G. Gilbert Scott, R.A., Architect.



Photo: Stewart Bale.

Liverpool Cathedral: War Memorial Transept.

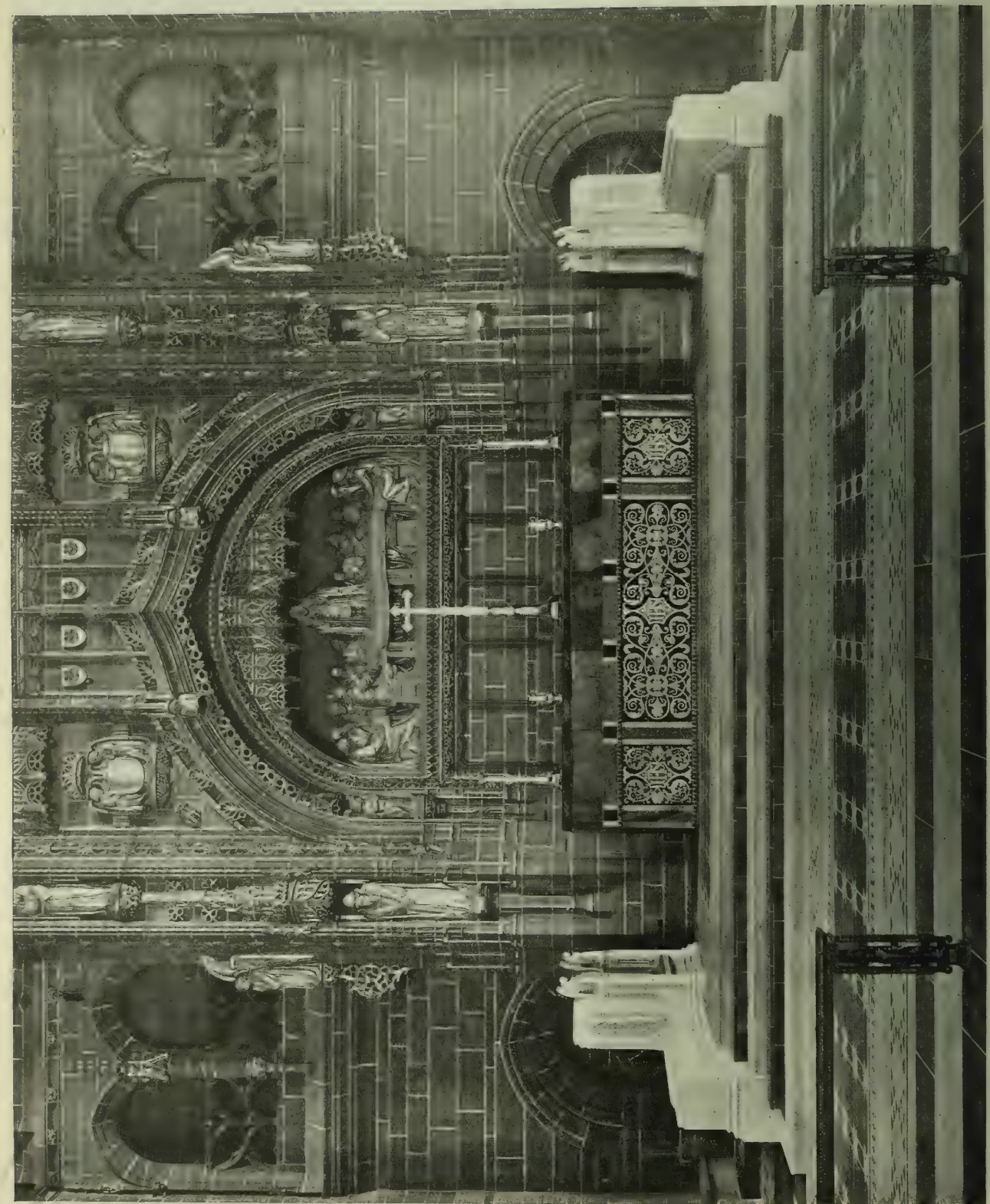
MR. G. GILBERT SCOTT, R.A., Architect.



Photo: Stewart Bale.

Liverpool Cathedral: Bishop's Throne.

Mr. G. Gilbert Scott, R.A., Architect.



Liverpool Cathedral: The Sanctuary.
Mr. G. Gilbert Scott, R.A., Architect.

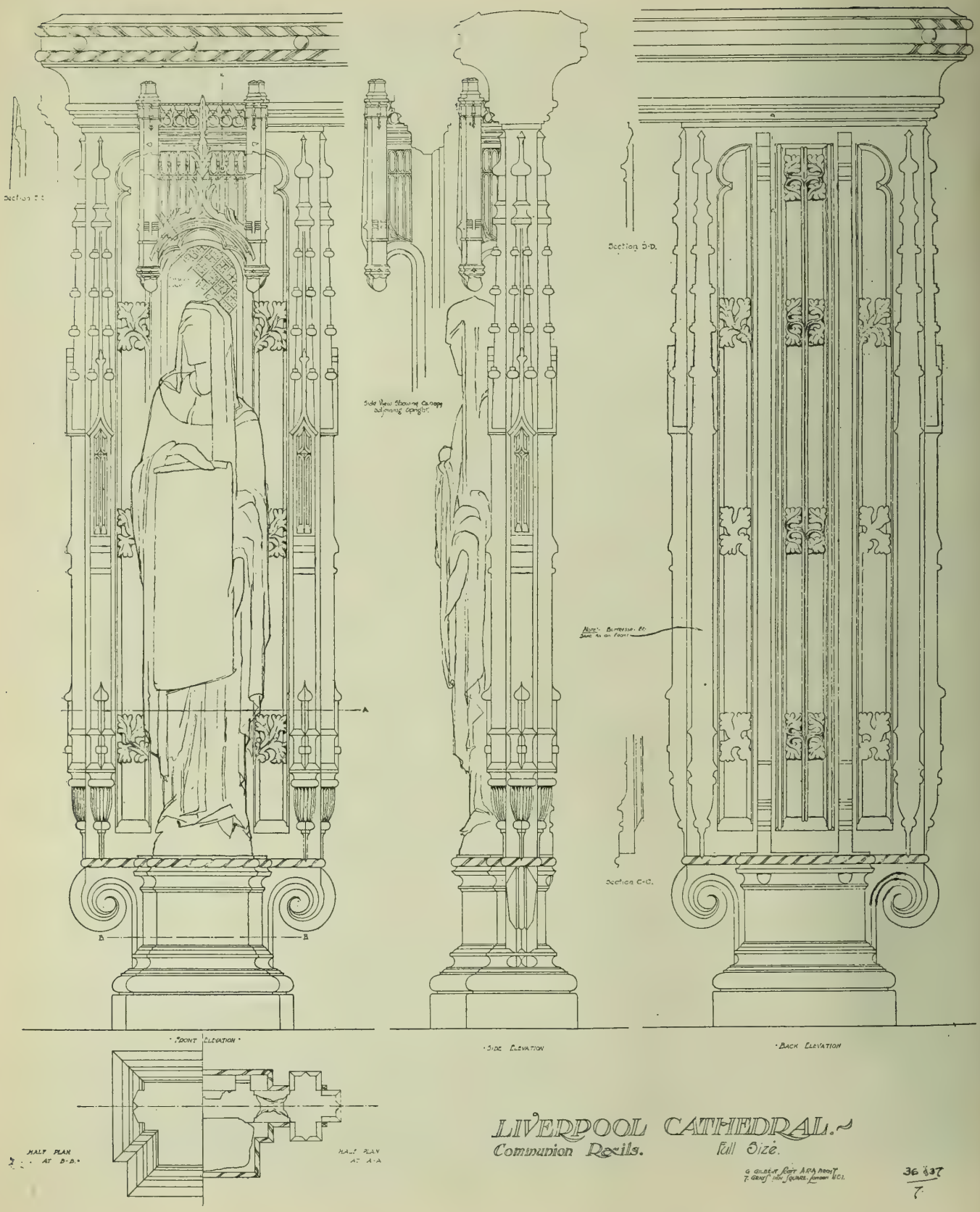
Photo: Stewart Bale.



Photo: Stewart Bale.

Liverpool Cathedral: The Choir Stalls.

Mr. G. Gilbert Scott, R.A., Architect.



Liverpool Cathedral.

Mr. G. Gilbert Scott, R.A., Architect.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS' CONFERENCE AT OXFORD

On July 10, Dr. Wells, Vice-Chancellor of Oxford University, gave, immediately prior to the lecture by Mr. Warren (the first portion of which we gave last week), an official welcome to the Conference on behalf of Oxford University. It gave him great pleasure, he said, to receive them, although, as they knew, the University of Oxford did not do anything officially for the study of architecture. By officially he meant the holding of examinations. In that respect they were inferior to the sister University of Cambridge, where graduates were allowed to take a certificate in architecture. There was a good deal to be said for that, and perhaps Oxford would come to it; they had at the present moment an active Committee of Fine Arts in Oxford. Up to the present time all the University had done for architecture was to have had the great advantage of employing the services of architects, with the result which they saw around them. Oxford certainly had been well served by their profession, and he especially claimed the right to say that, because he had the honour of presiding over the college which gave Christopher Wren to the University. Wren came up to Oxford in 1649, and resided at Wadham College for two or three years before he went to All Souls, but he had connection with Wadham greater than that, for he returned to the college as Professor of Geometry. As they knew, he was one of the most many-sided of men, and was one of the greatest English mathematicians. He was residing at Wadham College at the time he designed that building; which, as they knew, marked the complete triumph of the classic side of Oxford over the old Gothic traditions which had lasted so markedly, and of which the college in which he had the honour of receiving them was so striking an example. It might seem rather pathetic that there should have been a son of Wadham who completely killed the old Gothic traditions at Oxford of which his college was so striking an example, but he (Dr. Wells) did not think it was pathetic. Probably the time had come when the old Gothic had to pass away, and the new style of architecture in England had been developed. Wren certainly started that in a most magnificent way, and other survivals of the Gothic in Oxford were not so successful as Wadham. As Oxford had gained so much from architecture and architects, it was fitting and desirable that the University and City should have had the honour of receiving the members of that Institute. Two of the greatest names in English architecture at Oxford were Sir Thomas Jackson and Sir Reginald Blomfield. Sir Thomas Jackson was an ex-scholar and now honorary Fellow of his own college, who had very largely rebuilt Oxford, and had represented honourably the great traditions of English architecture, based upon a knowledge of the past and understanding of the requirements of the present day. Sir Reginald Blomfield was also a member of their Institute; a contemporary of his, although he believed he (the speaker) had the disadvantage of being one term senior. Sir Reginald went out from Oxford to forward the cause of English architecture, and at the same time to give them the advantage of his skill there, as in the building of Lady Margaret Hall. So far as the relations of the University with architecture were concerned he felt they certainly ought to do what they could to make themselves familiar with the great traditions of the past. No living art ought to be fettered by the traditions of the past, but at the same time he thought they would agree with him that in all the work done in the present it was as well to take note of the lessons of the past. He thought they in Oxford, not only by example—of which they had plenty—but also by precept, ought to do something to spread a knowledge of architecture amongst their own men. This had always been done, certainly since the Gothic revival, which was begun more or less by the old Oxford Architectural Society, of which at one time he had the honour of being librarian. The Vice-Chancellor went on to pay tribute to the work of Professor Freeman, Regius Professor of History, from whom he learned more of the meaning of architecture in history than from anyone else, and said he seemed to be the type of man they really wanted in Oxford in order that the young men might understand the great heritage they had in the past. What they wanted to bring home to people was the enormous importance of the inheritance which they had. Dr. Wells mentioned in connection with the University's effort to promote the study of English architecture that the lectures given by Professor



Photo: H. F. Traylen, F.R.I.B.A.

Magdalen Tower.

Newton had been well attended, and he welcomed the offer of the Institute to help the continuance of the lectures during the coming academic year.

The President proposed the thanks of the Conference to the Vice-Chancellor, and Mr. W. H. Stucke, of Johannesburg, representing the South African Institute of Architects, seconding, said, if the University should take up and promote to a greater extent the study of architecture, then they could safely leave such matters in the hands of the Vice-Chancellor.

The Vice-Chancellor, returning thanks, welcomed the fact that the vote was seconded by a representative of the British races beyond the seas, for their traditions were the traditions of England. Those traditions in a democratic age had to be maintained.

Mr. E. P. Warren, F.S.A., then gave his lecture entitled: "An Historical Sketch of Oxford." The following is the concluding portion of the lecture:—

The Theatre in which we are assembled, built by the munificence of Archbishop Sheldon, and opened in 1669, was one of Wren's first essays in architecture, and still, as you observe, serves its purpose not unfitly.

Several buildings in Oxford are attributed to him without the warrant of positive evidence, but since it is well known that his advice was as freely given as it was freely sought, it is probable that, in many instances he gave general advice without supplying positive directions or drawings. He appears, however, to have been employed upon work at Trinity College, and the north wing of the Garden Court is confidently attributed to him, and is said to have been in progress before the Theatre was completed.

He is further thought to have advised as to the rebuilding of Queen's College, and to have designed the Chapel and, since Hawksmoor, his pupil and friend, is known to have carried out the Front Quadrangle and its imposing screen and cupola, it is very possible that Wren, who was getting very old (he died in 1723 at the age of 91), gave advice, and, very likely, rough sketches for Chapel and Hall. The old Hall or "Refectory" was only pulled down in 1722, so that it is unlikely that Sir Christopher could have seen the building of the new one.

In regard to the Chapel, more confidently attributed to him, it may be that he had made drawings for this and the Hall, and that Hawksmoor carried out both. The general treatment of the Front Quad, and the Screen completed about 1730, most probably were derived from the great man's inspiration. These striking features, however, so closely resemble in idea Dr. Caius' Court and Gate of Honour at Caius College, Cambridge, which gave to his College a quadrangle with the Chapel forming the north side, dwellings upon the east and west, and the low screen and fine central gate on the south side, planned carefully by the very able and rather meticulous doctor for the admission of southern sunshine, on clearly and emphatically stated grounds of health, that it seems unlikely that the resemblance is accidental.

Dr. Caius had set a new fashion, in the open-fronted College Court. Hawksmoor, at any rate, repeated this form in his Great Quadrangle at All Souls College, next door, but in this instance, his "open" side, with its low central screen and gateway, is of necessity on the west side, and, like all that he did at All Souls, is in the Gothic manner. His queer, thin, but picturesque Twin Towers, which seem to have been suggested by the west front of a church, perhaps by Wren's suggestions for Westminster Abbey, face the screen on the east side of the quadrangle. On the east side of this fine court, and over the central doorway of the Codrington Library, that form its north side, is an indubitable bit of Wren's work, designed by him as a Fellow of All Souls for his college. This is the great sundial which he set up, and which was first put up on the north side of the beautiful and complete little Front Quadrangle, upon the range combining Chapel and Hall.

Hawksmoor's work at All Souls is much criticised, but whatever its merits or demerits, one most conspicuous service rendered by him to that college, to Oxford, and the world, should never be forgotten. This service was to protest against the demolition, actually proposed to him by the College, of the beautiful little front quadrangle with its entrance tower on the High-street, almost all of the fifteenth century and very perfect. He thus resisted the opportunity of planning and building a complete new college. He says: "Whatever is good in its kind ought to be

preserved in respect to antiquity as well as our present advantage, for destruction can be profitable to none but such as live by it. What I am offering at in this article is for the preservation of Antient, durable, Publick Buildings that are strong and usfull, instead of erecting new fantasticall perishable Trash. . ."

He carried the day, and the quadrangle and its tower remain, as you will, I hope, see for yourselves this afternoon.

With this fine achievement, which should ensure to Nicholas Hawksmoor a niche in any future hall of the Society for the Protection of Ancient Buildings, we may, in all honour and regard, bid adieu to his memory, whether or no we agree with Walpole in his dictum upon his work at All Souls, that "the architect has blundered into a picturesque scenery not devoid of grandeur." If he had not won his victory, you would be unable to see several very beautiful and interesting things, that I hope you will see. On the east side of the front quadrangle, and on the first floor, is the elaborate and charming old library, late Elizabethan or early Jacobean, with its fascinating ceiling with "lantern" pendants, its panelling and its heraldry. You will also see the fine little Chapel, its imposing oak screen, and its admirable old glass. The Hall and its pictures, and the very handsome Codrington Library, which contain among its chief treasures a large collection of Wren's drawings. It should be borné in mind that the College of All Souls, or "All Soulen College," was founded by Archbishop Chichele, himself a Wykehamist, in 1437, for the study of philosophy, theology, and law, but primarily and ostensibly as a war memorial, where masses might be sung for the souls of those who fell in the French Wars.

I must apologise if my dates and references seem to come in odd order, but Wren and Hawksmoor have led me to All Souls, and that college not unnaturally to some hint of its origin.

It is easier to trace the origin and dates of foundation of the colleges than those of the University itself, and my temerity, in this presence, carries me no further than the statement that the University of Paris appears to have been, to some extent, a model for those of Oxford, and that, as the University of Paris is thought to have grown from the schools of Notre Dame, that of Oxford may have found its origin in those of St. Frideswide, which appear to have been grouped to the westward of the church of that saint, and therefore to have occupied part of the sites of Christ Church and Tom Quad.

A strong connection with France was a natural outcome of the Norman Conquest, and about a hundred years after that event there seems to have been a migration of English students from Paris to Oxford. There is frequent mention of French speaking at Oxford, and nothing can be more likely than that, under Norman-French dominance, and with a French-speaking garrison at the Castle, that tongue should have been, as it was at Westminster, the common speech of the educated classes.

Mr. Boase, in his book on Oxford, states that a Statute of the Thirteenth Century ordains that Latin should be construed in English and French alternately, lest French be dropped altogether.

What I believe may chiefly interest my brother architects, who are present in such numbers to-day, is the evolution and establishment both at Oxford and at Cambridge, of the typical grouping and form of college buildings, and it seems to me that, as the more ancient University of the two, and possessing, in Merton College, the earliest of deliberate college foundations, and in New College the most typical early instance of carefully ordained architectural grouping, on a well-conceived plan, it is at Oxford that the earliest type may be best studied.

But before considering the matured college



Photo: H. F. Traylen, F.R.I.B.A.

Old House: "The High."

plan, it will be well to give a little attention to the halls of various dates and descriptions which were the precursors of the colleges, but several of which existed as separate corporations, and separate architectural entities until the last quarter of last century, when they were absorbed by Colleges. One, however, remains, as, in plan and general arrangement, a little college, complete with chapel, hall, and library; this is St. Edmund's Hall in Queen's-lane, and upon the south side of the Church of St. Peter's-in-the-East, of the south side of whose churchyard it forms the boundary. It is very well worth visiting, as the one remaining instance of a "Hall" in use as such, and for its individual charm and interest. It was founded, or re-founded, in the latter half of the sixteenth century, but tradition attributes its foundation to St. Edmund in the early part of the thirteenth century.

Halls, houses, or hostels, for they were known by all these names, were the original communal lodgings of poor scholars, and were the natural outcome of mediæval conditions. Bands of poor scholars made their way from different parts of the country, from north, south, east, and west, to seek learning at Oxford. They naturally clung together in a strange town, and grouped themselves round their leader, who, by seniority, superiority of education, or force of character, assumed or was chosen for that position. Thus the position of Head, or Master, under whatever title, filled itself naturally, and the other very necessary official, the Treasurer, purse keeper, or "bursar," to see to the collection and expenditure of the pooled resources of the group, was found in one of its members having the required aptitudes.

These groupings of students, generally formed by young men coming from distant towns or countries, occurred in all countries where universities were established, at Bologna, Salamanca, Paris, and elsewhere. In Paris these groups of students, whose hostels grew eventually into important colleges, were known as "nations," even when they represented other towns or provinces in France—nations of Picardy and Normandy as well as of England, Scotland, and Ireland. The same system obtained amongst the Knights of St. John of Jerusalem, in their establishment in Malta, where the hostelries, which grew to be rather magnificent buildings, were known as "Auberges," or inns, like our own Inns of Court, and where the different nationalities were known as the "langue" or language of France, of Italy, of Castille, etc.

In Oxford, probably in imitation of Paris, the scholars were divided into nations, northern and southern, with proctors to keep order, and the respective nations were careful, as Mr. Boase tells us in his excellent book of the Historic Towns Series, that one of these proctors should always be a south and the other a north countryman. The Irish and Welsh, he says, usually sided with the Southerners, and the Scotch with the Northerners, and that "in 1389 the Northerners sacked several halls and much ill-treated the Welsh," while you may be surprised to learn, from the same source, that "in 1401 the Irish had a riot of their own, and they were mostly banished in 1422."

The earliest Halls were sometimes mere assemblages of students in any obtainable lodging, or, in many cases, in an inn. As time went on, some of the more numerous or richer groups managed to acquire stone houses, mostly built by the Jews, as before stated, and roofed with the stone tiles, which are the characteristic and beautiful roofing material in Oxford, but which, alas! have, in view of expense, yielded place enormously of late, to red tiles, or the abomination of purple Welsh slates.

These Halls were, of course, at first, merely ordinary dwelling houses, small, and roughly adapted to their use by the students. A kitchen, a common room for meals, and a few bedrooms or a loft capable of use as a dormitory, were usually all they had to boast, or all indeed that was demanded of them.

They were usually known by names derived from their external peculiarities, or from their position, their owner's, or the patron saint of a neighbouring church. There were such names as Broadgates Hall, Angle Hall, White Hall, and Black Hall, the last still existing, in name at any rate, in a fine seventeenth-century house opposite St. Giles's Church, in the wide street to the north known as St. Giles's. Chimney Hall, as says Cecil Headlam, to whose "Story of Oxford" I am indebted for such information about these Halls, "recalls the days when a large chimney was a rarity." Many Halls retained the names of their owners, like Peckwater's Inn, formerly on the site of Peckwater Quadrangle at Christ Church; others from the signs of the inns in which they were first established, or the signs they had adopted for distinction, and had hung over their doors, such as The Brazen Nose, the Eagle, the Elephant, the Saracen's Head, and the Swan. Of the existing inns, the Clarendon was built on the site of an old inn or hall known as the Star; the Roebuck was once Coventry Hall.

These halls or hostels, in the process of time, as the University gathered power and prestige, and as the benefactions of rich, benevolent and influential men, who valued, and were eager to promote learning, were attracted to Oxford, were perceived to be insufficient, and the deliberate foundation and building of colleges naturally followed.

University College claims, and apparently with justice, to be the earliest of University endowments. At first known as The Great, or Mickle University Hall, it had a north country connection, and was endowed in 1249 by William Archdeacon of Durham. Statutes were granted to the Hall in 1280, which I

suppose may be taken as the date of incorporation. At first established on the north side of the High-street, moved in 1332 to its present site on the southern side of that street, where its fine long and homogeneous front, though it is not all of one date, adds immensely to its character and dignity.

Merton College was founded by Walter de Merton, of Merton, in Surrey, a man of great ability and distinction, sometime Chancellor to Henry III, and Bishop of Rochester, from whom he obtained a charter in 1264 to incorporate his establishment of Scholars of Merton, at Malden in Surrey, into an independent society. Later, in 1274, he transferred this establishment to Oxford to its present site, purchased from the Abbey of Reading, and incorporating the parish church of St. John. His intention was to provide means of maintenance for poor students, and their education for the service of Church and State, and he drew up careful and exact rules for the governance of his College. He banned all monastic influence, no monk or friar was to be admitted on his foundation.

Of the first buildings of Merton College little now remains. Some of the carving over the College gateway, the great north door of the Hall, and perhaps the Treasury, and part of the Sacristy. The noble Chapel, the Hall, and the incomparable Library, as well as the charming inner quadrangle known as Mob Quad., are all of later date. The choir of the chapel dates from the end of the thirteenth century, the transepts begun apparently in that century or early in the fourteenth, but were not completed till the fifteenth, while the fine tower was finished in 1451. The Chapel seems to have been planned as a cruciform church, with nave, transepts, and choir, but the nave was never built, perhaps in imitation of the plan of the Chapel of New College, which, though begun much later, was finished earlier.

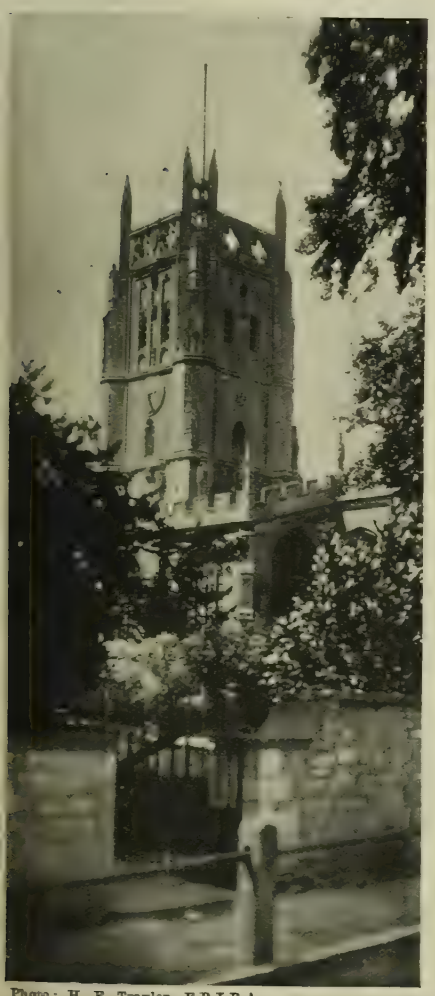


Photo: H. F. Traylen, F.R.I.B.A.

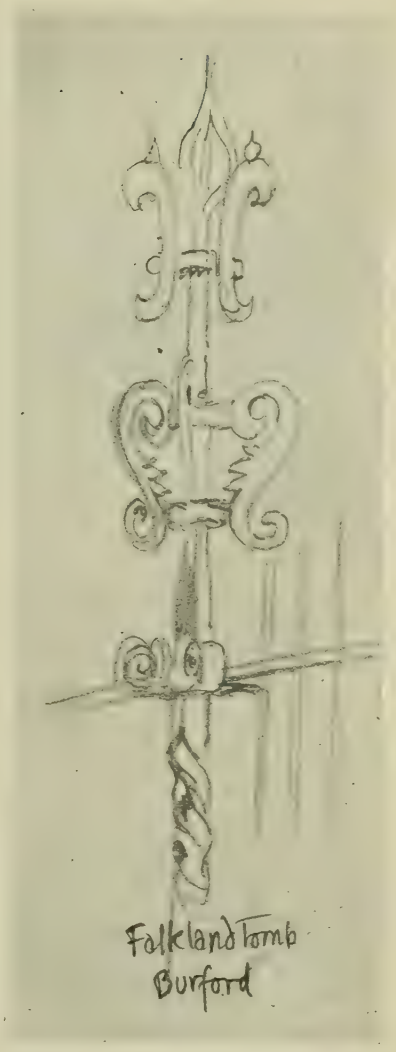
Fairford Tower.

Merton College, albeit possessed of extraordinary charm and beauty, is not a typical college, as we understand that term. Its planning is irregular and not deliberately evolved.

Its nearest contemporary, or immediate successor in date of foundation, Balliol College, founded in 1266, possesses no buildings coeval with the earliest of Merton, and was upon a smaller scale; it still possesses its old Hall and Library, and a very beautiful Oriel window, all of the fifteenth century, but beyond the plan of its front quadrangle and entrance, which is of the accepted college type of the fifteenth century, it has been so much rebuilt and modernised that it neither conveys the effect of its antiquity nor its original disposition.

As a nobly conceived and nobly executed group of College buildings, finely planned and finely built, the New College of St. Mary de Winton, commonly called New College, founded in 1379 by William of Wykeham, Bishop of Winchester, presents, as I think, the most perfect type of the mediæval college, and one of the most remarkable instances of adroit and supremely dignified use of an irregular and somewhat difficult site to be found in, or out of, this country. I speak of the original buildings of the founder. The beautiful front quadrangle was badly marred in the seventeenth century by the clumsy addition of an additional story to the long, low fourteenth-century buildings, and the high northern range of chapel and hall have suffered in consequence by the alteration of scale thus occasioned. But they are noble buildings in themselves, albeit somewhat mauled by Wyatt and Scott. The charming little cloister, with its chestnut-timbered roof, its garth intended as a cemetery for the Society, the admirably proportioned bell tower, on the rampart line, the Warden's Lodgings, the simple and dignified College gateway, and the bold and charming device of the arched wing of the lodgings, carried over the lane to increase building space and form a bridge for the Warden to his garden and to the noble Tithe Barn which faces the long stable buildings on this northern side of the lane, are all intact, or so little touched that the sense of the fourteenth century seems to linger about the grey old walls.

Intended by its founder as a senior college or secondary school to his college at Winchester for younger scholars, Wykeham achieved at once two great educational ideals: he founded together a model college and a model public school, both housed in noble buildings. He was a most remarkable man, astute, practical, a great man of affairs, and with a sure instinct for architecture, fostered no doubt by his early contact with the crafts and some early practice in business by his juvenile experiences. Born the son of a carpenter at Wykeham, he was educated at a grammar school, and subsequently in a notary's office. He was sometime supervisor of the King's Works at Windsor, where, it may be presumed, he learned architecture. Oxford owes him much; his college became a model in many respects, architectural and other. His conjunction of public school and college was copied by Henry VI in his linking of Eton with King's College, Cambridge, and later by Sir Thomas White in linking his College of St. John with Merchant Taylors' School, while his architectural conception of a college was largely imitated at Oxford. This is conspicuously the case in respect to the Chapel plan, adopted by so many of the subsequent College Chapels, of the long collegiate or monastic choir, screened from a short nave arranged for four altars, but large enough to form an ante-chapel, capable of being used, as before the Reformation it frequently was used, for lectures and disputations. His placing of Hall and Chapel in one continuous range, as the side of a quadrangle, you will find in several other colleges. It is observable that at New College the high range of Chapel and Hall is placed upon the north side of the Quadrangle, the best position, as, while shutting no sunshine off the quadrangle, it receives full sunshine itself on its southern flank.



Time, and your patience I fear, will not permit me to describe or even to mention more than a very few of the other fine colleges of Oxford, all of which are interesting in their degree, and most of which, indeed, have interest and beauty of a very high order. I must, however, and on every account, say something of Magdalen, where the adroit use of an unusually beautiful site, the happy adaptation of the existing buildings of the Hospital of St. John, and the proportionate scale and beautiful detail of its mediæval buildings, and the very dignified range of the early eighteenth century known as the New Buildings, make a college group which, with its 100 acres or so of deer park, great trees, wide garden and river walks amid the windings of the Cherwell, make of Magdalen a collegiate pleasaunce unlike anything else in the world.

Like New College, it had a great, energetic and rich founder in William of Waynflete, Bishop of Winchester and first Provost of Eton, who founded the College of St. Mary Magdalen about 1448. The long southern front, aligning the roadway between the site of the old East Gate and the Bridge, stands upon and incorporates parts of the buildings of the Hospital of St. John, and contains, in a blocked doorway still in evidence, the dole-gate where doles or food were handed out to pilgrims or the poor.

The fine bell-tower, whose proportions give it a greater apparent height than it possesses —it is only about 120 ft. high to the top of the parapet and 140 ft. to that of the pinnacles —was begun about 1492, and took eleven years to complete. The design appears to be so perfect as it stands that it greatly surprised me, when entrusted with its repair some dozen

years ago, to find that the very effective octagonal angle buttresses were not originally intended, the quoins of plainly finished angles existing behind them. This shows that the whole design of the noble crown of pierced parapet, angle and intermediate pinnacles, could not have been part of the designer's first intentions.

The most remarkable cloisters, with their buttresses, symbolic figures and grotesques, were evidently built on the mediæval model, but without intention of the mediæval use, as a place for exercise and meditation in the open air, but rather as a convenient covered passage of connection, around the new fashion of quadrangle, between the various parts of the College, the Chapel, the Hall and its offices, the President's Lodgings, the Library, and the various chambers and dwellings of the College, and as the main body of the College, the intended entrance being by the door in the superb Founder's Tower, the old, irregular quadrangle of St. John remaining as a sort of fore-court.

The delightful Grammar Hall, on the west side of St. John's Quadrangle, is a relic of the former foundation, and the most effective and proportionate buildings between Tower and river, though thoroughly Gothic in type, were not added until later.

The "New Buildings," across the wide garden to the north of the Cloisters, were put up in or about 1733.

The latest addition of St. Swithun's Quadrangle was built in 1882, from the designs of Messrs. G. F. Bodley, R.A., and Thos. Garner. The Quadrangle, however, has never been fully completed.

It will be observed that the New College plans of forming one side of the quadrangle, by placing the Chapel and Hall end to end, under one roof, was copied here, and that the short nave or ante-chapel, of which that College had set the fashion, was here observed.

Magdalen has always maintained a strong connection with Winchester, whose bishop is the Visitor of the College, and with Eton through its founder; but it has three schools for boys of its own, one at its gates, one at Brackley, and one at Waynflete.

I can only briefly mention one other College, of a later date and of conspicuous interest and beauty—the College of St. John, in the broad street known as St. Giles', and, like Magdalen, outside the city walls.

Again like Magdalen, this College was built upon the site, and incorporated part of the buildings of an older foundation, the suppressed College of St. Bernard, founded in 1437 by Archbishop Chichele for the Cistercian monks of Rewly Abbey, dissolved by Henry VIII.



Photo: H. F. Traylen, F.R.I.B.A.

Brazenose Knocker:

Bought by the College with the property at Stamford, 1901.

The College of St. John Baptist was founded in 1555 by Sir Thomas White, Merchant Taylor, and twice Lord Mayor of London, and preserves in the range which forms the west front, with its Tower Gateway, a portion of St. Bernard's College, together with the interesting forecourt enclosed by low stone walls, with a heavy weathered coping. St. John's being the only College to retain its external forecourt intact, though Balliol, upon the evidence of eighteenth-century prints, retained one until far into that century, and Wadham retains the form, but fenced with modern railings. St. John's presents, in plan, no unusual features. It accepted the admitted type, but in proportion, charm of design and of detail, as well as in the beauty of its garden, it has its own extreme distinction. Its Hall and its Chapel, 1502-1530, placed wisely on the north side of its first quadrangle, like those of New College. In the inner or Canterbury Quad, which was completed about 1636, it has semi-classical colonnades, and a magnificent central "frontispiece" with admirable bronze statues of Charles I and Henrietta Maria. The colonnades, as a convenient college adjunct, may have been suggested by the arcades of Magdalen cloisters. The College is, of course, indelibly associated with the memory of Archbishop Laud, President of the College and sometime Chancellor, whose distinction of taste, scholarship and conspicuous loyalty are reflected in the beauty of the Canterbury Quad, whose name commemorates his Archbishopric, in the rich and handsome Library, in the royal statues, and in the extreme beauty of the east or garden front of this remarkable college.



Burford Priory; Eastern Front.

From a Sketch by Lieut.-Col. H. P. Cart De Lafontaine, A.R.I.B.A.

I cannot trespass further upon your time and patience, but I am sure that those of my audience who have already seen something of Oxford, and you will all, indeed, be of that number by this time to-morrow, will admit the impossibility of conveying anything further than the merest suggestion of its architecture, as illustrating its history, and of its history as explaining its architecture, within the limits of even a longer paper than mine.

May I end by expressing the hope that those of you who are here for the first time may carry away the happiest impressions of your visit, that those others to whom Oxford was already known may find, as I have always found, that her charm ever increases, and her interest never fails.

Mr. John Keppie, President of the Incorporation of Architects in Scotland, proposed a vote of thanks to the lecturer, which was seconded by Mr. Percy Thomas, President of the South Wales Institute of Architects, and Mr. Warren briefly replied.

The delegates partook of luncheon at Magdalen and Queen's Colleges, and were photographed in the gardens of Magdalen College. The photograph was given in our Oxford edition last week, and is included this week as an inset plate. The afternoon was spent in personally conducted visits to various college buildings.

In the absence of the Mayor, the Deputy-Mayor welcomed the members of the Conference at the Town Hall in the afternoon. He said much had been said and much written with regard to Oxford and its architecture. It had considerable interest for the members of the Institute, and he was sure they would be amply repaid by their visit.

Town Planning in Oxford.

Mr. Raymond Unwin then lectured on "Town Planning in a City like Oxford." In the course of his remarks he said Oxford was not alone in that its town-planning problems were peculiar. Every city had its own special conditions and needs. One might say of each great city that it had a character, almost a personality, of its own, which the town planner should seek to preserve and develop. But of few cities were the special circumstances so important, and the character so unique, as in the case of Oxford; consequently they should be a dominating influence in the planning of the city. There were university cities in which the town was so large and important that the university exerted little appreciable influence on its development; there were others in which the town was so small that its chief function was, and was likely to remain, that of ministering to the material needs of the University. Oxford was in a different position. Here the city was the older partner; it had a long and honourable history. On many occasions it had been chosen as the seat or refuge of the English Parliament. Before the University was constituted the town had intimate connection, almost on a footing of equality, with the City of London. The City Fathers had been brought into relations of special loyalty with several of the Kings and Queens of England. The town had, indeed, a life history and a personality of its own. At the same time, its relation to the great University, which had an equally glorious past, and an even more world-wide reputation, had been one of the greatest interdependence and intimacy, not always free from strain or jealousy. The ties which united the two resembled, perhaps, the

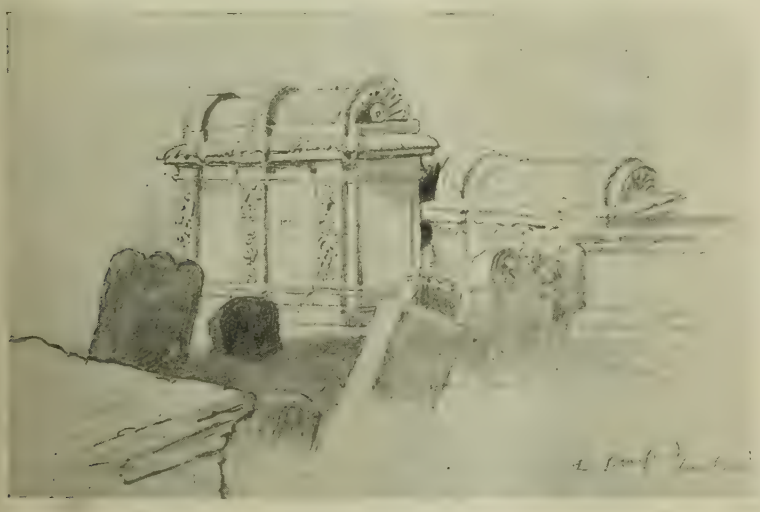
nion and the bonds of matrimony. The roblems of their mutual relations and their ights were at least not unlike those of two narried people, each of whom had a strong ndividuality and was inspired by the honour- ble desire for a personal career. Such a re- ationship would not be permanently har- nonious on the basis of the subordination of ither party, but only on that of mutual espect and understanding, on a right appre- iation of the importance of the different func- ions which each had to perform, and a due cceptance of the limitations which their re- ationship and their deper dence on one an- other must impose on both alike. When they considered that that dual life of such excep- ional interest and value was housed in and bout an ancient city, which, as a mere col- ection of buildings of interest and beauty, onstituted one of the greatest and most highly rized treasures of the world, they would egin to realise something of the difficulty, nd something, too, of the fascination, which he preparation of a town plan for Oxford and he surrounding lands presented. In the joint orking out of that plan, they might confi- ently hope for a further advance of that utual appreciation between the University nd the city which had already made so much rogress, since the time when T. H. Green, f Balliol, made the encouragement of good nderstanding between those two bodies one f the aims of his life. They confidently ex- ected that in making their plans University nd municipality alike would cheerfully recog- ise the duty which they owed to mankind preserve from injury the unique beauty of he city which they had jointly inherited. haring the respect and affection for their ommon home, they might be relied on the ore willingly to put up with such compara- ve inconvenience as might be necessary to onserve its character. As it became urgent solve the problems which progress brought p—problems of congested traffic, of expand- g commerce, of modern requirements in nitation, and the like, before adopting any olution dangerous to the existing beauty ey would search diligently for alternative ethods, seeking each time to find the way ut of or round their difficulties which would est harmonise with the *genius loci* so highly easured. He wished to congratulate the ity Corporation and their officials on the eps already taken. Instead of being content ith a small scheme for the unbuilt-on area ithin the city boundaries, they had taken a ore adequate view of the area which was timately bound up with Oxford, and had alised that the built-up centre of the city as vital to the scheme. Authority had now een given by the Minister of Health for a heme to be prepared for practically all the nd within a radius of three miles from arfax. At no distant date a preliminary statement of the proposals would be called for. It would be realised that town-planning on this scale was no mere scheme for developing a few housing sites, as some seemed to think. On the other hand, it was no scheme for stereotyping in detail the planning of all the sites within that vast area. Nor was a town-planning scheme a preliminary measure to the enlargement of the borough boundary; on the contrary, while it secured co-operation in planning, it left full autonomy to surrounding authorities in administration. Town planning was, in fact, the application of imagination, skill, and foresight to direct and guide the future development of the area, instead of leaving it entirely to the mercy of the haphazard play of individual interest or caprice. It consisted in looking ahead, studying the growing requirements of the district, foreseeing the dangers which threatened, and making a general plan of the main lines of development which would best provide for the growing needs, and avoid danger to the existing city. Increasing traffic he imagined to be one of the most threatening dangers. They shared this difficulty with all modern cities, but whereas most of them were still obsessed with the importance of providing more and more facilities for an ever-growing volume of movement, they, he hoped, would first seek to discover how far it might be practicable to abate the swollen stream which already threatened to flood their central area. They would inquire whether some of it might be directed into new channels, and so carried harmlessly round the threatened district. Even more important, they would study how needless movement to and fro might be reduced by a better location of the people and the places to which they chiefly resorted. For this purpose they would investigate the various causes of traffic congestion and the way in which they might be controlled. The increasing multiplication of motor vehicles of all kinds was one of these causes, of which they in this country had not yet experienced the full force. It was well to realise that already in America there were cities in which the multitude of motor-cars in use afforded seats for the whole population, who could thus empty the city and all go riding at once if their roads would accommodate them. In view of the necessity of limiting the volume of traffic in the central area, the question of diverting as much as possible along by-pass roads was of special importance when planning any new roads at Oxford. It was important, for example, that through traffic from the north, as well as that between the northern suburbs of the town and those east of Magdalene Bridge, should be enticed from passing through the centre of the town by the provision of alternative routes. Equally important was it to improve communication between that part of the town which lay north of Broad-street and the railway stations, or the towns and villages which lay beyond them. Such traffic should be discouraged from coming further into the town than Beaumont-street. Owing to the position of the rivers, parks, and other features obstructive to road-making, the planning of these highways was not without considerable difficulty; but if Oxford continued to grow their advantage would be increasingly realised, and he was confident that they were justified in making great efforts to preserve the best possible routes for these roads. They need not be too much deterred by the fear of costly bridges; they were apt in modern times to forget or to despise the humble ferry, which was still so effective a substitute on many a wider river. Where on their projected roads the cost of a bridge might not be justified, a ferry might prove a very serviceable substitute for many a year.

Apart, however, from planning or making new roads, there were other means which they could take to check the growth of centralised traffic. In this country they had not yet general town-planning powers applicable to the built-up areas of their towns; but in Oxford they had such a unique collection of special buildings, of historical interest and of beauty, that practically the whole of their central area had been deemed to come within the clause passed to meet such exceptional cases in the Housing and Town-Planning Act of 1923. While the powers conferred by this clause might not enable them to do all that might ultimately be found to be desirable, they did carry them a long way, and included among other things the regulation of the



Photo: H. F. Trayler, F.R.I.B.A.

Coleshill House.



In Burford Churchyard.

height and character of buildings. He would ask them to consider carefully how far they might be able to use these powers to prevent an increased density of building in the central areas; to check the increased occupancy of sites for business or other purposes which would stimulate traffic in the centre; and to limit the heights of buildings on sites already occupied for business purposes. It had not been sufficiently realised how greatly the increase in height of buildings added to the volume of traffic in the adjacent streets. This was brought home to one very forcibly in studying American conditions, where one might find the population of a small town occupying one lofty building and owning among them over 1,000 private motor-cars. He did not, of course, anticipate such extreme conditions in Oxford; but might they not ask those who were fortunate enough to have business premises in the central area of Oxford that they should accept reasonable restrictions in regard to any further increase in the size or height of their buildings? This, he was convinced, was one of the most important of all the precautions which could be taken to avoid increasing congestion in the city.

Continuing, Mr. Unwin said what was true of the vision of the city, as a whole, was true also of many charming vistas within the city. Much might be done to preserve these and to protect their setting. It was not enough in this respect to have regard only to the buildings of outstanding merit—the colleges, churches, and the like. These might be preserved in themselves and yet be largely destroyed by replacing the harmonious background of simple but charming buildings, which were so common at Oxford fifty years ago, by blatant or merely incongruous examples of the modern lack of taste.

They were there as a gathering of architects. It was the peculiar function of the architect to unite the useful with the beautiful, to study scientific construction, to consider the practical requirements, and to satisfy them in beautiful form. He knew of few activities in which this specially trained imagination was more needed than in town planning and city building. And they should be agreed that there were few cities in which this need could be stronger than in Oxford. He was glad to think that this was well understood by the Corporation and their able officials, who had already made so auspicious a beginning of the town-planning scheme. There was, of course, equal need for the experience and knowledge of the engineer and surveyor and for the student of the economics of land development. Each had scope and work of importance enough to satisfy their greatest ambition in such an opportunity as this city afforded. From what he knew of the councillors and of the city engineer, he should be surprised if they did not amply recognise the need, and cordially welcome the help which could be given by the experienced architect in forming a complete scheme. With such co-operation, while preserving the old and cherished heart of the city, it should be possible to lay out and design new quarters for the expanding population, their business and their play, which would be as attractive as convenient.

A vote of thanks was passed to the lecturer for his instructive discourse.

The Excursions.

Of the two excursions suggested for Friday the attractions of the river drew the bigger following. The flock, well over a hundred, lacked an official shepherd, but it succeeded in fulfilling its destiny without casualties. Perfect weather and the placid pace of the *Queen of England* were in accord with the serene beauty of England's river. At Abingdon the party lunched in a room adjoining the Abbey gateway, which had been lent by the Corporation. Very little is left of the original buildings, but the Corporation is fortunate in its home, and still more in the fine collection of pictures, including two Gainsboroughs and a S. Sebastian attributed to Van Dyck. Abingdon is essentially the protegé of patrons, and the sense of public spirit permeates the town. There are several delightful old almshouses, with quaint endowments, and fine details presented by benefactors, while St. Helen's Church reveals the same personal touch in numerous monuments, not omitting that to William Lee, who died aged 93 years leaving "in his Lyfe Tyme issue 200 lacking but 3." The monument habit is, however, less happily expressed by some of the appalling windows of the last century. The church has five aisles, and the elegant columns supporting the arches are curiously reminiscent of the forest. In the market-square the seventeenth-century Town Hall is a contribution by yet another generation, and is a further proof of Abingdon's good fortune. The second half of the river trip ended, after tea on board, at Day's lock, and the party reached Dorchester by a trek across the sun-kissed desert. At Dorchester in the interval before the arrival of the 'buses there was another church to visit. Probably even architects will confess that old churches can become a pious pilgrimage, and it is a sincere tribute to the Abbey Church of Dorchester that its appeal is so dramatic and distinctive. Bare and lofty, its general character has the quality of a cathedral, while the beauty of the east and north chancel windows is positively startling. The huge central pier of the east window holds the two sidelights like a rock, and was presumably intended as a support for a groined roof. It is not possible to linger over the many delightful details, including a lead font, because on the return journey Bus No. 3 displayed an enterprise of its own and gave its occupants a glimpse of Iffley Church. If the message of Dorchester is highly spiritualised, that of Iffley is elemental. The church is small and strong and the architecture is not consistent, but the sincerity of its Norman builders, their love of mass and plain surfaces, are the origins to which our modern church builders are returning. For this reason many of those fortunate enough to have seen it for the first time will rank Iffley as the gem of the day. In saying this, let us not forget the tulip tree in full bloom, with orange-flecked cups, that stands as a sentinel beside it; nor shall we prejudge what 'buses 1 and 2 thought of our pleasant deflection.

Motor Excursion.

Both excursions were so attractive that it was difficult to choose between the river and a motor trip through some of the most delightful scenery of the district, with the prospect of seeing some interesting architecture in addition.

The motor trip took us first over Cumnor Hill, whence a magnificent view of the district was obtained. From this point there was a long descent until our first halt at Faringdon, a picturesque village in the Vale of the White Horse was reached. Here a visit was made to the church, which contains some fine tombs and a good piscina. The most remarkable features, however, are the early twelfth-century wrought-iron hinges to the south door, which are still in a good state of preservation, owing to the fact that (until the last century) this door was protected by a porch which was cleared away during one of the "restorations," as it was not considered to be in keeping with the church.

Our next halt was at Coleshill House, too well known to require detailed description; during our inspection the question as to who was the architect was debated, as, although the house is described and illustrated in a standard work as being the work of Inigo Jones, later investigations would seem to cast a doubt on this attribution. Personally, we are inclined to think that the owner (in a manner not unknown to Inigo Jones' modern successors) wrote and told his friends that the design was his, and that he had "that clever fellow, Jones, to put my ideas into shape you know!" He may or may not have entrusted the actual execution to a relative, as is supposed to have been the case. An inspection of the building tends to confirm the latter theory, as although the plan and proportions of the hall and reception rooms are excellent, the detail—particularly in the case of the elaborate plaster ceiling—appears somewhat heavy, and is everywhere laid on with such a generous hand that it produces



Photo: H. F. Traylen, F.R.I.B.A.

Fairford Porch

restless and unsatisfactory effect. The dining room is another problem, as the walls are panelled in oak with pilaster strips, etc., of Jacobean type. Presumably this panelling was removed from an earlier house and re-erected here at a later date.

Proceeding on our way, we passed through Lechlade, and had time to record a snapshot mental picture of its picturesque roofs and curving street before, some miles further on, we halted for lunch at Fairford.

St. Mary's Church is probably the most complete example of the English parish church of late mediæval times which now exists. One of the remarkable features of the building is the (almost) complete set of fifteenth-century painted glass windows, of which the most curious is a series (in the clerestory window of the north aisle) representing persecutors of the Church. Here, in the smaller tracery lights, are representations of small devils in place of the angels which accompany the figures of the martyrs on the south side. The high altar was designed by Mr. J. N. Comper, and an attractive altar with carved triptych and hangings in the north aisle is the work of Mr. Geoffrey Webb.

From Fairford our route was homeward, the first stopping-place being Burford. This village is certainly one of the most beautiful in Oxfordshire, and the wide main street descending steeply towards the centre of the clustered group of gables, high-pitched roofs and varied chimney-stacks, with the graceful tower and spire of the church appearing above some ancient elms on the right, forms a picture of typically English beauty. Space does not permit of any detailed description of the church, which was first visited, after which members of the party went their various ways in search of architectural beauty. Unfortunately, we were not able to visit Burford Priory, a fine house well restored in a beautiful setting, but a distant view of the entrance front made us envy the fortunate owner of so delightful a retreat. All too soon the warning whistle called us for an excellent tea, and we once more climbed into our motor coach en route for Oxford, which was reached shortly after six o'clock.

Much of the success of this excursion is due to the information so kindly given by Messrs. E. P. Warren (President, Berks, Bucks and Oxon Architectural Association), Rogers, Rayson (Chairman and Hon. Sec. of the Oxford Society of Architects), and Harry Hutt (Hon. Sec., Berks, Bucks and Oxon Architectural Association), to all of whom our sincere thanks are due.



Photo: H. F. Traylen, F.R.I.B.A.

Almshouses, Burford.

THE BANQUET.

On Friday evening a banquet was held in Christ Church Hall, the President presiding.

After the loyal toasts, the President proposed "The University and the City of Oxford," and said the Institute Conference had never been held in such a fascinating centre. At the Conferences their aim had not been so much to discuss matters of high importance as to confer amongst themselves as friends, to draw closer the bonds of unity. Although the face of Oxford remained on the whole much as it had done for many centuries, yet he fancied that they had done something to alter its appearance, and whether their interference was not visible even in the old colleges and those old façades which had apparently not changed for many years, there still seemed when one visited them after a lapse of years a sort of change, a kind of subtle alteration which might arise from the buildings themselves or might arise from the eyes with which they viewed them. However hurried the life of Oxford might be becoming, whatever new problems faced the civil authorities, they felt confident from what they had seen in Oxford that the authorities would regard the great heritage over which it presided with infinite respect and infinite care.

The Rev. R. L. Phelps, responding, said to do so was a great responsibility when he was asked to, and in a sense, represent the Vice-Chancellor. He felt that the most careless undergraduate, although he had not perhaps thought upon the subject, although he had not thought of the stream-like winding of that glorious street, High-street, although he had been deaf and blind to all the charm of Oxford, what he did carry away was a vision of architectural beauties of that kind and another. Thanks to those represented there that night and their profession, they had most abiding memories of Oxford. When they came to consider its buildings there was something of the same mystery, something of the same lack of certainty, that there was with regard to the University. Who could tell who was responsible for many of Oxford's finest buildings? Take his own college. The front quadrangle of Oriel College formed one of the beauties of the place. Who was responsible for it? There was no name of an architect connected with it, the college accounts did not show that anyone carried it through, it was thought out, he took it, by the craftsmen who executed it with their own hands, and what was true of that was true of many buildings. They heard disputes over work attributed to Wren, how far Inigo Jones worked in this place, and the history of the Ashmolean. He thought those who were comparative strangers had not noticed the extent to which Oxford drew from all four quarters of the globe. They looked for something which would unite the diverse elements which came together from all quarters of the Empire, and they found nothing more calculated to do so than the stone walls which made the city of Oxford, its colleges and its buildings. It was to them and those who had gone before that they owed what was in the present, and would be still more in the future, one of the strongest bonds which united the members of the different parts of the Empire who came to Oxford. There was a great deal which they had done, and which they would do in uniting districts far apart, but even more difficult work was to unite the present with the past. Of all other links that could make appeal to the sense there was none which could equal Oxford's architecture. The architect had a great work before him, for he had to unite the aims, the ideals of the present with the aims and ideals of bygone generations. That was his task above all in Oxford. It would not be gracious to ask how far the present generation had succeeded in discharging that task. Oxford had suffered through the amateur architect, but they owed to architects no small debt in the past. That debt was ever increasing, and when he expressed the gratitude of Oxford for their work, their gratitude was at the expense of favours expected.

The Mayor of Oxford also responded.

Sir Herbert Warren, K.C.V.O., in proposing "The Royal Institute of British Architects and its Allied Societies," said Dr. Johnson was a sort of crowning incident of his career that he should be invited to dine in Christ Church Hall, that splendid hall which he (the speaker) always considered to be the most splendid chamber in Christendom. He had no doubt that a Magdalen man, Cardinal Wolsey, was the founder of Christ Church, but he did not know they had heard much about Wolsey as an architect. Wolsey was also the architect of Magdalen Tower; certainly in that splendid hall in which they were met, the kitchens, and also of Hampton Court. They could claim that he was one of the great architects of England. What constituted an architect; what was the function of the architect? The great architect must be a man whose art must cover the whole gamut of human interest, cathedral, palace, hospital, law court, the university college, the laboratory, the library, and above all, the home. He had to give it a perfect or as nearly possible a perfect form, and make it suitable to all the needs of life. It was a great task and a great calling. He coupled with the toast the names of Mr. Gotch, Mr. E. P. Warren, and Mr. Paul Waterhouse.

Mr. Paul Waterhouse, who responded, said if he had got to give a message to Oxford, let him say, as a man in the street, to the people who said Oxford must bring itself up to date, "don't take those things to heart." If Oxford went out of business as an old-fashioned place of business, let others take on the job; don't let them try to emulate the Universities of the north, don't try to emulate Cambridge, don't let them even become as Bletchley.

Mr. E. P. Warren, also responding, said there was no Society more loyal to the Institute than the one he represented, and he felt that as it represented three counties, each of which was represented by a conspicuous establishment, it had some distinction. Berks claimed the castle of Windsor, Bucks one of the most beautiful public schools, while Oxon claimed the beautiful city of Oxford and a great University. The speaker paid a tribute to the Presidency of Mr. Gotch, and speaking of the work of the Institute, said wherever the British flag flew, the Royal Institute of British Architects was in greater or minor degree represented by architects. They all showed the greatest possible loyalty towards the Institute. So far as that Conference was concerned, it was impossible for them to leave Oxford without acknowledging in the fullest and warmest manner the debt which they owed, the debt they would feel for years to come, towards the University and City for the facilities they had been offered and met with. That Conference had not been carried out without a good deal of work, and might he be permitted to ask for consideration of the efforts made by the Executive Committee and by the Chairman of the Oxford Society of Architects (Mr. Rogers) and the Hon. Secretary (Mr. Rayson), both of whom had been responsible for the arrangements locally, and further by that prop of the Royal Institute of Architects, Mr. MacAlister. Oxford was always inspiring to architects, but he was sure every architect who had attended the Con-

ference would hope that the University would, in the erection of new buildings, consider its dignity, and the expression of that dignity, as it had done in the past, and that it would most carefully watch the preservation of its beauty, and would not allow the mere consideration of rapidity of travel and the like to injure its amenities, and that it would not consider any form of advertisement, for Oxford, like good wine, needed no bush.

The Conference owed much of its success to the work of Mr. E. P. Warren, President of the Berks, Bucks and Oxon A.A., and Mrs. Warren; to Mr. H. S. Rogers, Chairman of the Oxford Society of Architects; Mr. Rayson; the local societies; and to Mr. Ian MacAlister, the indefatigable Secretary of the R.I.B.A.

THE International Congress on Architectural Education will take place at 9, Conduit-street, from July 28 to August 2. The following programme has been arranged:—

Monday, July 28.—In the evening, at the R.I.B.A., there will be a reception by the President and Council R.I.B.A.

Tuesday, July 29.—In the morning there will be a meeting of the members at the R.I.B.A., when papers on Architectural Education in the Past in America, France, Italy, and England will be read and discussed. In the afternoon the members will assemble at the Architectural Association, 34, Bedford-square, W.C., for a visit to the School of Architecture, and proceed thence on a visit to the Bartlett School of Architecture.

Wednesday, July 30.—In the morning, papers on Architectural Education at the Present Time in America, France, Italy and England will be read and discussed. In the afternoon members will embark on a launch at Lambeth, and proceed to Greenwich.

Thursday, July 31.—In the morning, members will meet at the R.I.B.A., when papers on Architectural Education in the Future in America, France, Italy and England will be read and discussed. In the afternoon a visit will be paid to the British Empire Exhibition at Wembley. In the evening the Congress Banquet will take place at the Hotel Victoria.

Friday, August 1.—Visit to Cambridge.

Saturday, August 2.—The following conducted visits have been arranged: Westminster Abbey, by Professor W. R. Lethaby; St. Paul's Cathedral, by Mr. Mervyn Macartney; the City Churches, by Mr. Arthur Keen and Mr. Arthur Stratton; and the British Museum, by Sir John Burnet.

The attention of members is drawn to the exhibition of students' work which will be held in connection with the Congress. About fifty schools will be represented, and it has been found necessary to use both Grosvenor House, Upper Grosvenor-street, and Devonshire House, Piccadilly, in addition to the Galleries of the R.I.B.A. The exhibition will be of the greatest possible interest to all architects, and will be open daily from July 28 to August 2 inclusive, from 11 a.m. to 9 p.m. Tickets of membership for the Congress, including admission to the exhibition, catalogues, and a copy of the congress book of proceedings may be obtained from the Secretary, Board of Architectural Education, 9, Conduit-street, W.1, price 10s. 6d.

The British School at Rome: The Rome Scholarships.

The following awards are announced:—

Faculty of Engraving.—Mr. W. E. C. Morgan (Slade School) has been awarded the Rome Scholarship in Engraving for 1924.

Faculty of Architecture.—Mr. M. A. Sisson, B.A. (London University), has been awarded the Henry Jarvis Studentship of the Royal Institute of British Architects for 1924. No appointment will be made to the Rome Scholarship in Architecture for 1924.

Sir John Simpson has been re-appointed to represent the R.I.B.A. for a further period of three years on the Council of the British School at Rome.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

*** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Sand-lime Bricks.

SIR,—Would you kindly inform me where I can get some reliable information as to the advantages and disadvantages of the manufacture and use of sand-lime bricks in this country? D. B. H,, *Lt.-Col., R.E.*

Stains on Slates.

[Reply to MR. R. T. BECKETT.]

SIR,—I feel sure that many will not agree with Mr. Beckett's experience as to stains on slating, and I think it is commonly accepted that lead and iron produce more obvious stains than does copper. Iron rusts when the paint has perished, or is improperly applied in the first place, and water carries the rust stain down on to the slating; while lead is of a roughish texture that readily collects soot and dirt from the atmosphere, which is again carried down on to the slates below by the weather.

The extent by which the slating retains these impurities depends upon its surface; and the extent by which such stains when once retained are visible, depends upon the depth of colour of the slate. The smooth dark blue Welsh slate is the least liable upon both counts; while the rough and lighter coloured green Westmorland "Peggie," and similar varieties, are much more liable for the same reasons.

I am inclined to think that in the instances where Mr. Beckett has noticed the stains under copper finials flashed with lead, the trouble springs from the lead flashings and not from the copper, and that his memory has failed him when he states that he has not noticed a like thing under an all-lead finial.

I should have said that there is no cure, but that the prevention lies in the use of copper finials flashed with copper.

Apart from the case of finials, there is no doubt that when a beautiful green or grey slate is used, much unsightly staining can be avoided by designing the roof gutters so as not to discharge directly on to a slated surface.

"M.A."

Insulating.

[Further Reply to "INSULATION."]

SIR,—In my reply recently to the above correspondent, I should have stated that where a cavity wall is used for insulating purposes, the cavity should be sealed and not ventilated as in ordinary cavity work. A ventilated cavity merely brings the temperature of the outer air all the nearer to the inside of the building, and, therefore, defeats its own object. A sealed cavity, on the other hand, forms a stagnant cushion of air that is non-conducting and a very valuable auxiliary to the non-conductive properties of the material of which the inner wall shell should be constructed. Care should be taken that this stagnant air cannot escape into the building and thus vitiate its atmosphere.

"L. X."

Cow Houses.

SIR,—Could any of your correspondents with experience in the matter advise me as to the best arrangement and materials for the floor and drainage of a high-class cow-house?

AGRICULTURAL.

Party Walls.

[Reply to "F. J. B."]

The expression "party-fence-wall" is defined by the London Building Act, 1894, as meaning, a wall used or constructed to be used as a separation of adjoining lands of different owners; and, standing on lands of different owners. Such a wall is, however, exempt from Parts VI and VII of the Act, when not exceeding in height seven feet, as measured from the top of its footings.

Both the London Building Act, 1894, and the Towns Improvement Clauses Act, 1847 (which is incorporated in the Public Health Act, 1875), make provision for taking down, securing, or repairing dangerous walls; but, whereas the former Act provides for the expense to party walls to be borne in various ways, the latter Act does not do so. Under the London Building Act, 1894, the expenses of the work would be divided between the two owners A and B; since any Common law rights they may have are excluded by that Act. If, however, the wall is not within the area covered by that Act, then A and B have common law rights. It may be there is possession in common, and therefore a tenancy in common of the wall (see Jones *v.* Read, Ir. R. 10 C.L. 315). If there is no evidence of ownership, a jury is entitled to find that the wall is owned by the adjoining proprietors as tenants in common. (See Standard Bank of British South America *v.* Stokes, 47 L.J. Ch. 554.) Also common user is prima facie evidence that the wall and the land on which it stands belongs to the owners of those adjoining lands as tenants in common.

In Cubitt *v.* Porter, 2 Man. and Ry. 267, it was held that trespass does not lie by one part-owner or tenant in common of a party-wall against the other, unless there is complete ouster, *i.e.*, dispossession or ejection, or some destruction of the common property; but, where one of two tenants in common of a party-wall does some act which, though not amounting to the total destruction of the wall, yet does partial damage, and so causes disturbance to his co-tenant, such co-tenant, whilst he cannot maintain trespass, shall nevertheless have his action for damages.

It follows that outside the London area, A would (if he can prove the rebuilding of the wall is due to B's tree) have a right of action against B for damages, and that therefore B should bear the expense.

With reference to this query, Mr. Henry Lovegrove has sent us the following note:—

This wall should be properly described as a party *fence* wall, and if "A" can clearly prove that the tree on "B's" side did the damage, there can be no doubt as to "B's" liability. Trees should never be planted near walls. I have known many cases of failure.

England's Ancient Monuments.

The work of the Royal Commission on the Ancient and Historical Monuments and Constructions of England is to be reduced owing mainly to the need for economy. In its seventh interim report, which was issued recently, regret is expressed that, owing to loss of staff and its continued non-replacement owing to Treasury ruling and to the refusal to entertain any immediate prospect of its extension, it has not been possible to go forward with the pre-war intention of the Commission to train and place senior investigators in charge of separate counties or divisions of counties with competent staffs under them to report the results of their inquiries to a central office in London for final editing and publication. The succeeding inventories of the Commission will deal in three volumes with the county of London (including the cities of London and Westminster), and the county of Middlesex.

Downham £900,000 Scheme.

Approval for an expenditure of £900,000 in connection with the building of 2,000 houses on the Downham Estate was asked of the London County Council last Tuesday.

THE BUILDING TRADE

BUILDERS' CONGRESS AT OXFORD

The Southern Counties' Federation of Building Trades Employers held its annual summer meeting recently at Oxford. The earlier sessions of the Congress were private, but a public luncheon took place at which the members of the Oxford Federation acted as hosts. There was a reception on the same evening in the Town Hall.

At the reception, Mr. W. C. Walker, the President, on behalf of the Southern Counties' Federation of Building Trades Employers, presented to Mr. W. E. Collier, of Reading, their late President, an illuminated address.

Mr. W. E. Collier, in acknowledging the certificate, said it was true that the time had been one of stress, and one in which a critical situation was reached. They surmounted that without a conflict, he was glad to say, and he hoped they would surmount the present situation in the industry, which might result in a serious conflict. A conflict would bring bitterness and struggle for a certain period. The loyalty of the employers generally last year enabled them to overcome their difficulties, and he believed if the same atmosphere prevailed now the same would probably occur again.

The President introduced Mr. Matthews, President of the National Federation of Building Trades Employers. He should have been with them earlier in the day, but he was at London with the Minister of Labour.

Mr. Matthews said it was owing to their kindness and consideration that he was President of the National Federation a year before he expected to be, and he wished to express his gratitude. He also expressed regret that he was not able to take part in their summer meeting as fully as he would have liked. That day he, among others, had received a message from Mr. Tom Shaw, the Minister of Labour, asking them to meet him at Bedford Square. They were, he might add, going on just as if everything was normal, in the hope that something might save the situation as last year. The prospects were not so bright, however, now. There was one determining factor which could not be left out of the question. If there was to be withdrawing on one side, there should be a withdrawal on the other side. If Liverpool was allowed to carry on as it was at present, Liverpool would not be alone very long—it would spread to Manchester and throughout the country. He believed it was reckoned that there had been so many breaches in the agreement that it demonstrated that the operatives were in the wrong. He was not going to say that some of the employers were not in the wrong; they were, for they made proposals beyond the agreement. They ought to stick to the agreement.

At the ceremonial luncheon, among the members and guests of the Federation who were present were the Mayor and Mayoress, the Sheriff and Mrs. Brown, Ald. Hutchins, Councillor W. M. Gray, the Chief Constable, the Town Clerk, the City Treasurer, Mr. H. Paintin, Mr. W. C. Walker (President of the Federation), Mr. G. A. Hotter (secretary of the Federation), Mr. H. S. Critchley (secretary of the Oxford Association), Mr. Cowley, Mr. G. Gardner, Mr. T. E. Knowles, Mr. T. Rayson, Mr. C. E. C. Lowry, Mr. E. J. Strange, Mr. Lovell, and Mr. Wallis.

Capt. Bourne, the new City member, said it was a very pleasant duty to propose prosperity to the City of Oxford and to welcome the conference to the city. He did not think they would find any more suitable place for a congress of builders than this city, for he thought that here they would find examples of nearly every style of architecture and type of building known in the country. They were threatened, Capt. Bourne continued, with troubles in the building trade which he sincerely hoped would not come to a head. The housing shortage was the most urgent problem of the day, and there was no doubt that there was a very great deal of work before the country in this direction, and he sincerely hoped that nothing would occur to hinder the supply of houses which the builders had in hand. He hoped that Oxford would continue to grow as a city of fine houses, making a worthy setting for the fine buildings which it was its happiness to contain.

The Mayor, who replied to the toast, drew their attention to two little buildings within a stone's throw of where they sat. They were Bishop King's palace, and No. 3, Brewer-street. No one wished for the prosperity of the city more than he did. They had recently had a little dispute in the City Council about some posters, and some University members had objected to the idea of advertising Oxford. But the posters, after all, were only to draw people's attention to the beauties of the city. He hoped they, as builders, would carry out what they set themselves.

Mr. T. E. Knowles, of whom the chairman spoke as one of the oldest and most respected members of the Oxford Association, proposed "The Southern Counties' Federation of Building Trades Employers."

Mr. C. E. C. Lowry, who replied, said that the Federation had a great deal to be thankful for. But he was afraid—though he hoped not—that they had some trouble pending. They were not out to fight their men in the least, and they only wanted to come to reasonable terms with men with whom they had worked for many years. The whole object of the Federation was to avoid quarrelling, and the one aim of their meetings was to try to come to some amicable arrangement with their men.

Proposing "The Oxford Association," Mr. E. J. Strange said the Southern Counties' Federation was trying to build up a scaffolding which should be of permanent advantage to the building industry.

Mr. W. C. Walker, the President, said builders were trying to benefit the industry to which they belonged. They were endeavouring also loyally to carry out the things their Federation expected them to do. Whether they succeeded or not was not for him to judge, but the members would at least agree with him when he said that Oxford in the past had compared favourably with other towns and districts in that respect.

Municipal Corporations and Housing.

The Earl of Derby was recently re-elected President of the Association of Municipal Corporations at their annual meeting at the Guildhall. His re-appointment was moved by the Lord Mayor.

In presenting the Association's annual report, Lord Derby made reference to the subject of housing. It was, he said, the most difficult problem that they had to deal with, and he wished he could hope that political feeling and bias would be kept out of the consideration of the subject. He did not think there was any great enthusiasm in the Association for the present plan, and the Council was divided on the subject. All that they could lay down, as an Association, was that the question must be and could only be determined by Parliament, and that, so long as no undue burden was imposed on the local authorities, every local authority should do its best to give effect to the wishes of Parliament.

Mr. Trevelyan Thomson, M.P., moved: "That in the opinion of this Association local authorities should have a discretion to increase the maximum superficial area of houses, which will rank for subsidy, by 100 square ft." While it was true, he said, they could build a passable house for the 950 superficial ft. under the subsidy scheme, there were many towns, in the north of England which, if they were to provide decent-sized houses, must have greater freedom and discretion. The motion was carried.

THE BUILDING TRADE DISPUTE.

Our *résumé* of this dispute last week ended with the close of the Court of Inquiry.

After the meeting of the employers' federation at Blackpool the following statement was issued:—

"In regard to the strike in the building trade the employers received with pleasure reports of the loyalty of members in various regions, and desire to emphasise the importance of maintaining their determination to pursue the matter to a definite and honourable conclusion. The meeting approves the action of its representatives at the Court of Inquiry, and agrees to a conference under the presidency of Lord Buckmaster provided that the notices issued nationally for the cessation of work shall be posted on July 12 unless the Court of Inquiry otherwise request."

Mr. W. H. Nicholls paid a high tribute to Lord Buckmaster and his colleagues for their masterly grasp of the points in dispute. Lord Buckmaster had offered to preside over a meeting of both sides, and the employers had accepted. The operatives had promised to consult their executive. As to the merits of the dispute, there might be an impression in the public mind that the dispute might be one of wages or hours only, but the issue was far bigger. It was a fight for a principle and the honouring of an agreement constitutionally made between the organised bodies of the employers and operatives, and of the employers being able to exercise reasonable control in their own businesses.

Following a meeting of the Disputes Committee of the Operatives' Federation, Mr. R. Coppock, the men's secretary, declared that the reports they had received from the country were very satisfactory. He said more men were returning to work because the employers were giving way, and that hundreds of agreements conceding the terms had been signed, and sent to his office for registration.

Concerning the possibility of a Liverpool Conference, he said that the Operatives' Federation had not the slightest objection to the Liverpool operatives meeting the Liverpool employers, but he declared that this would not affect the national position.

In a statement issued subsequently by the employers, however, it is stated that in the Agreement which the men are trying to get individual employers to sign, conceding an advance and a guaranteed week, there is the following clause:

> That this agreement is operative only so long as the general position remains unsettled, and will be subject to the provisions of any larger agreement.

This we take to mean that the men's demands for local and regional settlements are only temporary, and that these are expected to be superseded by a new national agreement. The employers desire that the public should realise that the statement made by the operatives that hundreds of employers have signed agreements on the operatives' terms may convey an entirely false impression, such agreements being in a large number of cases between unfederated employers and individual men only.

Meanwhile Mr. Moss, the secretary to the Liverpool employers, met Mr. Fyles, the leader of the strikers. They discussed, it is stated, the possibility of a resumption of local negotiations. Mr. Moss gave the following account of the interview:—

"In view of the appearance of different statements purporting to be from Mr. Fyles and Mr. Wilson respecting a suggested round-table conference, I had an informal interview with Mr. Fyles to clear the matter up. After a long discussion Mr. Fyles said that his

society would be prepared to discuss the position, but under no circumstances would his society meet the national employers or the national operatives. I urged from every point possible that good might result from the round-table conference, but he would not agree. It is a complete fabrication that I gave any assent to the possibility of a resumption of local negotiations or to a conference between employers and operatives this week-end."

The following statement was issued later by the London Employers' Association:—

Our members are absolutely loyal. Every inquiry has been made into the statement that federated firms have signed the operatives' agreement. There is no basis whatever for such a statement. Members of the London Association complain of trade union organisers visiting various firms and stating that such and such a firm has signed the agreement, but when the matter has been inquired into and demand has been made for production of the signature it has not been forthcoming.

The London master builders are now issuing permits to their own members in exceptional circumstances where work must be carried out in the interests of the public health and safety, and they drew public attention to the action of the operatives in the case of Westminster Hospital, where alterations are nearing completion and where patients have been informed that they would be received on the 17th inst. The men refused to allow the operatives to work on the job until the increased rate was paid.

The lock-out has been further postponed by the building trade employers, as will be gathered from the following announcement:—

The National Allied Building Trades Employers' Disputes Committee met to consider the dimensions of the strike. Reference was made to the statement of Mr. Nicholls at the Court of Inquiry that if a request was received from that quarter to suspend the lock-out notices they would be suspended. Although no such request has been received owing to the delay in issuing the Court's report, it was felt that in view of the fact that the strike is now national in character and extent, the notices should be further suspended pending further instructions, and telegrams were despatched accordingly.

Mr. R. Coppock, secretary of the National Federation of Building Trades Operatives, speaking at a mass meeting of the North Staffordshire branch of the Federation held on Saturday at Trentham Park, North Staffs, made several important announcements.

Among them Mr. Coppock said, with regard to the question of hours, the Federation was going to support the whole of the men in their claim for the maintenance of a forty-two hour week—or less. With regard to a guaranteed week, they could not, and did not, intend to enter into negotiations to consider whether it was right or proper. The building industry could afford to pay guaranteed time, and must. It could do so if it organised in such a manner as to take over the newer methods which were at their disposal.

The employers, in a reply to the speech of Mr. Coppock, state: In many places the building of houses, particularly those for the working classes, is not an economic proposition, as the value of the house when erected is less than the cost in labour and material. The operatives are forcing an upward tendency in the cost of production at a time when the cost of living is tending to fall. Mr. Coppock openly declared that the operatives had, as a result of their organisation, an opportunity of exploiting the situation, and they would use this to the advantage of their members. The public should see, from this evidence, that the future position of building is extremely uncertain, in view of the progressive demands of the operatives; and the employers, in the interest of the public as well as in their own interest, are pressing for a settlement on a national basis that will restore security.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Cost of the New Houses.

Mr. Masterman asked the Minister of Health if he would now state the figures proposed by the Building Committee in Cmd. 2104 as *x* and *y* per square ft. at which they were prepared to build two and a half million houses of a limited size during the next fifteen years.

Mr. Wheatley said he thought it would be against the public interest to publish the figures in question. It would be remembered that he had agreed with the local authorities to proceed normally by the method of competitive tenders.

Mr. Masterman: Is it not impossible for us to discuss the question without knowing the offer made between the combinations of building operatives and employers?

Mr. Wheatley: The right hon. gentleman is not justified in describing it as an offer. It was an item of information supplied to the Ministry of Health to enable it to judge whether the best competitive tender was a reasonable one in present circumstances. If I circulate it, the right hon. gentleman will readily understand that it will become a guide to competitors.

The 1923 Act.

Mr. Wheatley informed Captain R. Terrell that applications were still being received for authority to proceed with the erection of houses under the Housing, etc., Act, 1923. Since the beginning of this year authority had been given for the erection of 62,743 houses —20,421 by local authorities and 42,322 by private enterprise.

Size of the New Houses.

Mr. T. Thomson asked the Minister whether he was aware that at the recent annual meeting of the Municipal Corporations Associations, held in the Guildhall under the presidency of Lord Derby, a resolution was passed by 300 representatives of local authorities protesting against the limitation of the maximum measurement for houses proposed in the Government's Housing Bill, and would he reconsider the policy of the Government on this question.

Mr. Wheatley said he had had no intimation of the resolution referred to, but very few local authorities had utilised to the full the powers which they already possessed.

Mr. D. G. Somerville: Is not the fact that the local authorities have not utilised their powers due to there being no men to build them?

The £500 House.

Mr. Wheatley informed Mr. Simon that he did not propose to introduce a Bill under which houses costing £500 each would be let at a rent of 3s. 3d. weekly.

Mr. Simon: Is the right hon. gentleman aware that the statement made by him that a £500 house could be let for 3s. 3d. per week has been broadcast all over the country, and was repeated in an interview given by him to the *New Leader* of last Saturday? If he does not propose to introduce a Bill, I think he owes it to the House to say that he is totally incapable, either under capitalism or under socialism, of doing anything of the kind.

Mr. Wheatley: It is quite true that I stated in the House and in the public press that, but for the interest charged on capital, a £500 house could be let economically at 3s. 3d. a week. I am not prepared to say what I would do in a state of socialism.

Mr. Hannon: How does the right hon. gentleman propose to erect houses in this country without capital?

Mr. Wheatley: I was not proposing to erect them without capital. I was proposing to erect them with bricks, and other materials.

Mr. Simon: How does the right hon. gentleman propose to raise the money for this purpose without paying any interest to the people who lend the money?

Mr. Wheatley: I am not proposing to borrow money free of interest under this Bill, nor, indeed, to borrow money at all. That will be the business of the local authorities.

Wooden Houses.

Mr. Wheatley informed Lieut.-Commander Fletcher that a small number of proposals had been received from local authorities for the erection of houses mainly constructed of wood, or for sanction to grant financial aid to such houses, and in some cases approval had been given. He believed the position as regarded special methods of construction was generally understood by local authorities, but he would note the suggestion of issuing a circular following the passing of the Housing Bill.

Lieut.-Col. Fremantle asked if Mr. Wheatley would make some kind of investigation into the length of life of these wooden houses, in view of the statements that were being made on the subject, and of the quite general feeling of those who, like himself, had had experience of condemning insanitary houses, that their life was not long enough to justify the comparative saving in cost.

Mr. Wheatley said he thought that information might be very valuable, and he would endeavour to obtain it.

Capt. Eden: Is it not a fact that some of these houses have been in good repair for between 80 and 100 years?

Mr. Wheatley: I do not know, but I have known some which were not in good repair after ten years.

The Treaty with the Building Trade.

Mr. E. Simon asked the Minister of Health whether the treaty he had made with the building trade as to the augmentation of labour was embodied in any other documents beyond the Housing (Financial Provisions) Bill; if not, whether the building trade and the several trade unions concerned had explicitly accepted the Bill as constituting a guarantee in return for which they were prepared to undertake that there should be one apprentice to three craftsmen in the various branches of the trade; if so, what period was covered by this undertaking; and would he submit to the House copies of any documents signed on behalf of the building trade or the trade unions in this matter.

Mr. Wheatley said the Report of the National House Building Committee had already been submitted to the House, and there were no further documents signed on behalf of the building industry dealing with the matter referred to.

Mr. Simon asked what guarantee there was, if the House passed the Housing Bill, that the agreement embodied in the measure might not be repudiated by one or more of the trade unions, and that they might not refuse to provide the extra labour and apprentices which was part of the bargain.

Mr. Wheatley: The only guarantee that one honourable body of men gives to another.

Mr. Simon: Is it not the fact that honourable bodies of men can only be bound by some thing to which they have agreed? I want to know whether they have agreed.

Mr. Wheatley: They have agreed to deliver so many houses per annum for a given number of years, on condition that the State and the local authorities order them. They have given that guarantee in the building trade report; no other guarantee is of very much importance.

Replying to further supplementary questions Mr. Wheatley said that the Building Committee's Report contained the guarantee given by the building industry to him. The Housing Bill contained the guarantee given by him the industry.

Bricklayers' Apprentices.

Asked by Mr. D. G. Somerville whether was aware that it would be three to fo years before any apprentice was capable taking his place among tradesmen in t Bricklayers Union, and whether, under circumstances, he considered that the resto

tion of the apprenticeship system in the building industry would be adequate to meet the shortage of labour in carrying out the housing proposals of the Government, Mr. Wheatley said the answer to both questions was "Yes."

Price of Building Materials.

Mr. Wheatley informed Sir K. Wood that there had been considerable fluctuations in the prices of such materials as lead and iron water pipes during the last four years. He was not able to say to what extent these fluctuations had been due to the demand of foreign markets. They had no doubt been due to various circumstances, especially to the fluctuations in prices of raw materials.

Structural Materials.

Mr. Wheatley informed Mr. Foot Mitchell that according to the circular to local authorities issued in connection with the Housing Act, 1923, the materials to be used for the construction of houses must be of good quality such as was ordinarily specified by a local authority in a contract for workmen's houses; and the construction must be of a type for which a period of not less than sixty years would be allowed by the Minister of Health for the repayment of loan. Provision was, however, made for variation by special approval of the Minister. The question would be further considered.

Belgian Bricks.

Mr. Penny asked the Minister whether he was aware that Belgian bricks were being offered alongside wharf in the Thames at 55s. per 1,000 as compared with 85s. and 75s. for Kentish first- and second-class stock bricks in the field; whether he could say how the quality of the Belgian bricks compared with that of British-made bricks; and whether any considerable quantity of the former were being used in the construction of subsidised houses.

Mr. Wheatley said the answer to the first part of the question was "Yes." In answer to the second, he understood that the bricks at present available were not regarded as equal in quality to first- and second-class stock bricks. In answer to the third, he was not aware that the bricks were being used on subsidised houses. If foreign bricks of satisfactory quality were available at lower prices than British bricks he should expect local authorities to avail themselves of them.

Prices per Foot.

Mr. Wheatley informed Lieut.-Col. Horlick that the average prices per superficial ft. of non-parlour houses with three bedrooms included in tenders obtained by local authorities and approved by the Ministry of Health during the month of July in each of the years 1919, 1920, 1922 and 1923 were:—

	s.	d.
1919	16	5¼
1920	20	2¾
1922	9	4
1923	8	7½

The average price per superficial ft. for non-parlour houses in January, 1924, was 9s. 10d., and for May, 1924, 10s. 8d.

Dwelling-Houses or Offices?

Mr. T. Thomson asked the Minister of Health whether, in view of the continued aggravation of the housing shortage by the conversion of existing dwelling-houses into offices, garages, clubs, and other purposes, he would reconsider his refusal to introduce legislation this session, in order that no further diminution of the present number of dwelling-houses should take place, with its consequent suffering and additional overcrowding.

Mr. Wheatley said he would consider whether it would be possible to take steps to deal with the matter referred to, but in view of the state of Parliamentary business he was afraid he could not undertake to introduce legislation for the purpose this session.

Town-Planning Areas.

Mr. Greenwood informed Mr. Ayles that 229 local authorities had passed the necessary resolutions preliminary to making town plans for their areas.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
E. Glam. (Mon. Vall)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 114.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders: and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

JULY 19.—**Dewsbury.**—HOUSE.—For erection of house, Healds-road, Dewsbury. Messrs. Holtom & Fox, architects, Corporation-street, Dewsbury.

JULY 19.—**Erpingham.**—COTTAGES.—For the erection of a pair of cottages in the parish of Trimingham, together with well, for the R.D.C. Mr. A. R. Tuddenham, Surveyor, St. Peter's-road, Sheringham.

JULY 19.—**Erpingham.**—PAINTING.—For painting cottages in Runton, Aylmerton and Southrepps, for the R.D.C. Mr. A. R. Tuddenham, Surveyor, St. Peter's-road, Sheringham.

JULY 19.—**Essexford.**—RECONSTRUCTION.—For re-erection of station buildings, for the Great Northern Railway Co. of Ireland. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

JULY 19.—**Netherthong.**—DECORATIONS.—For the re-decoration of the nave of the church. Rev. H. N. Hind, Netherthong Vicarage, Thongsbridge, near Huddersfield.

JULY 19.—**Southampton.**—BRIDGES.—(*a*) Reconstruction of Titchfield (south-east) County Bridge, situated about ½ mile from Titchfield, with 5 ft. diameter concrete tubes; (*b*) widening of Pudbrook Bridge, situated about ½ mile west of Botley, consisting of extending the existing 10 ft. span brick arch by 5 ft.; (*c*) widening and reconstruction of Waltham Chase Bridge, situated about 1 mile south of Bishop's Waltham, with 3 ft. 6 in. diameter concrete tubes, &c. Mr. W. J. Taylor, County Surveyor, The Castle, Winchester. Deposit £1 1s. each contract.

JULY 19.—**Wigan.**—PAINTING.—For the painting of the outside ironwork and woodwork of buildings at the Poor Law Institution, for the B.G. Matron, at the Institution.

JULY 21.—**Ashington.**—ROOFING, &C.—For new roofing over platforms and alterations to station buildings at Ashington, for the London & North Eastern Railway Co. Mr. Stephen Wilkinson, Architect, N.E. Area. Irving House, Westgate-road, Newcastle-on-Tyne.

JULY 21.—**Bishopstoke.**—ALTERATIONS.—For adaptations at The Mount, Bishopstoke, for the Hants C.C. Mr. A. L. Roberts, County Architect, The Castle, Winchester. Deposit £1 1s.

JULY 21.—**Chelmsford.**—PAINTING.—For painting Admiral's Park water tower, for the T.C. Borough Engineer, Chelmsford.

JULY 21.—**Cork.**—ADDITION.—For building an addition to offices, let to Messrs. Guinness & Co., at Cork Station, for the Great Southern and Western Rly. Co. Chief Engineer, Inchicore, Dublin. Deposit £1 1s.

JULY 21.—**Dublin.**—ALTERATIONS.—For the construction of additional waiting rooms and structural alterations at the Tuberculosis Dispensary, Charles-street West, for the T.C. City Treasurer, Lord Edward-street, Dublin. Deposit £2 2s.

JULY 21.—**Edinburgh.**—ALTERATIONS.—For alterations to Bloodhouse, Slaughterhouses, Gorgie, for the T.C. Mr. James A. Williamson, City Architect, City Chambers, Edinburgh.

JULY 21.—**Edinburgh.**—PAINTING.—For outside painter work on corrugated iron roofs, iron rhones, and pipes of farm buildings, at Bangour Mental Hospital. Mr. James D. Gibson, surveyor, 60, Frederick-street, Edinburgh.

JULY 21.—**Gellygaer.**—VARIOUS WORKS.—For carrying out for the U.D.C. various works:—Repairing and painting the Fire Station at Gilfach and the house known as 15, Gilfach-street; laying 450 yards of 9 in. stoneware pipe sewer, with manholes, &c. Mr. F. Read, Surveyor, Council Offices, Hengoed.

JULY 21.—**Hull.**—ALTERATIONS.—For alterations to the Wincomlee Telephone Exchange, for the T.C. City Architect, Hull. Deposit £2 2s.

JULY 21.—**Lancaster.**—COTTAGE.—Erection of four cottages in Long Marsh-lane, for the T.C. Mr. Frederick Hill, Borough Surveyor, Town Hall, Lancaster.

JULY 21.—**Leeds.**—PAINTING.—For painting Market Hall shops, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

JULY 21.—**Longford.**—HOUSES.—For the erection of six houses, for the U.D.C. Town Clerk, Court House, Longford. Deposit £2 2s.

JULY 21.—**Manchester.**—FLOOR, &C.—For steelwork and the laying of reinforced concrete floor and roof of the new stores at the Withington Institution, Nell-lane, West Didsbury, for the B.G. Mr. Hargreaves, Superintendent of Works, Union Offices, All Saints, Manchester.

JULY 21.—**Manchester.**—PAINTING.—For painting the exterior of the Victoria Baths, for the T.C. City Architect, Town Hall, Manchester. Deposit 10s. 6d.

JULY 21.—**Newark.**—COTTAGE.—For the erection of a caretaker's cottage, Barnbygate, for the T.C. Borough Surveyor, Town Hall, Newark.

JULY 21.—**Newport (Mon).**—PAINTING.—For painting works for the Newport E.C.:—Outside of Corporation-road Schools, outside of Eveswell Schools, Bolt-street Schools, and Maindee Schools. Borough Engineer, Town Hall, Newport, Mon.

JULY 21.—**Rowley Regis.**—PAINTING, &C.—For painting at various schools, for the U.D.C. Mr. F. T. Wilson, Secretary, Education Committee, Rowley Regis.

JULY 21.—**Sheffield.**—PAINTING.—For painters' work at (1) Townhead-street garage, (2) passenger shelter, Commercial-street, (3) Corn Exchange. Mr. F. E. P. Edwards, City Architect, Town Hall, Sheffield.

JULY 21.—**Stockport.**—OFFICES.—Erection of a new office block, corner of Heaton-lane and Wellington-road North, for the T.C. Mr. Herbert Hamer, Borough Surveyor, Stockport.

JULY 21.—**Warrington.**—DWELLINGS.—For the erection of three firemen's dwellings in Cambria-place, for the T.C. Mr. A. M. Ker, Borough Engineer, Warrington.

JULY 22.—**Belfast.**—PAINTING.—For painting the outside woodwork, ironwork, &c., of 250 houses, for the T.C. City Surveyor, City Hall, Belfast.

JULY 22.—**Bethnal Green.**—FLOORING.—For repairs to wood block floorings at hospital, for the Board of Guardians. Mr. C. F. Jones, Clerk, Bishop's-road, Bethnal Green, E.2.

JULY 22.—**Bromley.**—COTTAGES.—Erection of four blocks of two cottages on the Housing Estate at Bromley Common, for the Town Council of Bromley. Contractors may tender for the erection of the four blocks, or for two, four or six cottages. Mr. Fred. H. Norman, Town Clerk, Borough of Bromley, Municipal Offices, Bromley, Kent. Deposit £2 2s.

JULY 22.—**Denholme.**—PAVILION.—For the erection of a tennis pavilion in Foster Park, for the U.D.C. Surveyor, Council Offices, Denholme.

JULY 22.—**Leeds.**—PAINTING.—For painting in various parks, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

JULY 22.—**Llanbradach.**—HOUSE.—For erection of a house at Llanbradach, for Mr. J. Meyrick. Mr. W. A. Griffiths, architect, Pontllanfraith, Mon.

★JULY 22.—**London, E.2.**—WOOD BLOCK FLOORING.—Repairs to wood block floorings in various wards, &c., in the Hospital in Cambridge-road, Bethnal Green, E.2, for the Bethnal Green B.G. Mr. C. Faulkner Jones, Clerk to the Guardians, Guardians' Offices, Bishop's-road, Bethnal Green, E.2.

JULY 22.—**Mountain Ash.**—HOUSES.—For erecting, for the U.D.C., on their housing site at Penrhiwceiber, 26 houses in seven blocks. Mr. W. H. Williams, Architect, Town Hall, Mountain Ash.

JULY 22.—**Nottingham.**—PAINTING.—For painting various properties, for the T.C. Estates Surveyor, Guildhall, Nottingham. Deposit £1 1s. for each of four contracts.

JULY 22.—**Nottingham.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Arkwright, Nottingham, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

JULY 23.—**Berks.**—COTTAGES.—Erection of eight cottages at Broadmoor Asylum, Berks, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

JULY 23.—**Birkenhead.**—HOUSES.—For the erection of 193 subsidy houses in concrete or brickwork, on the Derby Park Estate, for the T.C. Mr. Chas. Brownridge, Borough Engineer, Town Hall, Birkenhead. Deposit £2 2s.

JULY 23.—**Dover.**—PAINTING.—For painting and decorating works at the elementary schools during the summer holidays, for the T.C. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House, Dover.

JULY 23.—**Dublin.**—CATTLE ENCLOSURE.—For provision of cattle enclosure at Sheriff-street Goods Station, for the Great Northern Railway (Ireland) Co. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

JULY 23.—**Hackney, E.8.**—MAISONETTES.—Erection of 48 maisonettes in a terrace of 24 buildings on the south side of Fletching-road between Wattisfield-road and Chatsworth-road, for the Council of the Metropolitan Borough of Hackney. Borough Engineer and Surveyor, Borough Engineer's and Surveyor's Office, Town Hall, Mare-street, Hackney, E.8. Deposit £2 2s.

JULY 23.—**Hemsworth.**—HOUSES.—Erection of 166 concrete houses at Westfield-lane, South Elmsall, and construction of new roads, sewers, surface water drains, &c., for the R.D.C. Mr. W. T. Lynam, Architect, Council Offices, Rotherham-road, Hemsworth, near Pontefract.

JULY 23.—**Hull.**—PAINTING.—For the internal painting and cleaning of the Guildhall, and external painting at certain Corporation properties. City Architect's Office, Guildhall, Hull.

JULY 23.—**Liverpool.**—HOUSES.—Erection and completion of blocks of flats on the Larkhill and Springwood Estates, designed by the undermentioned architects for the Housing Committee of the City of Liverpool. Conditions of contract may be seen at the offices of the respective architects:—Scheme 1, Messrs. Gray & Evans, 21, Harrington-street (24 Flats); Scheme 2, Mr. Gilbert Fraser, 67, Lord-street (25 Flats); Scheme 3, Mr. B. T. Lister, 17B, The Temple, Dale-street (24 Flats); Scheme 4, Messrs. Morter & Dobie, 36, The Temple, Dale-street (24 Flats); Scheme 5, Messrs. R. Owen & Sons, 3, Crosshall-street (24 Flats); Scheme 6, Messrs. Shepheard & Bower, Liberty Buildings, School-lane (24 Flats); Scheme 7, Messrs. Quiggin & Gee, 24, North John-street (24 Flats).

JULY 23.—**Torquay.**—LYCH GATE.—For the erection of a lych gate at Tor Parish Church, Torquay. Messrs. Appleton & Bruce, architects, Scala Chambers, Torquay.

JULY 24.—**Bournemouth.**—FOUNDATIONS.—Foundations contract of the new pavilion in the Pleasure Gardens, Bournemouth, for the County Borough of Bournemouth. Mr. Herbert Ashling, Town Clerk, Town Hall, Bournemouth. Deposit £1 1s.

JULY 24.—**Chatham.**—PAINTING.—For painting the bridge over Railway-street, the fire station, &c., for the T.C. Borough Surveyor, Town Hall, Chatham.

JULY 24.—**Cleckheaton.**—PAINTING.—For repainting Providence-place Congregational Church, Cleckheaton. Mr. Harold Bottomley, Heaton-avenue, Cleckheaton.

JULY 24.—**Darton.**—PAINTING.—For the painting of 250 houses. Messrs. Fountain & Burnley, Ltd., Woolley Colliery, near Barnsley.

JULY 24.—**Dover.**—PAINTING.—For painting works at the Isolation Hospital and at the Town Hall, for the T.C. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House, Dover.

JULY 24.—**Great Yarmouth.**—PAINTING.—For outside painting of four schools, and washing and distempering inside walls of Edward Worlledge Schools, for the T.C. Borough Engineer, Town Hall, Great Yarmouth.

JULY 24.—**Royston.**—HOUSES.—Erection of four houses and making of roads and sewers, for the U.D.C. Messrs. Dyson, Cawthorne & Coles, architects, Barnsley.

JULY 24.—**Winchester.**—ADDITIONAL INFIRMARY WARDS.—Erection of additional Infirmary wards and the extension of the Nurses' Quarters at the Winchester Union, for the Guardians. Mr. B. D. Cancellor, architect, Queen Anne Chambers, Winchester. Deposit £3 3s.

JULY 25.—**Aberystwyth.**—HOUSES.—Erection of 70 houses for the T.C. Mr. W. P. Puddicombe, Borough Engineer, Aberystwyth. Deposit £1 1s.

JULY 25.—**Chatham.**—PAINTING.—For painting the exterior of 52 houses, for the T.C. Borough Surveyor, Town Hall, Chatham.

JULY 25.—**Guildford.**—HOUSES.—Erection of one pair of parlour and two pairs of non-parlour houses on the Merrow Housing Site, for the Guildford R.D.C. Mr. John Anstee, Council Offices, Commercial-road, Guildford. Deposit £2 2s.

JULY 25.—**Holmfirth.**—HOUSE, &C.—For erection of porter's house and a home for district nurse in connection with Holme Valley Memorial Hospital. Mr. P. N. Brown, architect, Hollowgate, Holmfirth.

JULY 25.—**Hull.**—PREMISES.—For the erection and completion of new buildings in South-street and West-street, Hull, for the *Daily Mail* and *Hull Times* Co., Ltd. Messrs. Blackmore, Sykes & Co., architects, Ruskin Chambers, Scale-lane, Hull.

JULY 25.—**Rothwell.**—ADDITIONS.—For additions at Isolation Hospital, for the Rothwell, Methley, and Hunslet Joint Isolation Hospital Committee. Messrs. W. E. Richardson & Wm. Whitehead, joint architects, Rothwell.

JULY 25.—**Wood Green, N.22.**—PAVILION.—Erection of a pavilion in the Albert-road Recreation Ground, for the Wood Green U.D.C. Engineer and Surveyor to the Council, Town Hall, Wood Green, N.22. Deposit £1 1s. (payable to the Treasurer).

JULY 26.—**Hinckley.**—SHOP, &C.—For demolition of property in Castle-street and erection of butcher's shop, gas offices, &c., for the U.D.C. Mr. J. S. Featherston, Surveyor, Council Offices, Hinckley.

JULY 26.—**Llanddarog.**—VESTRY ROOM.—Erection of vestry room at Capel Newydd, Llanddarog. Mr. G. Davies, architect, Harddfan, Upple Tumble, Llanelly.

JULY 26.—**Manchester.**—VARIOUS WORKS.—For reinforced concrete flooring, constructional steelwork, and cast and wrought ironwork, electric lighting, steel casements, steel lantern lights, wall tiling, and sanitary fittings required for the new Operating Theatre Block, &c., at the Crumpsall Institution, for the Board of Guardians. Mr. A. J. Murgatroyd, architect, 23, Strutt-street, Manchester.

JULY 26.—**Mountain Ash.**—HOUSES.—For the erection of 26 houses at Penrhiwceiber, for the U.D.C. Mr. W. H. Williams, Architect, Town Hall, Mountain Ash.

JULY 26.—**Peterborough.**—PAINTING.—For painting and distempering the interior of the County School for Girls, Lincoln-road, for the C.C. Mr. W. J. Deacon, Clerk, County Education Offices, Cross-street, Peterborough.

JULY 26.—**Thornley.**—HALL.—For the Hall and Institute, Thornley, for the Thornley Welfare Scheme. Messrs. Frank Caws, Steel & Caws, architects, 22, Fawcett-street, Sunderland. Deposit £1.

JULY 27.—**Adwick-le-Street.**—ADDITIONS.—For erection of bar and seating in concert room, for the Adwick-le-Street Working Men's Club. Secretary at the Club.

JULY 27.—**Bury.**—GARAGE.—For erection of motor garage and shed at Florence Nightingale Hospital, for the Bury and District Joint Hospital Board. Mr. F. Wild, Clerk, Bury.

JULY 28.—**Bath.**—BUILDING WORK.—For the building work in connection with the extension of the Electricity Works, Dorchester-street, for the T.C. Mr. W. A. Williams, P.A.S.I., 20, Old Bond-street, Bath. Deposit £3 3s.

JULY 28.—**Bournemouth.**—CONCRETE PIER HEAD. Reconstruction in reinforced concrete of Boscombe Pier Head, for the Council of the County Borough of Bournemouth. Borough Engineer, Mr. F. P. Dolamore, Town Hall, Bournemouth. Deposit £1 1s.

JULY 28.—**Chorley.**—HOUSES.—For the erection of 40 houses on the Highfield Estate, for the T.C. Borough Surveyor, Chorley. Deposit £2 2s.

★JULY 28.—**Croydon, Surrey.**—BUILDING CAR DEPOT.—Erection and completion of a car depot and offices, situate on the south and west side of the existing car sheds in Brighton-road, Purley, for the County Borough Council of Croydon. The Borough Engineer, Town Hall, Croydon. Deposit £5 5s.

JULY 28.—**Glamorgan.**—VARIOUS WORKS.—(1) Mountain Ash Police Station and Court, alterations and additions; (2) Tonyrefail Police Station, alterations and additions; (3) Gowerton Police Station, construction of new porch, &c.; (4) Barry Dock Police Station and Offices, internal painting and repairs. Mr. T. Mansel Franklen, Clerk, Glamorgan County Hall, Cardiff.

JULY 28.—**Great Yarmouth.**—PAINTING.—For the internal decoration of the Assembly Room of the Great Yarmouth Town Hall. Mr. S. P. Thompson, Borough Engineer, Town Hall, Great Yarmouth.

JULY 28.—**Newton-in-Makerfield.**—SUB-STATIONS.—For sub-station buildings, for the U.D.C. Mr. E. M. Lacey, 12, Victoria-street, Westminster, S.W.

✱JULY 28.—**Sittingbourne.**—MAPLE FLOORING.—Supplying and laying a maple floor (about 60 ft. by 30 ft.), at the Town Hall, Sittingbourne, for the Urban District Council. Council's Surveyor, Mr. M. W. Lashmar, Town Hall, Sittingbourne.

✱JULY 28.—**Staffordshire.**—EXTENSIONS.—Extensions to the Sanatorium buildings at Burntwood, in the Rural District of Blore Heath, Staffordshire, to the Staff and Administrative buildings, which are of concrete construction, for the Cheshire Joint Sanatorium Committee, Burntwood Sanatorium, Staffordshire. Mr. H. Beswick, F.R.I.B.A., Newgate-street, Chester. Deposit £2 2s.

JULY 29.—**London, E.**—ALTERATIONS.—Alterations to the East Ham Telephone Exchange for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

JULY 29.—**Normanton.**—BATHS.—For construction of public baths, for the U.D.C. Mr. W. F. Copp, Architect, Council Offices, Normanton.

JULY 30.—**Horsted Keynes.**—PUMPING STATION.—Erection of a pumping station, comprising engine house, filter house, office, workshop and stores, for the Mid-Sussex Joint Water Board. Mr. Francis Martin, Engineer, Waterworks Offices, Haywards Heath. Deposit £3 3s.

JULY 30.—**New Shildon.**—CLUB.—For new premises for the Shildon Club and Institute, Ltd., Railway-terrace, New Shildon. Messrs. W. Winder Lee & Son, architects, Houndgate, Darlington. Deposit £1 1s.

✱JULY 30.—**Woolwich, S.E.18.**—PAINTING AND DECORATIVE WORK.—External and internal painting and decorative work at the Infirmary, Plumstead High-street, S.E.18, for the Guardians of the Woolwich Union. Can be inspected any day at the Steward's Office upon the premises. Copies are not supplied.

JULY 31.—**Glasgow.**—HOUSES.—Erection of 380 houses at Hamiltonhill, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow.

JULY 31.—**Hemsworth.**—HOUSES.—For the erection of 18 houses at Highfields, for the U.D.C. Mr. A. Wright, Council Offices, Hemsworth, near Pontefract.

JULY 31.—**Wallingford.**—FIRE STATION.—For the erection of a new fire station in Station-road, Wallingford. Borough Surveyor, 12, St. Martin's-street, Wallingford.

AUGUST 1.—**Northwich.**—ENGINE HOUSE, &c.—For the construction of an engine and pump house, engine foundations, and adjunct works at Sandyford, for the U.D.C. Mr. W. M. Beckett, 10, Throgmorton-avenue, E.C.2. Deposit £5.

AUGUST 2.—**Glasgow.**—PAVILION.—Erection of pavilions, &c., at Bellefield Sanatorium, Lanark, viz., (1) slater work; (2) tile work; and (3) electric light. Office of Public Works, City Chambers, 64, Cochrane-street, Glasgow.

✱AUGUST 5.—**St. Helens.**—HOUSES.—Erection of 20 houses at Windlehurst, for the County Borough of St. Helens. Mr. Arthur W. Bradley, M.Inst.C.E., Borough and Water Engineer, St. Helens. Deposit £1.

✱AUGUST 6.—**Barnet, Herts.**—COTTAGES.—Erection of six cottages at Bells Hill, Barnet, subject to the confirmation of the Minister of Health, for the Guardians of the Barnet Union. Messrs. White, Son, & Pill, 13 and 15, High-street, Barnet.

✱AUGUST 6.—**London, W.C.**—PAINTING, &C.—Internal painting and treatment of hardwood at the Royal Courts of Justice, London, W.C., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

✱AUGUST 7.—**Bournemouth.**—NEW POST OFFICE.—Erection of a new Post Office at Winton, Bournemouth, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary.)

AUGUST 8.—**Woking.**—HOUSES.—For the erection of 28 pairs of cottages, for the U.D.C. Mr. G. J. Woolridge, Surveyor, Council Offices, Woking.

AUGUST 9.—**Wallingford.**—HOUSES.—For the erection of sixteen working-class dwellings, in Station-road, for the T.C. Borough Surveyor, 12, St. Martin's-street, Wallingford. Deposit £1 1s.

✱AUGUST 12.—**Southall-Norwood.**—COTTAGES.—Erection of three cottages (concrete block construction) at Adelaide Dock, Endsleigh-road, Southall, for Southall-Norwood Urban District Council. Mr. J. B. Thomson, Assoc.M.Inst.C.E., Chartered Civil Engineer, Engineer and Surveyor, Town Hall, Southall.

NO DATE.—**Bradford.**—PAINTING.—For the painting and cleaning of the Daisy-hill Institution and the Homes for Aged Poor, for the Board of Guardians. Mr. Fred Holland, architect, 22, Manor-row, Bradford. Deposit £2 2s.

NO DATE.—**Marsden.**—HOUSES.—For the erection of 36 houses in Mount-road, for the U.D.C. Messrs. A. J. Howcroft & Son, architects, Retiro Chambers, Waterloo-street, Oldham.

NO DATE.—**Salford.**—REPAIRS.—For the repair of the Destructor chimney at Wilburn-street Depot, for the T.C. Superintendent, Wilburn-street Depot, Salford.

NO DATE.—**Stanford.**—DEMOLITION.—For the demolition of windmill and erecting steel and brick building. Blackstone & Co., Ltd., Stamford.

NO DATE.—**Tonypandy.**—BUILDING.—For the erection of a corrugated iron building to serve as a Parish Hall, at Trinity-road, Tonypandy. Catholic Rectory, Tonypandy.

FURNITURE, MATERIALS, etc.

JULY 21.—**Warrington.**—EDGING.—For 2,200 lineal yds. of 6 in. × 12 in. stone edging. Mr. A. M. Ker, Borough Engineer, Warrington.

JULY 23.—**Clacton.**—CEMENT.—Supply of 50 tons of Portland cement to the U.D.C. Surveyor, Council Offices, Clacton.

AUGUST 5.—**Portsmouth.**—MATERIALS.—For supply of materials to the Tramways Department of the T.C. Mr. V. G. Lironi, Engineer, Portsmouth.

ENGINEERING, IRON AND STEEL.

JULY 19.—**Glasgow.**—RAILS, &C.—Supply of 50 tons of new rails and chairs, points and crossings, for Dalmarnock Gasworks. General Manager, Gas Department, 30, John-street, Glasgow.

✱JULY 21.—**Chiswick.**—HEATING.—Reconstruction of the heating system at Hogarth Boys' School, with provision of new boiler, &c., for the U.D.C. Mr. Edward Willis, Engineer, Town Hall, Chiswick.

✱JULY 21.—**Chiswick.**—EJECTOR STATION.—Erection of ejector station with two ejectors of 100 galls. capacity, for the U.D.C. Mr. Edward Willis, Engineer, Town Hall, Chiswick.

JULY 21.—**Cowdenbeath.**—FENCING.—For the supply and erection of (1) Wrought iron railings and gates; (2) stob and wire fencing. Mr. C. A. Alexander, Burgh Surveyor, Town House, Cowdenbeath. Deposit £1 1s. each contract.

JULY 21.—**Fort William**—PIER.—For construction of a reinforced concrete pier and approach viaduct and works at Fort William, for the British Aluminium Co. Messrs. S. S. Meik & Buchanan, 16, Victoria-street, S.W. Deposit £5.

JULY 21.—**Hillsborough.**—BRIDGE.—For the reconstruction of a steel underline bridge between Knockmore Junction and Hillsborough, for the Great Northern Railway (Ireland) Co. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

JULY 22.—**Paddington.**—GIRDERS.—Supply to the Great Western Railway Co. of 163 tons of steel girders and other steel and iron work of British manufacture. Mr. A. E. Bolter, Secretary, Paddington Station.

JULY 23.—**South Shields.**—STEELWORK.—For the constructional steelwork in connection with the extension of the car-sheds at Dean-road, for the T.C. Mr. S. G. Stanton, Borough Engineer, Town Hall, South Shields.

✱JULY 25.—**Bedford.**—HEATING AND HOT WATER.—Reconstruction of the heating and hot-water service systems at the Bedford County Hospital. Mr. E. H. C. Inskip, architect and surveyor, 27, Goldington-road, Bedford.

JULY 25.—**Blackburn (West Lothian).**—BRIDGE.—Extension to bridge over River Almond at Blackburn, for the C.C. District Offices, Bathgate. Deposit £2 2s.

JULY 26.—**Goole.**—TOWER.—For the erection of a ferro-concrete water tower, with a capacity of 750,000 gallons and 120 ft. high, for the U.D.C. Mr. E. J. Silcock, 25, Victoria-street, Westminster, S.W. Deposit £5.

JULY 26.—**Llangollen.**—RESERVOIR.—For construction of small country reservoir and laying water mains at Garth and Fron-Cysilte, for the R.D.C. Messrs. Berrington, Son & Watney, Wolverhampton. Deposit £5 5s.

JULY 28.—**Bingham.**—BRIDGE.—For the construction of a new reinforced concrete bridge at Hickling, for the R.D.C. Mr. Arthur Parry, Surveyor, Council Offices, Bingham, Nottingham.

✱JULY 28.—**Croydon, Surrey.**—STEEL CONSTRUCTIONAL WORK.—Ironfounders and steel constructional work required in connection with the erection of a car depot and offices situate on the south and west side of the existing car sheds in Brighton-road, Purley, for the County Borough Council of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £3 3s.

JULY 28.—**Orkney.**—LIGHTHOUSE.—For the building of a lighthouse on the Brough of Birsay, Orkney. Engineer of Northern Lighthouses Commissioners, 84, George-street, Edinburgh.

JULY 28.—**Swindon.**—FENCING.—For supply of 730 yards of wrought-iron fencing and gates for Rodbourne Recreation Ground for the T.C. Borough Surveyor, Swindon.

JULY 31.—**Carmarthen (near)**—ERECTION OF BRIDGE.—For erecting a girder bridge, at Panteg, on the boundary of the Abergwilli and Llanegwad parishes, for the Carmarthen and Llandilofawr joint R.D.C.s. Mr. T. D. Thomas, surveyor, Westfa, Nantgaredig; or Mr. D. Protheroe, Surveyor, Carmarthen U.D.C. Offices.

JULY 31.—**Teddington.**—CAMPSHEDDING.—For campshedding the Manor-road Recreation Ground, fronting the River Thames, for a total length of 190 ft., for the U.D.C. Mr. M. Hainsworth, Surveyor, Public Offices, Teddington. Deposit, £2 2s.

AUGUST 12.—**Portsmouth.**—QUAY WALL.—For the construction and maintenance in repair for twelve months of a new quay wall, for the T.C. Mr. Arthur W. Ward, Borough Engineer, Town Hall, Portsmouth. Deposit £3.

SEPTEMBER 1.—**Lochaber.**—AQUEDUCT.—For the construction of an aqueduct between Loch Treig and Fort William, Inverness-shire, including fifteen miles of pressure tunnel with intake shafts and other works, for the North British Aluminium Co. Messrs. C. S. Meik & Buchanan, 16, Victoria-street, Westminster, S.W.1. Deposit £5.

NO DATE.—**Aberbargoed (Mon).**—VARIOUS WORKS.—For carrying out, for the Bargoed, Aberbargoed, and Gilfach Welfare Association, as follows: Supplying and erecting 1,080 yds. of unclimbable iron fencing, and gates. Mr. J. Edwards, Powell Duffryn Coal Co.'s Offices, Bargoed.

ROAD, SANITARY, AND WATER WORKS.

JULY 19.—**Carnforth.**—SEWER.—For construction of 120 yards of 9 in. and 80 yards of 6 in. stoneware sewers, for the U.D.C. Surveyor, Carnforth.

JULY 19.—**Porthcawl.**—ROADS.—Construction of 1,200 yards lineal of new road between the Esplanade, Porthcawl, and Newton-road, also between The Moorlands School and the Globe Inn, Newton, for the U.D.C. Mr. T. L. Oliver, Council Offices, Porthcawl. Deposit £3 3s. for each of two contracts.

✱JULY 21.—**Chiswick.**—ROADS.—Taking up certain existing wood paving and concrete foundation in Chiswick High-road, and relaying same with concrete and wood blocks, together with other incidental works, for the U.D.C. Mr. Edward Willis, Engineer, Town Hall, Chiswick.

JULY 21.—**Cowbridge.**—ROADS.—For an improvement at Rhydygofal-road, Llanharan, for the R.D.C. Mr. G. E. Morris, Surveyor, District Council Office, Cowbridge. Deposit £2 2s.

JULY 21.—**Gellygaer.**—SEWER.—For constructing 450 yds. of 9 in. stoneware pipe sewer, for the U.D.C. Mr. F. Reed, Surveyor, Hengoed.

JULY 21.—**Grimsby.**—ROADS.—For the reconstruction and widening of Laceby-road, for the T.C. Borough Engineer, 170, Victoria-street, Grimsby. Deposit £2 2s.

JULY 21.—**Grimsby.**—SEWER.—For construction of sewer in Armstrong-street, about 850 lineal yds. of 21 in., 18 in., and 12 in. pipes, for the T.C. Mr. H. G. Whyatt, Borough Surveyor, 170, Victoria-street, Grimsby. Deposit £2 2s.

JULY 21.—**Llanharan (Glam).**—ROAD IMPROVEMENT.—For making an improvement to the Rhydygofal-road, Llanharan, for the Cowbridge R.D.C. Mr. G. E. Morris, Surveyor, Council Offices, Cowbridge. Deposit £2 2s.

JULY 21.—**Manchester.**—ROADS.—For the repaving (granite setts on concrete foundation), of the following streets: Middleton-road, Crumpsall; and Cheetham Hill-road, Cheetham, for the T.C. Paving, &c., Department, District Surveyor's Office, Town Hall, Manchester. Deposit £1 1s.

JULY 21.—**Richmond.**—WATER MAIN.—For laying 750 yards of 9 in. and 340 yards of 7 in. diameter cast-iron pipes, &c., for the T.C. Mr. H. P. Williamson, Water Engineer, Riverside, Surrey. Deposit £2.

JULY 21.—**Workington.**—ROADS, &C.—For construction of roads and sewers in connection with Salterbeck housing scheme, for the T.C. Mr. H. B. Williams, Borough Engineer, Workington. Deposit £3 3s.

JULY 22.—**Abercynon (Glam).**—ROADS, &C.—For construction, for the Mountain Ash U.D.C., of roads and surface water drains at the housing site. Mr. W. G. Thomas, Town Hall, Mountain Ash.

JULY 22.—**Bromley.**—PAVING.—For paving the carriageways in a portion of the High-street and Mason's-hill, with creosoted wood blocks, for the T.C. Mr. Fred. H. Norman, Town Clerk, Municipal Offices, Bromley. Deposit £1 1s.

JULY 22.—**Coulsdon and Purley.**—ROADS.—For the making-up of Higher-drive and Olden-lane, Purley, for the U.D.C. Mr. R. Chart, Surveyor, Council Offices, Purley. Deposit £2 2s. each road.

JULY 22.—**Coulsdon and Purley.**—SEWER.—For sewer extension, Marltit-lane, for the U.D.C. Mr. R. Chart, Surveyor, Council Offices, Purley. Deposit £2 2s.

JULY 22.—**Dublin.**—ROADS.—For widening Finn's Corner, Castleknock, for the R.D.C. Mr. James P. Conry, Clerk, 66, Middle Abbey-street, Dublin.

JULY 22.—**Himley.**—ROAD.—For the construction of a road between Himley and Swindon, Staffordshire, for the G.W.R. Co. Engineer at Wolverhampton Station.

JULY 22.—**Manchester.**—ROADS.—(1) Widening Blackley New-road to 60 ft. wide, and new arch bridge over the River Irk; (2) continuation of Withington-road, Chorlton, 50 ft. wide, and widening of existing girder bridge over L. & N.E. Railway, for the T.C. City Engineer, Town Hall, Manchester. Deposit £3 3s each contract.

JULY 22.—**Southall-Norwood.**—ROADS.—For making up Gladstone-road, for the U.D.C. Mr. J. B. Thompson, Surveyor, Town Hall, Southall.

JULY 23.—**Edmonton, N.18.**—DRAINAGE WORK.—Work connecting two cottages, known as Spring-court Cottages, 129 and 131, The Ridgeway, Enfield, with the newly-laid Council sewer, for the Edmonton Union. Guardians' architect, Mr. J. C. S. Mummery, 34, Bloomsbury-square, W.C.1.

JULY 23.—**Erith.**—ROADS.—For reconstruction of carriageway, footpath, &c., of the widened bridge in Bexley-road, for the U.D.C. Surveyor, Erith. Deposit £1.

JULY 23.—**Newark.**—SEWERS.—For the construction of sewers and manholes in the Winthorpe-road and Lincoln-road district, for the T.C. Mr. J. W. Hipwood, Borough Surveyor, Town Hall, Newark.

JULY 23.—**Stainland.**—SEWERS, &C.—(1) For laying 412 lin. yds. of 9 in. pipe sewer at Drury-lane; (2) laying 95 lin. yds. of 9 in. pipe sewer at Forest Hill-road; (3) repaving 300 super. yds. of Yorks setts on Stainland main road; (4) erecting 60 lin. yds. of dry fence wall, and about 17 lin. yds. of burr wall at Gosport-lane, for the U.D.C. Mr. H. Edgar Moses, Surveyor, Council Offices, Stainland.

JULY 23.—**Walthamstow.**—WIDENING.—For widening in Hale End-road, for the U.D.C. Mr. G. W. Holmes, Surveyor, Walthamstow.

JULY 24.—**Middleton.**—ROADS.—For construction of road from Slattocks to Stakehill, for the T.C. Borough Engineer, Town Hall, Middleton. Deposit £2 2s.

JULY 24.—**Worthing.**—BOREHOLES.—For the construction of two boreholes (Contract No. 1) and supply of about 240 tons of cast iron socket pipes, 14 in. diameter (Contract 2), for the T.C. Water Engineer, Municipal Offices, Tudor Lodge, Worthing. Deposit £3 3s.

JULY 25.—**Brentford.**—ROADS.—Construction of a further section of about three furlongs of the Great West-road at Brentford, for the Middlesex T.C. Mr. A. Dryland, County Engineer, Middlesex Guildhall, Westminster, S.W. Deposit £21.

JULY 25.—**Merton and Morden.**—ROADS.—For making up the (a) Wandle-road, approximate length 1,000 yards, (b) Pollard-road, approximate length 280 yards, for the U.D.C. Mr. G. Jerram, Surveyor, Council Offices, Merton, S.W.19. Deposit £2.

JULY 25.—**Plymouth.**—SEWERS.—For the construction of about a mile of roads and 2½ miles of sewers on "G" site, No. 3 Section, of the North Prospect Housing Scheme, for the T.C. Mr. J. Wibberley Borough Engineer, Municipal Offices, Plymouth.

JULY 25.—**Tynemouth.**—WATER MAIN.—For laying 7¼ miles of 18 in. trunk water main, near Morpeth, for the T.C. Mr. J. W. McKerrow, Water Engineer, Norfolk-street, North Shields, Deposit £3 3s.

JULY 26.—**Aylesbury.**—DRAINAGE.—For land drainage, building catch pits, constructing paths, &c., at the cottages at Weston Turville and Quainton, for the R.D.C. Mr. Fred Taylor, Architect, 7, Bourbon-street, Aylesbury.

JULY 26.—**Bedwas and Machen.**—SEWER.—For the construction of a reinforced concrete pipe sewer, 150 yds. lin. in length, for the U.D.C. Mr. Idris Leyshon, surveyor, Bedwas.

JULY 26.—**Dewsbury.**—SEWAGE.—For construction of equalising tanks and other works in connection with sewage disposal works, for the T.C. Messrs. J. Diggle & Sons, 14, Brown-street, Manchester. Deposit £2 2s.

JULY 26.—**Glass Houghton.**—ROAD.—For the improvement of the Leeds and Barnsdale (Hook Moor Branch) main road at Glass Houghton, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

JULY 26.—**Llangollen.**—WATER WORKS.—For the construction of a small concrete reservoir, the provision and laying of mains, for the R.D.C. Messrs. Berrington, Son & Watney, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

JULY 26.—**West Riding.**—ROADS.—For improvement of the New Mill District main road, at Sinking Wood, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

JULY 28.—**London.**—SEWER (BRICK AND CONCRETE).—Construction of a 4 ft. diameter sewer in brick and concrete, of a total length of about 200 ft., with weir chamber and tumbling bay, Bell Wharf outlet, Shadwell, in the Metropolitan Borough of Stepney, in the Administrative County of London. Chief Engineer, L.C.C. Old County Hall, Spring Gardens, S.W.1. Deposit £5.

JULY 28.—**Pontefract.**—ROADS.—Street works in The Mount, for the T.C. Borough Surveyor, Pontefract.

JULY 29.—**West Hartlepool.**—ROADS.—Construction of back Gloucester and Shrewsbury-street, for the T.C. Mr. Francis Durkin, Borough Engineer, Municipal Buildings, West Hartlepool.

JULY 30.—**Culmstock.**—ROADS.—For excavation and removal of road, hedges, &c., on the Pencross Hill, Hemyock, for the R.D.C. Mr. W. H. James, Surveyor, Egypt House, Hemyock.

AUGUST 5.—**Glasgow.**—ROADS, &C.—For the construction of roads and sewers at Low Balornock, Springburn, for the T.C. Director of Housing, Govan Town Hall.

AUGUST 6.—**Uwchaled.**—WATER WORKS.—Construction of a small water reservoir and the provision and laying of about 6,450 yards of 3 in. cast-iron water mains, for the R.D.C. Messrs. Berrington, Son & Watney, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

Competitions.

(*See Competition News, page* 82.)

Auction Sales, Tenders, etc.

JULY 19.—**Bucks.**—Mr. G. Francis Duck will sell, unless previously disposed of, three wooded building sites, South Park, Gerrard's Cross, suitable for country residences. Freehold; main drainage. Auctioneers, Gerrard's Cross.

JULY 22.—**Deptford Green, S.E.**—Messrs. Fuller, Horsey, Sons & Cassell will sell, by order of the Directors of A. Lloyd & Sons, Ltd., wood-box and packing-case making machinery and stock, on the premises, at 11 o'clock. Auctioneers, 11, Billiter-square, E.C.3.

JULY 22.—**East Suffolk.**—Messrs. Garrod, Turner & Son will sell, by direction of the Board of Guardians of Bosmere and Claydon Union, at the Crown and Anchor Hotel, Ipswich, extensive freehold premises, with floor area of 48,000 ft., late Basham Workhouse, 37 acres in all, the greater part with possession. Electric light and power plant. Auctioneers, Ipswich.

JULY 22 AND 23.—**Ilford, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Corporation of the City of London, upon the depots situate in Lonsdale-avenue, Cranbrook-road, Ilford, surplus building plant and stock of the Ilford Estate. Auctioneers, Newington Green, Islington, London, N.16.

✱JULY 22.—**London, S.W.**—Messrs. Veryard & Yates will sell, without reserve, building materials, at Brixton Hill (in rear of Calder's-road, opposite New Park-road). Catalogues from the Auctioneers, 365, Norwood-road, S.E.27.

✱JULY 23.—**Beddington.**—Mr. C. E. Clark will sell, without reserve, timbers and builders' effects (new goods), at Beddington House, Beddington (opposite the "Plough" Hotel). Catalogues from Auctioneer at above address, also at Brighton-road, Purley, and Lower-road, Bookham.

✱JULY 24.—**Yorkshire.**—Messrs. A. Gadie & Son are instructed by the Liquidator of Oates (Thornton), Ltd., Mr. Bernard A. Bates, of Messrs. Paton, Boyce & Welch, Chartered Accountants, 3, Piccadilly, Bradford, to sell, at the Empress Hotel, Tyrrel-street, Bradford, the modern and well-known fireclay works at Thornton, near Bradford, Yorkshire. Auctioneers, Thorpe Chambers, Hustlergate, Bradford.

✱JULY 29.—**Denmark Hill.**—Mr. Henry V. Chew will sell second portion of useful building materials, at Champion Park, Denmark Hill. Auctioneers, 44, Bedford-row, Holborn, W.C.

JULY 29.—**Holborn, W.C.**—Messrs. J. T. Skelding & Co. will sell, without reserve, *re* Charles B. Luck, Rowland B. Wood, and Percy A. Watson, trading as "Luckwood," under a deed of assignment, by order of the Trustee, Mr. W. H. Cork, F.L.A.A., on the premises, Nos. 44–46, Eagle-street, Holborn, W.C.1, the extensive well-assorted and up-to-date stock-in-trade of wholesale builders' merchants, sanitary glazed ware, plumbers' goods, fixtures, fittings, and office furniture. Auctioneers, 48, Gresham-street, Guildhall, London, E.C.2.

JULY 29.—**Limehouse, London, E.**—Messrs. Joseph Hibbard & Sons will sell (unless previously sold by private treaty), upon the premises, Gun-lane Saw Mills, Grenade-street, at a nominal reserve, by order of the Liquidator, Mr. C. H. Bull, F.C.A., *re* Clark, Williams & Co., Ltd., in liquidation, valuable and well-situated freehold store yard, mill and offices, known as Gun-lane Saw Mills, Grenade-street, vacant possession upon completion; also the brick-built freehold foundry adjoining. Auctioneers, Gun-lane Saw Mills, Grenade-street, Limehouse, E.

JULY 29.—**Limehouse, London, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Liquidator, Mr. C. H. Bull, F.C.A., *re* Clark, Williams, & Co., Ltd., in liquidation (immediately following the sale of the freehold premises), upon the premises, Gun-lane Saw Mills, Grenade-street (close to Limehouse Church), salvage and other saw mill machinery, timber, ironmongery, and stores of ships joiners, &c. Auctioneers, 15, Newington Green Islington, London, N.16.

✱JULY 29.—**Surrey.**—Messrs. Hampton & Sons will sell, by order of trustees, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1, four plots of freehold building land ranging from nearly 3¼ acres to over 5 acres each, extensive frontage to Sandy-lane, at Longcross, near Chertsey, Surrey. Auctioneers, 20, St. James's-square, S.W.1.

✱JULY 30.—**London, N.W.10.**—Messrs. Philip Lake & Co. will sell, on the premises (retiring from business), the contents of the works of Messrs. H. G. Cleaver, Ltd., Park Royal, Wembley, N.W.10, the wood-working plant, machinery, timber, mouldings and hardware. Auctioneers, 66, Victoria-street, Westminster, S.W.1.

✱AUGUST 12.—**Hayes, Middlesex.**—Mr. F. H. Clark will sell, absolutely without reserve, at the National Filling Factory, Hayes, Middlesex, new and second-hand timber and building material, machines and lorries. Auctioneers, Railway Wharf, York-road, Wandsworth.

Public Appointments.

✱JULY 21.—**Grays, Essex.**—Architectural and Town Planning Assistant required in the Engineer and Surveyor's Department, by the Orsett Rural District Council. Applicants must have experience in Municipal Housing. Mr. G. F. Andrassy, Engineer and Surveyor, 2, Orsett-road, Grays, Essex.

✱JULY 28.—**Marylebone, N.W.1.**—District Road and Works Superintendent in the Works Department required by the Council of the Metropolitan Borough of St. Marylebone. Mr. James Wilson, Town Clerk, the Town Hall, Marylebone-road, N.W.1, with copies of not more than three testimonials of recent date.

✱AUGUST 11.—**Birmingham.**—Town-Planning Assistant Surveyor in connection with the work of Regional Planning in their area required by the Midland Joint Town-Planning Advisory Council. Mr. Herbert H. Humphries, M.Inst.C.E., Surveyor to the Council, Council House, Birmingham.

SEPTEMBER.—**London, S.E.1.**—(*a*) Lecturer in architecture and building; (*b*) instructor in brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week. Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1

✱SEPTEMBER.—**Wimbledon, S.W.19.**—Evening lecturer in (a) Surveying, (b) Brickwork and Masonry, to the Standard of Grade 1 City and Guilds Syllabus. The Principal, Technical Institute, Wimbledon, S.W.19.

✱NO DATE.—**London.**—Takers-off and Workers-up required on hourly rate basis, temporary appointments. Candidates must have served in H.M. Forces during the war and have had first-class experience with leading quantity surveyors (London system). Joint Substitution Board (Treasury and Ministry of Labour), Montagu House, Whitehall, S.W.1, giving full particulars and hourly rates required.

The County Hall.

At the L.C.C. on Tuesday, Mr. J. D. Gilbert inquired as to the present position of the County Hall Extension scheme, if the raft foundation had been completed, whether the contract had been let for the new wing, and when it would be completed.

Mr. E. Gray replied that the raft foundation was still in progress, the date for completion being in August. The question of the superstructure had not yet been decided, but was under consideration. It would take two years to complete.

Experimental Houses.

At the L.C.C. on Tuesday, Captain O. Wakeman inquired whether, in view of the desirability of ascertaining more definitely the merits of some of the cheaper methods of house construction which are being advocated, the Housing Committee would be disposed to give facilities for experiments to be tried on some of the Council's housing estates with that object?

Col. Levita, Chairman of the Housing Committee, replied that, with the concurrence of the Ministry of Health, the Committee was prepared to give facilities, subject to necessary safeguards, for a thorough trial of any and every form of construction which responsible persons might propose, and which would be worth a trial on the basis of economy in money, men and materials.

An Outing in Surrey.

The Provincial Committee for this County of the Surveyors' Institution arranged for the usual annual meeting to be held this year at Guildford. The Mayor and Mayoress received the members in the Town Hall on Friday last, and after inspection and description of the ancient building and the paintings a visit was paid to the ancient Grammar School. After luncheon the Mayor called on Mr. Henry Lovegrove to propose the toast of the Surveyors' Institution, to which Mr. Alex. Goddard, O.B.E., the Secretary, responded. Mr. Brown, the Chairman of the Provincial Committee, proposed "The Ladies," to which the Mayoress responded. The party then went in motors to Loosley Hall (a fine Tudor mansion), then to the chapel and pottery works of the late G. F. Watts at Compton.

Kelly's Directories, Ltd.

We have received from Messrs. Kelly's, Ltd. a copy of the thirty-eighth annual edition of their "Directory of the Merchants, Manufacturers and Shippers of the World." Information is given in respect of every civilised country of the world.

The Directory is in two volumes. The first deals with foreign countries, and their dependencies; while the second gives information concerning England, Scotland, Ireland and Wales, and the British Dominions and Possessions. For each of the foreign towns and cities, carefully classified lists are given of those engaged in trade and commerce, with the class of goods in which they deal. In the section devoted to Great Britain and Ireland, classified trade lists are given for (1) London and its suburbs, and (2) for the rest of the country. Exhaustively indexed in four languages, all vital information is instantly accessible to the reader.

It gives a comprehensive list of Builders, Building Manufacturers, &c., in fact, all branches of the trade in all parts of the world, from America to Zürich. It is of equal interest to architects, as it enables them to obtain in the easiest manner full particulars of all trades connected with architectural interests, not only in Great Britain and Ireland, but in the remote places of the world. The latest edition more than ever merits its popular title, "The Key to the World's Commerce." The use of the book is considerably simplified by a concise explanation of its arrangement and by a practical example of how to use it. The Trade Mark and Brands (an interesting feature) are arranged alphabetically under the trade heading of those goods which each manufacturer is best-known as the maker.

Bath Master Builders' Association.

The annual outing of the Bath Master Builders' Association took place recently, when a party of over 70 journeyed by train to Newport from where they proceeded by chars-a-bancs to Abergavenny. The party afterwards proceeded to Tintern, via Usk and the Wye Valley. The Mayor of Bath, Councillor C. H. Hacker, and the City Surveyor, Mr. E. P. Sissons, accompanied the party on the trip.

Master Builders' Federation.

The Master Builders' Federation, at their conference at Blackpool recently, discussed a report of their National House Building Committee, and passed a resolution condemning the financial proposals of the Government with respect to their housing programme.

New London Hospital.

The Chairman of the Royal Ear Hospital, Dean-street, Soho, W., Mr. Geoffrey E. Duveen, recently announced that negotiations had now been completed for the purchase of a site on which to rebuild the Ear Hospital. The site was situated on the corner of Huntley-street and Pancras-street, Bloomsbury, W.C., and had the chief advantage of being adjacent to University College Hospital and the New Rockefeller Buildings. The work of clearing the site and building the new hospital would be put in hand as soon as possible.

PROPOSED NEW BUILDINGS & OTHER WORKS

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERDEEN.—Plans passed by T.C.: Bungalow, Queen's-road, for Mr. Andrew S. Gorrod, per Mr. Geo. Watt, architect; offices, Crombie-road, for Mr. Thomas Watkins, per Messrs. Tawse & Allan, architects; two bungalows, Braemar-place, for Mr. Alexander M. Wilson, per Messrs. Tawse & Allan, architects.—The Town Council are asking the Scottish Board of Health's approval to the erection of 20 houses at Torry, at an estimated cost of £7,108.

ASHBRIDGE.—The M.H. has conducted an inquiry regarding the application of the R.D.C. for sanction to borrow £25,000 for the purpose of a water supply for parishes of Banwell, Puxton, Wick St. Lawrence, and Congresbury.

BARNES.—Plans passed by U.D.C.: Two houses, Priory-road, by Mr. Alfred Harvey; house, Sheen-lane, for Messrs. Couch & Coupland; five houses, Shalstone-road, by Mr. R. B. Rowell; conversion of house into two, Percy Lodge, by Mr. R. Atkinson; 21 houses, "Fifeway," Percy Lodge, by Mr. R. Atkinson; music hall, Gordon-avenue, by Mr. F. J. Wren; new house, to be known as "Fifeway," Percy Lodge, by Mr. R. Atkinson.

BARNSLEY.—Plans passed by T.C.: A. Firth, bungalow, Lund-lane; Mrs. S. A. Tinker, cottage, Greenfoot-lane; T. Booton, bungalow, Pontefract-road; D. R. Snowden & Son, Ltd., lock-up shop, Sheffield-road; W. Sykes, bungalow, Palmyrt, Old Town.

BASINGSTOKE.—The M.H. has sanctioned a loan of £900 for the purchase of two fields adjoining the Memorial Park. It is proposed to widen Bunnian-road at a cost of £2,025.

BATLEY.—Extensions to the Girls' Grammar School also to be carried out by the Governors at a cost of £1,500.

BEWDLEY.—Plans passed: House at Winterdyne, for Mrs. B. M. Stuart, and 12 houses at Hern's Nest and Lower Gate, for Mr. J. D. Wray.

BIRKENHEAD.—Plans passed by T.C.: Six houses, Chapman-street; shop and bakery, corner of Borough-road and Parkhill-road; two houses and shops Borough-road; pair of semi-detached houses, corner of Westbank-road and Clarence-road; stone masons' shed, room, offices, worksheds, &c., corner of Tollemache-road and Bidston-avenue; pair of semi-detached houses, Tollemache-road; house, corner of Howbeck-road and Waterford-road; pair of semi-detached houses, corner of Bedford-drive and Mount-road; house, corner of Tollemache-road and Heather-brow; seven lock-up garages, 40A, Mather-road; five pairs of semi-detached houses, Bebington-road.

BISHOP'S STORTFORD.—Plans passed by U.D.C.: Garage, South-road, for Mr. E. Markwell; house, Warwick-road, for Mr. B. W. Wilkinson; house on Golf Links Estate, Dunmow-road, for Mr. R. Stephenson.

BLACKBURN.—Plans passed by T.C.: Two houses, Billinge-road, by Mr. J. Ashworth; two houses, Whalley-road, by Messrs. John Fecitt & Sons, Ltd.; two bungalows, Pleckgate, by Mr. John Whalley.

BLACKPOOL.—At a meeting of the Church Council of St. Stephen's-on-the-Cliffs, it was decided to obtain sketches and plans for the new church which, when completed, will cost close upon £20,000.

BRADFORD.—Subsidies granted: J. Barker, house Bingley Nurseries, Leeds-road, Undercliffe; L. D. Sutherland, 28 houses, Westfield-lane, Idle; J. H. Smith, four houses, Norman-avenue and Norman-street, Eccleshill; The Heaton (Bradford) Estates Co., Ltd., two houses, Smith-avenue; R. J. Patchett, five houses, Nursery-road.

BRIXTON.—Plans passed by T.C.: Mr. Sutcliffe, Green-lane; Duke of Devonshire, caddie house, Ley-lane.

CARLISLE.—The City Council are granting a sum of £500 for the improvement of two very important houses in the city. The M.H. and M.T. are making grants towards the cost.

CHAPEL-EN-LE-FRITH.—Plans passed by R.D.C.: Church Corn Mill, Messrs. W. Eyre & Sons; engine house, &c., Chapel-en-le-Frith, Messrs. Ferodo, Ltd.; bungalow, Buxton-road, Horwich End, Mr. W. C. Taylor; porter's house, High Peak Hospital Committee; bungalow, "Cowdale," King Sterndale, Mr. J. Wardle.

CHELTENHAM.—Plans passed by T.C.: G. Day, house off Gloucester-road; T. F. Hough, house, off Leckhampton-road; J. B. Hiron, house, Whaddon-lane; Cheltenham College Council, boarding house, Christ Church-road.

CHESTER-LE-STREET.—The R.D.C. has approved a scheme submitted by the Aged Miners' Homes Committee for a reading room near the Homes, Leybourne Holds.

CHORLEY.—The M.H. has approved a scheme for the improvements of the sewage works at Bridgeholme Farm for the Chapel-en-le-Frith R.D.C. Sanction has been granted for the carrying out of the scheme.

CLACTON.—Plans passed by U.D.C.: House, Station-road, for Mr. A. Parnick; bungalow, Vicarage-gardens, for Mr. A. Blackall.

CLEVELEYS.—Plans passed by the T.C.: Messrs. Hall & Clayton, three houses, Vaughan-street; Mr. Whilton, two houses Neasham-road; two houses, Stanley-road, from Neasham-road to Yarm-road; bungalow, Bispham-lane; two houses, Yarm-road; Bussey & Armstrong, 24 houses, New-street, off Brinkburn-road; Messrs. Rogers, six houses, The Fairway; Clark & Moss, two houses, Leafield-road; J. W. Laybourn, two houses, Haughton-road; P. E. Teasdale, house, Abbey-road; J. Reeve, house, Deneside-road; Darlington Co-operative Society, six houses, The Fairway; H. Parvin, amended plans, two houses, Bowman-street; amended plans, four houses, Lewes-road; Cleveland Bridge and Engineering Co., Ltd., store, Geneva-lane; W. E. Moody, amended plans, two houses, Bowman-street.

EASTBOURNE.—Plans passed by T.C.: W. R. Hamblyn, for T. Swadling, house and shop premises, Church-street; P. D. Stonham, for H. O'Hara, conversion into flats, 37, Carlisle-road; P. D. Stonham, for Miss Robinson, house, Grassington-road; M. Martin & Sons, shops and flats, Meads-street; Peerless Dennis & Co., shop premises, Cornfield-road; A. Ford, for M. Hookham, house and shop, junction of Sidley and Seaford-roads; A. W. King & Sons, for G. E. Bryant, bungalow, Old Town; A. Ford, for E. S. Fowlas, conversion of ground floor into business premises, 11, Gildredge-road.

EAST GRINSTEAD.—The R.D.C. have instructed the surveyor to prepare plans and estimates of cottages similar to those in the Horsham rural district.

EDINBURGH.—Dean of Guild Court has granted warrant for the following: British Oxygen Co., Ltd., for the erection of a house, mess-room, and store, at Seafield-road; Edinburgh E.C., building at Sciennes School; St. Bernard's Parish Church, building at West Claremont-street, to be used as a choir vestry; Edinburgh Corporation, electricity sub-station at West Main-road; bungalows at Hillview-terrace, Corstorphine, and St. John's-road; and conversion of self-contained house at 9, Belmont-crescent into four separate houses.

EXMOUTH.—The U.D.C. has approved of specifications for fifteen houses.

FOLKESTONE.—The T.C. have decided to carry out a portion of the scheme for a tunnel sewer to relieve the sewers in the low area. They have instructed their consulting engineers, Messrs. W. H. Radford & Son, of Nottingham, to prepare plans.

FRIERN BARNET.—The U.D.C. has passed plans for a semi-detached house in Sutton-road, by Mr. A. E. Hamlin; house in Myddleton-park, by Mr. J. C. Hands; garage, with living-rooms, at "Homelands," Oakleigh-park South.

GLASGOW.—Warrant granted at Dean of Guild Court: James W. G. Oswald, Scotstoun, road between Dane's-drive and Northland-drive, Scotstoun; William Neilson, 213, Buchanan-street, double villa and garages at corner of Hatfield-drive and First-avenue, Kelvinside; Roman Catholic Archdiocese of Glasgow, additions to school, Graham-street, Bridgeton, at an estimated cost of £20,328; Queen's Park Football Club, Ltd., addition of latrines and boundary wall to Hampden Park, Mount Florida; Acme Tea Chest Co., Ltd., 204, Polmadie-road, sawmill at works there; North British Bottle Manufacturing Co., Ltd., 515, Old Shettleston-road, additions to works; Thomas Baird, 134, Bath-street, ten self-contained houses at Park-road and Colledge-street, Shawlands (cost estimated at £8,023); Young Bros., Craigmore House, Riddrie, cottage in Whitefield-road, Govan; Andrew Aitken, junr., 29, Maxwell-road, Pollokshields, five double villas in Courthill-avenue, Cathcart; Corporation Electricity Department, electricity works in lane between Hughenden-lane and Hughenden-crescent-lane; William Wilkie & Co., Ltd., 161, Millerfield-road, 80 semi-detached houses between Winton-drive and Kelvindale-road; Corporation Housing Department, houses at Sandyhills-road and Amulree-street (this is a house purchase scheme similar to that in course of erection at Kelvindale, the plans provide for 272 houses of three, four and five apartments); Corporation Housing Department, dwelling-houses and form streets and sewers at Shieldhall-road, Gordon-street, and Stanley-street, Govan.

HADHAM.—Plans have been passed by the R.D.C. for a bungalow at Much Hadham, for Mr. F. W. Warner and for a bungalow at High Wych, for Mr. Davis.

HARWICH.—Plans passed by T.C.: Extensions to Harwich and District Cottage Hospital; house, Marine-parade, Dovercourt, for C. E. Hills.

HOUGHTON-LE-SPRING.—The War Memorial Committee has decided that the local memorial should consist of St. Cuthbert's Cross in Portland stone, with figures in relief of a sailor and soldier in life size. The approximate cost will be about £700.—The U.D.C. is applying to the M.H. for permission to erect 36 houses.

HOVE.—Plans passed by T.C.: Messrs. Dumbrell & Co., for Mrs. Fry, bungalow, Erroll-road; Messrs. F. T. Wilson & Sons, for Miss M. Longden; house, Palmeira-avenue; Mr. J. M. Comber, for Mr. H. W. Tingley, pair of houses, Raphael-road; Messrs. Dumbrell & Co., for Mr. A. P. Holmes, house, Dorothy-road; Messrs. Dumbrell & Co., for Miss Holmes, house, Glebe Villas; Mr. H. F. Goff, bungalow, Glendor-road; Mr. E. S. Hall, for Mr. H. Willis, house, Grand-avenue; Mr. D. W. Jones, stores, 11, Titian-road; Messrs. T. Garrett & Son, conversion into flats, 54, Brunswick-square; Mr. F. Axtell, for Mrs. C. Shaw; conversion into flats, 6, Westbourne-villas; Mr. J. Cooper, conversion into flats, 60, George-street; Mr. A. C. Houston, for Mr. S. Hind, conversion into flats, "Sunnyside," Third-avenue.

KEIGHLEY.—Plans passed by R.D.C.: Seventeen semi-detached houses, Sandbeds, Morton, for Mr. Newall; silo, Redcar Farm, Steeton, for Mr. Sam Clough; bungalow, Sandbeds, Morton, for Mr. John Waddington.

KINGS LYNN.—Plans passed by T.C.: Bungalow, Loke-road, for Miss B. Spragg; two semi-detached houses, Vancouver-avenue, for Mr. E. Means; house, Chase Estate, for Mr. J. Pooley, house, Chase Estate, for Mr. Lyon.

LANCHESTER.—The R.D.C. has decided to embark upon a scheme for the improvement of Low Mill-road, at an estimated cost of £22,000.

LIMERICK.—The Corporation has decided to take advantage of the Housing (Builders) Facilities Act. A scheme has been adopted for the building of 75 houses by way of loan, with a remission of a proportion of rates for a period of twenty years.

LINTHWAITE.—Plans passed by T.C.: Two bungalows, Avison-road, Milnsbridge, for Ashworth and Ainley; bungalow at Royds, for W. Schofield.

LIVERPOOL.—Plans passed by the Corporation: Elmhall-drive, Lewis & Smith, for William Cowley, five houses, Carsdale-road, one house; Lynmouth-road, J. C. Martin, for Brierley Building Co., Ltd., two houses; Mersey-avenue, J. C. Martin, for J. W. Rawlinson, house; Garden-lane, G. H. Tyrer, for Pattinson & McKee, two houses; Primrose-road, Woolfall & Eccles, for W. Moore, house; Dudlow-lane, Gray & Evans, for T. Jones, house; Melbreck-road, Mersey Building Co., Ltd., for selves, house; Staplanas-road, R. Owens & Son, for H. Jones & Sons, 14 houses; Garston Old-road, or Basing-street and Bellmore-street, W. Pecorini, for H. J. Thomas, four houses; Rock-street, "Rock House," W. A. Scott, for W. Williams, 17 garages; Benns-gardens, E. Kirby & Sons, for Liverpool Printing and Stationery Co., Ltd., reconstruction of existing bridge over street; Wellington-avenue, A. Heaton, for T. Martin, 11 lock-up garages; Windsor-street and Hampton-street, Lewis F. Price, for Committee of Governesses' House, nine lock-up garages; Barlows-lane, Fazakerley, A. E. Shennan, for Fazakerley Conservative Club. North. Conservative Club; Broad Green-road, corner Molyneux-road, Mortimer Ward, for J. Newton, two bungalows; Breck-road, R. G. Tyrer, for T. H. Blinkhorn & Co., two lock-up shops; Aigburth-road, J. C. Martin, for Brierley Building Co., Ltd., two houses; Carnatic-road, F. Rimmington, for W. Mountford, house; Green-lane, Allerton, J. W. Jones & Sons, Ltd., for selves, two houses; Menlove-avenue T. Wainwright & Sons, for R. Jones & Co., house Great Richmond-street, City Engineer, for Corporation of Liverpool, six houses; Hornby-street, for the Corporation, six houses; Limekiln-lane, for the Corporation, six houses; Bond-street, for the Corporation, 24 houses; Chestnut-grove, C. F. Elias & Lancaster, for J. R. Ruddock, four houses; Derby-road, Garston, J. W. Griffiths, for self, four houses; Mersey-avenue, Brown & Sanders, for R. C. Cleugh, two houses.

LONDON (CATFORD).—The Licensing Justices have passed plans for the re-building of the "Green Man" public house.

LONDON (GREENWICH).—The M.H. has held an inquiry into the proposal of the B.C. to borrow the sum of £22,000, for the purpose of defraying the cost of constructing the foundations of the proposed new public baths and wash-houses, on a site which has been acquired from the Greenwich Hospital Estates, in Trafalgar-road.

LONDON (LEWISHAM).—Plans passed by B.C.: G. Watt, nine houses, Ravensbourne Park-crescent; R. J. Bellingham, eight houses, Baring-road; E. C. Christmas, shop, Dartmouth-road.

LUTON.—Plans passed by T.C.: T. Sharp, house, Dunstable-road; A. T. Worboys, house, Old Bedford-road; E. H. Smith, house and shop, Leagrave-road; T. N. Burditt, store shed, Wellington-street; R. V. How, ten motor houses, Portland-road; W. J. Ashton, seven houses, Ferndale-road; H. F. J. Bottoms, three shops and offices, Bury Park-road; A. Tate, two houses, Stratford-road; F. E. Shoosmith, two warehouses, Guildford-street.

MALVERN.—Plans passed: Pair of flats in Hornyold-road, for Mr. Flint; pair of houses in Delamere-road, for Mr. Gill; schoolroom at Malvern Wells, for Miss Judson; bungalow at Delamere-road, for Miss Tyrrell; residence in Colwall-road, West Malvern, for Miss W. H. Mayo; club-house for the Worcester Golf Club; shop at Barnard's Green, for Mr. R. Woodyall; bungalow at Clarence-road, for Mr. S. Ferriss; four detached houses near golf house, for Mr. W. Hayes; a new water main is to be laid to the new houses in Colwall-road, at an estimated cost of £335.

MANCHESTER.—The Manchester and Salford District Nursing Institution have decided to open a maternity home and make provision for 18 beds.—The Public Health Department of the Corporation are acquiring premises, 68-72, Rosamond-street West, for £595, as a maternity and child welfare centre.—A proposal is under consideration for the provision of public sanitary conveniences at the Grand Lodge entrance to Heaton Park.—Purchase of land has been approved in connection with doubling the tram track in Gorton-lane.—A plan has been prepared in the City Architect's Department for proposed offices to be erected at the Lloyd-road tramway siding, Levenshulme; the drawings have been approved and tenders are to be invited.—It is proposed to carry out during the long vacation painting and maintenance work at the Technical College, at an estimated cost of £417.—A site is to be acquired on the Blackley Housing Estate for the erection of a new public elementary school.—Sketch plans have been approved for proposed erection of a school clinic on a site adjoining Cheetham temporary school, and submitted to the B.E.—The Governors of the Grammar School have purchased a site for £14,333, and their architects, Messrs. Percy Worthington and Francis Jones, jun., are now preparing plans for the erection of new school buildings.

MIDDLETON.—Sanction has been received to borrow £6,000 from the M.H. for provision of new water mains.—Plans passed by T.C.: Two houses, Manchester New-road, for Taylor & Davies.

MONKWEARMOUTH.—The scheme for the erection of a hospital to replace the old Monkwearmouth and Southwick Hospital, in Roker-avenue, has been advanced another stage, the Governors having unani-

See also our List of Contracts, Competitions, etc.

mously approved of a scheme for building a hospital of 160 beds on the Ashville site in the Newcastle-road, which they purchased some time ago.

NEWCASTLE.—The Corporation Libraries Committee has decided to recommend the City Council to erect a branch library at Denton-road, Scottswood, at a total cost of approximately £13,000.

NEWPORT (ISLE OF WIGHT.).—Plans passed by T.C.: Store, Messrs. Stratton & Millgate, architects, for Crouchers, Ltd.; store, Lugley-street, for Mr. Colson; additions to offices, Castlehold-lane, Messrs. Stratton & Millgate, for Messrs. Buckell & Drew.

NEWPORT (MON).—Plans passed by T.C.: Buckingham-place, four houses, Gibson Bros., Clayton-street; Barrack-lane, bungalow, English Homesteads Co., for Mrs. T. A. Simpson; Barrack-lane, house, English Homesteads Co., for Miss L. M. Willmett; Rosslyn-road, house, Page & Lawrence, for C. Parker; Northumberland-road, two houses, F. R. Bates & Son, for R. Dacy and W. W. Davies; Grafton-road, house and shop, Page & Lawrence, for D. J. Evans; James-street, new Labour Hall, A. E. Sheppard, for W. B. Lewcock; Rothesay-road, nine houses, A. D. Davies; Mendalgief-road, two houses, C. E. Compton, for W. T. Dunn and W. H. Harrington; Brecon-road, two houses, Graham, Hitchcox & Co., for T. H. Dark; Rochester-road, stores and boundary wall, Swalwell & Havard, for Pioneer Working Men's Club; Oswald-road, house, R. Berry, for Miss Bartlett; Corporation-road, house, J. W. Holmes, for W. G. Phipps; Crawford-street, offices, H. P. Eames for Venn & McPherson; Balmoral-road, four houses, H. Budgen & Co., for A. E. Moss; Chepstow-road, extension to shop, F. R. Bates & Sons, for C. & G. S. Thorne; Jenkins-street, Sunday school, Griggs & Vaughan, for Rev. C. Feetham; Chepstow-road, house and shop, Graham, Hitchcox & Co., for H. S. Waters.

NEWQUAY.—The U.D.C. has received the sanction of the M.T. for the construction of a new road in the Trenance Valley, upon which an expenditure of £23,000 is estimated.

NORTHAMPTON.—The T.C. are adopting road reconstruction schemes costing approximately £50,000. The following road schemes will be carried out under the supervision of the Borough Engineer:—Kettering-road, £2,166; Spencer Bridge-road, £7,213; Grafton-street, £3,317; St. Andrew's-road, £17,584.—The T.C. have adopted a scheme for the redecorating of the large hall in the Town Hall. A design has been submitted by Mr. Colin Gill to cost approximately £900, and has been approved. The Borough Engineer has been instructed to carry out the reconstruction of the tramway track in Sheep-street.—Plans passed by T.C.:—Four houses, Beech-avenue, R. West; shop, Arnold-road, A. Marsham; two houses, Wycliffe-road, Throssell & Co.; house, Pleydell-road, Delapre Estate, Sale & Co.; warehouse, 35, Sheep-street, A. R. Cleaver; sub-station, Bruce-street, Northampton Electric Light and Power Co., Ltd.; extension to factory, Kingsthorpe-road, Barratt & Co., Ltd.; house, Kingswell-road, J. H. Marriott; two houses, Cedar-road, Smith & Jones, Ltd.; two houses, Clarence-avenue, A. E. Thompson; two houses, Balmoral-road, Northampton Co-operative Society, Ltd.; house, Stanhope-road, Northampton Co-operative Society, Ltd.; house, Beech-avenue, Mrs. Harland; house, Spencer-street, J. E. Tomalin; two houses, Delapre-crescent, A. Whiting; three houses, The Vale, Lack, Rivett & Robinson; house, Stanhope-road, H. Boswell; house and shop, Birchfield-road E., A. Valentine.

NORWICH.—Plans passed by T.C.: Messrs. Tyrrell Bros., two houses at George Borrow-road; Mr. H. R. Jolly, bungalow at Corie-road; Mr. T. G. Skingley, house, "The Avenues"; Mr. A. H. Palmer, house, "The Avenues"; Mr. G. D. Fitt, two houses, George Borrow-road; Mr. J. G. S. Whitworth, house, Corie-road; Mr. A. O. Metcalf, bungalow, Earlham-road; Mr. H. W. Trower, house, Highland-road; Dr. Boswell and Mr. H. E. Ames, two houses, Unthank-road; The Norwich Housing Development Co., Ltd., six houses, George Borrow-road; Messrs. Buckingham & Berry, house, Branksome-road; Mr. S. Le Good, house, Judge's-walk; Mr. E. C. Lovett, two houses, Colman-road; J. & J. Colman, Ltd., eight houses, Kerrison-road.

OLDHAM.—The project of bridging the railway line between Belgrave-road and King's-road has been approved by the directors of the L.M.S., and detailed drawings prepared by the District Surveyor are to be submitted before the work proceeds.

OSSETT.—Plans passed by T.C.: Warehouse, Wakefield-road, for J. H. Nettleton.

PERSHORE.—Plans and estimates for the provision of a new water scheme for Pershore, Pinvin and Eckington are being prepared on behalf of the R.D.C. by Messrs. Wilcox & Raikes. The M.H. are then to be approached for permission to loan the amount necessary to carry out the work.

PLYMOUTH.—The Housing Committee have accepted a tender for the erection of a further 134 houses at North Prospect.

PONTEFRACT.—Additional accommodation for 100 children is to be provided at the Lone-lane Council School.—The T.C. has instructed the surveyor to proceed with the lay-out of about sixty more houses on land in Love-lane.

PORTRUSH.—The U.D.C. has decided to proceed with the erection of 10 workmen's houses at a cost of £350 each.

RAWDON.—Plans passed: Pair of bungalows and three pairs of semi-detached houses.

ROCHDALE.—The Cemetery Committee of the T.C. are proposing surfacing the main carriage drive and other roads at the cemetery; tenders are to be invited.

ROCK FERRY.—To provide work for the unemployed a scheme is under consideration to develop and beautify the foreshore.

ROYTON.—Plans have been approved for the erection of 16 houses of the semi-detached type at Dogford-road, for Mr. J. W. Beswick.

ST. ASAPH.—The members of the local branch of the British Legion are raising funds for the proposed erection of a new club room.

ST. NEOTS.—Reconstruction of works of C. G. Evans & Sons, Cambridge-street.

SANDBACH.—A firm of soap manufacturers are seeking approval of the D.C. for the erection of a new soap works on a site at Wheelock.

SELBY.—Mr. J. Blacker and his sister, Miss Blacker, have consented to defray the cost of the extension to the St. James's Church, Standering Hall, estimated to be from £300 to £400.

SHEFFIELD.—Greystones and Marlcliffe-road Council Schools are to be adapted for intermediate schools at a cost of £3,300.—Plans passed: Two houses, Talmont-road, for Miss M. Wood and Mr. C. C. Wood; house, Dalewood-avenue, for Mr. J. V. Auckland; two houses, Gleadless-common, for Mrs. West and Mr. H. Hall; two bungalows, Dalewood-avenue, for Mr. J. V. Auckland; two houses, Ford-road, for Mr. A. W. James and Mrs. H. C. Shaw; bungalow, Selborne-road, for Mr. P. Parry; house, Greystones-road, for Mrs. A. Ranson; two houses, Greystones-road, for Messrs. F. W. Gilling & C. Harrington; house, Greystones-road, for Mr. Riley Watson; six houses, Chesterfield-road, for Mr. R. Jones; bungalow, Gleadless-common, for Mr. Wm. Birtles; house, Dalewood-avenue, for Mr. G. H. Wilson; two houses, The Drive, for Mr. E. Bilbrough; six houses, Rupert and Sandford Grove-roads, for Mr. W. A. Wright; two houses, Sharrow-lane, for Mr. W. R. Wilson; house, Sharrow-lane, for Mr. Wm. Holden; two houses, Muskoka-drive, for Mr. G. M. Taylor; four houses, Muskoka-drive, for Mr. G. M. Taylor; bungalow, Muskoka-avenue and drive, for Mr. G. M. Taylor; four houses and garages, Dalewood-road and New-road, for Mr. W. H. Hughes; bungalow, Muskoka-avenue, for Mr. H. Anderson; house, Brincliffe Edge-road, for Mr. H. Henstock; four houses, Folds-crescent, for Mr. T. Leadbeater; house, Northfield-road, for Mrs. M. Sherringham; two houses, Sandford Grove-road, for Mr. W. A. Wright; house, Dalewood-avenue, for Mr. J. V. Auckland.

SLAITHWAITE.—The U.D.C. has decided to proceed with the paving scheme to the north side of the new road towards which the W.R.C.C. has made a grant of £12,307.

STAFFORD.—Plans passed by T.C.: Four houses at Rising Brook, for Mr. L. Bailey; two houses at Rising Brook, for Mr. A. Wood; and a house at Rising Brook, for Mrs. M. E. McHugh.—Plans passed by R.D.C.: House, Bradley, for Mr. R. Cantrill.

STROUD.—House, Middle-street, Mr. E. P. Dromgole, for Mr. G. H. Smith.

SUNDERLAND.—The T.C. has approved a list of road improvements in various parts of the town at an estimated cost of £83,000, to be submitted to the Unemployments Grants Committee as work proposed to be carried out to relieve unemployment.

THORNABY.—The T.C. has approved a plan f bungalow for Mr. Wm. Yates, in Millbank-road.—Ap cation is being made by the T.C. for permissio borrow £2,200 for making up Oxford, Victoria and Paul's-roads.

TRAWDON.—Plans have been approved for erection of a bungalow at Moor Bottom, for Mr. Starkie.

TRURO.—The difficulty which is being experience so many towns of providing a parking place for mo cars is to be met at Truro by the bridging over of river at Lemon Quay. The plans, which involve a t expenditure of £5,050, include the erection of a cov portion. At a meeting of the corporation it was dec to submit the plans for sanction to the Board of Tr and apply for a loan from the M.H.

UPPER RENFREWSHIRE.—Plans passed by C mittee: Villa at Patterton, for J. C. B. Parcaple Par ton; church hall and annexes at Corkerhill-r Cardonald, for the Scottish Episcopal Church; v at Parkhouse, Barrhead, for D. Shanks, Raisd Barrhead; double villa on new road off Craigneth road, Whitecraigs, for J. Allan; seven bungal on new road off The Grove and Woodvale-aven Giffnock South, for the Forth Building and Investm Co., Ltd., 30, George-square, Glasgow; bungalow the Whitecraigs Golf Course; 31 terrace house new road off the Busby-road, Giffnock, for the Giffn Building Syndicate Co.; bungalow at corner Milverton-road and Torrington-avenue, Giffnock Sou for Andrew M'Neill Brown, Dumbreck, Glasgow.

WAKEFIELD.—Plans passed by T.C.: Mr. A. Carbert, four houses, Barnsley-road; Messrs. Mass Holdsworth, two houses, Dickinson-street, for Mr. Walker; Messrs. Bell & Kay, house, Horbury-r for Mr. W. A. Craven; Mr. H. Dobson, bungal Horbury-road, for Mr. H. Potts; Mr. W. Wrig house, Woodthorpe-lane, for Mr. H. Summers; J. P. Firth, two houses, Dewsbury-road, for Messrs Kendal & D. Scott; Mr. H. Dobson, house and h and shop, in May Bush-road and Agbrigg-road, Mr. A. J. Mutch; Mr. W. Wentworth, house, Ba lane, for Mr. G. Ashton.

WALLASEY.—The M.H. sanction is being sought the Corporation to the borrowing of £14,300 for widening of the remaining portion of Leasowe-roa The estimated total cost of the work in connection the scheme for providing an additional supply water is £38,885, including £14,600 for mains in Birkenhead area and £17,000 for a culvert un Wallasey Pool; application is to be made to the M for permission to borrow this amount.

WALSALL.—The T.C. is to be asked to agree anticipation of the new Housing Bill becoming law plans being prepared for the erection of 100 additio houses. It is proposed further, to build 12 house Lincoln-road.

WATFORD.—Plans passed by T.C.: Two hou Rickmansworth-road, for Messrs. Kempster & Willia Burton-avenue, and Mr. J. A. Thompson, 4, Sus road; workshops and stores, Willow-lane, for M Judge; pair of semi-detached houses, Oxhey-r for Mr. J. Randall; eight houses, King Georg avenue, for Kempster & Williams; house, Sus road, for Mr. J. A. Pearce; house, Bucks-aven for Mr. W. J. Foster; house, The Avenue, for Mr. J Gee; house, Westbury-road, for Mr. A. E. Mallet

WEYMOUTH.—Plans passed by T.C.: Mr. J. Broomfield, villa, Belfield-park; Messrs. S. Jackso Sons (for the *Hampshire Advertiser and Echos*, Lt re-building 57 & 58, St. Thomas-street, as offi shop and store; Mr. J. Cornick, bungalow, Icen-ro Mr. K. Openshaw, pair of semi-detached bungal Southlands-road, Buxtons; Mr. S. Jackson (for H. C. Cornwell), bungalow, Alexandra-road.

WREXHAM.—The T.C. proposes to acquire 6 sq. yds. of land in Kings-street for road improvem and motor parking centre and sanction to bor the purchase price (£5,500) has been received f the M.T.

FIRES.

ELLAND.—A serious fire has occurred, when dam provisionally estimated at between £30,000 £40,000, was done at the Atlas Works of Messrs. Ja Dyson & Co., Ltd., soap, &c., manufacturers.

LONDON.—Damage estimated at several thous of pounds was caused by a fire, which occurred rece at a large factory and warehouse in Red Lion-st Holborn.

COPPER for ROOFING

COPPER for GUTTERS and DOWN PIPES

COPPER as a Covering for DOMES, PINNACLES, etc.

No Architect or Contractor should miss seeing the indications of the uses of Copper in Building, shown upon Stand 237, Palace of Engineering, British Empire Exhibition, by the Non-Ferrous Metal Trades Joint Exhibit Committee. Booklet on Application.

PRICES CURRENT OF MATERIALS

wing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.

BRICKS, &c.

	£ s. d.
er 1,000 Alongside, in River Thames up to London Bridge.	
Stocks	4 3 6
d Hard Stocks	3 18 6
r 1,000. Delivered at London Goods Stations.	
ns. at	£ s. d.
g's Cross	2 13 3
rooved for	
ster	2 15 3
Bullnose ..	3 8 3
Stourbridge Fire brick :—	
in.	8 11 0
D BRICKS—	
r White	
ory, and	
t Glazed	
etchers ..	22 0 0
ers.....	21 10 0
s. Bull-	
e and 4½in.	
ts	28 10 0

ond Quality, £1 per 1,000 less than best. Cream uff, £2 extra over white. Other colours, Hard £5 10s. extra over white.

	£ s. d.
Best Pressed Staffs.	9 5 0
Do. Bullnose ..	9 15 0
Blue Wire Cuts	7 5 0
3 in.	10 3 0
D'ble Str'tch'rs	30 10 0
D'ble Headers	27 10 0
One Side and two Ends ..	31 10 0
Two Sides and one End	32 10 0
Splays and Squints	30 0 0

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
er yd. super	2 1	3 in. per yd. super	2 11
"	2 6	4 in. "	3 6

	s. d.	
s Ballast	10 6	per yard.
nd	14 9	" "
s Sand	15 6	" "
Washed Sand.....	15 6	" "
Shingle for Ferro-crete	14 0	" "
"	15 0	" "
roken Brick."	10 6	" "
reeze	7 6	" "

delivered 2 miles radius Paddington.

ton delivered in London area in full van loads.

Portland Cement, British
ndard Specification Test £2 18 0 to £3 3 6
- alongside at Vauxhall in 80-ton lots.

	£ s. d.
rete per ton extra on above.....	0 10 0
Cement	4 8 0
n Cement	8 15 0
Cement	5 15 0
's Cement, White.....	5 15 0
" Pink	5 10 0
r, Coarse, Pink	3 0 0
" White	3 12 6
Fine	5 12 0
te, Coarse	3 9 0
Finish	3 17 0
tone Lime	2 11 9
Lime	2 11 9
round Blue Lias Lime.....	2 4 6
.....	17 0 0
e Chippings	1 12 0

—Sacks are charged 1s. 9d. each and credited 6d. if returned in good condition within three ths, carr. pd.

ridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
STONE—delivered in railway trucks at	
tbourne Park, Paddington, G.W.R., or	
h Lambeth, G.W.R., per ft. cube.....	2 9½
o. delivered in railway trucks at Nine s, L. & S.W.R., per ft. cube.....	2 11½
AND STONE—	
wn Whitbed, in random blocks of 20 ft. erage, delivered in railway trucks at ine Elms, L. & S.W.R., South Lambeth ation, G.W.R., and Westbourne Park, addington, G.W.R., per ft. cube.....	4 4
do. delivered on road wagons at above ations, per ft. cube.....	4 5
te basebed, 3d. per ft. cube extra.	
E.—½d. ft. cube extra for every foot over 20 ft. *erage*, and ½d. beyond 30 ft.	

N-WOOD STONE.

elivered at any Goods Station, London.	
andom blocks, up to 10 ft. cube. Per ft. cube	7 /-
m blocks from 10 ft. and over "	17 /-
wo sides "	27 /-
hree or four sides "	32 /-

STONE, BLUE—*Robin Hood Quality.*

	s. d.
elivered at any Goods Station London.	
wn two sides landings to sizes (under super.).....Per Ft. Super	5 3
bbed two sides, ditto..... "	5 9
wn two sides slabs (random sizes) "	2 1½
o 2½ in. sawn one side slabs om sizes) ..... "	1 5½
2 in. ditto, ditto ..... "	1 3

YORK—

livered at any Goods Station London.	
d random blocks.....Per Ft. Cube	5 6
wn two sides landing to sizes (under super.).....Per Ft. Super	5 4½
bbed two sides ditto ..... "	6 0½
wn two sides slabs (random sizes) "	2 10
ditto. ditto "	2 5
ll-faced random flags..Per Yard Super	7 11

ARTIFICIAL STONE.

	s. d.
ed in London Area in full van loads.	
..... per ft. cube	6 6
1 ..... " "	7 9
..... " "	8 3

WOOD.

GOOD BUILDING DEAL.

per stan.		Inches.		per stan.
1	£34 0	3 × 6		£24 10
9	32 0	3 × 11		30 0
8	26 0	2 × 11		30 0
7	26 0	3 × 9		26 0
3	25 10	2½ × 9		27 0
7	25 10	3 × 4½		25 0
....	24 0	3 × 4		24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10
1 × 9	£36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	33/6
⅞	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
¾	17/6
⅞	21/-
1	26/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 lin.

SAWN LATHS.

Per bundle				0	2 8
Dry Wainscot Oak, per ft. super, as inch	0	2 0	to	0	2 6
⅞ in. do. do.	0	1 6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1 9	to	0	2 6
Cuba Mahogany	0	3 0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per load	45	0 0	to	50	0 0
American Whitewood planks, per ft. cube ..	0	14 0	to	0	16 0
Best Scotch Glue, per cwt.	4	10 0	to	—	
Liquid Glue, per cwt. ..	4	7 0	to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12.....	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11.....	31 5 0	16 by 10	17 12 6
20 by 12.....	29 15 0	16 by 8	13 15 0
20 by 10.....	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
Ditto hand made ditto	5 12 6
Ornamental ditto	5 17 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in...	13 10 0
⅜ in.	14 10 0	⅝ in. to 2½ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28⅓%	35 %	45 %
Steam	22½%	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.....	1 7½	11d.	3½d.
3½ in.	1/2⅝	1/0½	3½d.
4 in.....	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.....	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.....	1 6½	1/2¾	3½d.
3½ in.	1/6½	1/2¾	3½d.
4 in.....	1/7⅝	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.....	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.	£ s. d.
Common Bars.....	13 10 0 to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0 ..	15 10 0
Staffordshire "Marked Bars"	17 0 0 ..	18 0 0
Mild Steel Bars	12 10 0 ..	13 10 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..	14 0 0
Hoop iron, basis price	16 10 0	..	17 10 0
" Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g...	15 0 0	..	16 0 0
" " " 24 g...	16 0 0	..	17 0 0
" " " 26 g...	18 0 0	..	19 0 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..	22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..	24 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22 0 0

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	43 0 0
Pipe in coils	43 10 0
Soil Pipe	46 10 0
Compo pipe.....	49 10 0
NOTE—Country delivery, 30s. per ton extra: lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s.6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area, at Mills ..... per ton	30 0 0 .. —
Do., ex country, carriage forward ..... per ton	31 0 0 .. —

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	4 in.
7/6	10/-	14/-	23/-	30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1½ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ..	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps ..	35/-	45/-	66/-	126/- "

	£ s. d.	
COPPER—		
Strong Sheet ....per lb.	0 2 3	.. —
Thin " .... "	0 2 4	.. —
Copper nails .... "	0 2 3	.. —
Copper wire .... "	0 2 4	.. —
TIN—English Ingots "	0 2 2	.. —
SOLDER—Plumbers' "	0 1 1	.. —
Tinmen's ..... "	0 1 3	.. —
Blowpipe ..... "	0 1 4	.. —

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes .....per gallon	0 3 7
" " " in barrels .... "	0 3 9
" " " in drums .... "	0 4 0
Boiled " " in barrels .... "	0 4 0
" " " in drums .... "	0 4 3
Turpentine in barrels ..... "	0 5 9
" in drums (10 gall.) .. "	0 5 0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	57 0 0
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered	80 5 0
Red Lead, Dry (packages extra)....per ton	52 0 0
Best Linseed Oil Putty.....per cwt.	0 16 0
Filocol .....per cwt.	0 15 6
Size, XD Quality.....1kn.	0 3 6

(*Concluded on next page.*)

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PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds	10½d.
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d.
¼ Rough rolled	5¾d.
Figured Rolled, Oxford Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7¾d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak.....	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water).....		0 12 0
Brunswick Black.....		0 7 6
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine.....		0 9 0
Cuirass Black Enamel.....		0 7 0

Westminster Bank, Ltd.

The Directors of Westminster Bank, Ltd., have declared an interim dividend of 10 per cent. for the half-year ended June 30 on the £20 shares, and the maximum dividend of 6¼ per cent. on the £1 shares for the same period. The dividends, 10s. per share and 1s. 3d. per share, respectively (both less Income Tax), will be payable on August 1.

THE SCOTTISH BUILDE

NEW BUILDINGS IN SCOTLAND

Sauchie.—CHURCH.—The Stirling and Dunblane U.F. Presbytery has approved of plans for a new church. The estimated cost is £8,000.

Coatbridge.—HOUSES.—The Dean of Guild Court has passed plans submitted by the T.C. for the erection of 224 houses at Rosehall, at an estimated cost of £70,000.

Harthill.—HOUSES.—At a meeting of the Middle Ward District Committee of the Lanark C.C. the Housing Committee agreed to borrow £50,000 to meet the cost of the erection of 90 houses at Harthill, under the scheme for the improvement of insanitary areas.

Elgin.—HOUSES.—The Corporation is considering a scheme which has been prepared by the Burgh Surveyor, for the erection of houses, at an estimated cost of £280 each.

Stirling.—SCHOOL.—The Stirlingshire E.C. has decided to erect a school in the Riverside district. The building will provide accommodation for 800 scholars.

Aberdeen.—VARIOUS.—The Board of Health has notified the T.C. of their approval to the amended lay-out of the sixth development of the Torry housing scheme.—The Directors of Aberdeen Royal Infirmary agreed to accept the offer of the Cruikshank Trust to provide the sum of £11,114 6s. 3d., the portion payable by the Infirmary of the price of the site for the new Aberdeen Joint Hospital.

Glasgow.—VARIOUS.—The Dean of Guild Court has passed the following plans: J. Wheatly, M.P., and others, trustees of the Shettleston Branch of the I.L.P., a hall in Darleith-street, Shettleston, at a cost of £1,440; City Bakeries, Ltd., a bakery at 23, Clarendon-street, £24,034; T. Baird, 134, Bath-street, 11 terrace houses at Doune-gardens, Cathcart, £8,613; Scottish Co-operative Wholesale Society Ltd., extension to boot factory at Renfrew-road, Shieldhall, £16,803; Howard & Wyndham, Ltd., alterations to Theatre Royal, Hope-street, £3,000; J. Melrose, 788, London-road, bungalow in Webster-road, Mount Vernon; G. Hoy, grocer, 8, Robertson-street, Partick, shops, Thornwood-avenue, Partick; and cross Miners' Welfare Society, an inst in Dunlop-street, Tollcross, £5,780.

Troon.—HOUSES.—The Dean of Guild has passed the following plans: W. M. Langside, Glasgow, house in Logan-dri an estimated cost of £800; J. Wheelan, ander-street, Airdrie, two houses in Ces road, at an estimated cost of £2,000.—H. Troon, house in Harling-drive, at an esti cost of £1,000; and Miss A. Neilson, St street, Glasgow, house in Harling-drive estimated cost of £1,000.

DUNDEE HOUSING SCHEME

THE Housing Committee of Dundee Council met recently and Mr. John Re convener, made reference to a large sch private enterprise in building that was launched by a new Dundee company. company has already obtained land, pr lay-out plans, drawn up type plans and cations, and if the Government's new Bi tained a clause authorising the Corpora give a subsidy to private builders, the company was to launch a huge scheme o building. The houses were proposed built in blocks of from three to eleven hous the total number of houses on four selecte was 1,166. The suggested rent of the was £28 per annum, and it was also prop build a number of five-roomed houses to at £34. The total number of houses to b was 5,000. He added that the Corp must see that the type of houses to be built be such as would raise the standard of in Dundee, and that they would not me a makeshift—a scheme having for its p purpose the creating of huge dividends pany promoters or their shareholders.

Mr. W. H. Buist calculated that th subsidy from both the Government and t authority to this scheme would amount t £400,000 in 20 years.

New Park for Edinburgh.

Hillend Park, presented to the city o burgh by Mr. John White, builder, Co drive, Edinburgh, was opened recently b Provost Sir William L. Sleigh in presen large company, who were present on the tion of the Public Parks Committee of th burgh Town Council. The new park, w a strip of Pentland Hills land, has north side Lothianburn Golf Course rises in a north-westerly direction; views from the higher parts of the hill are the most magnificent that can be obtain any part of the Pentlands to which th have access. The Lord Provost, in d the park open, thanked Mr. John White park which he had gifted to the city.

Obituary.

Mr. William G. Rowan, the Glasgow a whose death occurred recently, speci the erection of ecclesiastical buildings, left many examples of his skill in His earlier work included Pollokshie Church, St. John's Wesleyan, Wy Church, Crown-street; and Strathbung Church.

New Method of Bricklaying.

In the House of Commons a f since, the Minister of Health w if his attention had been calle new method of building, which was n demonstrated at Tonbridge, under was claimed that an unskilled man 3,000 bricks a day.

Mr. Wheatley said he was awar new method of laying bricks in co struction, in regard to which he ha quiries made, was being tried at T but the work was not sufficiently ad enable any opinion to be expressed

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Plasterers' Labourers.
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½	
Airdrie	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Alexandria	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½	
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½	
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½	
Blairgowrie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—	
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Coatbridge	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dumbarton	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Dumfries	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½	
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½	
Falkirk	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½	
Hamilton	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Hawick	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2	
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½	
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2	
Kilmarnock	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Kirkcaldy	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/3½	1/4	1/3	1/0	
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
Leith	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Motherwell	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 107

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2: 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1¼

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Fixed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1¼"
Plain deal jamb linings framed	per ft. sup.	1/8	1/9	2/0
Deal shelves and bearers	"	1/5	1/7	1/10
Add if cross tongued	"	2d.	2d	2d.

STAIRCASES.

		1"	1¼"	1¼"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft run.	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	"	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/4
Sash fasteners	11½d.	Mortice locks	5/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	17	0
Plain compound girders	"	20	0
Do. stanchions	"	23	0
In roof work	"	28	0

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do.	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	59	0
Do. Do. in flats	"	57	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft run.	0	6
Soldered seam	" "	1	6
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2	
Do. service	"	1/8	2/2	2/7	3/10		
Do. soil	"						7/6
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	2
Do. Do. Sirapite	" "	2	4
Do. Do. Keen's	" "	3	3
Add sawn lathing	" "	1	5
Add metal lathing	" "	2	3
Portland cement screed	" "	1	10
Do. plain face	" "	3	0
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8
26 oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece	2/- to 4/-	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of it should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ABERDEEN.—For supply of water pipes for Woodside District, for the T.C. :—

*Macfarlane, Strang & Co., Glasgow.. £2,362 13

ABERDEEN.—For laying water pipes in Woodside District, for the T.C. :—

*W. Tawse £1,874 16 10

ABRAM.—For painting and decorating the hospital buildings and painting and decoration of the Caretaker's house at the sewage works, for the U.D.C. :—

*W. Gaskell & Sons.

AUDENSHAW.—For the erection of an asbestos church, for the Trustees of St. Hilda's, Denton-road, estimated to cost £1,000 :—

Ginger Lee & Co., Manchester.

BARNSLEY.—For making up various streets, for the T.C. :—

*H. Hibbert & Son—
Bond-road £1,798 9 0
Cross-street 542 4 11
Clarke-street 600 8 4

BEDFORD.—Cleaning and painting Prebend-street bridge, for the T.C. :—

‡Izzard & Son £175 15

BIRKENHEAD.—For reconstruction of convenience at Borough Hotel, Thomas-street, for the T.C. :—

*A. W. Bevan..... £218

BIRKENHEAD.—For erection of retaining walls on Hoylake-road Estate, for the T.C. :—

*Selwood, Lloyd & Co. £475 15

BLAKENEY.—For extension of school buildings for Managers of Council School :—

*J. H. Davis, Blakeney £1,385

BRADFORD.—For (1) painting and cleaning at Central Library; (2) vacuum cleaning at Library, for the T.C. :—

*(1) A. Sutcliffe & Sons £585 0 0
*(2) West Riding Cleaning Co. .. 288 13 6

BRADFORD.—For painting interior of Kirkgate Market, for the T.C. :—

*Taylor & White £2,186 4 6

BRADFORD.—For reconstruction of fish stalls in Rawson-place Market, for the T.C. :—

J. Moulson & Son £258 10

BRECONSHIRE.—Additions at Ystradgynlais County School, for the E.C. :—

*J. E. Hitt & Sons, Bridgend..... £385

CANNOCK.—For the erection of cottage houses, for the Board of Guardians :—

*C. Linford & Sons, Cannock £3,391

CARDIGANSHIRE.—The C.C. has accepted tenders, as follows, for repair of bridges :—

*F. Powell—
For Morfa Bridge £225
For Nebo Bridge 115

CHESTERFIELD.—Decorating the public rooms of the Market Hall :—

*F. V. Pashley £417 10

DORCHESTER.—For painting at high level reservoir, for the T.C. :—

*W. G. Beaumont & Co..... £169

DOUGLAS (I.O.M.).—For the erection of (*a*) Ten parlour houses, and (*b*) ten non-parlour houses, on the Hills Estate, for the T.C. :—

‡Cowell & Corkill: (*a*) £675 each; (*b*) £605 each.

GLAMORGAN.—The following tenders have been received from the Mid-Glamorgan Water Board :—

CONTRACT No. 1.

	Cast Iron Pipes.	*Spun Pipes.*
J. B. Packer.....	£12,170 0 4	*£11,670 0 4
Engineer's Estimate	12,600 16 0	12,143 9 6
Barnes, Chaplin & Co.	12,715 0 6	12,171 1 5
H. Middleton	12,911 0 6	12,433 8 7
Fothergill Bros.	13,001 15 6	12,501 15 6
J. Sutherland	13,202 7 6	12,796 7 6
Standard Contracting Co.....	13,567 0 0	13,000 0 0
Richard Jones	13,600 9 0	13,101 3 0
Hybart, Broadhead & Co.....	14,506 11 0	14,028 1 10
Watson & Horrocks..	18,144 5 3	17,619 5 3
J. C. Hitt & Sons....	20,008 7 6	19,508 7 6

CONTRACT No. 2.

Engineer's Estimate	19,335 7 9	18,646 11 3
J. Sutherland	19,587 12 6	*19,117 12 6
J. B. Packer	20,208 9 10	19,658 9 10
Fothergill Bros.	20,290 7 6	19,590 7 6
Barnes, Chaplin & Co.	20,322 3 6	19,630 19 10
Harry Middleton	20,629 8 6	20,092 8 6
Richard Jones	20,855 18 0	20,302 16 0
Standard Contracting Co.....	20,902 0 0	20,142 0 0
S. A. Bartlett	21,038 18 0	20,159 2 6
Hybart, Broadhead & Co.....	22,758 19 10	22,220 5 7
Waston & Horrocks..	24,905 3 9	24,309 3 9
J. C. Hitt & Sons....	26,058 5 6	25,558 5 6

CONTRACT No. 3.

Henry Evans	24,664 9 9	*£22,664 9 9
J. I. Rees	26,842 12 6	25,842 12 6
J. Sutherland	27,992 8 9	25,692 8 9
J. C. Hitt	28,281 5 0	25,964 5 0
Engineer's Estimate	30,595 17 0	27,657 7 0
Standard Contracting Co.....	30,812 0 0	27,900 0 0
J. B. Packer	31,110 2 6	28,787 2 6
Fothergill Bros.	31,870 4 6	29,370 4 6
R. Jones	32,291 4 0	29,900 18 0
Barnes, Chaplin & Co.	33,050 16 3	30,277 2 10
Hybart, Broadhead & Co.....	33,354 13 6	30,927 3 3
Watson & Horrocks..	34,069 9 6	31,659 9 6
Rees Jones	34,471 19 0	—
Middleton	36,889 2 6	34,590 9 6

GLASGOW.—For carrying out housing scheme at West Craxton, for the T.C. :—

Excavator, brick and mason work—
*Wm. Taylor & Son (Glasgow), Ltd. £16,566 4 5
Carpenter, joiner, &c., work—
*W. Vernal 14,254 10 9
Lath work—
*Arthur Finlayson 883 4 7
Glazier work—
*Geo. G. Kirkland 551 0 0
Slater and roughcast work—
*Robert A. Sanderson 3,694 19 7
Plumber work—
*Andrew Gilmour 6,949 13 4
Plaster work—
*Archibald M'Kellar..... 2,880 16 1
Iron railings and gates—
*P. & R. Fleming & Co. 482 18 1
Painter work—
*M'Kenzie & M'Arthur 1,045 10 4

GLASGOW.—For roads and footpaths at Hawthorn-street housing scheme, for the T.C. :—

*A. Stark & Sons £3,786 3 4

GLASGOW.—For repairs and improvements to halls, for the T.C. :—

*J. Yowlden & Son, *tile work at Cowper Institute* £183 12 1
*J. Lindsay & Son, *painter work at Cowper Institute* 222 9 9
*Logan & Gray, *painter work at Pollokshaws Hall* 110 0 0

GLASGOW.—For iron railings and gates at Hamilton Hill, for the T.C. :—

*A. Peters, Ltd. £929 18 3

GLASGOW.—For painter work at Yorkhill housing scheme, for the T.C. :—

*T. Hastie £549 6 3

GLASGOW.—For roads and sewers at Hawthorn-street and Campbell-street, for the T.C. :—

*J. Gillies & Co. £3,853 7 2

GRAVESEND.—Construction of paddling pool, for the T.C. :—

‡Mears Bros. £498

HANWELL.—For re-surfacing roads on the housing estate, for the U.D.C. :—

Brookes, Ltd. £858 15 0
W. W. Wheeler & Co., Ltd..... 805 0 0
Constable, Hart & Co., Ltd..... 695 16 8
Tarmac, Ltd. 695 16 8
Chittenden, Ltd. 686 5 0
W. Shepherd, Ltd..... 662 5 10
Beaufort Quarries, Ltd..... 657 10 0
‡J. Wainwright & Co., Ltd..... 657 10 0

HARROGATE.—For the reconstruction of the storeys of the Majestic Hotel, for the Fire Assessors :—

*Lazenby Bros., Ltd., Leeds.

HOLSWORTHY.—For erection of lych gates and boundary wall, for the U.D.C. :—

*Glover £234

KILLAMARSH.—For erection of a miners' welfare hall, at Killamarsh, Derbyshire. Messrs. W. H. Wagstaff & Sons, architects and surveyors, 57, Saltergate, Chesterfield.

*S. Higton & Sons, Woodseats, Sheffield £2,500

LAMBETH.—Erection of additional story at the London School (Lambeth) for Printing, for the L.C.C. Education Committee :—

Douglass, Halse & Co., Ltd., Woolwich £1,594
Prestige & Co., Ltd., Grosvenor-road .. 1,545
J. Garrett & Son, Balham-hill 1,499
E. C. & J. Keay, Ltd., Birmingham .. 1,417
Geo. Parker & Sons, Ltd., Peckham.. 1,369
C. P. Roberts & Co., Ltd., Dalston.. 1,325
J. & C. Bowyer, Ltd., Upper Norwood 1,290
‡The Somerville Barnard Construction Co., Ltd., New Cross..... 1,275

The architect's estimate comparable with the foregoing tenders is £1,344.

LEEDS.—For reconstruction of premises in Park-place, for Messrs. David Little & Co., Ltd. :—

*Lazenby Bros., Ltd., Leeds.

LEEDS.—For the rock asphalte paving of a section in Dewsbury-road, for the Highways Department :—

*Tunstall's Rock Asphalte Co., Ltd., Leeds.

LEYTON.—For widening Lea Bridge-road, near Knotts Green, for the U.D.C. :—

W. Manders & Co..... £541 5 10
J. & J. Dean 537 5 0
W. & C. French 521 18 9
*F. J. Coxhead..... 499 0 0

LIMEHOUSE.—Removal of stepping, Thomas-s Central School, Limehouse, for the L.C.C. Educ Committee :—

Geo. Keetch, Hackney £464 0 0
W. Simms, Stepney 408 10 0
Griggs & Son, Victoria-street .. 397 0 0
Turnbull & Son, Fenchurch-street 379 0 0
Whitby's, Ltd., High Holborn.. 354 5 0
J. & C. Bowyer, Ltd., Upper Norwood 352 0 0
W. S. Sharpin, Bow..... 345 8 3
G. B. Farrar & Co., Whitechapel-road 338 0 0
W. J. Dixon & Son, Blue Anchor-lane 330 0 0
‡Fred. & T. Thorne, Isle of Dogs, E. 14 ..... 320 0 0

The architect's comparable estimate is £323.

LONDON.—Painting of non-provided schools L.C.C. Education Committee :—

All Saints' R.C. (Rotherhithe)—
A. G. Shorter £300 0 0
Christ Church (Chelsea)—
F. Robertson 200 0 0
St. Luke's Parochial (Finsbury)—
E. D. Pearcy..... 597 0 0
St. Peter's and St. Paul's R.C. (Finsbury)—
H. Roffey & Sons 318 0 0
Kingsland R.C. (Hackney C.)—
A. F. Fiddes 290 0 0
Bartram's R.C. (Hampstead)—
Harrison & Spooner 355 5 0
St. Giles-in-the-Fields (Holborn)—
J. F. Munday..... 598 0 0
Macklin-street R.C. (Holborn)—
J. A. Hunt & Co., Ltd..... 563 0 0
St. Matthew's (Brixton)—
F. Ward & Sons..... 120 0 0
St. Peter's (B) (Lambeth, N.)—
G. Brittain & Sons, Ltd..... 316 4 0
St. Peter's (G. and I.) (Lambeth, N.)—
G. Brittain & Sons, Ltd..... 484 11 0
Corpus Christi R.C. (Brixton)—
Peacock Bros. 210 0 0
Brockley R.C. (Lewisham, W.)—
N. Harris & Sons 357 10 0
St. Mary and St. Joseph's R.C. (Poplar, S.)—
J. A. Hunt & Co., Ltd..... 511 0 0
Homer-row R.C. (St. Marylebone)—
J. Sanders & Sons, Ltd. 333 0 0
St. John's Wood R.C. (St. Marylebone)—
H. A. Murphy & Co..... 375 0 0
Clarendon-square R.C. (St. Pancras, S.E.)—
Bovis, Ltd..... 270 0 0
St. Dominic's R.C. (St. Pancras, N.)—
J. F. Hatchman 606 0 0
Thanet-street R.C. (St. Pancras, S.E.)—
Pellew & Wright 345 0 0
St. Anne's (Limehouse)—
Turnbull & Son..... 584 0 0
Mile-end-road R.C. (Limehouse)—
Bishop Bros. 400 0 0
St. Patrick's R.C. (Whitechapel and St. George's)
W. M. Brand..... 495 0 0
St. Anne's R.C. (Whitechapel and St. George's)
G. Barker 315 0 0
All Saints' C.E. (Putney)—
H. Roffey & Sons 444 0 0
Streatham C.E. (Streatham)—
J. H. Jenkin & Co. 345 16 0
St. Peter's C.E. (St. George's, Westminster)—
J. A. Hunt & Co..... 498 0 0
Boutcher (Bermondsey, W.)—
Coughtrey & Son 820 10 0
Amicable Society's C.E. (Rotherhithe)—
R. L. Stuart & Sons..... 275 0 0
Clarence-street (Rotherhithe)—
R. L. Stuart & Sons..... 395 0 0
St. Mary's (Rotherhithe)—
Seymour & Mackenzie 560 0 0
St. Paul's (Rotherhithe)—
Seymour & Mackenzie 350 0 0
Sacred Heart R.C. (Hammersmith, S.)—
F. W. Martin & Son..... 295 0 0
Trinity (Hampstead)—
E. D. Winn & Co., Ltd. 219 0 0
St. John's (Fulham)—
F. Prater & Son..... 419 0 0
St. Peter's Italian (Holborn)—
W. Mills & Sons..... 589 0 0
Our Lady of Dolours R.C. (Paddington, S.)—
W. Mills & Sons..... 474 0 0
St. Matthew's C.E. (Paddington, S.)—
G. N. Watts, Ltd..... 365 0 0
St. Gabriel's Parochial (Bow and Bromley)—
Harris & Wardrop 447 0 0
Kentish Town C.E. (St. Pancras, N.)—
C. W. Barrett..... 167 0 0
Aldenham-street R.C. (St. Pancras, S.E.)—
W. Mills & Sons..... 195 0 0
St. John the Evangelist (St. Pancras, S.W.)—
W. F. Bertie 369 0 0
Westminster Jews' Free (St. Pancras, S.W.)—
J. Kinnimount & Sons..... 486 0 0
Tooting R.C. (Balham and Tooting)—
Marsland & Sons, Ltd..... 487 0 0

All accepted.

LONDON.—For the erection of two sheds central repair depot for the storage of old m for the L.C.C. :—

W. Harris, Ltd. .....
Thomas & Edge .....
*Douglass Halse & Co., Ltd. .....
W. Harbrow, Ltd.....
J. & C. Bowyer, Ltd. .....
W. J. Dixon & Son .....
H. Groves & Son .....
F. & T. Thorne .....
T. D. Leng.....

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

CXXVII.—No. 4251. JULY 25, 1924.

MR. WHEATLEY'S HOUSES

THOSE who read the debate in the House of Commons on the Housing Bill on July 16 must have been struck by the new spirit shown. It would not be exaggerating to say that this debate was epoch-making. Colonel Fremantle moved an amendment roviding that no proposal for the provision of twenty-five r more houses should be sanctioned until the Minister was tisfied that it would not be prejudicial to any town-planning heme, his object being to "prevent a housing scheme from eing a blot on the country-side or tending to the future creation slums." Mr. Wheatley, although for technical reasons unable accept the amendment, undertook to draw the attention of cal authorities to the tremendous importance of the object nderlying this amendment, and to the need, in the re-building a large part of the country, of particular care in order to see at the lay-out would be creditable to the country. Colonel remantle withdrew his amendment on the understanding that definite provision dealing with the subject he had raised would inserted on the Report stage of the Bill. In reply to another ggestion concerning the purchase of houses by local authorities, r. Wheatley stated his objection that this might lead to the trusion into local schemes of houses that would injure the cality, but that, since his object was to get houses, he would consider the matter and try to bring in a satisfactory form words which would protect the locality. In the same debate, r. Brown, supported by Viscount Wolmer, moved an amend-ent providing that in an agricultural parish not more than ght houses should be built to the acre. Mr. Wheatley, in ply, expressed his willingness to accept the amendment in bstance, and also to limit the number of houses to be erected an urban district so that they should not exceed twelve to e acre without the consent of the Ministry.

The importance we attach to this debate will probably pear extraordinary to the next generation, "For," they ll say, "surely these precautions are natural enough, and any nsible man would adopt them." That any Housing Act ould be passed without providing for amenity and density, ll be as unthinkable to them as it is to us that women should til recently have been regarded as their husbands' chattels, that little boys should have been forced up suffocating imneys. While Dr. Addison was the political pioneer in proved housing, yet we must remember that he was in office ring a period of enthusiasm; whereas Mr. Wheatley finds mself in an atmosphere of disillusionment. We take no litical side and sincerely hope that all parties will co-operate so far as the maintenance of the improved standard of housing concerned. If we say that we cannot afford it, we place our-lves in the position of the man who says he cannot afford to nd his children to the dentist, and we invite all the responsi-lity for disaster that such culpable negligence entails. The ct that both Colonel Fremantle and Viscount Wolmer are nservatives is of happy augury, and will, we hope, help to t this national question out of the rut of party politics.

At the same time, while we are all desirous of providing r amenity and reducing the number of houses built to the re, we must not shut our eyes to the facts, and we know drastic limitation of houses to the acre in some districts is t of the question as things are. The discussion at the Liver-ol Congress of the Royal Sanitary Institute affords some indication of the opinion of competent officials who are practically interested in the question, and we may quote the remarks of Mr. J. A. Brodie, City Engineer of Liverpool, who said: "In parts of Liverpool, near the Mersey, with plenty of open space, as many as fifty dwellings had been built to the acre, and there was not a more healthy and sanitary area in the city. In large cities the cost of land was so high that the limitation of twelve houses to the acre was quite impossible. Also, it had to be remembered that everybody who was used to city life did not want a garden, and many of them did not know what to do with them when they got them."

If Mr. Wheatley carries his points where possible he will have taken a step forward which no future Government will dare to retrace. The numerous societies that have been formed to protect the community, and organised public opinion generally, will be too strong to be flouted, and we sincerely hope private enterprise will take its stand on the side of progress which alone can enable it to make good. We well know there is an improvement—a great improvement—but no one can travel the country without realising that there is still a sufficient percentage of bad work to nullify the effect of the good new houses. Some localities are still entirely bad, others, to their credit, are altogether good, but the majority are a jumble of good and shoddy. We know of one estate belonging to a local authority which has been developed and laid out on excellent lines; some two dozen perfectly simple and nice houses were built, and then one of the plots was sold to a man who erected a hideous bungalow that could only be appropriate among its fellows at Jazzing-on-Sea. Local authorities ought to exercise control over their estates, and when they sell plots they should reserve the right to approve plans and elevations of the proposed houses and submit them for approval to somebody who knows his job.

The school children are the citizens of the future, and they ought to be educated in the way best calculated to make them efficient. We suggest that some of the time they now spend in learning irregular verbs, historical dates, and the names of promontories might well be devoted to learning the elementary principles of architecture. As a lesson it would, if well taught be extremely popular; it could, in many districts, be illustrated by visits to good local buildings, while *mauvais examples* would always be available for instruction and amusement.

To return from the Board of Education to the Ministry of Health and its problem. The house builder, very naturally, objects to being called a "Jerry-builder"; he associates jerry-building with flimsy construction and scamped work, but he does not often realise that the term is used even more to denote a certain pattern of design; and while he continues to build on Peckham lines—no matter if his walls are 20 in. granite (of course, roughcast and "Tudored" outside), he will continue to earn the name "jerry-builder," even though his friends may be too polite to call him by that name. The construction is not visible from the outside, it is the design that is seen by the passer-by. An opportunity is open to the National Federation of House Builders to institute among its members a serious course of study in house design, to examine Georgian work, and so to get to know why his designs as designs have made him less effective than he might be in his present appeal for reinstatement.

NOTES

Sir Giles Gilbert Scott, R.A.

The whole profession will join with us in appreciation of the honour of knighthood bestowed on the architect of the Liverpool Cathedral at the consecration services held during the visit of the King and Queen on Saturday. Sir Giles Gilbert Scott, R.A., has achieved much more than titular honour by the exercise of his fine and exceptional instinct for the development of Gothic art. The record of his work at Liverpool shows the inspiration of progressive thought, so that we may look forward with pleasurable hopes to the possible completion of his great work. The qualities which his design shows are those which the student of architecture needs to apprehend whatever be his predilections for style or method. It has been stated that he is more of a Classicist than a Gothicist, but his understanding of architectural values enables him to see where and how the dominance of the horizontal or the vertical may be rightly pronounced and to what extent the linear or plastic qualities may be emphasised in architectural design. After all, the definitions of art are very illusive, and cannot be reduced to rules and diagrams.

Parents and the Educational Conference.

A parent contributes a useful article on p. 123, which has been suggested by the Educational Conference which is being held next week in the rooms of the Royal Institute of British Architects. That parents have their privileges we are aware, and of their duties we are reminded when we are called upon to sign cheques for the education of our children, but our rights under our educational system are not so obvious. We wonder whether those responsible realise, as our contributor remarks, "the sweat and tears a sustained course at the schools means to many homes," and the importance therefore of co-operation between staff and homes: "While an easy sympathy may often exist between master and pupil, unless the former has made himself familiar with the pupil's circumstances, environment and health, he is hopelessly handicapped. He must co-operate with the parent, and induce the parent to co-operate with him."

Wooden Houses.

The discussion in the House of Commons on the subject of wooden houses, and also the correspondence in the Press on the subject, raises an issue which is in no way easily settled one way or another, and we are glad to see that an inquiry into the number of wooden houses and the desirability of building in wood, together with a general consideration as to their stability and liability to fire, is being considered. Without going beyond the boundaries of Essex or Kent, we are supplied with the evidence that numbers of such houses still exist in country districts, some of them dating from more than a century ago. It would be interesting to know whether statistics can show any greater liability of wooden buildings to fire than those of brick or stone. feel doubtful whether the proportion loss by fire can be shown to be m greater. Their term of life is proba shorter, and in the case of neglect to re and paint would be still more so, but can call to mind many cottages and sm houses, not to say mills, built in this w which charm us still by their agreea construction and attractive appearan They date mostly from a time sufficien long ago to include real taste in th appearance and planning, and we sho have thought at such a time it was clea desirable to encourage building in t material. With red tiles—pantiles preference—and their weather-board surfaces painted black or white, they fo an adornment to the countryside. T boarding needs to be well capped, and m of us are familiar with the traditio moulded edge which gives so attract a character to the weather-boarded ho of a hundred or more years ago.

Crockery Smashing.

What a gloomy nation should be if we had no se of humour! Mr. Pu often comes to the rese and we are grateful to him for illustrat recently his views on the build industry. Mr. Wheatley, with the ai a magic lantern, is demonstrating " perfect and almost automatic co-ordi tion between all branches of the build industry in pursuance of my great hous scheme." Unfortunately, through s error on the part of the operator, we shown a scene of the wildest pan monium. We all love smashing crock and if we cannot indulge at home " break up the happy home " at Wemb Failing this we enjoy even looking pictures of turmoil. Let us hope t this particular picture may serve to rem all connected with building of how exp sive it is to carry out our crock smashing at home.

An Ex-Minister's Views.

Sir Arthur Griffi Boscawen, writing housing in *The Times* July 16, asks for furt light on certain questions, the first be "How can private enterprise, as we k it before the war, be brought back i the business?" We suggest that answer to this is only of academic inter because few who have studied the sub want to get private enterprise back, *as knew it before the war*, although many us would like to get it back on impro lines and under adequate control. Arthur speaks with satisfaction of means taken during the past centur prevent the erection of "slums in sense I have described," but he does explain why he is prepared and anx to see us embark again upon the erec of houses which, if not slums to the b are certainly slums to the mind. To in an ugly and depressing neighbourh is as demoralising to the spirit as ins tary surroundings are to the body. politicians seldom understand this.



Photo: H. F. Traylen, F.R.I.B.A.

Burford Church Porch.



The 'Bus Ticket Nuisance.

We recently quoted some excellent advice from *The Children's Newspaper*. From the same source we extract idea that if the omnibus companies uld fix a box for disused tickets at the r of every 'bus it would save the eets from the litter of hundreds of usands of these tickets every day. r habit of throwing old tickets into the eet is untidy and slovenly and could ily be avoided in the way suggested. e same issue contains an appreciation Sir Gilbert Scott in connection with erpool Cathedral. It is a pity that grown-ups' newspapers do not give more art and science and less crime and sation. Are grown-ups really as far ind children as a study of the Press uld imply ?

The Dispute in the Building Industry.

Although the report of the Court of Inquiry into the Building Trade Dispute, which we summarise on p. 142, has been before the ployers and operatives for some days, movement appears to have been de to bring the parties together. e Ministry of Labour has invited the ties to meet early next week to see if re is a basis on which negotiations can resumed. We give on p. 139 some lections on the dispute by Mr. W. H. ocker, K.C., in the course of which the ggestion is made that the Industrial uncil for the Building Industry, or the ilding Trades Parliament as it was led, which was formed shortly after the r, but from which the employers subquently withdrew, should be set up in. One of the principal objects of this ncil, consisting of an equal number employers and operatives, was to ate goodwill in the industry and vent misunderstanding, and had it been in existence to-day we might very well have been spared the present unfortunate dispute.

Values in Stained Glass.

The mystery of reputation and how it is often seen to attach to what is so little worthy of it may be studied with some completeness if we compare the examples of ancient stained glass—some very beautiful indeed—to be seen in the churches of Paris. In popular estimation the glass in the Sainte Chapelle is the most famous, and the only way to account for the almost superstitious value attaching to it is to suppose that it came down from a time before Viollet-le-Duc perpetrated his destructive restorations. There may, before that time, have been some justification both on account of its ancient and artistic character, for the veneration in which it was held. For really the glass has now no claim to any such commendation, and much of it, if judged intrinsically, is very poor indeed. In its early original state, though primitive in character, it no doubt had the qualities which attached to the glass of that period, though we think these qualities much exaggerated, much of the design and colour of that time being very poor. Since the restorations carried out by Viollet-le-Duc, the colour on the whole is anything but good, and the lack of freedom and variety of design, the all-overishness, and want of contrast emphasises the tiresome reiteration of the conventional pattern and hot kaleidoscopic colour.

The Glass of St. Germains.

How many who would think it impossible to visit Paris without seeing this glass would feel the same in the case of the far more beautiful and adequate treatment of the glass of St. Germain, opposite the Louvre, in which glass treatment is not only seen at its best—we speak of the clerestory windows—but in which the architectural relation is so well maintained. Such restoration as this glass has received appears to have been limited chiefly to the repair of breaks and the original character is almost entirely preserved. It seems a great pity that popular judgment should be directed in such a way that its values are of so little account, and warns us of the danger of reputation bestowed so arbitrarily. In the Sainte Chapelle, the decorations by Viollet-le-Duc are of such a character as to challenge the apparitions of nightmare, and put on record the falsity of the pedant and archæologist being in any way identified with the artist.

The late Albert Bruce-Joy, R.H.A.

We regret to announce the death of Mr. Albert Bruce-Joy, R.H.A., the distinguished sculptor, which took place after a long illness at Hindhead, on Tuesday, at the age of 82. The deceased, during his long and interesting career, carried out many important commissions, particularly portrait statues and busts, and his work was always conscientious and dignified. In our next issue we hope to give an account of his career, with illustrations of some of his best work.

High Labour Cost.

The great increase in the proportional cost of labour on building works is pointed out in a pamphlet on the housing question by Mr. W. Woodward, whose very long experience in building affairs causes him to look with great misgiving upon the way we appear to be drifting into a thoroughly bad and uneconomic policy. Much of what Mr. Woodward says is very pertinent to the present issue.



Panel to Front of Back Row of Choir Stalls. Carved by Mr. H. G. Ratcliff to the Architect's Design.

Liverpool Cathedral. Sir G. Gilbert Scott, R.A., Architect.

GENERAL NEWS

Professional Announcements.

The honour of Knighthood has been bestowed upon Mr. John Sulman, F.R.I.B.A., of Sydney, Australia. The recommendation was made by the Commonwealth Government of Australia, in consideration of the valuable work carried out by Sir John for that Government in connection with the new Federal Capital of Australia.

Mr. Frank Lishman, F.R.I.B.A., who has recently retired from the post of Consulting Architect to the Government of the United Provinces, India, which he has held since 1912, has now resumed practice at 8, Gray's Inn-square, W.C.1.

R.I.B.A. Examinations.

R.I.B.A. Final Examination.—It was decided that in the case of fourth and fifth year students of schools of architecture exempted from the R.I.B.A. final examination, six months spent on building works and/or in a builder's office (approved by the school), and otherwise gaining knowledge of the practical side of building, should be recognised as equivalent to six out of the twelve months now required to be spent in an architect's office.

R.I.B.A. Examinations, May and June.—The questions set at the intermediate and final (or special) examinations held in December, 1923, have been published and are on sale at the Royal Institute, price 1s. 6d. (exclusive of postage).

New Thames-side Wharf.

The engineer for the reconstruction in reinforced concrete of the existing timber wharf at Purfleet for Messrs. Harrisons (London), Ltd., is Mr. R. N. Stroyer, M.Inst.Mech.E., specialist in reinforced concrete, of 4, Westminster Palace Gardens, S.W.1. The new wharf, it is stated, will be one of the most important on the Thames, being about 1,000 ft. long, with a depth of water of about 40 ft., while the distance from the coping to firm bottom is about 60 ft.

Northampton Polytechnic Institute.

The vacant Principalship of the Northampton Polytechnic Institute, Clerkenwell, caused by the death of Dr. R. Mullineux Walmsley, in June, has been filled by the appointment of Mr. S. C. Laws, M.A. (Cantab.), M.Sc. (Lond.), Principal of the Wigan Mining and Technical College for the past nine years. The appointment is subject to the approval of the London County Council.

Birmingham General Hospital.

The Governors of the General Hospital, Birmingham, have prepared a scheme for the extension of the hospital, providing for a reorganisation and enlargement of the casualty and out-patients' departments, together with an addition of 130 beds, bringing up the total accommodation to 500 beds.

New Northampton Hospital.

The Governors of St. Andrew's Hospital, Northampton, are embarking on a new scheme for the treatment of patients in the early stages of mental trouble. An entirely separate hospital is to be built in the grounds, this being self-contained even to the staff. The contract has been entrusted to Messrs. J. Martin, Ltd., Northampton, the contract price being approximately £50,000. The architect is Mr. S. F Harris, F.R.I.B.A., Northampton.

Indian Tenders.

Among recent Indian tenders are: The Deputy Chief Engineer, King George's Dock, Port of Calcutta.—5,000 tons Portland cement.

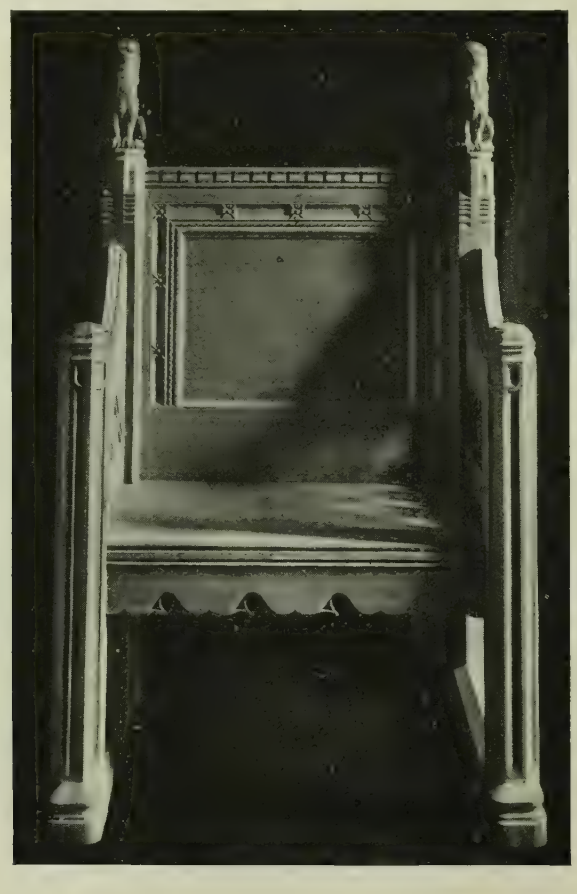
The Executive Engineer, Public Works Department, Delhi.—Wood panelling for Legislative Buildings, Delhi.

The Executive Engineer, Sanitary Works Division, Patna. — Sanitary installation in Hospital, Mental Central Asylum, Kankee, estimate Rs.17,850.

The Chief Controller of Stores, Indian Stores Department, Delhi. — Sukkur Barrage Project.—Workshop machine tools and plant, new or second-hand, and railway weighbridge, 35 tons. 750 tons cement, accompanied by copies of test certificate. Pile-driving plant, either steam-operated or compressed air driven.



Oak Reading Desk.
Liverpool Cathedral.
Sir G. Gilbert Scott, R.A., Architect.



Liverpool Cathedral. One of the Royal Chairs. (*See p.* 128.)

COMPETITION NEW

Public Baths, Newton-in-Makerfield.

The Council has appointed Mr. Arno Thornely, F.R.I.B.A., assessor in this co petition. Applications not later than July 2 Sending-in day, September 30. Conditio can be seen at this office.

Aldershot War Memorial.

The conditions of this competition are n in accordance with the Regulations of t R.I.B.A., and Members are advised to take part in it.

Netherlands.

H.M. Consul-General at Rotterdam inform the Department of Overseas Trade that t Municipality of Rotterdam have announce their intention to hold an internation competition for plans for the reconstruction the Koninginne Bridge.

The first prize is 10,000 guilders. Furth particulars from the Department of Overse Trade, 35, Old Queen-street, London, S.W (Reference A.X.1169).

Other Competitions.

Other competitions still open include t following (the dates given are, first the sendi in date, and second the issue of *The Builder* which full particulars were given):—Ross-Smi Memorial (Sept. 30; Feb. 21). Harrogate I firmary (Sept. 30; May 30). Hamilton W Memorial (Sept. 1; May 30). Glasgow Hi School Memorial (Sept. 30; June 13). Mason Memorial (Aug. 22; June 13). Bexhill Ente tainment Hall—Banned by R.I.B.A. (Sept. May 30).

PARENTS AND THE EDUCATIONAL CONFERENCE

By A PARENT

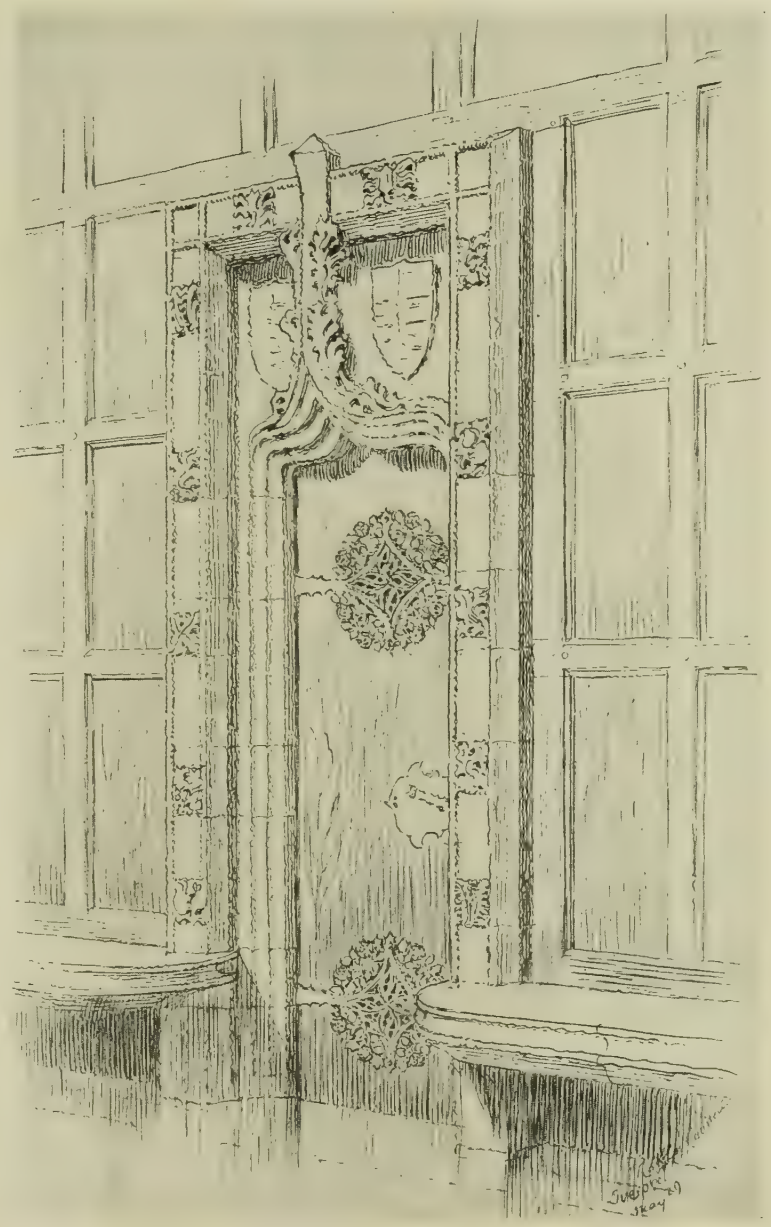
It is natural that the coming Conference on Architectural Education should be highly specialised. Those directly responsible for the training at the schools will have the opportunity to exchange experiences and, which is even more important, to discuss the influence of present methods with practising architects in touch with the young men and women leaving the schools, on whom their first employment largely depends. So far, good. All education is a partnership of which the components—student, teacher, and future employer—are generously recognised, but the remaining co-partner, the parent, is usually regarded as a necessary nonentity who signs cheques. The present writer, therefore, will boldly represent the parent as plaintiff and begin an action for professorial neglect. The defence will plead justification.

Looking back at the last century of boys' education, we can see how deeply rooted is the divorce between home and school in England. It has been a respectable tradition for parents to give up the responsibility of their sons to the schools or universities and, until the last two generations, to keep their daughters at home. This tradition has begun to yield with younger boys at preparatory schools, but as against any privileges that parents have gained there we have certainly lost any vestige of influence over our daughters' education, and we now find ourselves not only confronted with an assured, unconscious, masters' position, but also with most conscious entrenchment of mistresses. From the day that our children leave the friendly atmosphere of a preparatory school until, as men or women, they are finally through their technical education, we as parents are nothing but benevolent and paying neutrals. Possibly, like "subject peoples," parents are not yet ready for responsibility, but the professorial barriers, gracious and impenetrable, are not encouraging: one has sympathy with the lady who declared that she detested going to dinner with a schoolmaster because if he asked her he treated her like a sixth form boy, and if he didn't like her, a fourth.

Let us at once frankly acknowledge the amazing improvement in the educational methods of this generation; the growth of right individualism and character, and above all the delightful relationship between staff and pupil, are a revolution, but until the parent is also taken into full co-operation an essential element is left out, and the pupil is preserved in a protected world remote from everyday life and home. This atmosphere of sheltered grace in elementary education has its reaction on the technical training which follows. If architecture is chosen the prospect is five years at the schools and, while one does not dispute the importance of a sustained course, one wonders whether those responsible realise the sweat and tears it means to many homes. Added to the burden is the anxiety that the student may not prove suitable or may fail to get work when qualified. It is impossible to exaggerate the importance of co-operation between staff and home when doubt arises, or of the insight and decision required before advice can be given. While an easy sympathy may often exist between master and pupil, unless the former has made himself familiar with the pupil's circumstances, environment, and health he is helplessly handicapped. He must co-operate with the parent, and induce the parent to co-operate with him.

A further difficulty arises from the length of the technical training required if a boy wishes later to take a degree at Oxford or Cambridge (or in Ireland at Trinity College, Dublin). We must all admit that it is a good thing for the profession generally to have its percentage of graduates from the old universities, but at the present time of financial stress few men (or their parents) are sufficiently independent to afford the additional three or four years. Neither university gives an architectural degree, and the certificate at Cambridge only shortens the school course by about a year. Only those acquainted with the difficulties can realise how many and how complicated they are, and most people are agreed that it would be disastrous to embark on any scheme that would prejudice the prosperity of the existing architectural schools. Against this we may plead that neither the medical nor the musical schools seem to be injured by the degrees given at Oxford and Cambridge, and it remains a perpetual annoyance to parents that these universities cannot devise a plan with the architectural schools that will benefit both. The title Bachelor of Arts persists as a misnomer when the faculty excludes every branch of æsthetics. It appears ludicrous that among the list of professors we find the professors of Papyrology, Chinese, Animal Pathology, and Sanskrit, but look in vain for Architecture. The universities vaguely imply that they would be prepared to adopt a chair if anyone would endow it, while the architectural schools—perhaps with reason—maintain a lukewarm suspicion. Meanwhile, both are the losers. Nothing can benefit architecture more than the contribution of different experience, and certainly nothing could more enrich the culture of the two great universities than the study of the art to which they owe so much. Architecture depends for its life on cultivated opinion; it has withered because it has been segregated as a technical or archæological side issue. A school of architecture at Oxford or Cambridge in which a degree could be won would revivify its bones, and exercise an immense influence on educated opinion. The degree certainly should not be a diploma for practice, any more than is a medical degree, but its possessor should be eligible to enter the third year at an architectural school. Many men who are doubtful of their suitability to be practising architects would be glad to make this experiment in study. They would take their degree and be that much the richer, without feeling that the years had been wasted. The opportunity would also serve the double purpose of filter for the unsuitable and as a possible recruiting ground for those with special talent.

Once again I accept the statement that there are many difficulties, but most parents believe that if the architectural schools really desired it they could enlist the necessary enthusiasm to get the "chairs" and to make the liaison effective.



Doorway in Chapter House.

Liverpool Cathedral: Sir G. Gilbert Scott, R.A., Architect.

CORRESPONDENCE

Sir Charles Barry, R.A.

SIR,—I also have seen the drawings of the Houses of Parliament at the R.I.B.A. Their late date is obvious. They even appeared to me to be a set of the ventilation scheme as carried out. Possibly it makes no difference to your correspondent that, whereas Pugin died in 1852, Sir C. Barry lived to 1860. I imagine that Pugin did very little in 1851, except in connection with the Mediæval Court of the Great Exhibition —the place where Sir G. Scott records that he last saw him.

Your correspondent might look at Sir C. Barry's sketches for the improvement of Whitehall and completion of the Houses of Parliament (1859); reproduction in the cover of Bishop Barry's Memoirs.

In the course of years I have seen a good few of Barry's drawings and my conclusion is quite different. It has always struck me as a singular thing that Sir C. Barry's powers as a draughtsman are so little realised by architects in general. The "*discerning and sympathetic soul*" will continue to find in the interior of St. Augustine's, Ramsgate, too little visited, I fear, the best work of Pugin.

The whole controversy regarding the Houses of Parliament has always seemed both mischievous and misleading, but the matter is becoming better understood now than was perhaps possible in the heat of the Gothic revival.

There is nothing fresh to be said about it, and if there was the subject can only be approached on the usual lines of historical inquiry, with a due regard to evidence and dates. The late E. Ingress Bell once remarked to me that he could not follow what it was the Puginists proposed to prove. He saw quite clearly that the point of view had been shifted in the course of the old controversy. Does your correspondent realise that Godwin (Editor of *The Builder*) claimed from personal knowledge to be able to decide the matter himself, knowing the men and being about the work all the time?

ARTHUR T. BOLTON.



Liverpool Cathedral.

CARVED ANGEL TO FOURTH ORGAN CASE.

"Barry or Pugin."

SIR,—Early in the 'seventies, when it fell to my lot to become an architectural journalist, I took exactly the same view as that which my contemporary, Mr. C. F. A. Voysey, still maintains and has so emphatically put on record in last week's *Builder* for the information of posterity. Remembering my youthful enthusiasm for Pugin, I recognise with no small sympathy Mr. Voysey's feelings, but think he fails to do Barry justice. When the "Life of Sir Charles Barry" was published by his son, the Bishop, who was then Canon Barry, about the date above referred to, it became my business on behalf of the professional press to ascertain as far as might be what those friends and associates of Welby Pugin who were still living had to say of their own knowledge as to this same personal question. Among those whom I thus interviewed I remember Talbot Bury (whose own work first directed my attention to architecture) and Benjamin Ferrey.

The outcome of my inquiry was that Charles Barry was entirely the author of the lay-out and palatial character of the adopted scheme of the Houses of Parliament (which, as anyone can see, is distinctly Classic in idea), and that Welby Pugin graced the buildings, thus balanced and grouped together, with their final architectural detail. Rightly judged, Barry and Pugin ought to rank as joint architects. Mr. Voysey, however, seems to forget that Pugin submitted on his own a very different design for the Palace at Westminster, and I fancy he has overlooked St. Peter's Church, Brighton—an excellent example of Barry's own Gothic work unaided by Pugin. I dare say Pugin's hand may be discovered in Barry's work at Birmingham. I write away from home, and have not my note books with me.

MAURICE B. ADAMS.

Architectural Education.

SIR,—As a preliminary to the consideration of the above subject by the forthcoming International Congress a few words on the functions of the architect may not be amiss. If they can be definitely settled the educational legislators will know what to prepare him for.

What should the architect undertake? Formerly, erections of every kind came within the province of the architect; now, most large works of a public character—particularly where heavy construction is involved—have passed to the domain of the civil engineer, and at times are sadly and quite unnecessarily lacking in architectural character. Why has this happened?

After the Gothic revival had destroyed the Georgian tradition the architect, looking backward instead of forward, gave a disproportionate amount of time and attention to the study of archæology; also, in many cases, to the accessory arts. Being fully occupied with these matters, he was unable to keep up with the great advances that were being made in scientific construction, and consequently lost a great deal of work; it was undertaken by the civil engineer and executed in a purely utilitarian manner, sometimes to the disfigurement of both town and country.

It will be granted that architectural character of a satisfactory nature should be given to all erections, great or small. To obtain this it is suggested that the architect should be placed in his proper position of general director. He should be the Prime Minister of Building. He should plan and design the general scheme as a



An Oxfordshire Sketch.

grand whole, concentrating his strength on tha and have the details worked out by experts in t various branches working under his gener directions, like so many departmental Minister

Experience (little appreciated now), ri judgment, wide and clear vision, with a we developed sense of proportion, would be nece sary to enable him to see all round and grasp t salient points of a complicated problem a devise a solution that shall satisfy the sometim conflicting claims of convenience, constructi and art. A strong personality would be desi able and enable him to impress his fello workers and inspire them to labour for the lo of their art, also to enable him to hold his ow with boards and bureaucrats, combined wi diplomatic power for easing the difficulties th may hinder the execution of his well-consider schemes.

This is suggested as the ideal that should kept in view in training the architect. T "Mistress Art" requires master minds. Ma of course, would not reach the ideal; the should undertake small works that do n require such high qualifications.

W. J. H. LEVERTON.

Top and Side-light Picture Galleries.

SIR,—I am unable to trace the correspondenc referred to in Mr. Sington's letter in your la number, but I imagine that he has in mind t editorial note in your number dated 4th ins in which you drew attention to the merits of M Seager's "top-side lighting," where the fulle benefits are desired for the display of pictures a two-storied building.

Had you stated, as Mr. Sington suggests, th "the number of top-lighted galleries on a giv area can be doubled by making the ground flo rooms now lighted by windows also top lighted you would have admitted an absurdity. Th a certain portion of ground floor space can planned as top-side lighted galleries is a fa that Mr. Seager has clearly shown.

Mr. Sington has apparently not heard eitl of this well-known authority nor of the essent difference between top-lighting and top-si lighting, which is surprising considering t interest he appears to take in the subject picture galleries.

Mr. Seager's "New Zealand idea" is n generally recognised as the most satisfacto solution of a difficult problem.

G. M. A

The A.A. Excursion.

This year the annual excursion of the Ar tectural Association will be to Spain, the t lasting from September 11 to 26. Furt particulars may be obtained from the Secret 35, Bedford-square, W.C.1.

ARCHITECTURE AT THE PARIS SALON

We must admit that in the Salon—or, more correctly, the two exhibitions of the *Société des Artistes Francais* and the *Société Nationale des Beaux Arts*, which were this year combined—no one exhibition of devastating size—the architectural exhibits were below the average of interest and in general attractiveness. We have no doubt that the works selected were the best of their respective kinds," as we had the good fortune (or otherwise) to see some of those rejected during a visit to the Grand Palais early in the year.

The chief fault would seem to be a lack of imagination; many of the *projets* are sound examples of the traditional style of the Beaux Arts School, well "presented," and generally well drawn, but uninspired by any touch of architectural genius.

A remarkable exception is the very original *projet* by Monsieur Henri Defrasse, the talented son of the distinguished architect to the Bank of France, for a "Floating Island in the Atlantic." This set of drawings will be included in the collection representing the *Ecole Nationale des Beaux Arts*, to be exhibited at Grosvenor House in connection with the International Conference on Architectural Education. The idea is that in order to render possible an aeroplane service between America and Europe five or more such floating islands should be established in the Atlantic, where supplies of petrol could be picked up and repairs executed. The scheme is fully worked out, and is illustrated by some excellent drawings, in which careful draughtsmanship is allied to artistic ability, and was awarded a silver medal and the coveted *Prix du Palais de Longchamp*. This was founded in 1906 by the sculptor Bartholdi, with the sum paid him by the town of Marseilles for the *projet* of the *Palais de Longchamp*. It is awarded annually to a Frenchman under 30 years of age, "author of a work remarkable for its qualities of invention and imagination, in any category of art."

Among the other exhibits M. Bigot's design for the "New Thermal Establishment of Saint Nectaire" is an excellent example of the spacious and effective planning of an establishment of this type in which the natural advantages of the fine site have been considered.

M. Bigot also contributes a fine detail drawing, "An Institute of Art and Archæology," which shows an interesting brick treatment somewhat inspired by Assyrian examples.

M. Guilbert shows some of the best drawings in this year's exhibition in his plans and sections for "the Church of St. Joan of Arc at Versailles." The rendering of the sections is especially worthy of attention and is a silent but eloquent criticism of the hasty, slap-dash rendering which mars too many modern sets.

M. Nalamura, of Tokio, a past student of the Ecole des Beaux Arts, obtains a gold medal for an extremely able composition, "Maison du Japon à la Cité Universitaire," in which a good, practical plan is allied to elevations of a definitely Japanese character. The set is well drawn and rendered.

A native of Egypt, M. Edrei, is awarded a silver medal for a rather undistinguished design for the "*Palais du Justice* at Cairo," which is, apparently, the project awarded 1st premium and selected for execution in the recent international competition.

This year's exhibition was notable for the absence of the usual great projets of the Prix de Rome, &c., and for the number of water-colour sketches and "restorations." Most of these—especially the former—must have come before the jury when they were in not too critical a mood.

There are, however, one or two exceptions, such as the excellent drawings, executed for the *Commission des Monuments Historiques*, of the "Tower of the Church of Ploaré, Finistère," by M. C. J. Chaussepied, and the charming pencil sketches of various out-of-the-way corners by M. Trouvelot.

The remainder of the exhibits do not, we think, call for special notice; once again Great Britain is represented by a single set, a design for "Central Station (Buenos Aires), B.A.G.S.," by Mr. Arnold Mitchell. It is singular that English architects do not avail themselves of the opportunity which the Salon presents of reaching a much wider public (both British and international) than ever visits the crowded architectural room at the R.A. Exhibition.

Bartlett School of Architecture.

The following awards have been made at University College, Faculty of Arts (Bartlett School of Architecture):—

Lever Prizes in Architecture.—First prize (equal), Leonora F. M. Payne and C. H. Short.

Architects' Journal Essay Prize.—J. N. Summerson.

Herbert Batsford Prize.—P. A. Wailes.

Donaldson Silver Medal.—J. R. Alabaster.

Ronald Jones Prizes.—Mediæval Architecture, J. N. Summerson; Renaissance Architecture, H. Kendall.

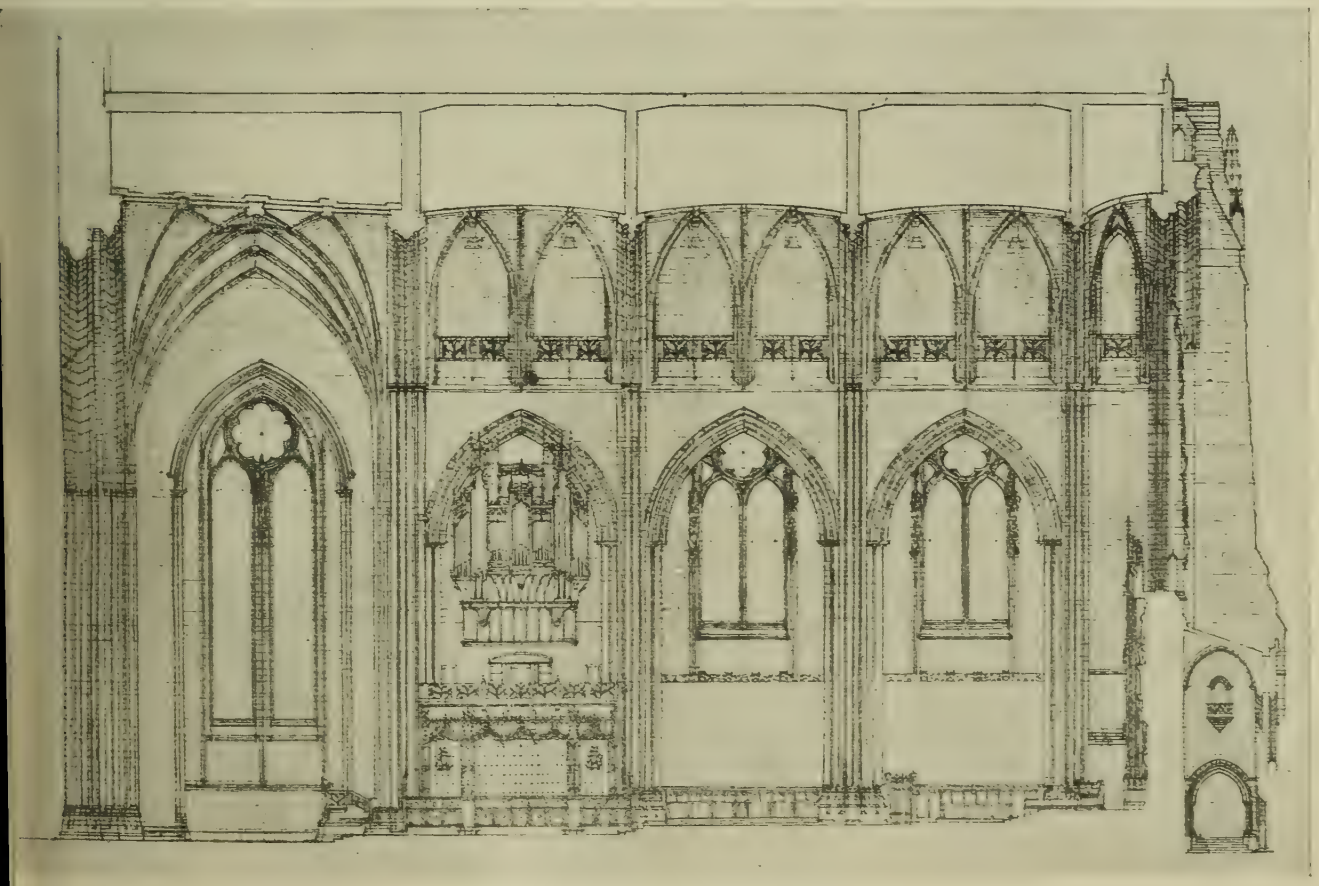
Ronald Jones' Travelling Studentship.—C. H. Short.

Certificates in architecture, under the new regulations (three years' course) have been obtained by:—Penelope G. Carmichael, J. F. L. De Silva, Sylvia C. Gray, R. C. Grice, H. T. B. Griggs, H. A. Johnson, G. F. Kelly, J. T. Lloyd, D. M. Micklethwaite, Z. Panitch, Leonora F. M. Payne, Elizabeth C. C. Philip, S. D. Wheeler.

In the Department of Town-Planning:—

Lever Prizes in Town-Planning.—First prize H. W. J. Heck; second prize, L. M. Austin.

Certificates in Town-Planning were obtained by:—L. M. Austin, H. W. J. Heck, J. P. Blake.



LONGITUDINAL SECTION, LOOKING NORTH.

Liverpool Cathedral. Sir G. Gilbert Scott, R.A., Architect.

EVERY DAY IN EVERY WAY

By AN ARCHITECT.

It is the fashion to be pessimistic—the older men amongst us who have watched us grow up tell us that there are no draughtsmen like Norman Shaw and Street; our young friends regard us—those in the middle way of life—as being quite decent fellows, but lacking in courage. The young are bursting with ideas—the old are burning with resentment at being pushed out of their rut!

Do we deserve this? Do we lack aspiration or ideals? It is fair to say, and it needs to be said, that this generation is better than its forebears, and also that those who come after it will be better still. We have sat at the feet of our old men, and they have given us prejudices and habits—we have listened to our young men and they have shown us ideals without balance. The same tale has been told in every period of history. The old must learn from the young—the young must teach kindly and not impatiently the old, and we are not greater sinners than those of the past.

The pessimist may grunt if he will, the old man can sigh, but what is the truth? Was the level of design amongst the members of our art in general ever higher than it is to-day? We can see in our own lives the clamorous aspirations of our art to higher things. To review our own generation—what did we have in the bad old days? We had to pick up our art as best we could. There were no Universities with architectural degrees; no special arrangements with our masters to allow us to spend half our time at the University and half in the practical school of professional life. No ateliers—nothing or little but our own anxious labour. We spent years at cleaning stretchers and copying letters. If we loved our work enough we gained knowledge, if not we gained tricks of trade, and there are some to-day amongst us whose one claim to the right to work is that they can get work—how is sometimes best not inquired into—but that was what the times made. As to those who are to come, they will start not only where we left off, but ahead of us. The serious student of to-day learns for very little expenditure except that of enthusiasm and industry the finest styles from the finest masters, and starts better and well equipped. And as to those whose one claim to work is that they know how to get work—they are going. Every day they are less in number, and, it may not be in this generation, but before very long, they will be as rare as quack doctors are now, and as poorly regarded.

The pessimist is a nuisance in any walk of life, but he is a dangerous germ in the body of any art. Art is delicate—it thrives like all delicate things in the warmth of loving service and wilts and droops under the bickering of unmerited censure. The artist—the true artist, that is—is happy in honest and fair criticism in anything that will show him how he can improve the child of his imagination. He hates gratuitous and false praise, and loaths the sycophantic babblings of inanity. But the germ of pessimism, like the bacillus of consumption, will wear his being to a shadow, and—since he is only one of many in our body politic—can, if allowed to remain, turn it from a healthy body to that of a frail and ailing invalid.

As to these germs amongst us—these pessimists—thank heaven they do not hold the reins in our world! They are merely the horse-flies which sting and torment our faithful steeds. For the truth is much different to their tainted vapourings. Our buildings are better to-day than they were. There are architects to-day greater than Wren. There are engineers greater than Archimedes. There are violinists better than Paganini. I have yet to see draughtsmanship of the past to compare with that of poor Rickards. There may be arid stretches in the historic road of every art, but we are not passing along a flowerless route now, even though few of us are making the secondary consolation of big financial success.

Nor is that our only advance. The standard of professional honour is higher than it was when we were younger; it was higher then than what our masters remembered—they told us so—and it gets higher. Perfect it cannot be until the millennium is reached, but the millennium will be the end. We shall not reach it—I doubt if most of us would like to—to feel that all was done!

This is no plea for self-satisfaction. An artist, if he be one, is never satisfied with himself or his work, though he rejoices in the perfection of his confrères. That we have faults, and bad ones, no one would be so foolish as to deny, but to lament what has not died and abuse what is better than ourselves is vice—it is that of which the pessimist is guilty.

It is welcome to all to be criticised constructively. We have had a good example of this criticism recently in Prof. Richardson's address to the Architectural Association, some of it severe enough but suggestive and encouraging in its tone. And even he would not say that, for instance, the problem of the modern shop front is not better dealt with either in Burberry's building in the Haymarket or Selfridge's stores than it has been in the past. And though all of us who walk down Kingsway sigh for what might have been, there are few of the new buildings to be found in it that do not portray a vigorous and progressive spirit; whether we like or dislike what has been given us there, and even though we say that the modes are transitional, the transition is one moving towards better and greater things. Let us look round on the fine young men who help us so largely now and see with warming gratitude to our own more jaded and chilled spirits the fine enthusiasm and lofty ideals that animate theirs, and then let us deal with the germ of discontent as we would with the horse-fly. Our fathers were better than theirs, we are better than they were, and our youngsters are already better than ourselves.

It only needs candid, open consideration—the genial but mechanical exercises of our friend Coué are not needed—to see that we are getting better and better.

THE ART LOVERS' LEAGUE

We find ourselves in some agreement with the objects of this League, which aims "to unite artists and public in the support of sane, healthy and progressive art." The marked originality of the creative mind must not be confused with merely neurotic tendencies and theoretic extravagance. All the finest men are nonconformist, as Emerson pointed out, so that it is not at all an easy task to steer a society with such aims between the rocks of mere orthodoxy and those of creative art. At the same time the League would appear to have clear convictions as to its objects, which, well handled, should have a corrective and educational value at the present time.

Dr. Hyslop, M.D., gave recently on behalf of the Society at Leighton House a lecture with illustrations on "Disease in Modern Art," and explained, in the course of his remarks, the art and art impulses of the mentally deranged, aided by illustrative slides and a series of reproductions. Mr. Julius Olsson, R.A., presided, and a number of new adherents were secured for the League. The lecturer declared, in reference to some of the reproductions shown, that those critics who attempted to place such works in the forefront of contemporary art must either be dishonest or on the borderland of insanity.

The manifesto of the League in formulating the reasons for support to such a body, points to the assiduous advocacy of doctrines in favour of dogma and eccentricity, and that those have been forced on the public in every possible way. As a consequence, work of extremist and incompetent character has been foisted on the national art collections of England and the Dominions. That there is room for serious criticism on this side we have pointed out before, but without much improvement in public taste a remedy is not easily to be found. Such a League, however, in emphasising these dangers may contribute usefully to reform. The public, far too easily led, surrenders its own judgment, and instead of exercising more independence in regard to such matters, invests the critic and the expert with a sort of infallibility. Otherwise we should not witness the acquiescence of the public with some of the works exhibited in our permanent collections. The extremists, however, we are inclined to think, have had their day, and though we would wish to curb in no way the adventure into new fields or yet untrodden ways, we shall in the future be less deceived by that which, proclaiming discovery, achieves only solecism.

There is little doubt but that contemporary criticism is largely responsible for the endorsement of much of the theory and extravagance which has granted so long a lease to incompetence. The confusion in regard to the nature of art and the primary principles which govern it has led us to incorporate insanity as one of its resources. But it is only in spite of such insanity that the natural powers of the artist, though clouded by a defective mental condition, give us such results as we associate with Ganguin, Van Gogh and others. An artist responding to the creative impulse whose nature is deformed by cerebral disorder achieves what that state produces; and when we add to this the further disorder of a wholly undisciplined life, we reach those results which some critics have discovered to be the new art, *i.e.*, deformity and eccentricity. This wholly unnatural state of things has worked infinite harm to the cause of true art.

As a passage in the League manifesto tells us: "While the public interest in sane art is actually on the increase, the public, owing to the continuous laudation of works of no merit, has become so bewildered concerning contemporary art that the purchases of it have been greatly reduced." We think there is something to be said for this view, but would like to point out to the League that it occupies very difficult ground to work on. If it distinguishes the spirit of adventure from mere perversity, perceives that art is to be valued not because it is orthodox but because it is art, keeping the doors wide open to the spirit of our own time, its aspirations and new unfoldings, it may do useful work in distinguishing jewels from mere glass. In giving a new and sounder direction to our choice than the mere vagaries with which we have so often been exploited over the last years the League should do useful service.

Manchester School of Architecture.

The result of the June Examination is as follows:—

B.A. (Honours Architecture).—Final, Kathleen O. Brayshaw. Part I, W. H. McNichola Eldon Alexander.

Intermediate R.I.B.A. Exemption.—Kathleen O. Brayshaw and Frank Whiteley.

Final R.I.B.A. Exemption.—Elsie Rogers, W. A. Norbury, P. Fairhurst, R. J. Willis and W. Owen.

The following travelling scholarships have been awarded:—

Manchester Institute of Builders' Travelling Scholarship.—£70, Elsie Rogers; £60, R. J. Willis; £50, Kathleen O. Brayshaw.

R.I.B.A. Travelling Scholarship.—£50, G. Graley.

The Heyseed Prize.—£10, W. H. McNichol



Kneeler Ends of Desks in Front of the Bishop's Throne. Carved by Mr. H. G. Ratcliff to the Architect's design.

Liverpool Cathedral.

Sir G. Gilbert Scott, R.A., Architect.

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ILLUSTRATIONS

Liverpool Cathedral.

This week we give some further drawings of Liverpool Cathedral, of which Sir G. Gilbert Scott, R.A., is the architect.

House at Limpsfield.

This house is now being built. The walling is built partly of old Tudor 2 in. bricks and partly of bricks from Messrs. Pascall, of Wrotham. The roof is also a mixture of new and old tiles. The woodwork throughout is mainly oak. The builders are Messrs. G. E. Wallis & Sons, Ltd., of Maidstone. The heating engineers are Messrs. Colley, Meikle & Co., Ltd., of 15, Great James-street, London, W.C. 1. The electricians are Messrs. Tyler & Freeman, of 40, Chancery-lane, London, W.C. 2; and the garden by Messrs. Cheal, of "The Nurseries," Crawley.

Messrs. Baillie Scott & Beresford are the architects.

House at Arnside, Westmorland.

This house has been erected on a beautiful site on the road to Jacob's Bay, under Arnside Knott, at the head of Morecambe Bay, and fine views are obtainable. The walls are brick with rough-cast face, and the roofs are covered with tiles of varied colour. The whole of the windows are in leaded lights in wood frames with metal casements to opening portions.

Messrs. Rainey Bros., of Barrow-in-Furness, were the contractors. Mr. C. B. Pearson, F.R.I.B.A., of Lancaster, was the architect.

House at Barnsley, Yorkshire.

This house, standing on a hilly site on the outskirts of the town, has been built of Yorkshire sandstone from Rivelin Quarry, Sheffield. The face of the stonework has been hammer-dressed, and in colour is of varying yellow and brown tones. The roof is covered with rustic slates, which blend with the colour of the walls.

The general contractors were Messrs. T. Roper & Sons, Ltd., of Sheffield; and the slating was carried out by Messrs. Roberts, Adlard & Co., Ltd., of London. The architects are Mr. Arthur Wm. Kenyon, F.R.I.B.A., and Mr Stanley G. Livock, A.R.I.B.A. The perspective drawing is by Mr. Cyril A. Farey.

Wood Carving at Liverpool Cathedral.

We illustrate this week some of the wood-carving work in Liverpool Cathedral which has been carried out by Mr. H. G. Ratcliff, of Cathcart Hill, London, N. The choir stalls were given by Lord Waring, and were made by Messrs. Waring & Gillow, Ltd., Mr. Ratcliff doing the carving for Messrs. Waring & Gillow.

The wood carvings for the Bishop's throne and adjoining clergy seats, the clergy seats opposite the Bishop's throne, and the fourth organ case were carried out by Mr. Ratcliff for the architect, Sir G. Gilbert Scott, R.A. The Royal chairs and faldstools, and the tall oak reading desk were also made and carved by Mr. Ratcliff for the architect. An effort has been made by the carver, who started on the work in 1913, to impart the character of *wood-carving* to the work, which is both vigorous and ecclesiastical in general effect, though it is by no means a copy or imitation of old work. An attempt has been made in the figures in the desk ends of the Bishop's throne and the choir stalls to carve them as they might have been carved by one of the old monks who had never learned anything about carving, but who wanted to carve some figures to fill niches which had been left vacant.

Old House, Sundridge, Kent.

This interesting old house, which, for many years had been used as three cottages, has been restored and adapted for residence. The front is characteristic of Kent and Sussex work of the late Middle Ages, and the interior consists of a central hall opening on the left-hand through a screen to the bakery and kitchen, and on the right to a withdrawing room. The insertion of brick chimneys, however, altered this arrangement. The original windows were without glass, and the remains of a central hearth in the hall were found under the floor. Porches have been erected in front and a new kitchen wing and staircase behind.

The builder is Mr. C. P. Munn, of Hampstead; and the architect is Professor Beresford Pite.

MEETINGS

FRIDAY, *July* 25.

Architectural Association. — Annual Prize Giving. Address by the Right Hon. Winston Churchill. At 35, Bedford-square, W.C.1. 3 p.m.

MONDAY–SATURDAY, *July* 28–*August* 2.

Royal Institute of British Architects.—International Education Congress. At 9, Conduit-street, W.1.

BOOK REVIEW

Pittura Italiana Antica e Moderna. By ALFREDO MELANI. 4th edition. (Ulrico Hoepli, Milan. 1923. L.48).

THIS history of Italian painting, which is most attractive both in contents and appearance, has deservedly reached a fourth edition. Professor Melani has given us a faithful presentation of facts, accompanied by suggestive comments. Every style of painting receives sympathetic treatment, for the author loves art in all its manifestations. Notwithstanding its brevity (it consists of one volume only, of the usual format of the Hoepli manuals) this book gives much more than a mere outline of the subject. Many artists of secondary importance are mentioned and the author has indicated the essential features of each — sometimes in no more than a few words, but his criticism is so penetrating and varied that all monotony is avoided. It would, indeed, be hard to find a more interesting work of the kind in one volume.

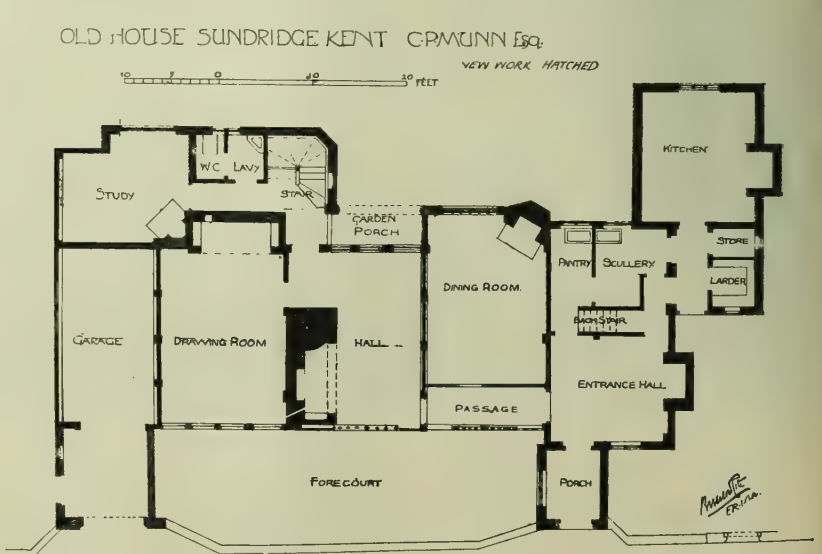
In this new edition more space is given to Barocco, of which the Professor has always been an ardent defender, and a chapter on contemporary painting has been added. The author has also increased the number of pictures and frescoes mentioned—not "out of vanity," as he says, "but to permit the reader to add to his knowledge and offer him the means of making wider comparisons." The great number of modern examples Professor Melani is able to cite is due to his habit of making daily, "almost hourly," notes of what he sees.

For the sake of their strength and suggestiveness, their mental and psychological value, "which exceed those of the finished picture," a number of sketches are included amongst the 198 illustrations. Many of these are reproductions of Italian work abroad, which is not so generally known. In speaking of the International Exhibition of Modern Art at Rome, the author praises the virile energy of contemporary painting. The English work exhibited receives its fair share of praise, but the water-colours sent to Milan in April, 1923, are less favourably criticised. Of these, the Professor remarks that they showed a strong adherence to the classic tradition and formed a marked contrast to the free modernity of the Lombard work in the same exhibition. "Personality, the conquest and glory of the present epoch"—those are his words; and he goes on to say: "Italy is not a faro spento; she knows she is heir to an immense patrimony and she will add to it."

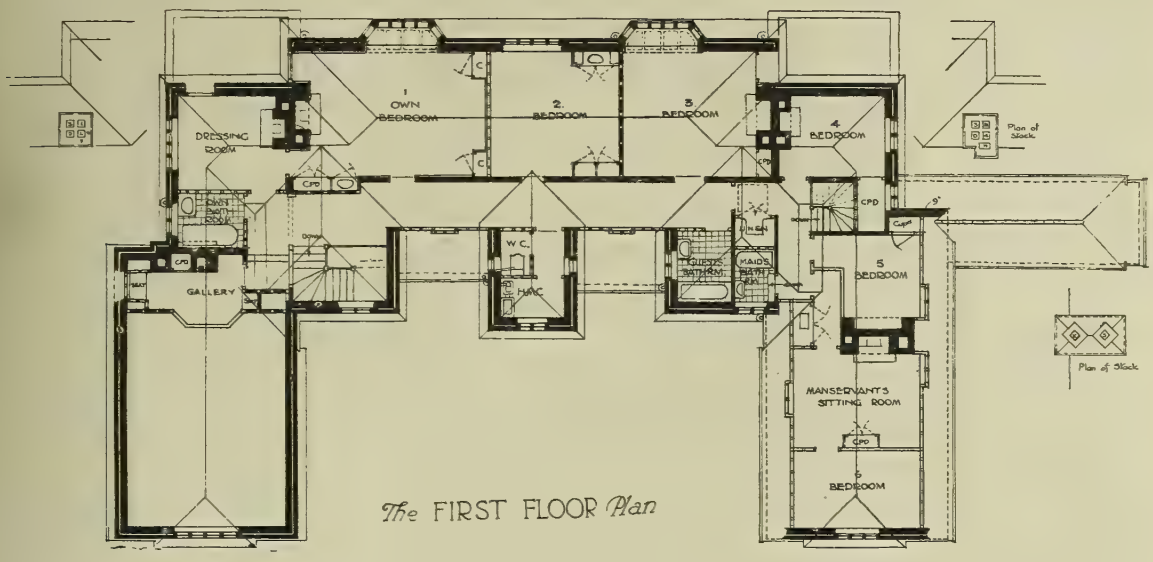
Books Received.

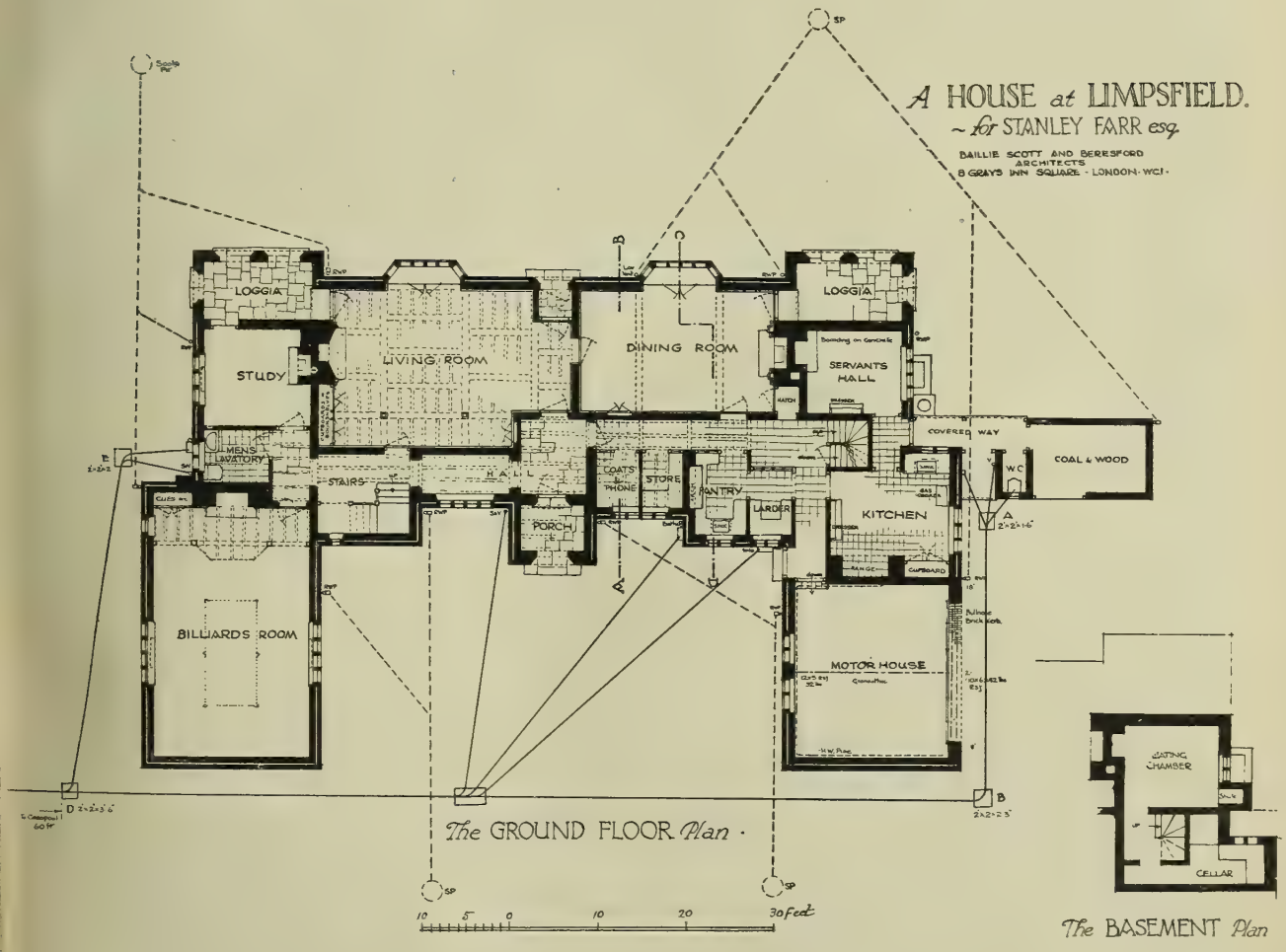
ARTWORK. (London: The Artwork Publishing Co.) Price 3s. 6d.

GLI STILI. By Alfredo Melani. (Milan: Manuali Hoepli.)



Restored and adapted by PROFESSOR BERESFORD PITE, F.R.I.B.A.





House at Limpsfield.

Messrs. Baillie Scott & Beresford, Architects.

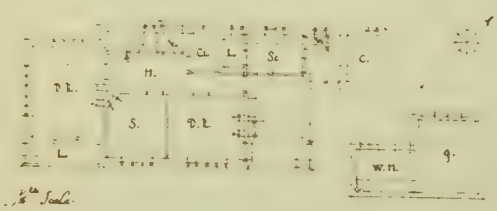


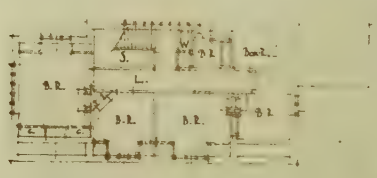
Old House at Sundridge. Restored and adapted by Professor Beresford Pite, F.R.I.B.A.











R.A. EXHIBITION.

MR. CHARLES B. PEARSON, F.R.I.B.A., ARCHITECT.



The NORTH Elevation ~ Entrance Front ·



· The SECTION on line A-B ·

SCALE
· One inch = eight feet ·



The SECTION on line C-D ·

MESSRS. BAILLIE SCOTT & BERESFORD. ARCHITECTS.

1924.

A HOUSE at LIMPSFIELD.

for STANLEY FARR esq

· BAILLIE SCOTT AND BERESFORD ·
ARCHITECTS
· 8 GRAYS INN SQUARE · LONDON · W.C. ·

Scale ~ One Inch = Eight Feet



· The SOUTH Elevation (to Garden) ·



· The WEST Elevation



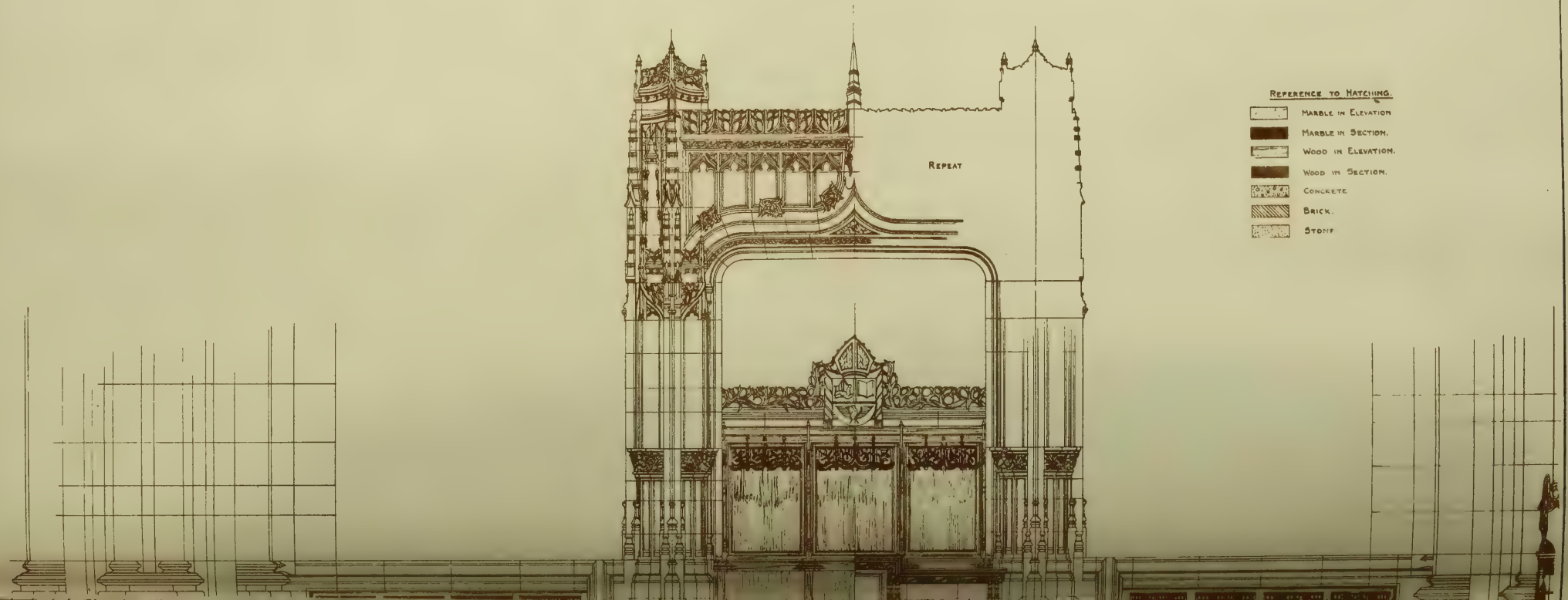
The EAST Elevation ·



LIVERPOOL CATHEDRAL.

BISHOP'S THRONE.

SCALE ½" TO ONE FOOT



REFERENCE TO HATCHING.

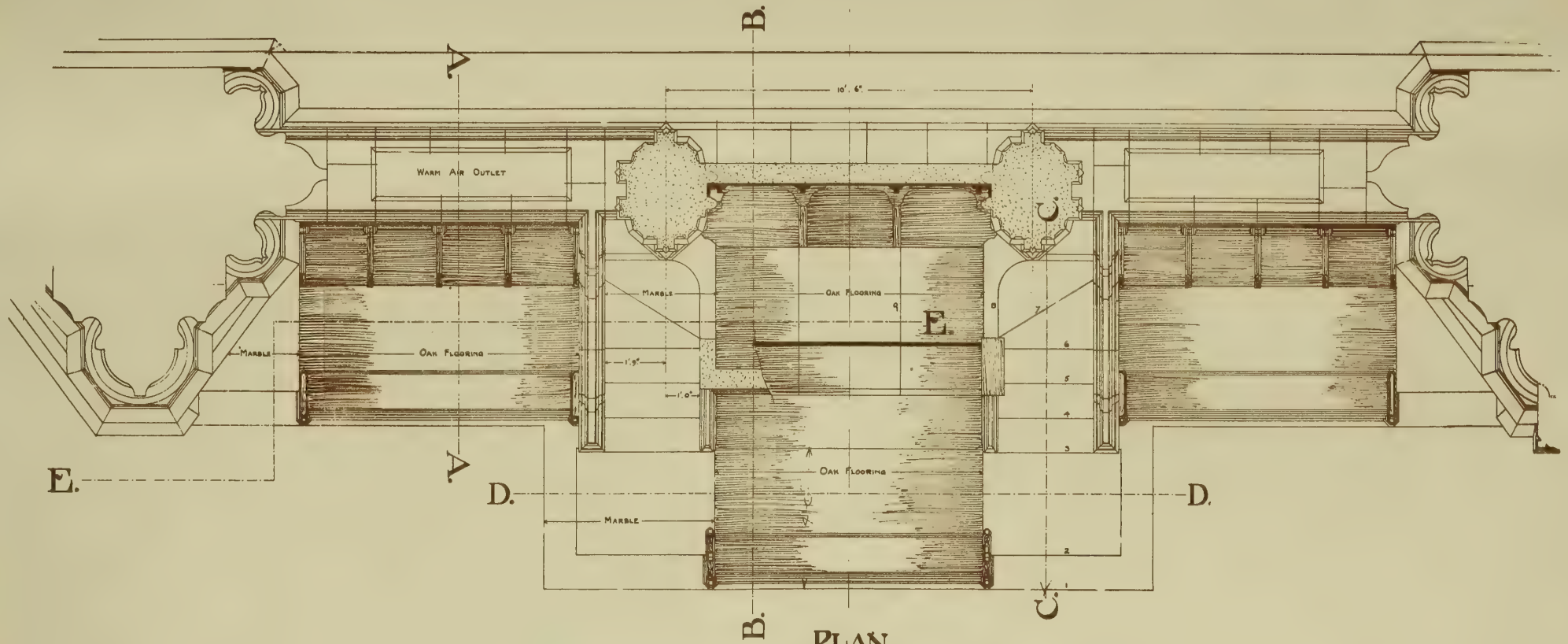
- MARBLE IN ELEVATION
- MARBLE IN SECTION.
- WOOD IN ELEVATION.
- WOOD IN SECTION.
- CONCRETE
- BRICK.
- STONE

THE BUI



SECTION E.E.

FRONT ELEVATION.



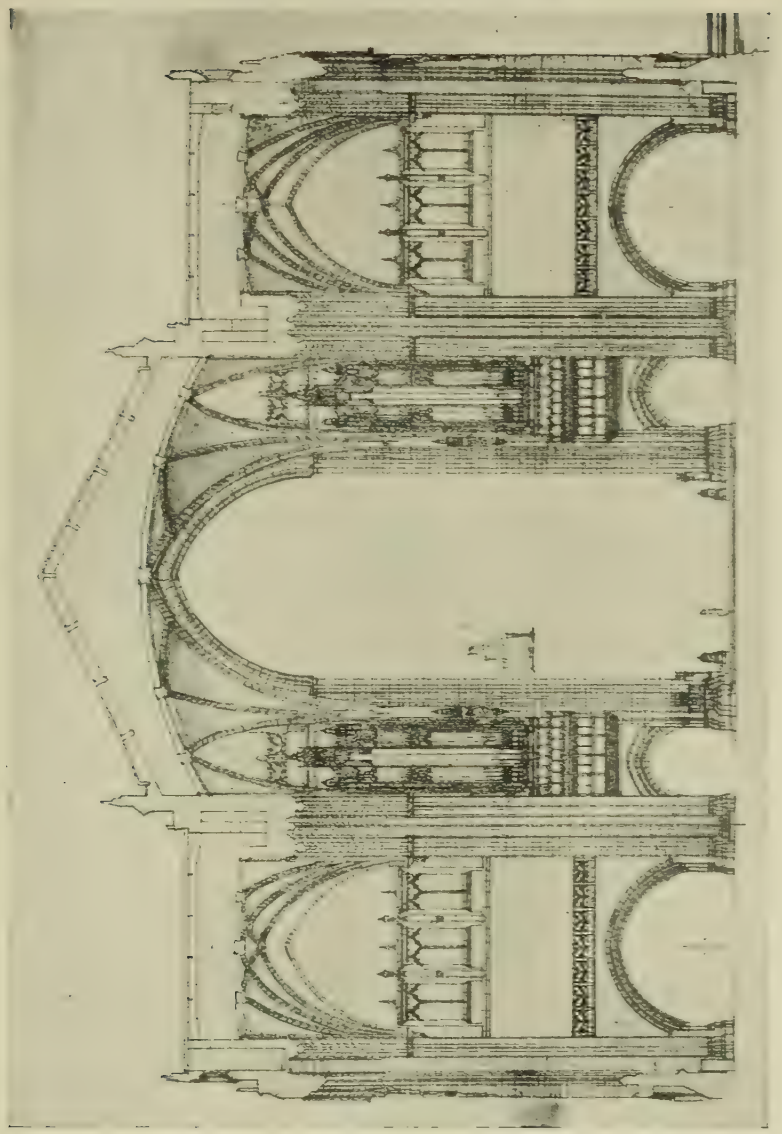
PLAN.

SIR G. GILBERT SCOTT, R.A., ARCHITECT.

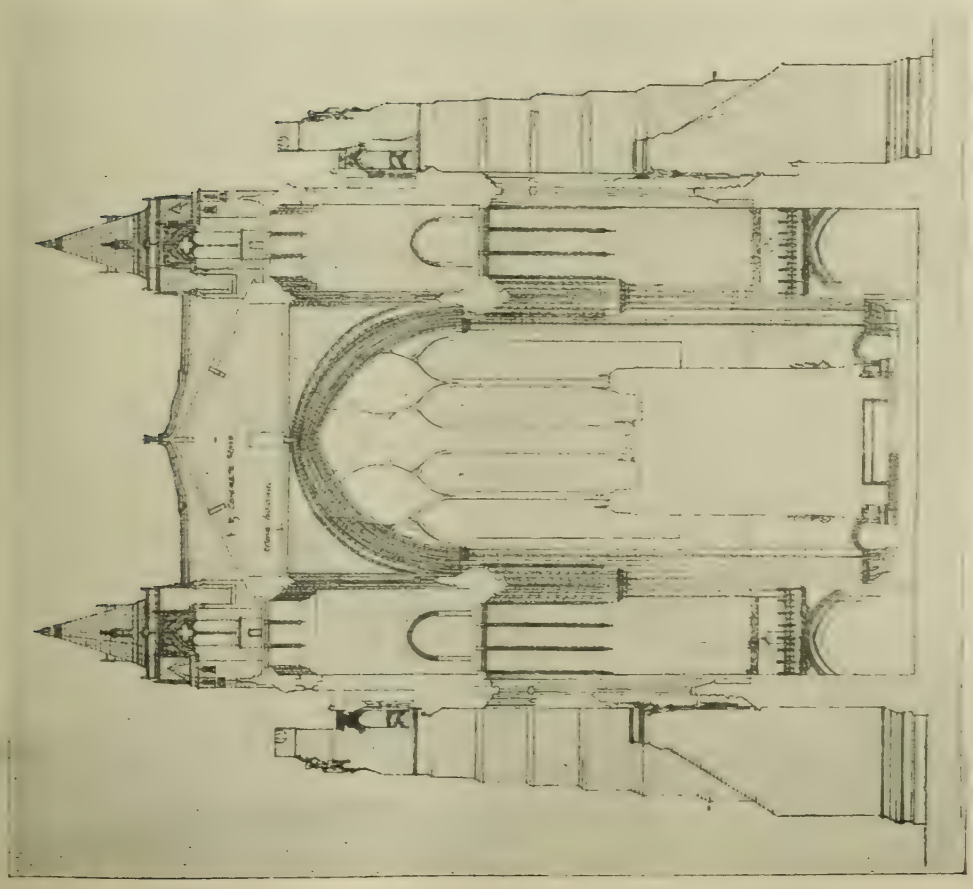


EXHIBITION.

— MESSRS. KENYON, F.R.I.B.A., & LIVOCK, A.R.I.B.A., ARCHITECTS.



SECTION THROUGH FIRST BAY, CENTRAL SPACE, LOOKING EAST.



SECTION THROUGH CHOIR, LOOKING EAST.

Liverpool Cathedral. Sir G. Gilbert Scott, R.A., Architect.

LEGAL SECTION

NOTES ON CURRENT CASES

Covenants to Repair: Damages for Breach.

In our Legal Section, May 30, we noted a case, Hewitt *v.* Rowlands, in which the point raised was the liability of a lessor under a covenant to "keep the premises dry" towards the tenant of an old house.

That case was appealed immediately after the note was written, and the report of the decision was published the day after *The Builder* for May 30 was published. We shall show below that the Court of Appeal agreed with the Divisional Court that the District Registrar had wrongly directed himself as to the principle on which the damages should be assessed and, having obtained further particulars from the Registrar, the case was remitted to him.

In dealing with this case, we reviewed certain cases relating to covenants in connection with old houses, and as will be seen when we come to deal with that case the Court of Appeal acted upon the decisions we cited; but on the subject of repairing leases generally, we referred to the decision given by Mr. Justice McCardie in Calthorpe *v.* McOscar, a judgment which was reversed by the Court of Appeal in December last, but which was not reported in the *Weekly Not s* or *Law R ports* until a full report was given in June (1924 1 K.B. 716).

This is a case of very great importance, so in the present note we take that first.

The houses in question in that case were newly erected houses at the commencement of the lease in 1825, the term of the lease was 95 years, with a repairing covenant which was summarised by two members of the Court of Appeal as "To well and sufficiently repair, support, uphold, maintain, paint, pave, empty, scour, cleanse, amend, and keep the three several messuages, with all manner of needful reparations whatsoever, and to yield them up at the end of the term well and sufficiently repaired, supported, &c., as aforesaid." It was not disputed that there had been a breach of covenant, but the point raised in the case was the nature and extent of the repairs which were necessary at the end of such a lease for the due performance of the covenant.

This question as to the assessment of damages had been referred to an arbitrator, a surveyor, who had assessed the sum on a double basis according to the two views put before him on behalf of the parties. The lessors said that under the covenant the lessee had to do all necessary acts well and sufficiently to repair, but for the lessees it was contended that the repairs need only be such as, having regard to the age, character, and locality of the premises, would make them reasonably fit to satisfy the requirements of reasonably minded tenants of the class that would be likely to occupy them.

On the first basis the damages were assessed at £586, and on the second basis at £229, and Mr. Justice McCardie had decided that the latter was the right assessment. During the hearing the Court of Appeal had asked the arbitrator to give information as to how the difference in the figures had been arrived at, and Lord Justice Bankes referred to his report "as a very clear and enlightening statement which demonstrates better than anything else could do how misleading a test of the obligation under a covenant to repair the supposed wants of an intending tenant at the expiration of a long lease may be."

We have not space to set out that document here, but the arbitrator explained that the principal difference between the figures arose in connection with outside and structural repair, although there was a difference also in connection with inside repairs. In the lower estimate, as regards outside repairs, only such repairs were practically included as would satisfy the requirements of the local authority. The report summarised the matter under two headings as regards the larger sum, but we only give the first as Lord Justice Bankes is reported as having said, in his judgment: "To most people head *a* will, I think, prove the more useful guide." That heading read as follows: "The higher sum in my award is my estimate of the cost of doing all needful and necessary acts well and sufficiently to repair, &c., the premises in the words of the covenant, which I took generally to mean the cost of putting the premises, (*a*) into such a condition as I should have expected to find them in had they been managed by a reasonably minded owner, having full regard to the age of the buildings, the locality, the class of tenant likely to occupy them, and the maintenance of the property in such a way that only an average amount of annual repair would be necessary in the future."

Then, as to the lower sum, the report expressed this as "the estimate of the cost of such repairs as would satisfy the literal requirements of reasonably minded tenants of the class now likely to occupy the premises, who would not accept any repairing obligations, with such additions as would be necessary to avoid the receipt of notices from the local authorities. Such repairs would not include many repairs necessary for the maintenance of the structures in accordance with (1) (a) and (b) above, the neglect of which, however, would not (1) interfere with the immediate comfort of the occupiers and so come within their requirements, or (2) cause danger to health and so come within the purview of the local authorities."

Mr. Justice McCardie based his decision on the case Proudfoot *v.* Hart (25 Q.B.D. 42), and in our note on his decision. November 16, we pointed out that case only applied to certain woodwork and we could not say whether the question of any change in the character of the locality was argued, but the Court of Appeal have now pointed out that Proudfoot *v.* Hart was a case where the tenancy was only under a three years' agreement, and that in such circumstances the class of tenant at the end of the tenancy would not differ from the class of tenant at the commencement of the tenancy and, therefore, that case only applies to terms of that nature. But further than this, at the hearing in the Court of Appeal, a case was cited Morgan *v.* Hardy (18 Q.B.D. 646), also a decision of the Court of Appeal, in which the contention between the parties was in substance the same as that raised in this case, and the Court had negatived the contention there put forward on behalf of the lessee. In the *Law Reports* no reference is made to the decision on this point when the case was before the Court of Appeal, the case being reported on another point, but in the *Weekly Reporter* (35 W.R. 588) mention is made of the point, and Lord Justice Bankes in the present decision is reported as saying that it appears almost contemptuously to have been rejected by the Master of the Rolls, Lord Esher, who was also a party to the decision of the Court of Appeal in Proudfoot *v.* Hart. Lord Esher is reported as having said, "As far as I understand this contention it is that the fact that a neighbourhood has deteriorated ought to decrease the measure of damages for a breach of a covenant to leave in repair. I think that such a proposition is wholly untenable and that every case is to the exact contrary." Lord Justice Bankes pointed out that the principle as laid down in head (1) (*a*) by the arbitrator in this case, the age of this building being the dominant feature and the class of tenant only considered in relation to the age of the building, if applied to the facts of Proudfoot *v.* Hart, would have produced the same result in that case as did the rule laid down by the Court in Proudfoot *v.* Hart.

We think the general effect of the decision is given by the following passage taken from the judgment of Lord Justice Scrutton: "Therefore in my view we are bound to look at the character of the house and its ordinary uses at the time of the demise. It must then be put in repair and kept in repair. An improvement of its tenants or its neighbourhood will not increase the standard of repair, nor will their deterioration lower that standard. It follows in this case that the principle put forward by the tenant was erroneous, and that the statement by the arbitrator in 1 (a) is accurate but must be limited to conditions at the time of the demise."

It appears from the judgments that the question of age comes in as to what is repairable and what amounts to reconstruction according to the rule in Lurcott *v.* Wakely (see below).

In our note of May 30 on the case Hewitt *v.* Rowlands, we only referred to Mr. Justice McCardie's decision for a subsidiary purpose, that is his observations on the effect of the various expressions used in covenants to repair, and on this point he received a certain amount of support from the Court of Appeal. Thus Lord Justice Bankes is reported as having said: "I attach no particular importance to the particular form of words used in the covenant. The effect is the same in my opinion, whatever words the parties use, provided they plainly express the intention that the premises are to be repaired, kept in repair, and yielded up in repair. In the present case the covenant was one in reference to newly-erected buildings, and the question, therefore, does not arise, which in some cases is very material, of the effect of the covenant to repair when at the time the covenant was entered into the buildings to which it applies are old and dilapidated. Considerations which arise in such a case were discussed in Lurcott *v.* Wakely."

Lord Justice Scrutton is reported as having said: "In my view the matter can be dealt with as if the covenant were one to 'keep and yield up at the end of the term in repair.' I do not think there is any substantial difference in construction between 'repair' which must mean 'repair reasonably and properly,' and 'keep in good repair,' or 'sufficient repair,' or 'tenantable repair,' or most of the various phrases cited to us. There is an analysis of the meaning of 'repair' in Lurcott *v.* Wakely with which, as far as it goes, I agree."

Lord Justice Atkin, in his judgment, does not appear to approve taking a number of terms which may be found in various leases, treating them all as synonymous, and so imputing to all of them a special meaning attached by authority to one of them, but there is one point in his judgment which should be especially noted. From the above judgments it may have seemed impossible to see what effect remained to be given to the decision in Proudfoot *v.* Hart, but Lord Justice Atkin refers to this case as follows: "Unguided, I should have thought that the original and proper sense of 'tenantable' was fit to be tenanted, that is, 'occupied,' and that the word meant no more than if it meant as much as 'habitable,' but Proudfoot *v.* Hart binds me to hold that in a three years' agreement it has reference to the reasonable requirements of a tenant of the class who would be likely to take the house. Accepting that construction I have no doubt that the requirements of such a tenant are deemed to continue the same during the term, or if not are to be estimated by the requirements of such a tenant as would be likely to take the premises at the commencement of the term."

We now come to the second case, the subject of our former note Hewitt *v.* Rowlands (*Weekly Notes*, May 31), which comes within a different category, being just such a case as was differentiated by the Court of Appeal in Calthorpe's case, as the house was old when the lease was entered into. It is unnecessary to recapitulate the facts which are stated in our former note. It was a cottage, the outer walls of the older portion of which were some 150 years old, being of red sandstone, additions having been made

t 80 and 60 years ago of brickwork and er, but in no portion was there a damp e. It had originally been let to the tiff in this action in 1875 for a term of years, but at the expiration of that term enant had remained on from year to year. defendant had become the owner of the sion in 1920. On March 31, 1921, he had the tenant notice to quit, but the tenant hen remained on as a statutory tenant under Rent Act. On November 26, 1921, the nt had given the defendant notice that cottage was very damp, and called upon to make it damp proof under the terms of original agreement, whereby the then lord had undertaken to "keep the cottage and the outside in repair." The cost of g this was estimated at £600; the rent of cottage was £60.

the Court of Appeal judgment had been red for the tenant, the plaintiff, but the ages had been referred to the District strar for assessment. The District Regis- had assessed the damages at £30, which ared to be in respect to some special age to a piano, pictures, &c., but he had that as the tenant had expended nothing oing repairs for which the defendant was e, he could only recover such pecuniary loss damage as he had suffered through the ndant's default. The Divisional Court had he was wrong in so directing himself and tted the case to him, and this was an al from the decision of the Divisional t.

he Court of Appeal referred to the District strar for further information as to how had arrived at the sum of £30, and the strar informed the Court that the sum was e up in respect of damage to articles of the ntiff, and a sum of £5 general damages, that he had proceeded on the view that as not in the contemplation of the parties n the agreement was entered into that er the covenant the tenant should be tled to recover any damages, beyond the al loss or expense to which the tenant nt be put, through the landlord's default, were such damages to be increased by the nt remaining in possession after the tenancy been determined in accordance with the s of the agreement, and that as the tenant not done any repairs, nor incurred any nses in connection therewith, he had con- ed the sum of £5 adequate as general ages, and in arriving at that figure he had n into consideration the fact that notice ant of repair had not been given by the nt until after the notice to quit had been ved from the landlord.

he Court of Appeal held that the Divisional t was right in holding that the Registrar misdirected himself, but intimated that as d seemed likely that he had not only mis- ted himself on the question that it was ssary before the tenant could recover he actually have spent the money to do the ssary repairs, but also upon the position the nt occupied as a statutory tenant under the Act they had referred to him for further rmation. It now appeared to the Court that he view of the Registrar the fact that the nt remained as a statutory tenant disen- d him to any damages beyond what he had ed as tenant under notice to quit under riginal agreement, and that the measure of damage would not include anything except the tenant might pay out of pocket in the repairs that the landlord ought to have

The Court held that the Registrar was g on both points, (1) the Rent Act had no g on the case as the tenant, as statutory t, was entitled to the performance by the rd of his obligation to repair under the ment, but (2) that obligation did not arise notice was given to the landlord of want air, but the breach was a continuing breach damages should be assessed down to the f assessment. Lord Justice Bankes held *prima facie* the measure of damage for of the obligation to repair is the difference lue to the tenant, during that period, en the house in the condition in which it , and the condition it would have been in had the landlord fulfilled his obligation, but, that in assessing the damage on these lines the difficult question is the extent of the landlord's obligation, for it is necessary to consider whether in view of the age of the structure the damage is really the result of the landlord's failure to do something he was under obligation to do; the main cause of damage appeared to be the saturation of the stone through the absence of a dampcourse, and the Registrar must consider whether on the facts the case fell under Lister *v.* Lane, as explained in Lurcott *v.* Wakely, and so much of the damage as he found due to dampness caused by defects which the landlord was not bound to remedy must be excluded from the assessment.

Lord Justice Atkin agreed with the above opinion as expressed by Lord Justice Bankes, but added that the Registrar must approach this question under Lister *v.* Lane without considering whether it is convenient or profitable to the landlord to fulfil his obligation. He also pointed out that as regards the damage to special articles of the tenant he would have to consider whether it was done in whole or in part before the landlord's liability arose, that is before or after the notice of want of repair.

In our Note of May 30 we referred to the case Lurcott *v.* Wakely and set out the facts and gave the test, as laid down by the then Master of the Rolls, that the question to be considered is, Has the subject matter of the demise so changed that the operation of repair involves the creation of practically a new structure? In that case the taking down of a wall was held only making good a subsidiary portion, but Lister *v.* Lane (1893 2 K.B. 212), was a case where a house had been erected on a timber platform, and the repair required was held to go beyond "repair," and to amount to reconstruction, and Torrens *v.* Walker (1906 2 Ch. 166, *The Builder*, May 19, 1906), affords another example of this as when notice of want of repair was given by the tenant the premises were held to be irrepairable.

Conversion into Flats.

An important point has been decided by a Divisional Court in the recent case Abrahart *v.* Webster (*Weekly Notes*, June 21, 1924). The appellant was the landlord of a dwelling house at Hove which consisted of a basement, ground floor and two upper floors, the standard rent of the whole house as on August 3, 1914, being £60. The landlord had purchased the property in January, 1921, and in 1923 he had converted the ground floor and the two upper floors into two separate and self-contained flats. The respondent had been tenant of the basement as a separate tenement since February, 1921, at a weekly rent of 11s. 9d.

In January, 1924, an apportionment had been made, on the application of the respondent, fixing the standard rent of this basement at one-fifth of the standard rent of the house (£60), and the landlord appealed from this decision.

The County Court judge had found as facts that the newly constructed flats could not be identified with the house as it was before conversion, but as the basement derived no benefit from these alterations and was occupied by the respondent before the alterations were commenced, it remained as it was and formed no part of the ground and upper floors which had been converted into two separate and self-contained flats, and he had apportioned the rent in respect of that.

It was argued for the landlord that under section 12 subsection (9) of the Rent Act, 1920, the premises were taken out of the operation of the Act, having been reconstructed by way of conversion into two or more separate and self-contained flats since April 2, 1919, whilst the tenant's contention was (1) that as the tenancy began before the alterations were made the subsequent reconstruction did not affect the tenant's right to an apportionment and (2) that as the basement had not been touched there had been no reconstruction of the house as a whole and, therefore, section 12 subsection (9) did not apply.

The Divisional Court, reversing the judgment of the County Court judge, held that the word "dwelling house" in that subsection must be construed in its ordinary sense, and that it refers to the whole structure as a unit, and as here the house regarded as a whole had been reconstructed by way of conversion into two or more self-contained flats, the basement could not be regarded as a separate dwelling house.

This point was really decided in Stockham *v.* Easton (1924 1 K.B. 52 *The Builder*, May 18, 1923) where part of the house had been converted into separate flats, but no practical reconstruction had taken place as regards the first floor which had been let to a tenant whilst the work of construction was still in progress. This tenant applied subsequently for an apportionment of the rent, and in the County Court his application had been granted. On appeal by the landlord, a Divisional Court held that the house must be regarded as a whole. Mr. Justice Lush is reported to have said the proper view was to regard the house as a whole; "and if it be found that the structural alterations to the whole house have been such as to cause it as such to lose its identity, and directly or indirectly to affect the separate floors or rooms in it, then to treat these floors or rooms as having themselves been altered in a substantial manner and as being no longer the same as they were in 1914."

In the course of that case it was found as a fact that the first floor had derived direct benefit from the reconstructural operations, and this is also referred to in the judgment, and it was this fact and the fact that the tenancy commenced before the alterations that made the County Court judge distinguish that case from the one he was considering (Abrahart's case), but from the short report at present available of Abrahart's case it appears that it is the loss of identity of the house as a whole which has to be regarded, not the identity of any particular portion of it.

Options to Purchase.

The Court of Appeal is so abreast of its work that a case is hardly noted in the Courts below before, if it is appealed, a further note is necessary. Thus we must at once call attention to the fact that the case Sherwood *v.* Tucker, which was reported in the *Weekly Notes*, May 10, and noted in our Legal Section, June 27, has been reversed on appeal.

It will be remembered that in an agreement for a three years' tenancy an option to purchase was contained giving the tenant the right to purchase the house "during the three years hereby provided for." Before the expiration of the term the parties had by endorsement extended the agreement as follows: "We, the undersigned, hereby agree that this lease be extended for three years expiring December 25, 1920." By a similar endorsement there had been a further extension for three years.

The Court below with some hesitation had held that these endorsements were intended to extend the whole lease with its terms, including the option, but the Court of Appeal has reversed this judgment. The Court again laid down the point, which will be found referred to in our former note, that an option to purchase is not part of the lease but a collateral independent contract, and said therefore it was important to approach the question bearing in mind the essential difference between the demise and the option, and pointed out that although a landlord might be prepared to give the tenant an option to buy at a fixed price for a definite period, it would be another thing that the option should be held as continued by an extension of the lease, and here the words used by the parties were adequately interpreted by referring them to the demise, and the demise only, and to hold that the words, "that this lease be extended for three years," referred to the continuance of the option would be to give them an arbitrary meaning. The Master of the Rolls stated that the other case, also noted in our Legal Section, June 27, Batchellor *v.* Murphy, was being appealed, and that therefore the Court would say nothing about that case at present.

THE CATHEDRAL CHURCH OF LLANDAFF

Mr. W. E. Lovegrove recently lectured before the Royal Archæological Institute on Llandaff Cathedral.

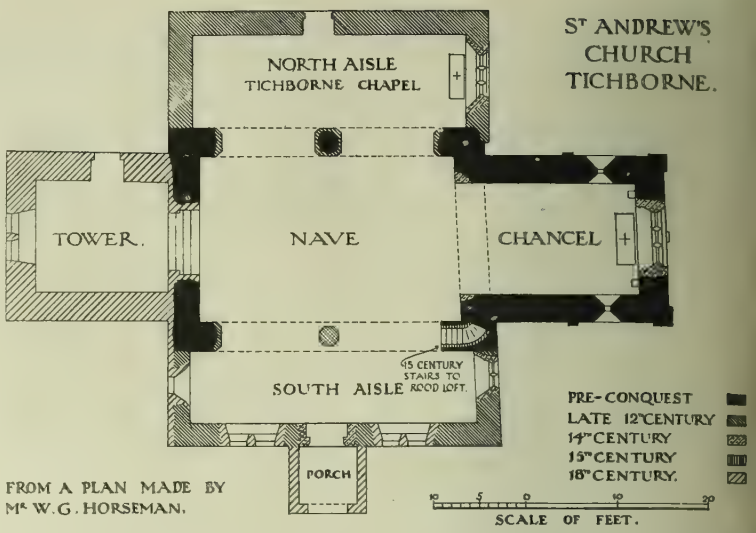
In the course of his remarks he said it might fairly be claimed for the See of Llandaff that it was the oldest in Great Britain, and that it might be put forward on behalf of the Cathedral Church that it contained the oldest work of any architectural importance in Wales. At Llandaff they had remains of Bishop Urban's choir, begun in 1120, and a building of great artistic merit. Documentary evidence relating to the fabric was unusually scanty. A careful search had only enabled him to find four or five notices bearing upon the fabric of the Cathedral Church. They had the date of the beginning of the work, 1120, and they also knew that the building of the new church did not entail the destruction of the old, for the work was begun on April 14 and seven weeks later, on June 2, the body of S. Dubricius was solemnly buried in the old Minster.

In the absence of any known foundations they could only guess where they must look for the side of the old Minster. One fact might have some bearing on the question. It was one of the peculiar characteristics of the site that the Cathedral was built so close to the steep hill-side that a certain amount of excavation must have been necessary. There was no apparent reason for this, as there was now plenty of room to the north, where the ground occupied by the present churchyard was quite level. It might be then that the old church stood on the north side of the later building, and that room for the new cathedral could only be found by cutting into the hill-side in the manner which seemed to them to-day to be so unnecessary. However that might be, it was clear that no immediate destruction of the old Minster was contemplated.

In regard to the fabric itself it was quite easy to recognise certain parts of the building as of Bishop Urban's time. These were the east wall of the presbytery and the main fabric of the south wall. The east wall was pierced by a noble archway as at Hereford, but the Llandaff Arch, being of considerably later date, was of a much richer character.

The south side of the presbytery contained portions of two Norman windows, which had been cut into by arches inserted beneath them in the fourteenth century.

The west front, which was certainly one of the most beautiful compositions of its time, and well worthy of all the praise that had been lavished upon it, was apparently the work of two periods, and had been carried out under two master builders. He spoke, of course, of the earlier parts, as they were not concerned at the moment with the fifteenth-century additions. It had not, perhaps, been noticed that they had two different types of design, both, he believed, modelled on Wells, and represented first by the nave and transept, and second by the west front. No church in Wales could compare with Llandaff in purely archæological interest. It was full of problems for those who sought them; some fairly easy to unravel, others more difficult, and others again impossible of solution.



Town Hall for Springs, South Africa.

His Majesty's Senior Trade Commissioner in South Africa (Mr. W. G. Wickham) has forwarded to the Department of Overseas Trade a report to the effect that the town of Springs, South Africa, is considering the question of building a new town hall, and has entrusted the preparation of plans to two architects. Firms desirous of offering British material and fittings can obtain the names of the architects upon application to the Department of Overseas Trade, 35, Old Queen-street, London, S.W. 1.

TICHBORNE CHURCH

An appeal for £850 for the restoration of Andrew's Church, Tichborne, is now being m The orginal building, *i.e.*, the chancel and n probably belong to a date prior to the Nor Conquest, the thickness and construction of walls, the double-splayed lancet windows, the external narrow pilasters being sign Saxon work. In the eleventh or early tw century the north and south aisles were adde the nave, arcades being pierced through north and south walls. In the north aisle is Tichborne Chantry, founded by Sir Roger T borne in the reign of Henry I. This aisle practically rebuilt by the Tichborne family s years ago; the chantry contains many m ments of the Tichborne family, notably on memory of Sir Benjamin Tichborne, the Baronet (1620). In the fourteenth century narrow Saxon chancel arch was replaced by present wide one. The stonework of the window belongs to the same date. The old pews, some of which are well carved, date f the reign of Elizabeth.

Some time ago cracks were observed in east wall of the south aisle, and the wall shored up with timber. The cracks, howe appeared to be spreading; the Church Co decided to call in expert advice, and Mr. T Atkinson, F.R.I.B.A., was consulted advised certain works.



St. Andrew's Church, Tichborne.

THE ROYAL SANITARY INSTITUTE

ANNUAL CONGRESS AT LIVERPOOL.—I

The annual congress of the Royal Sanitary titute always arouses a considerable ount of public interest in the city in which is held, and this year's event, which was d at Liverpool from July 14 to 19, proved exception to the rule, for in addition to the ge number of members and delegates esent, the conferences of the different sec-ns were well attended by the general public. The interests of the Institute cover a very le range, from medicine to building con-uction. The chief interest for architects l builders was in the section of Architecture l Construction, in which a number of eresting papers were read, of which ab-acts and reports of the discussions are given ow.

SECTION OF ENGINEERING AND ARCHITECTURE.

Presidential Address.

Mr. John A. Brodie, M.Inst.C.E., who ed as President of the Section, in his esidential Address dealt chiefly with the ject of housing. He said the question of cost of sites for rehousing often loomed large in the views of those responsible, l it was sometimes overlooked that even nparatively heavy site costs could, by icious planning and arrangement, be so dified as to form little greater charge to the ividual house than in the case of the outer as where the cost of land was cheap but number of houses to the acre very limited. ne little time ago a not unusual type of velopment for even comparatively expensive n sites was the individual cottage standing its own area limited in size only by the nimum open space and other conditions re-red by the by-laws. More recently blocks flats limited to three or four stories had n more generally adopted, and were giving isfactory results, but in some such cases had been customary wherever more expen-e sites had been purchased than those of demned property to write down the value he site to a merely nominal price per square d, and even then the return on cost was sufficient to meet outgoings.

n London recently he had an opportunity of wing modern blocks of dwellings of five ries in height, with ample areas for light l air, both at front and back. An electric of automatic type was available for use each householder, the distribution from the being by way of balconies to the individual ellings. Stairways were also provided for se who cared to utilise them, and, though able of improvement, in detail, this system peared to have a number of excellent tures. In Paris, blocks of dwellings eight ries in height, of very satisfactory appear-ce and character, had recently been com-ted, but notwithstanding the height of the per stories no lifts were provided. Much her blocks of residential flats were found isfactorily to meet the requirements of those iring to live in central positions, and able pay high rents, in London and other large tres, where efficient lifts were provided.

Although the demolition of small sections of nitely insanitary dwellings and the re-sing of those dispossessed was very gener-looked upon as the most pressing need in gested town areas, other almost equally portant matters were involved and often rlooked, and it was probable that the com-e replanning and reconstruction of many unhealthy sites on a more generous scale ld on the whole give more satisfactory lts both from the sanitary and from the eral amenity point of view. The erection blocks of buildings of a height properly portioned to the roads and open spaces lable, completely equipped with modern giving easy access to all floors and avail-at all hours, would appear to be one of lines of treatment which should be very carefully looked into as a solution having some essential possibilities in connection with the rehousing of the lower-paid workmen in positions within easy reach of their work. Especially was this the case wherever main arterial roads were necessary, and replanning of considerable areas became possible. In such cases the roadway, which should be of ample width, provided in itself the distance between the fronts on which the living rooms would look out, whilst at the back with buildings of the height suggested ample open space between buildings could be provided of approximately similar width.

Calculated on such a basis, including one-half road and back space, it was clear that such a number of dwellings could be erected as would meet the full normal dwelling requirements for most congested areas, whilst the site costs distributed over such a number of dwellings would allow of fairly expensive sites being utilised for such a purpose without throwing an excessive charge on each dwelling. On the question of health no question need arise where due attention had been paid to the provision of open spaces, and ample access for sunlight and air. One of the advantages of such a solution, if found to meet the requirements of the occupants, would be that where applied through poor neighbourhoods it would enable a more or less continuous system of demolition, erection, and transfer of residents to the new buildings to be adopted, and thus help to remove the present difficulty of getting possession of vacant dwellings so that the sites might become available for building purposes. With proper Government help on such lines, he thought it would be found quite possible to do away more quickly with many areas which at present were hardly creditable to the governing authorities, and were only excusable on the ground of the specially difficult conditions at present surrounding the whole question of cheap house building.

After some remarks on the treatment of partly-developed and undeveloped sites, the speaker dealt with the question of building labour and material. Perhaps the most important and most serious problems in connection with housing just now were, he said, those of the supply of skilled labour in combination with the question of reduced output for wages paid, and the rising prices of materials due largely to controlled output, which together bid fair to make the provision of homes for the lower-paid men very difficult at any cost within the capacity of those who in rates and taxes appeared fated to provide a very large proportion of the additional burden of cost needlessly inflicted upon them.

Training in a skilled trade was not now absolutely necessary for the earning of high wages, and many men who a few years ago were quite unskilled labourers were now earning a higher standard of wages than fully trained engineers whose trade required great skill and a long apprenticeship. The lessons of the munition period had not been entirely thrown away on thinking workmen. It was then seen that after a very short period of training intelligent men originally unskilled could turn out highly-skilled work in greater quantity than had been turned out by skilled men, and that when paid on the basis of output it was again seen that the amount of pay at the week-end depended upon both acquired skill and systematic attention paid to the work in hand.

They were told that building materials were going to be so controlled by Government that only reasonable prices were to be allowed. Those who had had long experience in the purchase and handling of materials in large quantities would be much interested in the new methods of control proposed to be adopted, but it was hardly likely that manufacturers who hitherto had been so well able to look after their own interests and to make a better living than the average by the exercise of brains, energy, foresight, and close attention to the details of their business, would be outdistanced by any gentleman, however clever, who had not a complete grip of the question of production. As, no doubt, ample margins between cost and sale prices of material at present existed, a surer method of control might be the actual production of supplies on a considerable scale at more nearly cost prices. However this might be, they all must admit that the question of a suitable and sanitary dwelling for the lower-paid workmen could not at present be produced without assistance to give a sound financial return, and that therefore there was at present little likelihood of such houses being erected by private builders unless assistance in some form was provided either by the Government or the municipal authorities.

It was one of the wonders of the world that the brick upon brick methods of Bible times should still remain the principal system of producing dwellings for the poorest people, but present conditions were concentrating attention on the subject, and brains and ability were at work on solutions which would ultimately produce organised systems of construction by which building costs could be much reduced.

In moving a hearty vote of thanks to the President of the Section, Mr. H. D. Searles-Wood, F.R.I.B.A., said he was much interested in the views expressed on the subject of higher buildings, and hoped Mr. Brodie would be able to visit London and help to convince people there.

Mr. A. J. Martin, in seconding the vote, said he was very glad to know that the fetish of ten houses to the acre was being attacked; if that principle were applied to Liverpool, with its present population, the city would be spread over 130 square miles.

CONCRETE CONSTRUCTION.

Flat-Slab Construction.

Two papers on concrete construction were then read and discussed together.

Mr. R. Travers Morgan, A.M.Inst.C.E., read a paper on the flat-slab system of reinforced concrete construction, in which the loads are carried direct from the floor-slab to the columns without the intermediary of beams or girders. This method, he said, could justly be described as a true system of construction, in that it in no way resembled the steel-frame or wood-joist methods. In general the construction consisted of a floor slab which was carried directly on to the columns, which had wide conical-shaped capitals where they met the floor slab. In many cases a small portion of the floor slab surrounding the column capitals was increased in thickness, thus forming what was known as the "drop panel." The reinforcement in the slab consisted of bands of small-diameter rods radiating from each column head, the reinforcement in general being situated at the bottom of the slab between the columns and at the top over the columns. The columns were circular in form, and did not differ much, as regarded reinforcing, from those used in the girder or beam type of construction, any difference being at the junction of the column head and slab in the methods employed to overcome tensional stresses between the two.

The advantages of this system were:

(1) There were few edges or corners, and therefore the effects of fire on the construction were greatly diminished, since spalling of edges and corners was materially obviated.

(2) The ceiling being flat, installations, either for sprinkler systems or lighting or otherwise, were made easier and consequently much more efficient.

(3) There being no beams, interruption of light from the windows was entirely eliminated, and the windows might be extended to the ceiling level.

(4) For high buildings a considerable saving in story height was effected, since the question

of beam depth for head room clearance was entirely eliminated.

(5) The time of erection was materially reduced, due to the absence of beams and boxes, and therefore the simplicity of the sheeting required, and also the bending and distribution of the reinforcement.

(6) The cost of construction was also reduced for the reasons given in para. (5).

(7) The absence of corners, and the flat surfaces, tended to better ventilation, cleanliness, and an atmosphere of openness.

(8) Ease of estimating and also quickness.

The lecturer illustrated his remarks by showing photographs and drawings of the Mersey Match Works, completed a year or two ago. Messrs. Mèwes & Davis, FF.R.I.B.A., were the architects, and Mr. S. Bylander the engineer. This building is 540 ft. long by 60 ft. wide by two stories high. The first story is 14 ft. high, split up into bays, 20 ft. by 15 ft. by the columns. The ground story is 20 ft. in height, and is treated similarly to the first. The roof slab is 6 in. thick, being designed for a superimposed load of 1 cwt. per sq. ft., and the first-floor slab, 9 in. thick, for a load of 3 cwt. per sq. ft. The columns in the first and ground story are 21 in. in diameter with the exception of four columns supporting a water tank, installed for the sprinkler system, which are slightly larger.

Upon the completion of the building, a test load was placed upon the first floor. The area loaded consisted of four whole panels surrounding an interior column, the idea being to test a column as well as a panel. As a precaution, the whole of the area of floor tested was strutted, the struts being arranged to give at all times a clearance of one-quarter inch by means of movable fox-wedges. The method of taking measurements was by beam deflectometers under the centre of each panel, together with level readings on to scales fixed to laths suspended from the four panel centres. The measurements taken on the column were by a scale fixed to the column, and read through a level.

In addition to this, a wire was tightly stretched from an arm fastened to the top of the column and with sufficient radius so as to enable the wire to be fastened to the floor outside the area of the footing. Readings were taken every ½ cwt. per sq. ft. of load superimposed; at the same time the propping was adjusted when necessary, and a close observation made of the behaviour of the adjoining construction joints. The results were highly satisfactory, the final load of 4 cwt. per sq. ft. being reached with a maximum slab deflection of ¼ in.

Mr. A. W. Legat, A.M.Inst.C.E., in his paper, said the term "reinforced concrete" was only applicable to combinations of steel and concrete in which each material assisted in resisting the stresses in the structure in the most efficient and economical manner. Structural steel encased in concrete, mass concrete strengthened, perhaps, by old rails and similar forms of construction, were not truly reinforced concrete.

The chief reason for the introduction of steel reinforcement was to resist tension in the members—a stress which concrete itself was not fitted to withstand. It was frequently used in compression members also, for the combined purposes of increasing the compressive resistance, resisting lateral bending, and forming a connection with other parts of the structure. The design of reinforced concrete was founded on the same principles as those applied to other materials, but whilst buildings of steel, stone or timber consisted of many separate members, with joints between, a reinforced concrete structure was monolithic. Whilst this feature was responsible for much of the efficiency and convenience of application of the material to different structures, it did undoubtedly complicate the design, and for this reason practically all details for reinforced concrete structures were elaborated by engineers specialising in such work.

When placing schemes in the hands of designers, it was important to supply full information regarding loads, sub-foundation, clear headroom, column spacing, roof, and floor finishes, provision required for heating, lighting and machinery, etc., in order that the scheme might be detailed to meet all requirements. As a general rule, on receipt of this data the engineer first prepared an outline scheme, drawings, and bills of quantities, leaving the preparation of full calculations and details of the reinforcements until the work matured.

The fire-resisting properties of the material had been clearly demonstrated in numerous conflagrations made, and tests by the Chicago Fire Underwriters' Association were of considerable interest in this connection, showing the very greatly increased resistance to fire of concrete construction.

Concrete itself might be made absolutely waterproof by careful selection of materials, and by thorough mixing and ramming. The joints between different days' work required very special attention, however, but if the concrete surface already laid was thoroughly and conscientiously cleaned off and flushed with cement compo, prior to placing further work, excellent results would be obtained. Failures had occurred in reinforced concrete work, as in other materials, but generally in countries where the standard of design and construction was sometimes not so high as in Britain. The employment of expert engineers to design the work, followed by keen and intelligent supervision of construction, invariably resulted in structures having strength, durability, and economy of construction and maintenance in the highest degree.—A number of slides were shown to illustrate several examples of different types of structure, designed and erected for some of the leading public bodies of the country.

Discussion.

In opening the discussion on these papers, Mr. Brodie said reinforced concrete was being used to a very great extent at the present time, and there was no doubt it was the building material of the future. The only objection to the material was that so far a completely satisfactory finish had not been found.

Mr. Temple said in his opinion reinforced concrete work as carried out was rarely completely monolithic because of the stoppages in the work at meal times and during the night, which prevented the material being poured continuously. It was important to know when the work could be carried out if it would be monolithic or not. In India a great deal of reinforced brickwork was used, as it was found that the native labourers could be relied on to put the reinforcement in properly with that class of work, while they could not always be trained to understand the importance of placing the rods or mesh correctly in concrete.

Mr. Tyler (Auckland) asked if any figures were available giving the relative cost of flat-slab construction compared with column and beam construction. In the case of a very large structure erected in Auckland it was claimed that a saving of £60,000 had been effected by using the flat-slab system.

Mr. Franks (Cardiff) asked what weight or amount of reinforcing steel was used in a typical floor built on the flat-slab system, and whether more or less steel was necessary than in girder construction. On the question of fire resistance, he said some very interesting tests were made in England recently, when a concrete house was destroyed by the fire insurance companies in order to find out the best aggregate from the point of view of fire resistance. It was found in those tests that the most fire-resisting aggregate was old broken brick, and it would be interesting to know what aggregate had been used in the Chicago tests referred to by the lecturer.

Mr. Tyler said the cheapest form of construction for dams up to 60 ft. in height was the slab and buttress type carried on piers. Dams of that type had been built in New Zealand at about 50 per cent. of the cost of the gravity type dam. The multiple-arch dam was more costly in timbering, but was extensively used in America, where they were built as high as 200 ft.

Mr. Brodie said some twenty-five years ago he built a concrete roof, exposed to the weather, with a thickness of only 5 in. and reinforced with hoop-iron. When it was required to remove the roof recently it was found impossible to break it up without the use of sledge-hammers, and it was found that the whole of the reinforcement was as bright as when it was put in—ample proof that concrete could be made weatherproof. There was no doubt that, in view of the shortage of bricks, concrete would have to be very largely used in housing schemes as well as for other work. He had seen concrete with a glazed surface which looked very well, but he understood that the particular method of glazing which he had seen did not weather very well. It was a matter of great importance now concrete was being so extensively used that a satisfactory and cheap method of providing an attractive surface finish should be found.

In reply to the points raised in the discussion, Mr. Morgan said he thought there were only three buildings in England erected on the flat-slab system. The difference in cost between the two methods of design was about 20 per cent. in favour of the flat-slab system. The percentage of reinforcing steel in flat-slab construction was about 0.675. With regard to surface treatment, so far engineers had concentrated more on utility buildings, but now concrete was being used for monumental buildings he had no doubt that, with the increased attention being given to the subject, a suitable and inexpensive method of surface finish would soon be discovered.

Mr. Legat said if the positions where the joints at the end of each day's work were to come were specified by the engineer so that they would come where expansion joints were needed, a complete monolithic structure would be obtained. A point often overlooked, with serious results, in concrete construction was the position of the plant, which should be placed in such a position that there was a minimum of vibration on the structure while the concrete was setting. In regard to the flat-slab system, it had to be pointed out that this method could not be carried out at present in districts which strictly adhered to the provisions of the London County Council Regulations for Reinforced Concrete. He did not know what aggregate was used in the Chicago fire tests, but there was no doubt that the most fire-resisting material for the purpose was thoroughly clean and well-burnt broken brick; the next best material from that point of view was rock which had been fired in the course of its formation.

Land for Housing.

Mr. J. D. Wallis, Official Arbitrator under the Acquisition of Land (Assessment of Compensation) Act, 1919, has issued his award in a claim by Lord Egerton of Tatton against the Corporation of Manchester, concerning the Corporation's compulsory acquisition, for housing purposes, of land, buildings, and hereditaments, containing an area of about 76¾ acres.

The Arbitrator has awarded that the acquiring authority is to pay to the owners the sum of £25,986 as purchase money and compensation and interest at the rate of 5 per cent. per annum from the date of entry until payment of the compensation. The acquiring authority is to pay the fees on the award, and £200 towards the owner's costs. The award is subject to certain conditions which were agreed between the parties.

At the hearing of the claim, Mr. John Herbert Hall, chartered surveyor, on behalf of the claimant, submitted a valuation of £34,738. On behalf of the Corporation, Mr. Joshua Burton, chartered surveyor, submitted a valuation of £23,090.

PROGRESS OF THE HOUSING BILL

The Committee stage of Mr. Wheatley's ousing (Financial Provisions) Bill was begun the House of Commons on July 16.

Clause 1 provides that sections 1 and 2 of the ousing Act of 1923 (relating to contributions the Minister of Health to the expenses of al authorities in assisting the construction houses) shall extend to houses completed fore October 1, 1939.

Sir T. Inskip moved an amendment to leave ut this date, on the ground that 15 years was o long a time for the pledge given by Parlia- ent to continue.

Mr. Wheatley refused to accept the amend- ent, stating that the 15-year period was part his agreement with the building industry d would be the first step towards stabilising at industry.

Sir Wm. Joynson-Hicks said the building ade wanted to know where it stood. If ilders were to put up new works, start new ickfields, and the manufacture of various ticles for building they wanted continuity. e denied that there was any continuity hatever under the Bill.

Sir P. Hastings (Attorney-General) said the arantee to the building trade was the finest Minister had ever offered, and it was the only ssible one. The Minister had gone to the ilding trade and had said, "You provide the uses and we will see that the contributions e given. All you have to do is to give the uses you have undertaken to give. We then arantee that you shall get the money."

Sir P. Pilditch said the only party bound that bargain was the State.

Mr. Sunlight suggested that, instead of the arantee being given for 15 years, it should be three years, to be renewed every three years oviding the building trade carried out their rt of the bargain.

The amendment was rejected by 255 votes 154.

Mr. Wheatley undertook to endeavour to et, on the report stage, the object of an ıendment to provide that no proposal for the ovision of 25 or more houses should be ıctioned until the Minister was satisfied that would not be prejudicial to any town-planning ıeme.

On the question that Clause 1 be agreed to, e size of the houses for which the subsidy is be given came up for discussion. Mr. nlight expressed himself in entire agreement th the Minister in holding on to the 950 ft. uit, because he had to cater for people who uld not afford large houses, but as a com- omise the smaller subsidy of £75 permitted der the Bill should apply to houses of 1,050 ft., as to differentiate between the larger and aller subsidies in respect to area.

Mr. Wheatley explained that there was thing to prevent the matter from being ised when they were considering the subsidy rms in 1927. They would do very well if they ilt between now and 1927 all the 950 ft. uses which would be erected if there was maximum at all.

Clause 1 was agreed to.

The Committee then considered clause 2, ich increases the subsidy from £6 a year 20 years, to £9 a year for 40 years (£12 10s. the case of an "agricultural parish").

Mr. Franklin moved an amendment to enable sons who were prepared to provide houses to so and to offer them to the local authority, o. although they had not initiated the putting of these houses by the giving out of the con- cts, would be able to purchase them.

Mr. Sunlight supported the amendment, ch, he said, empowered the local authorities purchase from the speculative builder. This uld help to keep down the cost of houses would give the speculative builder and ate enterprise a chance. Many professional , in the absence of work in their own profes- , would be quite ready to begin to build in nall way—say, a dozen cottages—provided could be assured that the local authority would be likely to take them over at a competitive price.

Mr. Wheatley refused at first to accept the amendment, but, on being pressed to encourage small builders, he agreed to draft some suitable words in order to carry out the object of the amendment and yet at the same time protect the locality from injury by intrusion into local schemes. On this understanding the amendment was withdrawn.

An amendment was moved by Mr. N. Chamberlain to provide that where a reduction in the subsidy could be made without imposing any burden on the local rate such reduction should be made to the extent that was possible. He pointed out it was possible that some new method of construction or material might greatly reduce the cost of houses, and this contingency had not been provided for.

Mr. D. G. Somerville supported the amendment.

Mr. Sunlight also supported the amendment, expressing astonishment that the Minister had not offered some premium for the purpose of designing new forms of construction which would bring down the cost.

Lord Wolmer said in time cheaper methods of construction would be found, and he had been assured that there was at the present moment a company which was prepared to bring out concrete-built houses which were a great improvement on any previous concrete houses. Such a method would mean that houses could be built for about £250 to £300 each.

Mr. Wheatley declined to accept the amendment, although he said he welcomed any good methods of providing houses. The amendment was defeated by 245 to 122.

Later, Mr. Wheatley accepted an amendment to enable a parish to be classed as "agricultural" (thus qualifying for the £12 10s. subsidy) if the population is less than 50 persons per 100 acres. The Minister also undertook, on report, to insert a new clause providing that in an agricultural parish no more than eight houses to the acre and in an urban district not more than twelve to the acre should be built without the consent of the Minister.

Mrs. Wintringham moved an amendment to provide that outside extensions of rural houses shall not be reckoned as part of the 950 ft. which are the limit for the size of the house. She said in country districts it was important that there should be a place where a workman could put his tools, bicycle, &c.

The Attorney-General said under the rules of the 1923 Act, which met the difficulty, tool sheds and bicycle sheds were not included in the measurement of the house.

Mr. D. G. Somerville inquired whether a garage would come under the subsidy.—The Attorney-General replied that he did not think the man who was paying only 5s. or 6s. a week rent was going to concern himself about a garage.

The amendment was negatived, and shortly afterwards the House adjourned.

On the following day discussion was begun on Clause 3, which sets forth that houses provided by a local authority shall be deemed to be subject to special conditions if the local authority undertakes in such manner as the Minister may require that certain conditions (set out in the clause) will be complied with in relation to the houses.

Mr. H. Johnstone moved an amendment to enable materials required for the construction of houses to be purchased in the cheapest market, wherever situate. Mr. Wheatley expressed sympathy with the object of the amendment, but said he would accept later a new clause embodying the object desired, and the amendment was therefore withdrawn.

Mr. Wheatley, on another amendment, agreed, on the report stage, to put down words which would give facilities for the sale of houses on terms that would not be better financially than if an occupier had purchased his house as he would purchase it now under the Act of 1923. He had no objection, he said, to the occupier of a house becoming the owner.

Mr. Vivian moved an amendment to ensure that the cost of building the houses under the Bill shall not exceed 10s. 6d. per ft. super. of contained area, unless otherwise provided for by the Minister. He said 10s. 6d. per ft. super. for a 950 ft. house was £498.

Mr. Wheatley, while agreeing with the object of the amendment, said he feared it would defeat the desire to keep down prices. If the building industry were properly organised—as it now had an opportunity of organising itself—it should be possible to build these houses for substantially less than £500 each.

The amendment was negatived by 236 votes to 111.

Mr. Sunlight moved a new sub-section to provide that the dimensions of all bricks used in building houses under the Bill should be 9 in. × 4½ in. × 3⅛ in. in size. He urged the standardisation of bricks on the ground of economy, and said before the war architects had a clause in their specifications that certain things, such as bricks, timber, &c., should be of a certain size. During the war, however, brickmakers not only raised the cost of bricks per thousand, but reduced the size from 4½ in. wide to 4¼, and from 3⅛ to 2¾ in. thick, so that the cost, both in material and labour, was increased. As soon as the present Bill became law and contracts were given out, brick-makers might attempt to reduce the size of bricks.

Mr. Wheatley said the amendment was unworkable, and he could see nothing in its merits which would justify making such a revolutionary interference with private business.

The amendment was negatived.

The House adjourned further discussion on the Bill until Monday.

During the concluding stages of the Bill, on Monday, a statement was made by Mr. Wheatley on an amendment to Clause 4 (which deals with the termination of the Government's liability to make contributions under the Bill), moved by Sir G. McCrae, to insert words to give the Government power to withhold contributions in the absence of adequate arrangements for the necessary increase in the supply of labour and materials at reasonable prices.

Mr. Wheatley, in reply, did not question the statement that they had not got an adequate supply of men and materials to ensure the desired number of houses. He intended to take steps, immediately the Bill went through, to make the apprentice bricklayer a more effective bricklayer than he usually was by the ordinary process of training. He intended to make an appeal for the co-operation of the educational authorities in this respect. They ought to have the very best class of training for their apprentices, and that training should be given in a manner which would enable them to get an output from the apprentices in the shortest possible time. In some schemes in the country already the employer had granted facilities for apprentices to attend training centres during two half-days a week. That had had very satisfactory results, and he intended to introduce a scheme as far as possible to make that general. Such training would be given largely in the local technical schools, but largely, he hoped, without much expenditure, on the actual job, where the services of highly skilled teachers were on the spot where the apprentice went to work, and where they would train him as rapidly as possible in the craft for which he was intended. He had not had an opportunity of submitting that to the National Building Committee, or to those who were likely to deal with it, but the men's leaders had assured him they would cheerfully co-operate. He had no doubt the employers would grant the necessary facilities, and he was very hopeful it might be possible that the apprentices who had received this special instruction would be passed, by a test, more rapidly into the industry than they would be if they had not had this practical assistance.

Dealing with new methods of building, Mr. Wheatley said that he was going to inspect a system of building houses largely of steel and timber, which had been invented by an eminent

business man, who had a great reputation in the business world. In the past few days he had had submitted to him a new material for house-building, which it was claimed would give more substantial and more beautiful houses in a tithe of the time now occupied in building, and which would give the houses more cheaply, and without the services of bricklayers or plasterers. He had no technical or scientific knowledge to enable him to pass judgment on the value of the material, but it seemed quite promising. If it succeeded, the building industry would still require to recruit its personnel, but instead of taking in bricklayers, plasterers and carpenters, men would be engaged to manufacture the new building material. To meet Sir G. Macrae's amendment, he proposed to add words on the Report stage to enable the Government to withdraw their contribution if the deficiency of houses was "due to the absence of adequate arrangements for the necessary increase in the supply of building labour (including any necessary augmentation of the number of apprentices employed), or for the necessary increase in the supply of materials at reasonable prices, or from any other cause."

Sir G. Macrae's amendment was accordingly withdrawn.

Mr. Wheatley moved a new clause to give the benefit of the "Chamberlain" subsidy to private persons in areas where local authorities had failed to put into operation either the "Chamberlain" Act or this Bill. Sir Charles Starmer moved to make the clause restrospective, but this was resisted by Mr. Wheatley. On this point the Government was defeated by 201 votes to 155—an adverse majority of 46.

Later in the sitting the Government was again defeated, this time on an amendment, moved by Mr. Paley, a Labour member, to provide that where employers build houses for their workpeople and these workpeople cease to be employed, the tenants shall not be evicted. Mr. Wheatley supported the amendment, which was rejected by 137 votes to 119.

After various minor concessions, the Committee stage was concluded at 2.28 on Tuesday morning, and the Bill, as amended, was reported to the House.

Constructional Glass at Wembley.

The British Empire Exhibition is entirely glazed, lit and protected with British glass.

Obviously, in an undertaking so large as Wembley, in which are scores of differently situated buildings, almost every kind of glass—polished plate glass, sheet, rough rolled, wired, and cathedral—has been used. Outside, the eight hundred round opal lamps, which light the avenues, are all glazed entirely with British flashed opal glass. Past the Burmese Temple is Old London Bridge, whose mullioned shops flaunt the old-fashioned bulls-eye glass of two centuries ago. But, actually, the glass is new for it was made only a few months ago at St. Helens. The stand of the two glass makers who supplied the Exhibition—Messrs. Pilkington Bros., Ltd., St. Helens, and Messrs. Chance Bros. & Co., Ltd.—is almost in the centre of the Palace of Industry. Messrs. Chance Bros., manufacturers of optical glass, are the only British makers of ordinary spectacle glass, and also of Chance's Crookes glass for protecting the eyes against glare and strain.

"Calorex" roofing glass is shown, with old English "Crown" microscopical cover glass and heat-resisting globes and chimneys. There is also a model of two factory buildings, one overshadowing the other, showing the difference in lighting made by prismatic glazing. The actual piece of glass used is not more than 6 in. square. The most noteworthy exhibit of Messrs. Pilkington's, perhaps, is not to be seen at the stand, but in the Palace of Engineering. At the Watt Gate Entrance stands a mammoth plate of glass (336 sq. ft.). This is stated to be the biggest piece of plate glass in the world, and weighs 1,700 lb.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

**** *We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Sand-Lime Bricks.

[REPLY TO D. B. H.]

SIR,—The Special Report No. 1 of the Building Research Board on "Sand-lime and other Concrete Bricks," price 3d., will probably give D. B. H. the information he requires. "S."

SIR,—Your correspondent who inquires *re* sand-lime bricks in your last issue will find what he wants in Special Report No. 1 ("Sand-Lime and other Concrete Bricks," by H. O. Weller, B.Sc., M.Inst.C.E.) of the Building Research Board (Department of Scientific and Industrial Research). 1921. Price 3d. net; to be obtained at H.M. Stationery Office, Imperial House, Kingsway.

MANNING ROBERTSON.

Insulating.

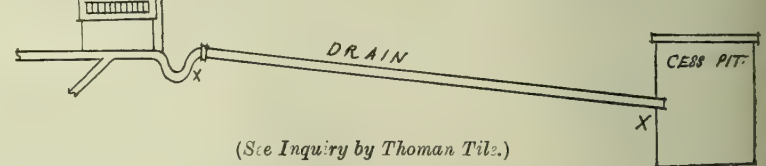
[REPLY TO "L. X."]

SIR,—Your correspondent, writing on the above subject, states (by what authority or on what grounds I do not know) that where a cavity wall is used for insulating purposes the cavity should be sealed so that a stagnant cushion of air is formed that is non-conducting. Surely it must be well known by now that it is well-nigh impossible to enclose "a stagnant cushion of air"? In a sealed cavity wall the air will always be liable to circulate through changes in its density brought about by variation in temperature between the enclosing walls, and as soon as circulation commences the insulation is seriously impaired.

"H. N. I."

Drainage.

SIR,—Would you kindly give me your opinion on the enclosed sketch? It is the present drainage system in a rural district to a small house. The cesspit gets full and overflows, causing a nuisance. The Rural District Council has ordered me to remove the intercepting



(*See Inquiry by Thoman Tile.*)

trap to the lowest end of drain and provide and fix an airtight cover to the inspection chamber. If this is done, there will be no fresh air in the pipes, and, as the cesspit gets full, the sewage will back-pound up the drains, which will be full of sewage. THOMAS TILE.

Cowhouse Floors.

SIR,—In answer to "Agricultural," the best floor for a cowhouse is composed of cement and granite chippings. This should be properly laid, sloping to a wide and shallow channel, wide enough to get a shovel in for cleaning. The floor should be grooved where necessary to prevent slipping, but the grooving should be arranged to allow water to run clear away. There should be a sloping piece between the cows and the channel so that solids do not block the channel. The floor should be rounded near the walls, and a cement dado carried up the walls high enough to prevent any soiling, the dado being washed down every day when the floor is cleaned. All channels should deliver on to a gulley outside the cowhouse, and the drains, which should be ventilated, should empty into a manure tank.

T. NOBLE REAVELL.

Leytonstone.

SIR,—The information asked for is rather too large for a reply through *The Builder*. I have made a study of this question and designed many modern cowhouses and agricultural buildings. If "Agricultural" cares to send his name and address to me through *The Builder*, I will gladly send him a tracing of plans of a model cowhouse. E. J.

SIR,—Your correspondent "Agricultural" will find all the information *re* cow houses he wants in leaflet No. 241, issued by the Board of Agriculture. H. L. WRIGLEY.

Ceiling Lining.

SIR,—We have an enquiry from a local architect for material for lining the ceiling of the hottest room in a Turkish bath. He wants something like porcelain-enamelled steel that will stand intense hot air, permanent faced, easily cleaned, must not lose its white colour, and to fix on joints or equal of lathing and plaster. P. W. A.

21 Oz. Glass.

[REPLY TO M. T.]

SIR,—The present price of 15 oz. sheet glass, fourths quality, is 3⅜d. per ft. super, and that of 21 oz. sheet, thirds quality, is 6¼d. per ft. super.

Your correspondent does not tell us what size house he has in mind, or what type or size of window, or how many of them, but I hope these figures will be sufficient for him to arrive at the information he requires. "Z."

Treatment of New Walls.

[REPLY TO A. G.]

SIR,—In response to your correspondent, "A. G." (*The Builder*, July 7), who inquires for what period new walls (which have not had time to dry out and the surfaces have been treated to lime putty finish) should be left before it can be taken that drying is complete, and that the soda, &c., has worked out, I am very pleased to be able to inform him that after repeated, length and exhaustive trials on a large and practica scale, if two thin coats of "primeroid" b applied to the walls in question and each coa allowed to dry out thoroughly (which take five to seven days), one can follow on as soon a the "primeroid" is dry.

M. A. (Cantab.).

SIR,—The period required for new lim plastering to dry out sufficiently for decoratio to stand thereon well, depends upon the weathe if the house is occupied or not; and if fires o other heat is provided in the rooms, and vent lation maintained. Generally a good averag period of twelve months will be found to b long enough unless circumstances are ver adverse. "L. T."

THE BUILDING TRADE

OME REFLECTIONS ON HE BUILDING TRADES DISPUTE

By W. H. STOKER, K.C.

"The resulting issue has been productive f much misunderstanding between the parties. Recognition by each side of the fact that their osition has not been understood by the other, he settlement of the Liverpool difficulty, and he resumption of negotiation appear to be he only means by which the dispute can be rought to a speedy end and good will re-tored in an industry of national importance nd owing great responsibilities to all classes f the public."

The above extract from the conclusions set ut in the Report of the recent Court of In-uiry presided over by Lord Buckmaster oints a moral. Rather more than a year go the writer, in the course of some articles ontributed to *The Builder*,* expressed the ope that means might be found of resus-tating the Building Trades Parliament, eally the Joint Industrial Council for the uilding industry. The Parliament had be-ome practically defunct owing to the seces-on therefrom in May, 1922, of the National ederation of Employers. This secession came st a year after the formation of the National Vages and Conditions Council, created to deal olely with wages and conditions of employ-ent. There can be little doubt that the xistence of this Council contributed to the ithdrawal of the National Federation of Em-oyers from the Building Trades Parliament. Vhatever were the real causes, the effect was at employers and operatives only met ationally to consider wages and conditions of mployment—that is to say, on the National Vages and Conditions Council—and no com-on meeting ground remained for the con-deration nationally of the general mutual ncerns of the building trade.

Lord Askwith, writing to *The Times* on arch 16, 1923, urged that each industry ould deal with its own unemployment, and at Joint Industrial Councils should devote tention to that subject; but he also drew tention to what he conceived to be the true nctions of the Industrial Councils, and precated their being regarded as committees ncerned only with the regulation of wages. ecognising the danger of this, the Building rades Parliament had entirely excluded from sphere the regulation of wages, this being ft to the Conciliation Boards previously tablished. It concerned itself with the mmon and mutual interests of the industry. Then the National Wages and Conditions ouncil was set up, it did not interfere, except so far as it settled wages and conditions of mployment, with the Conciliation Boards. hese continued to adjust questions and dis-tes other than those coming within the pur-ew of the National Wages and Conditions uncil. It will be seen, therefore, that the sition resulting from the formation of the tional Wages and Conditions Council and secession of the employers from the Build-Trades Parliament is that although there ll exists, in the shape of local Conciliation ards, machinery for settling disputes, other n wages and conditions, there are no oppor-nities for the national interchange of views l mutual discussion of matters of common erest.

This fact cannot but have weakened the ds of union between employers and em-yed, and the sequel is now seen in the sent position, as described in the extract ted above from the conclusions of the Buck-ster Court of Inquiry. Opportunities for fostering good will and the understanding by each side of the other is absent. The parties are in opposite camps and suspicion of motives is rife. Employers and operatives alike become prone to think and act parochially, and a general break-away ensues from national settlements and negotiations.

One of the many subjects appropriate for the consideration of the Building Trades Parliament, as a Joint Industrial Council, is that of an apprenticeship scheme ensuring the supply of skilled bricklayers and other skilled operatives. The shortage of these is now seriously affecting the erection of houses. Another is the regularisation of demand and the decasualisation of labour. This was one of the subjects taken up by the Building Trades Parliament, as a possible solution of the fear of unemployment. Progress with all these subjects was stopped on the withdrawal of the Employers' Federation from the Parliament. The causes leading to withdrawal were referred to by the writer in the previous articles set out in the footnote, and it is to be hoped that employers and operatives alike may at this juncture consider whether they cannot bridge over the difficulties in the way of re-establishing a National Council to consider and discuss matters of mutual interest and concern apart from wages questions, as contributing also to peace and good will in the more controversial side of their relations.

*March 30th, April 27th, and May 11th, 1923, Affiliation, Wages-Adjustments and Whitleyism in the Building Trades.

WORKMEN'S COMPENSATION

A recent case, Evans *v.* Postmaster-General (*The Times*, July 17), again raised the point, When does a workman's contract commence, so that in case of accident he can claim compensation as "arising in the course of" the employment?

The facts of the case are simple. The man was a postman, and while on duty he was permitted to use a bicycle; he was also allowed when one day's duty was finished to take the keys of the letter boxes home with him to save time. On the day of the accident, his first duty would be to go to a pillar box about three miles from his home, and clear it at 4 p.m. His hours of work were forty-eight hours a week, and the time taken to reach his first point of duty was not included. On the day in question, whilst riding from his home to this first pillar box, in uniform and with his bag and the keys, he met with a street accident at 3.40, which caused his death.

The County Court Judge had held that the applicant, the man's widow, could only succeed if she could show that it was an implied term of the contract of employment that it should commence when the man left his own door on the bicycle, and as this could not be shown, he held that the accident did not arise "in the course of" the employment. The Court of Appeal held that there was abundant evidence to support the finding of the County Court judge, and, therefore, the appeal must be dismissed. No cases are cited in the report, but the case appears to come within the principles which were laid down by the House of Lords in St. Helen's Colliery *v.* Hewitson (1924, A.C. 59), which we discussed in our issue for April 25 last.

In that case the men were not paid for the time occupied in travelling to their place of work, but a means of access was provided by train at a reduced fare. The use of this means of access was optional, and there were other means of access, but a man using this means of access and killed whilst in the train was held not to have been killed whilst acting "in the course of" the employment. The report of the case we are considering does not state whether the man was using a bicycle provided for him by the Post Office, or his own bicycle, but in either case the principle laid down by the House of Lords seems to apply that a mere right, apart from obligation, to use a particular means of access does not bring the man within his contract of employment.

In the case under consideration, it was not argued whether the accident arose "out of the employment," for it was admitted that if it arose "in the course of" the employment it would also arise "out of" it.

THE MANUFACTURE OF BRICKS

Bricks were the subject of an address given by Mr. S. B. Stedham recently to the members of the Plymouth Rotary Club. Mr. Stedham said brickmaking as an art was very ancient. Bricks were used in Egypt 12,000 years ago, and some discovered in Abyssinia were over 6,000 years old. Those early bricks were made with mud from the Nile mixed with straw. The Romans introduced bricks into England in the fifth century, and the earliest known example of their work was to be seen in Colchester Abbey. Probably the earliest brick building in this country—of a composite character—was in Suffolk and was built in 1260. Bricks were not found to be a necessity in this country until the thirteenth or fourteenth century, because there was plenty of wood in the forests for the construction of houses, and it was not until after the Great Fire of London in 1666 that they were generally used in place of wood, which had proved so disastrous a material. It was only about 85 years ago that the old style of brick-making by hand was superseded by manufacture by machinery. Dealing with the colour of bricks, Mr. Stedham said that in America and Canada to-day they were being turned out in all sorts of hues—blue, green, brown, yellow, purple, black, chocolate and red—and when they were mixed together in the construction of a house they gave it a very variegated appearance. Within the next 25 years be believed there would be long stretches of roads in England paved with bricks. Several trial lengths of brick paving had already been laid in Nelson (Lancashire), Keighley (Yorkshire), and in North Wales; others were in contemplation. In America it had been proved that there was no road paving material which would stand modern traction like bricks on a good foundation. Bricks were dustless and non-slipping, and the energy required to draw a load over them was one-half of that needed to draw an equal load over granite setts. The only drawback was the initial cost, which was 25 per cent. more than an asphalt road, but its life was much greater and the cost of upkeep very low, so that over a number of years brick paving was much cheaper than other forms of paving. In a city in Ohio, a brick road had been relaid after 25 years' use by simply turning the bricks over.

Mr. Stedham said an erroneous impression was abroad that the present price of bricks was responsible to some extent for the existing high housing costs, but as a matter of fact bricks represented about one-sixth of the total cost of the material of a £500 house, so that a few shillings one way or the other in their price made very little difference. There was no other manufactured article on the market which had to go through so many processes and yet was sold at less than 25s. per ton. Considering the tremendous amount of handling and the cost of coal, clay, oil and other items necessary in the manufacture, the marvel was that bricks should cost as little as they did to-day. In conclusion, Mr. Stedham contended that there was no material used in building which looked more artistic than bricks, and pointed out that they had the added advantage of improving with age.

THE HOUSING BILL IN COMMITTEE

The Housing Bill entered the Committee stage on July 16.

An amendment was moved to clause 1 in relation to the date fixed for completion of houses within the Bill, that is, October 1, 1939. The amendment was defeated, and it seems fairly obvious that if, as the amendment proposed, the date were deleted altogether the scheme of subsidies would continue for ever, but in the course of the discussion many important points were raised in connection with the action of local authorities and the so-called agreement with the building trade, but no fresh information appears to have been obtained on these points. The point of most importance appears to have been that the Minister of Health has conceded that the local authorities should have full power to fix the number of houses they will build in any period and a discretion to suspend building operations for any reason at any time, and that this is inconsistent with any fixed guarantee to the building trade that the Bill shall operate for 15 years.

We have already drawn attention to this point in connection with the powers given by the Bill to cease contributions under clause 4. In the discussion in the Committee it appears to have been asked whether if the local authorities failed to build under the Bill the Government could, and would, itself act as was provided under the Act of 1919. The Attorney-General stated that if the local authorities refused to build the only way to deal with them would be by fresh legislation, whereas Mr. Wheatley declared that the powers to supersede them still existed under the Act of 1919. No declaration of policy, however, was made, and the guarantee seems as precarious as ever. If the local authorities do not act the Government can in about three years withdraw subsidies; thus the guarantee amounts to a period of 3 years, and not 15, as stated in clause 1. Even if the powers still exist for the Government to step in and act for the local authorities, which is a question of law which can hardly be definitely answered until this Bill takes its final form, it is hardly likely that any Government would dare to supersede local self government on such a large scale in matters imposing such heavy charges on the rates over a prolonged period. Thus the guarantee to the building trade remains somewhat nebulous.

The next amendment, moved by Lieut.-Col. Fremantle, received sympathetic attention from the Minister. It proposed that no project for the provision of more than 25 houses should be sanctioned unless the Minister was satisfied it would not be prejudicial to any town-planning scheme. The Minister pointed out that the difficulty was that town-planning schemes need not be formulated until 1929, but he undertook to draw the attention of the local authorities to "the tremendous importance" of the object underlying the amendment and to the need in the rebuilding of a large part of the country of particular care in order to see that the lay-out would be creditable to the country, and said that if he could find any words which would carry out the object in view on the Report stage he would add them.

On clause 2 a very important amendment was moved by Mr. Franklin, as it has some bearing on the retention of private enterprise in connection with the Bill. The object of the amendment was to empower a local authority which did not itself provide houses to purchase houses completed after the passing of the Bill, and it was pointed out in the course of the discussion that the small builder could produce houses cheaper than the local authorities may be able to. The Minister, we are glad to say, consented to consider this matter, and at a later stage to produce a clause dealing with it.

An amendment moved by Mr. Comyns Carr to enable local authorities to call in the aid of building societies and guarantee to them the payment of the whole or part of the instalment due to the person who built or acquired the house also received sympathetic consideration from the Minister, who undertook to consider it on the Report stage.

Some amendments were promised as to the definition of agricultural parishes, and limiting the number of houses to the acre to 8 in agricultural parishes and to 12 in urban districts, unless the Minister consents otherwise. Consideration was also promised to be given to an amendment enabling a private person, living in a district where the local authority refused to apply the Bill, to obtain the subsidy.

The Attorney-General moved an amendment to include houses commenced or contracted for before the passing of the Bill, and an amendment moved by Mr. Snell was accepted relating to houses built under special conditions by a Metropolitan Borough Council enabling the London County Council to supplement any contribution made by the Minister to an extent not exceeding £2 5s. payable annually for a period not exceeding 40 years.

This represented one day's work in Committee, and we refer to this as showing how superior is the Committee of the whole House to other Committees.

At the second day's sitting an amendment was moved to clause 3 subclause (1) (*b*), which relates to subletting with the leave of the local authority, suggesting that this license, like that in ordinary leases, should not "unreasonably be withheld." The Minister promised in the Report stage to see that tenants were not prevented from taking in lodgers. We may point out that this taking in of lodgers is one of really great importance, as it lies at the very root of good housing conditions. The nation is taking the greatest pains to secure that the population shall be suitably housed in sanitary conditions, but often when houses are provided they are at once overcrowded in order that the tenants may pay their rent by taking in lodgers. Where a large State and local subsidy is being given towards the rent of houses it does not seem unreasonable that the local authority shall have a voice in the number of persons who shall occupy subsidised houses, and it is to be hoped that some control may be exercised in this direction and that the overcrowding and exploitation which has become connected with rent-restricted houses may not be repeated in the case of this vast scheme of houses subsidised as to rent.

A very important amendment was promised by the Minister to clause 3 subclause (1) (*c*), which should give facilities for the sale of houses by the local authorities on terms not better financially than if the occupier had purchased his house as he would purchase it now under the Act of 1923. We certainly welcome this concession, as we believe in allowing any man who so desires to own his own house, and we deprecated the terms of the Bill which would nationalise the holding of working-class dwellings. The terms of the new clause will be a matter for later consideration.

On the motion of Mr. Greenwood an amendment was agreed to that a fair-wages clause which complies with the requirements of any resolution of the House of Commons applicable to contracts of Government departments should be inserted in contracts for the building of houses under the Bill. An amendment to prevent inflation of building costs by fixing that the cost shall not exceed 10s. 6d. per ft. super of contained area unless otherwise provided by an order of the Minister, was not carried, but the Minister declared that whilst he was at the Ministry he would not pass schemes if prices went up.

An amendment relating to clause 3 subclause (1) (*e*), providing that the rents charged for the houses built under the Bill should not exceed the rents generally paid for the time being in the area of the local authorities for houses of similar size, type and amenity, was not carried, but the discussion showed that the same inequalities and preferences would result under the Bill as have been experienced in connection with rent restriction. Restricting rents and subsidising rents must inevitably produce such results, and it would almost appear that the well-tried system of economic rents has disappeared for ever with the inevitable further result of disturbing rating principles.

The House made excellent progress in two days in disposing of the greater part of three out of the nine clauses of the Bill, and some useful amendments have been accepted, but this will not suffice to get rid of the many inherent defects in this measure, which still appears to us impracticable, being too vast in its proportions and extending over too long a period, besides involving much too heavy expenditure of State and local funds, and the fear is that it may prove but a huge air balloon floating over the heads of the electors. Although the problem is vast, and less ambitious measures have not sufficed entirely to solve it, even Rome was not built in a day, and we should have preferred to see an attempt made to extend and amend existing legislation.

BUILDING EDUCATION

On Monday there opened in London the sixth of the series of short full-time courses for teachers of building subjects which has been arranged in recent years by the Board of Education. As in previous years a full and interesting programme has been arranged, and, as is fitting this year, when so many important conferences are taking place in London, the programme for this course is marked by a number of special features. The scope of the lectures has been considerably enlarged, so as to make it possible to include a number of topics of peculiar interest, particularly when considered in connection with the developments now taking place in the organisation of builders' work, and in the more thorough application of scientific knowledge to the technical problems of the building industry.

We understand that there has been a record number of applications from building teachers in technical schools to attend this course; over eighty of these have been selected to attend, again a record number. The course will extend from July 21 to August 2. The teachers in attendance will be divided into five groups, each group taking a different subject in each week. During the first week, Mr. T. P. Bennett, F.R.I.B.A., will deal with the subject of building design and planning; the subject of advanced mathematics and geometry for building students will be dealt with by Mr. F. E. Drury; Mr. A. Everett will deal with the introductory physics and chemistry of building science; while Mr. A. E. Holbrow, A.R.I.B.A., will take the subject of surveying for builders. During the second week, Mr. J. H. Barns and Mr. Leonard Lickis will deal with the subjects of builders' quantities and builders' estimates; Dr. R. E. Stradling with the experimental investigation of building materials; Mr. F. E. Drury with reinforced concrete; and Mr. L. Allen Gerrard will introduce the subject of building practice and organisation.

For the first time in the history of these teachers' lectures a course has been arranged for teachers of painting and decorating. This course will extend over the whole fortnight and, by the kindness of the London County Council, will be held at the L.C.C. School of Building, Brixton. The lecturers are Mr. H. Davis Richter, R.O.I., and Mr. A. R. H. Jackson, A.R.C.A.; while the craft instructor will be Mr. Leonard Drinkwater.

During the whole of the period the mornings will be given up to lectures and tutorial work. The afternoons and some of the evenings will be occupied by specialist lectures, by discussions on teaching methods, by visits to important works and research laboratories, and by conferences with various bodies. Conferences have been arranged with the Royal Institute of British Architects, the Institute of Builders the Institute of British Decorators, the National Joint Education Committee of the Painters and Decorators, and the National Federation o

Building Trades Operatives. During the first week, the teachers attending the course will be received at Whitehall by the President of the Board of Education.

For the third time in succession the teachers will be housed and most of the lectures will be given at the Westminster Training College, the whole of the accommodation in these buildings having been generously placed at the disposal of the Board by the authorities of the College. The opportunities which this short period of collegiate life gives to the teachers for the discussion of their problems with each other and for association with the genial and popular Principal of the College (the Rev. Dr. H. B. Workman, D.D.), form a not unimportant part of this attractive and useful course.

BUILDERS' BENEVOLENT INSTITUTION

THE annnual general meeting of the donors and subscribers of the Builders' Benevolent Institution was held on Tuesday at 48, Bedford-square, W.C.1, when the chair was taken by Mr. George M. Burt. President.

The minutes of the last meeting were read and confirmed.

The seventy-seventh annual report was presented, from which it was seen that the generous response to the appeal of the President had enabled the Committee again to grant gifts to pensioners at Christmas and Midsummer. The number of annual subscriptions had been increased and the year's working showed very satisfactory results.—The report was adopted.

Mr. George Perry Nash (Messrs. Hall, Beddall & Co., Ltd.) was elected President for the ensuing year.

Alterations in Rules I and III, whereby the Committee would be enabled to increase the amount of benefit in special cases, were proposed by Mr. G. M. Burt, seconded by Mr. G. J. Aldous, and carried.

The following were re-elected:—Hon. Treasurer, Mr. Frank May; Hon. Auditors, Messrs. Hubert S. Ward, F.C.A., and John T. Bolding. Committee: Messrs. G. J. Aldous, B. Hannen, G. R. Holland, H. T. Holloway, Sir Walter Lawrence, Messrs. J. W. Lorden, F. A. Minter, G. P. Nash, J. C. Nicholson, and Sir Frederick Rice.

Major Holliday proposed a vote of thanks to the retiring President, which was seconded by Mr. Bolding and carried unanimously.

Fort Dunlop.

Two million bricks have been used for the store building approaching completion at Fort Dunlop. It contains 36 tons of lead, 4,200 tons of steel, 4,800 tons of cement, 5,700 tons of sand and 20,000 tons of gravel for concrete. The concrete takes up 13,000 cubic yards in the floors and walls, and there are 16,500 ft. of Bath stone. The windows hold 42,000 ft. of glass, the roof 7,400 yards. On each of the floors there are metal racks on which to stack the tyres for which the building is intended. The building has two five-ton lifts, equal in power and capacity to the passenger lifts of the London Underground, and the total floor area of the complete building runs to nearly fourteen acres.

Test on Bitumen.

On July 23 a test was undertaken at Manchester with a view to proving the efficacy of a process recently discovered by Mr. R. O. Child, chemist of Messrs. D. Anderson & Son, Ltd., for rendering bitumen both stable and fire-resisting.

Incorporated Church Building Society.

At the monthly meeting of the Incorporated Church Building Society grants were made towards building new churches at Furzedown, St. Paul, Surrey, £150; West Silvertown, St. Barnabas, Essex, £200; and Walthamstow, St. John, Essex, £360.

Builder's Estate.

Mr. Elphinstone Forrest, of Laurel Bank, Myrtle Park, Crosshill, Glasgow, builder and contractor (in addition to considerable real estate), 5,432.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Prevention of Eviction Bill.

An agreement with the House of Lords having been arrived at, this Bill has now received the Royal Assent.

Smoke Abatement Bill.

The Public Health (Smoke Abatement) Bill, which is on the lines of that introduced last year, has been read a second time in the House of Lords.

Leasehold Reform.

Mr. Comyns-Carr was granted leave to introduce a Bill to amend the law governing the relations between landlords and tenants. He said the measure was intended to meet grievances arising out of the present system of leaseholds, particularly with regard to leases for lives, building leases, and leases for the occupation of business premises. Everybody knew the blight which settled in such a place as London on whole districts for 20 years before the falling in of building leases, and the absurdity of the rule in building leases by which property erected at the expense of one man automatically reverted to another without payment. The Bill proposed that a permanent tribunal of an expert character—that already in existence under the Acquisition of Land Act, 1919—should deal with all these questions in the light of equity as between the parties. Improvements effected after the passing of the Bill would become the property of the person who carried them out, and in the event of the lease being terminated they would be the subject of compensation by the landlord.

Building Lines in London.

Mr. Gosling, Minister of Transport, in reply to Sir E. Iliffe, said he was aware that in many cases insufficient provision was being made for the future widening of important roads on the outskirts of London and other great towns. In the present state of the law it was impossible to ensure the general prescription of adequate building lines, and he was considering, in conjunction with the Minister of Health, what additional powers were required for this purpose.

Brick or Wooden Houses?

Mr. Greenwood informed Lieut.-Commander Fletcher that the cost of houses of any form of construction varied considerably, but under normal conditions, with the same standard of fittings and completion, very little saving was found to be effected by the adoption of wooden forms of construction. In a recent case a local authority considering the use of wooden buildings found that the cost of the wooden houses came out at £460 as compared with £385 for houses similar in accommodation being built in brick. The time taken to erect either brick or timber houses varied considerably; in building the timber house three weeks to a month might on the average be saved in the erection of the shell, but ordinarily there would be no saving in time on the remainder of the work, which would be much the same. The life of a brick house was commonly held to warrant a loan period of 50 years. As to the timber houses, although certain timber houses had had a long life, the general experience was that the effective life could not on average be put higher than 40 years, and it was frequently much shorter.

Entertainment Tax.

During the report stage of the Finance Bill, Mr. Snowden, the Chancellor of the Exchequer, moved a new clause to exempt from entertainment tax exhibitions of works of graphic art, sculpture and arts craftsmanship.

L.C.C. Bricks.

Mr. P. Harris asked the Minister of Health whether he was aware that there were quantities of bricks stacked at the London County Council Becontree housing estate ready to be used for constructing houses; that before the dispute in the building trade it was impossible to find the necessary skilled labour for constructing houses with them; and whether he could suggest any method by which the difficulty could be overcome.

Mr. Greenwood said bricks were stacked on this site, but on other sites there was a shortage of material. One of the main objects of the Government housing scheme was to facilitate the augmentation of skilled labour and material in the building industry and to balance the supplies of both, and he had every hope that the result would be attained.

Training an Apprentice.

Mr. D. G. Somerville asked the Minister whether, in view of the officially admitted fact that it took from three to four years to train an apprentice to become a bricklayer's tradesman, he would state how any extension of the apprenticeship system was expected materially to assist in the construction of a large number of houses which were immediately and urgently needed.

Mr. Greenwood said the problem was to increase continuously over a period of years the present insufficient provision of houses for the working classes, and the proposals for an extended apprenticeship system made by the National House Building Committee appeared the best way of attaining the desired result.

New Method of Bricklaying.

Major Kindersley asked the Minister whether he was yet in a position to express an opinion on the new method of laying bricks in cottage construction, which was being tried at Tonbridge.

Mr. Greenwood said this method was in an experimental stage, and steps were being taken to improve it. It had only been tried on a small scale, and it was not yet possible to express any opinion on it.

The Building Dispute.

Sir K. Wood asked the Minister whether the present building dispute was affecting the housing schemes of the local authorities or house-building by private builders.

Mr. Greenwood said that generally the answer was in the affirmative, though he had no specific information as to the position in detail. The Minister proposed to take no steps favouring either one side or the other in the dispute.

The New Building Committee.

Mr. Masterman asked the Minister if he would state who were to form the Committee which were to guarantee the building of the municipal houses under his housing schemes.

Mr. Greenwood said representatives of all branches of the industry would be included. The principal duties of the sub-committees would be to see that sufficient labour and materials were available for the number of houses to be erected in the locality under the housing scheme. They would have no power to squeeze out any type of builder.

Skilled Craftsmen.

Mr. Greenwood said it would be a condition of every housing contract that apprentices up to a total ratio of one apprentice to three craftsmen should be employed in certain trades, and in considering applications special consideration would be given to men with previous experience in the trade.

Concrete Houses.

Mr. Greenwood, in reply to Major Moulton, said the Salisbury City Council, under a special direct labour scheme for training ex-service men, built 20 houses of concrete. An estimate of the labour costs showed a saving of £75 a house over the labour costs if the houses had been built at contract prices. The total difference in cost as compared with brick houses built by contract during the same period was substantial. The houses were built of concrete blocks or slabs made on the site, and a large proportion of labour by trainees unskilled in the building trades was employed.

Building Materials Bill.

Mr. Clynes stated that the Bill dealing with profiteering in building materials would not be taken until the autumn session.

THE BUILDING TRADES DISPUTE

REPORT OF THE COURT OF INQUIRY

THE Court of Inquiry, consisting of Lord Buckmaster (Chairman), Mr. F. A. Hargreaves, and Mr. Arthur Pugh, which heard evidence from employers and employed on the present dispute in the building industry, has now issued a long report. (Cmd. 2192. London: H.M. Stationery Office, price 6d. net), from which we take the following:—

Representatives of the employers and operatives attended, the respective cases being presented by Mr. W. H. Nicholls (chairman) on behalf of the National Allied Building Trades Employers, and by Mr. T. Barron (president) and Mr. R. Coppock (secretary) on behalf of the National Federation of Building Trades Operatives. In addition, on the employers' side, Mr. B. B. Moss presented the case of Liverpool, Mr. H. T. Holloway that of London, and Mr. T. Ferguson that of Scotland, while Mr. A. G. Cameron also spoke on behalf of the operatives.

The National Agreement.

In accordance with a "National Working Rule Agreement," which came into force as and from April 11, 1921, the working hours were fixed at 44 hours a week, or such other hours as should be nationally agreed. By the same agreement rates of wages were determined for four standard grades, A, B, C and D, and at a later date, rates intermediate between the four standard grade rates were determined and indicated by appropriate lettering. All the federated towns and districts throughout the country were graded in accordance with this scheme. The agreement further provided that the rates of wages then determined were assumed to correspond to a cost of living of 170 per cent. over the pre-war cost of living, provisions being introduced for variation in the rates of wages by the Council at any statutory meeting. Six reductions in wages amounting in the aggregate to 8d. per hour, were effected up to and including June 1, 1922, only two of which were due to the variations of the cost of living scale under the agreement, so that when at the statutory meeting in January, 1923, the employers put forward a proposal for a further reduction of wages of 20 per cent., and an extension of the working week, the hourly rate in operation was below what a strict adherence to the scale fluctuations would have provided. After fruitless negotiations on this proposal the employers in April, 1923, issued a notice that on and from April 14, 1923, there would be a reduction in wages of from 1d. to 2d. per hour, according to the grade of the town, and that the hours worked would be 47 for the summer months, 44 for two of the winter months, and 41½ for the remainder. The operatives declined to accept these conditions.

The Fraser Award.

The dispute was referred by consent to the arbitration of Sir Hugh Fraser. The award as to wages effected a reduction from ½d. to 1d. per hour, according to the grade of the town. The award as to hours contained the following clause:—"That the present rule whereby 41½ hours per week are worked during December and January be rescinded and that the working time of 44 hours per week shall proceed throughout the year except during the period of summer time as determined by statute, when the working time shall be extended to 46½ hours per week."

This was qualified by an independent paragraph to the following effect:—"Nothing in this award shall prevent the employers and operatives in any town or area from maintaining by mutual consent the 44 hours' week throughout the year."

These awards were incorporated in the constitution of the National Wages and Conditions Council by agreement between employers and operatives. The awards were received with extreme disfavour by many of the operatives, who gave notice of amendments, the effect of which was equivalent to a claim for an increase in wages of 2d. per hour and to prevent the operation of the award as to hours in respect of the essential condition that the standard working week for summer time should be 46½ hours. There was in some cases a definite refusal to work 46½ hours. In Scotland there was a general refusal to work the extended hours.

Regarding the hours question, the report states: The words of the award are in our opinion plain, and require 46½ hours as the normal hours for summer time, with permission for local exceptions by mutual agreement, but it is possible that this proviso was misunderstood by some of the less-informed operatives and interpreted by them as meaning that the whole question of hours to be worked in summer time was to be a matter of agreement. The idea that 46½ hours was permissive instead of compulsory seems to have been widespread, and could not have been due to the wording of the award. The employers, on their side, being persuaded that 46½ hours was an essential term for summer time in the interests of the industry as a whole, recommended to their local federations to "carry out the extended hours, and refrain from any variation without first consulting the negotiating Committee of the National Allied Building Trades Employers." The result of this was unfortunate. In many cases the men asked for a meeting to discuss the question of hours, but their request was constantly refused by the employers, who took the view that, as they had definitely decided not to consent to a 44-hour week, no useful purpose would be served by discussing the matter, but the necessary consequence of this action was that any misunderstanding which did exist was not cleared away. In some districts such meetings did take place, resulting, in a number of cases, in agreement being reached. Where, however, the employers endeavoured to apply the 46½ hours week, and the operatives refused to work, there was a clear breach on the part of the operatives of the provisions of the award. It is impossible to say that these circumstances have definitely caused the cessation of work, but they have undoubtedly produced distrust between the operatives and the employers, each of whom regards the other as having unfairly dealt with the award.

Output, Overtime, and Excess Wages.

The question of output was raised by the employers, but was not examined by us, as it did not, in our opinion, come within the terms of the inquiry, since it was not one of the causes of the dispute. The employers also complained that the men refused to consider the question of overtime, although it was expressly provided that in urgent cases this should be worked. On the other hand, the representatives of the operatives stated that certain federated employers had paid rates of wages in excess of those nationally agreed, and had thereby undermined the authority of the operatives' national organisation. It is easy to see that the friction and irritation arising from these causes produced an atmosphere in which explosion might readily occur, and the crisis was indeed quickly reached.

The main cause was, in the opinion of the Committee, due to the following facts:—

Position at Liverpool.

In 1919 a dispute affecting certain building trade operatives occurred in Liverpool. At that time the Liverpool Employers' Association was affiliated to the North-Western Federation of the National Federation, and thereby became part of the allied bodies. The operatives in Liverpool refused to accept the terms agreed upon by a Joint Committee for the North-Western Area, and the joiners and others employed in the Liverpool district ceased work. The master plumbers in Liverpool, with the approval of the Institute of Plumbers, subsequently effected an agreement which granted an increase of wages of 2d. per hour. The strike of the other classes of workmen lasted four months, and in the end the North-Western Federation authorised the Liverpool Employers' Association to arrange a local settlement on the best terms possible, and this was effected by an agreement under which the wages paid in Liverpool were to be 2s. per hour as compared with 1s. 8d. per hour in Grade A towns in other parts of the country. The Liverpool employers thought insufficient support had been given to them by the North-Western Federation, and being unable to obtain any guarantee of assistance in the event of further disputes with their operatives they gave six months' notice to withdraw from the Federation, to expire on May 31, 1920, and entered into an agreement with other employing bodies in Liverpool for the joint consideration of wages in the district. Before the notice had expired the Liverpool employers were expelled from the North-Western Federation, and from that time until 1923 they remained as an independent body and conducted their own negotiations with their operatives.

On September 12, 1923, the Liverpool Association were again admitted members of the North-Western Federation, and automatically became members of the National Federation of Building Trades Employers, and since that date they have acted under the instructions of the Federation.

On October 30, 1923, the Liverpool Association, in accordance with the local working rules, gave six months' notice to the operatives of their intention to bring the wages and conditions into line with those agreed upon by the National Wages and Conditions Council. At that time the rates of wages in the Liverpool district were higher than the rates paid in other parts of the country.

On November 9, 1923, the Liverpool Employers' Association received a counter-notice from the Liverpool operatives, made in accordance with the existing local rules, claiming improved rates of wages and conditions having no relation to the awards of the National Wages and Conditions Council. This claim included a demand for an increase of 6d. per hour, a working week of 44 hours, and full payment for lost time due to inclement weather. In December, 1923, the Liverpool employers made an application to their parent body that the Liverpool district should be placed in Grade A for the purpose of determining the rates of wages payable to their operatives. After a meeting between the employers and operatives had produced no result, the National Wages and Conditions Council decided on April 25, 1924, that Liverpool and District be classified Grade A as and from May 1, 1924, it being understood that Liverpool and district shall not participate in any advance which may be settled nationally until the hourly rates of the Liverpool and district operatives are brought into harmony with the above classification; provided that if there is any differential in the hourly rates of the Liverpool and district operatives after the national settlement of wages, such differential shall be dealt with by a reduction of one halfpenny per hour on July 1, 1924, and the remainder of the difference, if any, within six months from May 1924.

On April 28, 1924, the National Federation of Building Trades' Employers and the National Federation of Building Trades Operatives endorsed and accepted full responsibility for this decision of the National Wages and Conditions Council, and representatives of the Liverpool Employers' Association pledg

r members to carry out the decision. On 26, 1924, the operatives stated that they ld not accept the decision of the Council, that unless the employers entered into a rate agreement their members would cease k. They refused to meet a deputation of national bodies of employers and opera-, and on May 31, 1924, the bricklayers masons ceased work. The Liverpool atives were members of the National eration of Building Trades Operatives, and result of their action, taken without the oval of their headquarters and in breach the national agreement, the district branch suspended. The Liverpool employers e therefore left to deal with a body of men r whom no central authority could be exer-d.

National Negotiations.

hile the dispute at Liverpool was matur- questions were arising generally in the ling trade with regard to hours of work rates of wages. The operatives demanded niform increase of 2d. per hour and a ing week of 44 hours, to which was added ain to some guarantee for loss of time to inclement weather. On May 5, while negotiations were taking place on claim, the National Allied Building les' Employers wrote to the National eration of Building Trades' Operatives g that they should make immediate ts to bring the Liverpool operatives into and stating that it would be impossible the employers to conclude any general ement of the matters then outstanding be-n the two sides of the National Wages Conditions Council unless the Liverpool atives formally accepted the national ing rule agreement and the constitution awards of the Council.

May 14, the employers proposed (i) an ase of wages of ½d. an hour in places ting those which had already been the ct of increase by upgrading since Septem-26, 1923, and made provisions as to ising wages; (ii) to set up a joint com-e to inquire into the incidence of time owing to stress of weather or other causes de the control of the workmen and make mmendations on the question of compen-n: and (iii) that the position in London ld be the subject of local inquiry and tiation. The letter expressly stated that whole of the recommendations were en-y conditional upon "the termination of erate breaches by the members of the eration of Building Trade Operatives of National Wages and Conditions Council titution, including the summer working s, overtime regulations, and the refusal of ish operatives to put into effect the con-tional awards." It also stated that the oyers felt bound to make those conditions se of the impossibility of conducting iations whilst organised efforts were made to violate the agreed constitution. reaffirmed the provision with regard to pool which was given in the letter of 5, 1924.

on a ballot taken by the trade unions sented on the Wages and Conditions cil, the terms offered by the employers eir letter of May 14, 1924, were accepted, he condition as to Liverpool was not set n the ballot notice. On June 4, 1924, the nal Allied Building Trades' Employers ed that unless the recommendations ch were to be taken as a whole and were ely conditional upon the termination of erate breaches by the operatives of the nal Wages and Conditions Council Con-ion, including the summer working overtime regulations, the refusal of ish operatives to put into effect the con-tional awards, and that the provision l by the Negotiating Committee, in their of May 5, with reference to Liverpool lhered to, including a formal acceptance e National Working Rule Agreement, itution, and award of the National Wages and Conditions Council by the Liverpool operatives) were fulfilled within a period of ten days from that date, the offer would be withdrawn and a national cessation of work shall take place as and from June 23.

The position in Liverpool was forming a central feature in the dispute, and following upon the employers' resolution of June 4, an effort was made to get agreement in that area. The terms were accepted by the Liverpool employers, and representatives of certain of the operatives undertook to recommend acceptance to their members, and stated that they would report the result by June 18. The bricklayers, masons, and plasterers definitely refused to make such a recommendation.

On June 16 a meeting took place in London between representatives of the employers and the operatives, and an agreement was arrived at with regard to all the matters in dispute on the assumption that the Liverpool operatives would accept the terms offered to them. It is a fact deeply to be regretted, states the Report, that what appears to us to have been a confusion of ideas between the employers and the operatives upon this point should have led, as we think it has led, to the final catastrophe. Agreement being, as it was believed reached, the parties withdrew, leaving the respective secretaries to reduce the terms to writing and an agreed notice was sent to the Press stating that a settlement had been reached.

After giving the statements issued to the press from June 16 onwards, the report continues: "We have no reason to believe that there was any reluctance on the part of the employers to accept and ratify the agreed terms, nor was it at all probable that they would have repudiated terms negotiated and settled on their behalf. In view, however, of the reported refusal of the Liverpool operatives to accept the special terms offered to them on June 10, 1924, the employers decided upon a definite declaration of a lock-out throughout the whole building industry, a decision due to the fact that by this means only was it thought possible to compel Liverpool to come into line with other parts of the country."

No attempt at any further agreement was made nor, except upon the telephone, was the decision as to the lock-out made known to the operatives before it was publicly announced. They therefore regarded this decision as a complete breach of faith on the part of the employers and a repudiation of their national agreements. On June 24 and 25 the executive councils of the trade unions affiliated to the National Federation of Building Trades Operatives reached certain decisions which were communicated to their members in a circular letter dated June 27, 1924. The letter authorised the local branches to conduct regional settlements on the following basis:—(i) The minimum payment of a halfpenny per hour increase to both craftsmen and labourers. Such increase not to be subject to the cost of living sliding scale, but to be regarded as an improved status; (ii) a working week of 44 hours; (iii) provisions for payment of time lost through circumstances over which the operatives have no control.

The joiners, wood-working machinists and plasterers employed in the Liverpool district ceased work on June 21 and they were joined by the plumbers on June 28.

At the request of the Minister of Labour the National Allied Building Trades Employers agreed on July 2 to postpone their lock-out notices from July 5 to 12, in consideration of the appointment of a Court of Inquiry under Part II of the Industrial Courts Act, 1919. On July 3 the operatives gave notice of a strike to commence on July 5.

Conclusions.

The conclusions of the Court are as follows:

Having regard to the importance that the different interpretations of the agreement of June 16, 1924, and of the events leading up to that agreement bear upon the final cessation of work, it is necessary to state more in detail what were in our opinion the respective views of the parties in the matter. The employers appear to have regarded the whole situation as governed by the condition expressed in their letter of May 5, again repeated, by reference, in their letter of May 14. In their view there was no agreement unless and until the Liverpool situation was settled, and the terms of June 16 were those to which they were ready to consent when that condition was fulfilled.

The operatives, on the other hand, appear to have regarded the Liverpool difficulty as a local question that did not obstruct a national settlement but called for special adjustment with the co-operation of both parties. Their views were not inadequately expressed by the provision of Clause 7 of the agreement as drafted by the employers' secretary, who was present and took notes of the discussion, for it is to be observed that, although the latter portion of this clause stated that it was assumed for the purposes of the agreement that the Liverpool operatives would accept, yet in the event of rejection it provided only for the energetic co-operation of both parties for a complete settlement of the Liverpool issue. The amendment proposed by Mr. Nicholls would have provided that acceptance of the terms offered to Liverpool was "the basis of the agreement," and by altering the words "Should unfortunately any section of the operatives fail to fall into line" to "Should unfortunately the bricklayers or plasterers fail to fall into line," his intention was to make clear that, if the terms were accepted by all sections of the Liverpool operatives excepting the bricklayers and plasterers, the national bodies of employers and operatives were to co-operate energetically to secure a settlement as regards these two classes.

The Court accepts Mr. Nicholls' assurance as to his view of the matter, but it is easy to see that it is not the view made clear in the document, and we can readily understand the failure on the part of the operatives to realise Mr. Nicholls' position, particularly having regard to the agreed notice to the Press which stated that agreement had been reached and made no reference to any condition. It is owing to this misunderstanding that the operatives have asserted that the Liverpool difficulty is not the main cause of the dispute and that it is the repudiation by the employers of the terms agreed on June 16 which has led to the cessation of work.

It has become increasingly difficult to re-establish the position at Liverpool. Mr. Wilson, who was formerly secretary of the Mersey and District Branch of the National Federation of Building Trades Operatives, expressed himself as completely without authority to act on behalf of the Liverpool operatives, but stated that they would not consider any settlement except on the basis of the local rules which were operative up to May 1, 1924.

We find, therefore, that the immediate causes of the dispute are these:—

(*a*) A claim for increased wages on the part of the operatives.

(*b*) The refusal of large bodies of the operatives to carry out the award of Sir Hugh Fraser with regard to working hours in the summer.

(*c*) The belief by the operatives that the employers had attempted to obstruct the free working of local arrangements by which the extra hours in summer time might be avoided, and

(*d*) The Liverpool dispute.

Each of these circumstances was a contributory factor and entered into the final dispute, but it will be seen that all were included in the agreement of June 16, and had it not been for the Liverpool position would have been adjusted. In our view, therefore, the main cause of the cessation of work in the building industry is the refusal of the Liverpool operatives to accept the special terms of settlement offered to them on June 10 and to submit to the decisions of the National Wages and Conditions Council. The resulting issue has been

productive of much misunderstanding between the parties. Recognition by each side of the fact that their position has not been understood by the other, the settlement of the Liverpool difficulty and the resumption of negotiations appear to be the only means by which the dispute can be brought to a speedy end and good will restored in an industry of national importance and owing great responsibilities to all classes of the public.

VIEWS ON THE REPORT.

In an interview, Mr. R. Coppock, secretary of the National Federation of Building Trades Operatives, said there was nothing in the report that affected the course of the dispute in the least. No new facts were brought out, and the conclusions were merely a series of opinions. "There appears to have been a careful analysis of the evidence given before the Court of Inquiry," Mr. Coppock added, "but there is nothing in the report to indicate that it will have any effect upon the progress of the dispute whatever."

Mr. T. Barron, president of the Federation, stated: "The report completely justifies the attitude the operatives have taken all through. There is nothing in the opinions expressed to alter the course of the dispute."

Mr. G. Hicks, secretary of the Amalgamated Society of Building Trade Workers, said it was regrettable that the Court of Inquiry had not seen its way clear to express an opinion on the question of a guarantee for time lost by the workers through the inclemency of the weather and other causes for which they could not be held responsible.

The employers claim that the Court has found in their favour in respect of breaches of the arbitrator's award fixing 46½ hours as the length of the summer working week.

Mr. T. Barron and Mr. R. Coppock (of the Operatives' Federation) and representatives of the employers had interviews with officials of the Ministry of Labour on Tuesday.

STATEMENT BY EMPLOYERS.

The employers later issued a statement, which included the following:—

"It becomes increasingly plain that Liverpool is the crux of the general situation. Everything else is amenable to negotiations, if that can be settled. The Liverpool operatives hold in their hands the peace of the whole industry. . . . The public should know the three outstanding features of the Liverpool situation to-day. They are—first, the Liverpool men want a local settlement, thus ignoring national control, whether it be from their own national organisation or from the National Wages and Conditions Council, which is a joint body. Second, their present demand is for an advance of 6d. an hour upon a rate which is already from 1d. to 1½d. above the London rate. Third, Liverpool also claims extra money allowances of various kinds. It is, therefore, for Liverpool to say whether there shall be peace or war."

The Minister of Labour has communicated with the leaders of each side to ascertain whether they are willing to meet together early next week to see if there is any basis on which negotiations can be resumed. Up to the time of going to press the respective parties had not replied.

Yesterday the Operatives' Disputes Committee and the Employers' Disputes Committee held meetings, and a meeting of the executives of the various bodies included in the Employers' Federation was also held yesterday.

Prices of Building Materials.

Sir Halford Mackinder, Chairman of the Inter-Departmental Committee appointed to survey the prices of building materials, in a report for the month of June to the Minister of Health and the President of the Board of Trade, issued as a White Paper, states that there has been a further fall in the price of lead, but otherwise there have been no changes of general application to which attention need be drawn.

RATES OF WAGES IN THE BUILDING TRAD

The following are the rates of wages in the building trade in England and Wales. E endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
E. Glam. (Mon. Vall)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 151.

CONTRACTS, COMPETITIONS, &c.

some contracts still open, but not included in this List, see previous issues. Those with an asterisk ivertised in this number. Certain conditions beyond those given in the following information posed in some cases, such as that advertisers do not bind themselves to accept the lowest or any ; that a fair wages clause shall be observed ; that no allowance will be made for tenders : and eposits are returned on receipt of a bona-fide tender unless stated to the contrary.

date given at the commencement of each paragraph is the latest date when the tender, or the names e willing to submit tenders, may be sent in ; the name and address at the end is the person from whom ce where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

ULY 26.—**Dover.**—HOUSES.—Erection of houses following sites :—(1) Buckland Estate, 10 houses, 3 : (2) Dodd's-lane, four houses, Type B, and 11 Type A, for the Corporation of the Borough of Mr. A. T. Miller, Architect, 16, Castle-street, Deposit £1 1s. in respect of each site.

26.—**Hinckley.**—SHOP, &C.—For demolition of y in Castle-street and erection of butcher's shop, es, &c., for the U.D.C. Mr. J. S. Featherston, or, Council Offices, Hinckley.

26.—**Llanddarog.**—VESTRY ROOM.—Erection ry room at Capel Newydd, Llanddarog. Mr. G. architect, Harddfan, Upple Tumble, Llanelly.

26.—**Manchester.**—VARIOUS WORKS.—For rein- concrete flooring, constructional steelwork, and d wrought ironwork, electric lighting, steel case- steel lantern lights, wall tiling, and sanitary required for the new Operating Theatre Block, the Crumpsall Institution, for the Board of ns. Mr. A. J. Murgatroyd, architect, 23, treet, Manchester.

26.—**Mountain Ash.**—HOUSES.—For the erec- 26 houses at Penrhiwceiber, for the U.D.C. H. Williams, Architect, Town Hall, Mountain

26.—**Peterborough.**—PAINTING.—For painting tempering the interior of the County School for Lincoln-road, for the C.C. Mr. W. J. Deacon, County Education Offices, Cross-street, Peter- h.

26.—**Thornley.**—HALL.—For the Hall and e, Thornley, for the Thornley Welfare Scheme. Frank Caws, Steel & Caws, architects, 22, t-street, Sunderland. Deposit £1.

27.—**Adwick-le-Street.**—ADDITIONS.—For erec- bar and seating in concert room, for the Adwick- t Working Men's Club. Secretary at the Club.

27.—**Bury.**—GARAGE.—For erection of motor and shed at Florence Nightingale Hospital, for ry and District Joint Hospital Board. Mr. F. lerk, Bury.

28.—**Ashburton.**—REPAIRS.—For repairs to ton Grammar School. Mr. R. E. Tucker, Clerk ton.

28.—**Aspatria.**—ALTERATIONS.—For additions erations to Harriston Reading Rooms, for the Welfare Committee. Mr. H. Oldfield, architect, ngton.

28.—**Bath.**—BUILDING WORK.—For the build- rk in connection with the extension of the Elec- Works, Dorchester-street, for the T.C. Mr. W. A. ms, P.A.S.I., 20, Old Bond-street, Bath. Deposit

28.—**Bournemouth.**—CONCRETE PIER HEAD.— struction in reinforced concrete of Boscombe Pier for the Council of the County Borough of Bourne- Borough Engineer, Mr. F. P. Dolamore, Town Bournemouth. Deposit £1 1s.

28.—**Burnopfield.**—SHOP, &C.—Erection of nd warehouse at Highfield, Rowlands Gill, for rnopfield Co-operative Society. Mr. J. P. ham, architect, Blackhill.

28.—**Chorley.**—HOUSES.—For the erection of es on the Highfield Estate, for the T.C. Borough r, Chorley. Deposit £2 2s.

28.—**Croydon, Surrey.**—BUILDING CAR —Erection and completion of a car depot and situate on the south and west side of the car sheds in Brighton-road, Purley, for the Borough Council of Croydon. The Borough r, Town Hall, Croydon. Deposit £5 5s.

28.—**Dalserf.**—BRIDGE.—For the widening provement of Dalserf Bridge and approaches Lanark and Hamilton Highway, in the parish erf, for the Lanark C.C. Mr. W. A. Chapman, urveyor, District Offices, Hamilton.

28.—**Ebbw Vale.**—GARAGE.—For the erection mall garage at the Council Yard. Mr. P. I. Surveyor, District Council Offices, Ebbw Vale, Deposit £1.

28.—**Egremont.**—HOUSES.—For the erection houses at Hagget End, Egremont, for Mr. J. Mr. H. Oldfield, architect, Workington.

28.—**Felling.**—PAINTING.—For painting and g of Felling and Windy Nook Council Schools. W. Hall, Architect, Council Buildings, Felling.

28. — **Glamorgan.** — VARIOUS WORKS.— ntain Ash Police Station and Court, alterations litions ; (2) Tonyrefail Police Station, altera- d additions ; (3) Gowerton Police Station, con- n of new porch, &c. ; (4) Barry Dock Police and Offices, internal painting and repairs. Mr. sel Franklen, Clerk, Glamorgan County Hall,

28.—**Great Yarmouth.**—PAINTING.—For the decoration of the Assembly Room of the Great th Town Hall. Mr. S. P. Thompson, Borough r, Town Hall, Great Yarmouth.

28.—**Harrogate.**—EXTENSIONS.—For exten- the Convent, Harrogate. Mr. W. H. Herbert architect, 50, Cookridge-street, Leeds.

JULY 28.—**Huddersfield.**—PAINTING.—For painting and decorating at the Public Library and Art Gallery. Mr. F. C. Cole, Librarian, Public Library, Church-street, Huddersfield.

JULY 28.—**Lathom.**—COTTAGES.—For the erection of six pairs of cottages, for the U.D.C. Council Offices, Mill-lane, Lathom.

JULY 28.—**Londonderry.**—ADDITIONS.—For additions to Waterside Presbyterian Church. Messrs. R. B. Roe & Sons, Kingscourt, Wellington-place, Belfast. Deposit £2 2s.

JULY 28.—**Merthyr.**—PAINTING.—For painting and papering the nurses' sitting room at Merthyr General Hospital. Mr. C. M. Davies, M.S.A., Merthyr.

JULY 28.—**Newton-in-Makerfield.**—SUB-STATIONS.— For sub-station buildings, for the U.D.C. Mr. E. M. Lacey, 12, Victoria-street, Westminster, S.W.

JULY 28.—**Rochester.**—PAINTING.—For painting school buildings, for the T.C. Mr. F. T. Goring, architect, Rochester.

JULY 28.—**Sittingbourne.**—MAPLE FLOORING.— Supplying and laying a maple floor (about 60 ft. by 30 ft.), at the Town Hall, Sittingbourne, for the Urban District Council. Council's Surveyor, Mr. M. W. Lashmar, Town Hall, Sittingbourne.

JULY 28. — **Staffordshire.**—EXTENSIONS.—Extensions to the Sanatorium buildings at Burntwood, in the Rural District of Blore Heath, Staffordshire, to the Staff and Administrative buildings, which are of concrete construction, for the Cheshire Joint Sanatorium Committee, Burntwood Sanatorium, Staffordshire. Mr. H. Beswick, F.R.I.B.A., Newgate-street, Chester. Deposit £2 2s.

JULY 29.—**Aberdeen.**—ALTERATIONS.—For alterations at the Royal Mental Hospital. Messrs. Kelly & Nicol, architects, 367, Union-street, Aberdeen.

★JULY 29.—**Birmingham.**—HOUSES.—Erection of 65 parlour type houses on Shortheath-road and Slade-road, Erdington, under Contract 146, for the Public Works and Town Planning Committee of the City of Birmingham. City Engineer and Surveyor and Executive Officer for Housing Schemes, The Council House, Birmingham.

JULY 29.—**Devizes.**—COTTAGES.—For the erection of eight cottages, for the R.D.C. Mr. T. V. Trumper, Surveyor, Bath-road, Devizes.

JULY 29.—**London, E.**—ALTERATIONS.—Alterations to the East Ham Telephone Exchange for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

JULY 29.—**Normanton.**—BATHS.—For construction of public baths, for the U.D.C. Mr. W. F. Copp, Architect, Council Offices, Normanton.

JULY 29.—**Ormskirk.**—FLOORING.—For re-flooring the engine house of the Poor Law Institution. Master, Poor Law Institution, Ormskirk.

JULY 29.—**Royton.**—HOUSES.—For the completion of 24 houses, in pairs, at Ooze Wood, for the U.D.C. Surveyor, Town Hall, Royton. Deposit £2 2s.

JULY 30.—**Dewsbury.**—FLOORS.—For relaying with maple boards the floors at the Wheelwright Grammar School, for the T.C. Mr. H. Deardon, Borough Surveyor, Town Hall, Dewsbury.

JULY 30.—**Doncaster.**—SHED.—For the provision of cycle shed at Doncaster Grammar School. Education Department, County Hall, Wakefield.

JULY 30.—**Downderry.**—HOUSE.—For the erection of a house at Downderry, St. Germans, Cornwall. Messrs. Parkes, Lees & Roseveare, Launceston.

JULY 30.—**Horsted Keynes.**—PUMPING STATION.— Erection of a pumping station, comprising engine house, filter house, office, workshop and stores, for the Mid-Sussex Joint Water Board. Mr. Francis Martin, Engineer, Waterworks Offices, Haywards Heath. Deposit £3 3s.

JULY 30.—**Kingswood.**—HOUSES.—For the erection of 11 houses on the Hanham Building Estate, for the U.D.C. Mr. H. Glynn Warne, Surveyor, Council Offices, Kingswood, Bristol.

JULY 30.—**Leeds.**—DEMOLITION.—For pulling down certain old buildings in the Institution grounds, Beckett-street, for the Board of Guardians. Mr. J. H. Ford, Clerk, Poor Law Offices, South-parade, Leeds.

★JULY 30.—**London, S.E.18.**—TERRAZZO PAVING.— Terrazzo paving and works in connection at the Infirmary, Plumstead, High-street, S.E.18, for the Guardians of the Woolwich Union. Messrs. Whincop & Channer, Architects, 47, Thomas-street, Woolwich.

JULY 30.—**New Shildon.**—CLUB.—For new premises for the Shildon Club and Institute, Ltd., Railway-terrace, New Shildon. Messrs. W. Winder Lee & Son, architects, Houndgate, Darlington. Deposit £1 1s.

JULY 30.—**Woolwich, S.E.18.**—PAINTING AND DECORATIVE WORK.—External and internal painting and decorative work at the Infirmary, Plumstead High-street, S.E.18, for the Guardians of the Woolwich Union. Can be inspected any day at the Steward's Office upon the premises. Copies are not supplied.

JULY 31.—**Clydach Vale.**—HALL.—For the erection of an assembly hall, &c., at Clydach Vale, for the Library and Institute Committee. Messrs. R. S. Griffiths & Partners, architects, Tonypandy.

JULY 31.—**Dundalk.**—BUSINESS PREMISES.—For the building of new business premises, 99, Clanbrassil-street, Dundalk, for Messrs. P. M'Gorisk & Co., Ltd. Messrs. Morris & Kavanagh, quantity surveyors, Harcourt-street, Dublin. Deposit £3 3s.

JULY 31.—**Glasgow.**—HOUSES.—Erection of 380 houses at Hamiltonhill, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow.

JULY 31.—**Hemsworth.**—HOUSES.—For the erection of 18 houses at Highfields, for the U.D.C. Mr. A. Wright, Council Offices, Hemsworth, near Pontefract.

JULY 31.—**Rollesby.**—PAINTING.—For repairs and external painting to Shreeve's Farm House and farm premises at Rollesby, for the Norfolk Small Holdings Committee. Mr. Victor Playle, County Land Agent, Shirehouse, Norwich. Deposit £1 1s.

JULY 31.—**Tunstead.**—REPAIRS, &C.—For repairs and external painting to cottages and farm premises on the Hall Farm Estate, Tunstead, for the Norfolk Small Holdings Committee. Mr. Victor Playle, County Land Agent, Shirehouse, Norwich. Deposit £1 1s.

JULY 31.—**Wallingford.**—FIRE STATION.—For the erection of a new fire station in Station-road, Wallingford. Borough Surveyor, 12, St. Martin's-street, Wallingford.

AUGUST 1.—**Bedwellty.**—WALLING, &C.—For dry stone walling and concrete post and wire fencing round the housing sites at Pengam, Blackwood, and Aberbargoed, for the U.D.C. Mr. Dan H. Price, Surveyor, Aberbargoed.

AUGUST 1.—**Doncaster.**—ALTERATIONS.—For alterations and additions to offices at Nether Hall, for the Board of Guardians, Mr. W. R. Crabtree. surveyor, Nether Hall, Doncaster.

AUGUST 1.—**Girvan.**—HALL.—Erection of new hall in Wesley-road, for the Wesleyan Church. Mr. Thomas M. Jaffrey, surveyor, 109, Dalrymple-street, Girvan.

AUGUST 1.—**Glasgow.**—PAINTING.—For the painter work at Maryhill Public Halls, for the T.C. Office of Public Works, 64, Cochrane-street, Glasgow.

AUGUST 1.—**Northwich.**—ENGINE HOUSE, &c.—For the construction of an engine and pump house, engine foundations, and adjunct works at Sandyford, for the U.D.C. Mr. W. M. Beckett, 10, Throgmorton-avenue, E.C.2. Deposit £5.

AUGUST 2.—**Glasgow.**—PAVILION.—Erection of pavilions, &c., at Bellefield Sanatorium, Lanark, viz., (1) slater work ; (2) tile work ; and (3) electric light. Office of Public Works, City Chambers, 64, Cochrane-street, Glasgow.

AUGUST 2.—**Lenham.**—COTTAGES.—For the erection of eight cottages, in four pairs, at the Sanatorium, Lenham, for the Kent C.C. Mr. F. W. Ruck, County Architect, 86, Week-street, Maidstone. Deposit £1 1s.

AUGUST 2.—**Rhondda.**—MANSE.—For the erection of a manse at Trealaw, Rhondda, for the Trustees of the Wesleyan Methodist Church. Messrs. Thomas & Morgan & Partners, architects, 23, Gelliwasted-road, Pontypridd. Deposit £2 2s.

AUGUST 2.—**Trealaw.**—MANSE.—For the erection of a manse at Trealaw, Rhondda, for the Trustees of Trealaw Wesleyan Methodist Church. Messrs. Thomas & Morgan & Partners, architects, 23, Gelliwastad-road, Pontypridd. Deposit £2 2s.

AUGUST 5.—**Newry.**—HOUSES.—For the erection of 42 workmen's dwellings at Chapel-street, for the U.D.C. Town Surveyor's Office, Town Hall, Newry. Deposit £1.

AUGUST 5.—**St. Helens.**—HOUSES.—Erection of 20 houses at Windlehurst, for the County Borough of St. Helens. Mr. Arthur W. Bradley, M.Inst.C.E., Borough and Water Engineer, St. Helens. Deposit £1.

★AUGUST 5.—**Southend-on-Sea.**—HOUSES.—Erection and completion of 55 houses, comprising 22 parlour and 33 non-parlour type, in blocks, for the Corporation of the county borough of Southend-on-Sea. Mr. Robert H. Dyer, Borough Engineer, Southend-on-Sea. Deposit £2.

AUGUST 6.—**Barnet, Herts.**—COTTAGES.—Erection of six cottages at Bells Hill, Barnet, subject to the confirmation of the Minister of Health, for the Guardians of the Barnet Union. Messrs. White, Son & Pill, 13 and 15, High-street, Barnet.

AUGUST 6.—**Liverpool.**—ALTERATIONS.—For alterations to No. 8, Brougham-terrace, for the West Derby B.G. Mr. Ernest B. Bailey, F.S.I., 9, Cook-street, Liverpool. Deposit £1 1s.

AUGUST 6.—**London, W.C.**—PAINTING, &C.— Internal painting and treatment of hardwood at the Royal Courts of Justice, London, W.C., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

★AUGUST 6.—**Wanstead, E.11.**—WOOD BLOCK PAVING, &C.—Laying of about 5,700 yards sup. of 4 in. wood block paving, together with works of kerbing and drainage for the Wanstead U.D.C. Mr. F. R. Gibbins, B.Sc., Surveyor to the Council, Council Offices, Wanstead-place, E.11.

AUGUST 7.—**Bournemouth.**—NEW POST OFFICE,— Erection of a new Post Office at Winton, Bournemouth. for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary.)

★AUGUST 7.—**Winchester.**—ADDITIONAL INFIRMARY WARDS.—Erection of additional Infirmary wards and the extension of the Nurses' Quarters at the Winchester Union, for the Guardians. Mr. B. D. Cancellor, architect, Queen Anne Chambers, Winchester. Deposit £3 3s.

AUGUST 8.—**Woking.**—HOUSES.—For the erection of 28 pairs of cottages, for the U.D.C. Mr. G. J. Wooldridge, Surveyor, Council Offices, Woking.

AUGUST 9.—**Doncaster.**—MORTUARY.—For the erection of mortuary buildings in the Guild Hall Yard, for the T.C. Mr. R. E. Ford, 3, Priory-place, Doncaster.

AUGUST 9.—**Farnborough.**—COTTAGES.—For erection of six cottages, for the U.D.C. Mr. J. E. Hargreaves, Surveyor, Town Hall, Farnborough. Deposit £1 1s.

AUGUST 9.—**Navan.**—SHED.—Erection of storage shed, for the Meath C.C. County Surveyor, Navan.

AUGUST 9.—**Wallingford.**—HOUSES.—For the erection of sixteen working-class dwellings, in Station-road, for the T.C. Borough Surveyor, 12, St. Martin's-street, Wallingford. Deposit £1 1s.

AUGUST 11.—**Barnsley.**—PAINTING.—For painting railings to the Churchfield frontage to Sackville-street, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—**Cwmamman.**—HALL.—For the erection of workmen's hall, Garnant, Carmarthenshire, seating accommodation about 950. Messrs. H. Herbert & Co., Architects, College-street, Ammanford. Deposit £2 2s.

AUGUST 11.—**Rathmines and Rathgar.**—HOUSES.—Erection of 16 houses at Church-place, and works incidental thereto, for the U.D.C. Mr. Edwin Bradbury, F.R.I.A.I., 13, South Frederick-street, Dublin. Deposit £2 2s.

✱AUGUST 12.—**Kensington, W.**—PAINTING.—Internal painting at the Post Office Savings Bank, Blythe-road, Kensington, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

✱AUGUST 12.—**London, S.E.16.**—CONVERSION OF INSTITUTION.—Conversion of Parish-street Institution into flats for the Borough Council of Bermondsey. Mr. Fredk. Ryall, Town Clerk, Town Hall, Spa-road, S.E.16. Deposit £2 2s.

AUGUST 12.—**Southall-Norwood.**—COTTAGES.—Erection of three cottages (concrete block construction) at Adelaide Dock, Endsleigh-road, Southall, for Southall-Norwood Urban District Council. Mr. J. B. Thomson, Assoc.M.Inst.C.E., Chartered Civil Engineer, Engineer and Surveyor, Town Hall, Southall.

✱AUGUST 13.—**London.**—EXTENSION BUILDING.—Extension of the General Post Office (South), for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

✱AUGUST 13—**London, N.1.**—FLATS.—Erection of 132 flats on a site between Laycock-street and Highbury Station-road, Upper-street, Islington, N.1, for the Council of the Metropolitan Borough of Islington. Mr. E. C. P. Monson, F.R.I.B.A., Finsbury Pavement House, 120, Moorgate, London, E.C.2. Deposit £5.

✱AUGUST 13.—**London, S.W.10.**—DECORATION AND REPAIRS.—Painting, decoration and repairs at the Infirm Women's Wards, &c., in the Workhouse, 367, Fulham-road, S.W.10, for the Guardians of the City of Westminster Union. Mr. W. J. Lickley, Clerk to the Guardians, Guardians' Offices, Princes-row, Buckingham Palace-road, S.W.1.

AUGUST 15.—**Dewsbury.**—WALL.—For the demolition of property at Hill Head Farm, and the rebuilding of a length of boundary wall. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

AUGUST 30.—**Annfield Plain.**—WAR MEMORIAL.—Prices and designs for erection of war memorial in the Annfield Plain Park between £250 and £400. Hon. Secretaries, Council Offices, Annfield Plain.

NO DATE.—**Ashburton.**—HOUSES.—For the erection of twelve houses, for the U.D.C. Mr. B. H. Palmer, Lic.R.I.B.A., 11, Union-street, Newton Abbot.

NO DATE.—**Dublin.**—BUILDINGS.—For the erection of new buildings at the Dominican College, Eccles-street, Dublin, for the Rev. Mother Prioress and Community. Messrs. Morris & Kavanagh, 68, Harcourt-street, Dublin.

NO DATE.—**Romford.**—FLOOR.—For supplying and laying a wood block floor and for other work in the new Scarlet Fever Block at the Isolation Hospital, Rush Green, for the Romford Joint Hospital Board. Mr. T. W. A. Greenhalgh, Clerk, 16A, South-street, Romford.

FURNITURE, MATERIALS, etc.

JULY 28.—**Romford.**—KERBING.—For supplying 2,500 lineal yds. of 6 in. × 12 in. Norwegian granite edged kerb to the U.D.C. Mr. F. G. Beaumont, surveyor, 73, South-street, Romford.

AUGUST 1.—**Grimsby.**—MATERIALS.—For supply of highways and sanitary materials to the T.C. Mr. H. G. Whyatt, Borough Engineer, Grimsby.

AUGUST 5.—**Portsmouth.**—MATERIALS.—For supply of materials to the Tramways Department of the T.C. Mr. V. G. Lironi, Engineer, Portsmouth.

AUGUST 7.—**Birmingham.**—KERB.—For large quantity of concrete edge kerb, 4 in. by 10 in., and 5 in. by 10 in., in sections, composed of crushed granite and Portland cement, for the T.C. Mr. H. H. Humphries, City Engineer, Council House, Birmingham.

ENGINEERING, IRON AND STEEL.

JULY 26.—**Goole.**—TOWER.—For the erection of a ferro-concrete water tower, with a capacity of 750,000 gallons and 120 ft. high, for the U.D.C. Mr. E. J. Silcock, 25, Victoria-street, Westminster, S.W. Deposit £5.

JULY 26.—**Llangollen.**—RESERVOIR.—For construction of small country reservoir and laying water mains at Garth and Fron-Cysllte, for the R.D.C. Messrs. Berrington, Son & Watney, Wolverhampton. Deposit £5 5s.

JULY 28.—**Bingham.**—BRIDGE.—For the construction of a new reinforced concrete bridge at Hickling, for the R.D.C. Mr. Arthur Parry, Surveyor, Council Offices, Bingham, Nottingham.

JULY 28.—**Croydon, Surrey.**—STEEL CONSTRUCTIONAL WORK.—Ironfounders and steel constructional work required in connection with the erection of a car depot and offices situate on the south and west side of the existing car sheds in Brighton-road, Purley, for the County Borough Council of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £3 3s.

JULY 28.—**Orkney.**—LIGHTHOUSE.—For the building of a lighthouse on the Brough of Birsay, Orkney. Engineer of Northern Lighthouses Commissioners, 84, George-street, Edinburgh.

JULY 28.—**Swindon.**—FENCING.—For supply of 730 yards of wrought-iron fencing and gates for Rodbourne Recreation Ground for the T.C. Borough Surveyor, Swindon.

JULY 29.—**Barking.**—RAILS.—Supply of 115 tons of steel tramway rails to U.D.C. Mr. R. A. Lay, Surveyor, Barking.

JULY 29.—**Brentford.**—RAILINGS.—Supply of 700 yards of unclimbable wire fencing to the U.D.C. Mr. W. J. W. Westlake, Surveyor, Clifden House, Brentford.

JULY 29.—**Kirkcaldy.**—PIPES.—Supply to the Kirkcaldy and Dysart Water Commissioners of 750 tons of 8 in., 14 in., and 18 in. dry sand cast iron pipes and special castings. Messrs. J. & A. Leslie & Reid, C.E., 72A, George-street, Edinburgh. Deposit £1.

JULY 31.—**Carmarthen (near)**—ERECTION OF BRIDGE.—For erecting a girder bridge, at Panteg, on the boundary of the Abergwilli and Llanegwad parishes, for the Carmarthen and Llandilofawr joint R.D.C.s. Mr. T. D. Thomas, surveyor, Westfa, Nantgaredig; or Mr. D. Protheroe, Surveyor, Carmarthen U.D.C. Offices.

JULY 31.—**Teddington.**—CAMPSHEDDING.—For campshedding the Manor-road Recreation Ground, fronting the River Thames, for a total length of 190 ft., for the U.D.C. Mr. M. Hainsworth, Surveyor, Public Offices, Teddington. Deposit £2 2s.

AUGUST 9.—**Wokingham.**—BRIDGE.—For construction of reinforced concrete bridge at Embrook, for the R.D.C. Mr. A. H. Prince, Surveyor, Council Offices, Wokingham. Deposit £2 2s.

AUGUST 12.—**Manchester.**—TRACK WORK.—For the supply of permanent way special track work. Mr. Henry Mattinson, General Manager, Corporation Tramways, 55, Piccadilly, Manchester. Deposit £1 1s.

AUGUST 12.—**Portsmouth.**—QUAY WALL.—For the construction and maintenance in repair for twelve months of a new quay wall, for the T.C. Mr. Arthur W. Ward, Borough Engineer, Town Hall, Portsmouth. Deposit £3.

SEPTEMBER 1.—**Lochaber.**—AQUEDUCT.—For the construction of an aqueduct between Loch Treig and Fort William, Inverness-shire, including fifteen miles of pressure tunnel with intake shafts and other works, for the North British Aluminium Co. Messrs. C. S. Meik & Buchanan, 16, Victoria-street, Westminster, S.W. 1. Deposit £5.

SEPTEMBER 19.—**London.**—STEELWORK.—For supply of structural steelwork for underframe shop, for the South Indian Railway Co. Secretary, 91, Petty France, S.W. Charge, £1.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

NO DATE.—**Gloucester.**—WEIR.—For reconstruction of Cleeve Weir. Mr. E. J. Cullis, Southgate Chambers, Gloucester.

ROAD, SANITARY, AND WATER WORKS.

JULY 26.—**Aylesbury.**—DRAINAGE.—For land drainage, building catch pits, constructing paths, &c., at the cottages at Weston Turville and Quainton, for the R.D.C. Mr. Fred Taylor, Architect, 7, Bourbon-street, Aylesbury.

JULY 26.—**Bedwas and Machen.**—SEWER.—For the construction of a reinforced concrete pipe sewer, 150 yds. lin. in length, for the U.D.C. Mr. Idris Leyshon, surveyor, Bedwas.

JULY 26.—**Dewsbury.**—SEWAGE.—For construction of equalising tanks and other works in connection with sewage disposal works, for the T.C. Messrs. J. Diggle & Sons, 14, Brown-street, Manchester. Deposit £2 2s.

JULY 26.—**Glass Houghton.**—ROAD.—For the improvement of the Leeds and Barnsdale (Hook Moor Branch) main road at Glass Houghton, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

JULY 26.—**Llangollen.**—WATER WORKS.—For the construction of a small concrete reservoir, the provision and laying of mains, for the R.D.C. Messrs. Berrington, Son & Watney, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

JULY 26.—**West Riding.**—ROADS.—For improvement of the New Mill District main road, at Sinking Wood, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

JULY 28.—**Bo'ness.**—ROADS.—For laying of cement concrete footpaths and hydraulic pressed concrete paving blocks, &c., for the T.C. Mr. Wm. Beattie, Burgh Surveyor, Bo'ness.

JULY 28.—**Dysart.**—ROADS.—For causewaying at Normand-road and Dysart-road, for the T.C. Burgh Surveyor, 14, Victoria-street, Dysart.

JULY 28.—**Hull.**—TRAMWAY EXTENSION.—For the extension of the Anlaby-road Tramway to Pickering-road, a distance of about ½ mile, for the T.C. Mr. F. W. Bricknell, City Engineer, Guildhall, Hull.

JULY 28.—**London.**—SEWER (BRICK AND CONCRETE).—Construction of a 4 ft. diameter sewer in brick and concrete, of a total length of about 200 ft., with weir chamber and tumbling bay, Bell Wharf outlet, Shadwell, in the Metropolitan Borough of Stepney, in the Administrative County of London. Chief Engineer, L.C.C. Old County Hall, Spring Gardens, S.W.1. Deposit £5.

JULY 28.—**Manchester.**—ROADS.—For sewering, draining, &c., Redgate-lane, Gorton, and the Avenue from Redgate-lane to Kirkmanshulme-lane, Gorton, for the T.C. City Engineer's Department (District Surveyor's Office), Town Hall, Manchester. Depoist £3 3s.

JULY 28.—**Margate.**—WATER MAINS.—For supplying and laying the water mains, &c., on the Bridgewell Hospital Estate, Westbrook, and in new road leading from Princes-gardens to Northdown-road, for the T.C. Borough Engineer, 13, Grosvenor-place, Margate.

JULY 28.—**Pembroke (co. Dublin).**—ROADS.—Construction of grano-concrete pathway at Ringsend Park Housing site, and construction of roadway and side-walks, main sewers, water mains, &c., at Bath-avenue housing site, for the U.D.C. Mr. Joshua C. Manly, Clerk, Town Hall, Ballsbridge, co. Dublin. Deposit £1.

JULY 28.—**Pontefract.**—ROADS.—Street works in The Mount, for the T.C. Borough Surveyor, Pontefract.

JULY 29.—**Barking.**—TRAMWAYS.—For recon tion of permanent way of tramways in Londo for the U.D.C. Mr. R. A. Lay, surveyor, Barkin

JULY 29.—**Great Crosby.**—ROADS.—For wi portion of Mersey-road, for the U.D.C. Mr. Wright, Surveyor, Council Offices, Great Crosby.

JULY 29.—**Sunderland.**—ROADS.—For makin Cooper-street, for the T.C. Borough engineer, Su land. Deposit £1 1s.

JULY 29.—**West Hartlepool.**—ROADS.—Constr of back Gloucester and Shrewsbury-street, for th Mr. Francis Durkin, Borough Engineer, Mun Buildings, West Hartlepool.

JULY 30.—**Birmingham.**—ROADS.—For constr of 965 yards of brick and concrete and 2,500 y stoneware pipe sewers, for the T.C. Mr. H Humphries, City Engineer, Council House, Birmin Deposit £2.

JULY 30.—**Culmstock.**—ROADS.—For excavati removal of road, hedges, &c., on the Pencros Hemyock, for the R.D.C. Mr. W. H. James, Sur Egypt House, Hemyock.

JULY 30.—**Wallsend.**—SANITARY.—For convers cell privies into water-closets, for the T.C. Bo Surveyor, Town Hall, Wallsend.

AUGUST 2.—**Birmingham.**—ROADS.—For the pletion of Bangor-road and Crown-road, Bor Green, for the T.C. Mr. H. H. Humphries Engineer, Council House, Birmingham. Depos

AUGUST 2.—**Birmingham.**—ROADS.—For the struction of Icknield-street, for the T.C. Mr. Humphries, City Engineer, Council House, Birmin Deposit £2.

AUGUST 5.—**Glasgow.**—ROADS, &C.—For the struction of roads and sewers at Low Balo Springburn, for the T.C. Director of Housing, Town Hall.

AUGUST 6.—**Cardiff.**—SEWERS.—For the constr of about 472 lineal yards of earthenware pipe s &c., at Main-road, Radyr, for the R.D.C. Mr. W Farrow, Surveyor, Park House, 20, Park-place, C

AUGUST 6.—**Uwchaled.**—WATER WORKS.—Co tion of a small water reservoir and the provisio laying of about 6,450 yards of 3 in. cast-iron mains, for the R.D.C. Messrs. Berrington, S Watney, Prudential Chambers, Lichfield-street, W hampton. Deposit £5 5s.

AUGUST 9.—**Spenborough.**—CULVERT.—For t construction of a culvert partly under the Wa and Halifax main road at Spenborough, for the Riding C.C. The West Riding Surveyor, County Wakefield. Deposit £1.

AUGUST 10.—**Skegness.**—ROADS.—For street in Sunningdale and Muirfield-drives, Brancaster and Sea View-road, for the U.D.C. Mr. R. H. Je Council Offices, Skegness. Deposit £1 1s.

AUGUST 11.—**Barnsley.**—ROADS.—For makin Cawley-place, Smithies, for the T.C. Borough neer, Fairfield House Offices, Barnsley.

AUGUST 11.—**Panteg.**—ROADS, &C.—(a) Con tion of roads on the housing estate at H Fawr, Griffithstown; (b) intercepting sewer, U.D.C. Mr. H. R. Davies, Surveyor, Council C Pontymoel.

AUGUST 15.—**Dunmow.**—WATERWORKS, &C. sinking borehole, supplying cast-iron pipes, and 4,000 yds. of stoneware pipe sewers at Thaxte the R.D.C. Messrs. Sands & Walker, Milton Cha Nottingham. Deposit £2 2s. each of four cont

SEPTEMBER 8.—**Hong Kong.**—WATERWO Driving and lining of two tunnels, approxi 2,160 ft. and 4,680 ft. in length, through the Smi Ridge and Golden Hill respectively; the constr of an open conduit, approximately 2,000 ft. in l and contingent works. Crown Agents for the Co 4, Millbank, London, S.W.1.

NO DATE.—**Lochaber.**—ROADS.—For reconstr two miles of road near Tulloch, for the Lochaber L Board. Mr. J. Schooler, Road Surveyor, William. Deposit £1 1s.

Competitions.

(*See Competition News, page* 122.)

Auction Sales, Tenders, &

✱JULY 28.—**London, E.C.1.**—Messrs. Fryer & Co., will sell, at their Rooms, 3, Redcross-street, the stock-in-trade of a brush manufacturer, com 5,000 dozen brushes in large variety. Auction Redcross-street, E.C.1.

JULY 29.—**Denmark Hill.**—Mr. Henry V will sell second portion of useful building mate Champion Park, Denmark Hill. Auctionee Bedford-row, Holborn, W.C.

✱JULY 29.—**Holborn, W.C.**—Messrs. J. T. S & Co. will sell, without reserve, *re* Charles B Rowland B. Wood, and Percy A. Watson, tra "Luckwood," under a deed of assignment, by the Trustee, Mr. W. H. Cork, F.L.A.A., premises, Nos. 44–46, Eagle-street, Holborn, the extensive well-assorted and up-to-date st trade of wholesale builders' merchants, sanitary ware, plumbers' goods, fixtures, fittings, an furniture. Auctioneers, 48, Gresham-street, G London, E.C.2.

JULY 29.—**Lee, London, S.E.**—Messrs. Cha Davis & Co. will sell *re* Briggs & Westwood, in ruptcy, by order of the Trustee, upon the pr No. 24A, Church-street, Lee, S.E., the builde decorators' stock-in-trade and plant, timber, hangings, ironmongery, motor lorry, &c. Auct 285, Borough High-street, S.E.1.

JULY 29.—**Limehouse, London, E.**—Messrs. Joseph Hibbard & Sons will sell (unless previously sold by private treaty), upon the premises, Gun-lane Saw Mills, Grenade-street, at a nominal reserve, by order of the Liquidator, Mr. C. H. Bull, F.C.A., *re* Clark, Williams & Co., Ltd., in liquidation, valuable and well-situated freehold store yard, mill and offices, known as Gun-lane Saw Mills, Grenade-street, vacant possession upon completion; also the brick-built freehold foundry adjoining. Auctioneers, Gun-lane Saw Mills, Grenade-street, Limehouse, E.

JULY 29.—**Limehouse, London, E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Liquidator, Mr. C. H. Bull, F.C.A., *re* Clark, Williams & Co., Ltd., in liquidation (immediately following the sale of the freehold premises), upon the premises, Gun-lane Saw Mills, Grenade-street (close to Limehouse Church), salvage and other saw mill machinery, timber, ironmongery, and stores of ships joiners, &c. Auctioneers, 15, Newington Green, Islington, London, N.16.

JULY 29.—**Surrey.**—Messrs. Hampton & Sons will sell, by order of trustees, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1, four plots of freehold building land ranging from nearly 3¼ acres to over 5 acres each, extensive frontage to Sandy-lane, at Longcross, near Chertsey, Surrey. Auctioneers, 20, St. James's-square, S.W.1.

✱JULY 30.—**Llansamlet, Swansea.**—Messrs. David Roberts & Son have received instructions from Mr. Charles H. Harvey, A.C.A., the Receiver on behalf of the Debenture Holders, to sell (unless previously disposed of by private treaty), at the Hotel Metropole, Swansea, the business of the South Wales Structural Co., Ltd., including the leasehold premises known as the Birch-grove steelworks, plant and machinery. Auctioneers, 31, Wind-street, Swansea.

JULY 30.—**London, N.W.10.**—Messrs. Philip Lake & Co. will sell, on the premises (retiring from business), the contents of the works of Messrs. H. G. Cleaver, Ltd., Park Royal, Wembley, N.W.10, the wood-working plant, machinery, timber, mouldings and hardware. Auctioneers, 66, Victoria-street, Westminster, S.W.1.

✱JULY 31.—**Acton.**—Messrs. Veryard & Yates will sell, without reserve, to clear site, at "Oldfields House," The Vale, Acton, timber and building materials arising from demolition of the residence. Auctioneers, 365 Norwood-road, S.E.27.

AUGUST 12.—**Hayes, Middlesex.**—Mr. F. H. Clark will sell, absolutely without reserve, at the National Filling Factory, Hayes, Middlesex, new and second-hand timber and building material, machines and lorries. Auctioneers, Railway Wharf, York-road, Wandsworth.

PRELIMINARY ANNOUNCEMENT. — **London, W.**—Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

Public Appointments.

JULY 28.—**Marylebone, N.W.1.**—District Road and Works Superintendent in the Works Department required by the Council of the Metropolitan Borough of St. Marylebone. Mr. James Wilson, Town Clerk, the Town Hall, Marylebone-road, N.W.1, with copies of not more than three testimonials of recent date.

✱JULY 31.—**London, W.1.**—Full-time Lecturer required (qualified surveyor) for examination subjects of the Surveyors' Institution. Director of Education, The Polytechnic, Regent-street, W.1.

✱AUGUST 2.—**East Molesey.**—Temporary Clerk of Works required by the East and West Molesey U.D.C. for their housing scheme, now in progress. Chairman to the Housing Committee, Council Offices, Dundee Villa, East Molesey.

✱AUGUST 9.—**Bedford.**—Architectural Assistant required in the Borough Engineer and Surveyor's Department by the Bedford Borough Council. Mr. N. Greenshields, Borough Engineer and Surveyor, Town Hall, Bedford.

✱AUGUST 9.—**Leicester.**—Chief Architectural Assistant in the Housing Department required by the City of Leicester. Mr. J. S. Fyfe, A.R.I.B.A., Housing Architect, Wyggeston House, 18, Highcross-street, Leicester, endorsed "Chief Architectural Assistant."

✱AUGUST 9.—**Stafford.**—Town Planning Assistant required by the Borough of Stafford. Mr. W. Plant, A.M.I.C.E., F.S.I., Borough Engineer and Surveyor, Borough Hall, Stafford.

AUGUST 11.—**Birmingham.**—Town-Planning Assistant Surveyor in connection with the work of Regional Planning in their area required by the Midland Joint Town-Planning Advisory Council. Mr. Herbert H. Humphries, M.Inst.C.E., Surveyor to the Council, Council House, Birmingham.

SEPTEMBER. — **London, S.E.1.**—(*a*) Lecturer in architecture and building; (*b*) instructor in brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week. Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1

✱SEPTEMBER.—**Wimbledon, S.W.19.**—Evening lecturer in (a) Surveying, (b) Brickwork and Masonry, to the Standard of Grade 1 City and Guilds Syllabus. The Principal, Technical Institute, Wimbledon, S.W.19.

✱NO DATE.—**Yorkshire.**—Required at Catterick Camp, Yorkshire, temporary services of Quantity Surveyors and Surveyors' Clerks, ex-Service men preferred. Chief Engineer, Northern Command Headquarters, York, with copies of three recent testimonials.

Cardiff's Civic Week.

Cardiff will be in residence in the Civic Hall at the British Empire Exhibition from July 21 to 30, 1924, inclusive.

PROPOSED NEW BUILDINGS & OTHER WORKS

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERYSTWYTH.—The Borough Surveyor has been instructed to report on the supply needed of 12 in. iron pipes for water conduit to North Parade area.

ALVASTON.—The U.D.C. has passed plans for the erection of houses as follows: Miss Hunt and Mr. Cursley, Baker-street; Mr. Ballard, Allenton; Mrs. Smith, new licensed premises, Shelton Lock.

AUDENSHAW.—The erection of a bowl house, shelter and lavatories, at an estimated cost of £250, is contemplated by the Recreation Ground Committee.

BANSTEAD.—The L.C.C. has passed a capital vote of £20,177 for the modernisation of two blocks at Banstead Mental Hospital.

BARNET.—The Herts C.C. is purchasing a two-acre site in May's-lane, for a new elementary school.

BEDFORD.—Part of Newnham houses to be rented by the T.C. and converted, at a cost of £450, into office accommodation, for the Borough Engineer's staff. Plans recommended: — Boiler-house and heating system, St. Paul's Church, for Churchwardens; house, Cutliffe-place, for Mr. E. H. C. Inskip.

BEVERLEY.—The B.S. has been asked to prepare plans for a convenience near the market. The T.C. is discussing the Hull-road improvement scheme with the Hull Corporation and the C.C.

BIRMINGHAM.—Land has been acquired at Kingsfield for the R.C. congregation of St. Dunstan's, King's Heath, as a site for the erection of a new church, schools, presbytery, and parochial hall. A large house on the estate is to be adapted as a high school for girls.

BIRSTALL.—The Co-operative Society propose to erect a new branch stores on the new housing site, comprising grocery and butchering departments, at an estimated cost of £2,000.

BLAYDON.—The U.D.C. has approved plans submitted by the Consett Iron Co., Ltd., for the erection of 142 houses at Spen.

BRECONSHIRE.—The County Main Roads Committee is to improve the Talybont-road, at an estimated cost of £2,000, and the Ystradgynlais-road, at estimated cost of £1,450.—The Llanwyrtyd U.D.C. has adopted plans submitted for erection of a new pump house at Victoria Wells.—The Brecon T.C. Works Committee has approved plans for buildings to be erected at Maeudu site by A. Tulley, and by W. Watkins, of Brecon.—The County E.C. has decided as follows: To obtain site for erection of a school, of which the plans are already approved, at Pont-Neath-Vaughan; to obtain site on which to erect a school at Glanrhyd; and to consider a scheme to be submitted for erection of central schools at Brynmawr and Ystradgynlais, or enlarging the present buildings.

BRENTFORD.—Plans passed by U.D.C.: House at Nos. 188 and 187, High-street, for Mr. E. C. Jones.—The Council agrees under the town-planning order to a proposal of Messrs. Emerson & Norris, Ltd., to erect a factory at the junction of Lionel and Great West roads.

CALVERLEY.—Amongst other plans passed by the U.D.C. were eight houses on the Ravenscliffe Housing Estate.

CARDIGANSHIRE.—The County Main Roads Committee is to proceed with a scheme for erection of a new bridge at Trecefel. The original estimate of cost was £2,200, but this did not permit of a width of bridge up to standard of Ministry specification. The Committee has decided to join with the Cardigan T.C. in the scheme to widen Bridge-street, at an estimated cost of £10,000.—The Aberystwyth T.C. has appointed a committee, with plenary powers to act, to consider the building of houses along Station-road.—The Aberayron U.D.C. has passed plans as follows: Conversion of the old Wesleyan Chapel, Victoria-street, into a bungalow, for Mr. James Thomas, Capel Ficer; public convenience to be erected beneath steps to Town Hall. The County Police Committee has called for estimates of cost of erecting a new police station and court at Llandyssul.

CEFN.—A site for the War Memorial on the Plaskynaston Estate, has been accepted by the committee, who have invited students of the Liverpool University School of Architecture to submit competitive designs.

CHESTER.—Plans passed by T.C.: Conversion of shops, 84, Brook-street, for Messrs. Crowder Bros.; house, Curzon-Park Estate, for Mr. F. J. Gould; house, 141, Curzon Park Estate, for Mr. T. E. Houghton; pair of houses, Curzon Park Estate, for Messrs. R. Dye and H. Rowlands; pair of houses, St. Mark's-terrace, Saltney, for the Exors. of the late Henry Vernon; house, Curzon Park Estate, for Mr. R. W. Shuard; alterations, Northgate Tavern and Liverpool Arms, for the Chester Northgate Brewery Co., Ltd. The following plans for houses on the Curzon Park Estate have also been passed:—For Messrs. F. Connah, J. Reynolds, H. Hoyle, J. Edwards, A. Cartwright, E. Jenkins, W. E. Lloyd, E. Whitmee, A. E. Smith, C. H. Hudspith, and L. J. Dodd.

CHESTERFIELD.—Plans passed by T.C.: Factory, Sheffield-road, for Messrs. Lamp Caps, Ltd.; house, Brookside-bar, for Mr. F. Wilkins; bungalow, Four Lane-ends, Cutthorpe, for Mr. W. Plummer; house, Oakfield-avenue, Brampton, for Mr. T. Mottram; house, Brookside-bar, for Mr. F. Wilkins; house, Hasland-road, for Mr. F. Whitham; two houses, Devonshire-avenue, New Whittington, for Messrs. S. Sims & Sons, Ltd.; house, Hunloke-avenue, for Mr. S. Wheatcroft; house, Manor-road, for Mr. Roper; two bungalows, Newbold-road, for Messrs. J. Collis & Sons; house, Brushes, for Mr. W. H. Belfitt; pavilion, Albert-street, Whittington, for Whittington Miners' Welfare Committee.—The B.S. has been requested to prepare plans for the erection of houses on the vacant sites on the Boythorpe Estate, and the Town Clerk instructed to make enquiries as to suitable housing sites in the Hasland area.—The B.S. is to prepare a plan of the whole of the undeveloped portion of the borough not already included in a town-planning scheme.

CHORLEY.—The Board of Management of the Hospital are raising funds for a proposed scheme of enlargement of the institution and up-to-date equipment, estimated to cost £10,000.

CHURCH.—A plan submitted by the Dunkenhalgh estate agent of a proposed street, to be known as First-avenue, has been approved by the U.D.C. Plans submitted by Mr. D. Priestley, of Southport, for a house in First-avenue have been approved; plans submitted by Mr. D. Grimshaw for houses, 181A and 183A, Drill Hall-lane, have been approved.

CITY OF LONDON.—In connection with the clearance of insanitary areas in the Minories, the City Corporation recommends that tenement dwellings to accommodate about 600 persons be erected for the purpose on a site outside the City, at a total estimated cost of £95,000.

CLAPHAM.—Tenders are to be invited for the rebuilding of New-road Elementary School, which is estimated to cost £29,378.

CLITHEROE.—A scheme has been submitted to the M.H. for the erection of 140 houses on Corporation land in Pendle-road.

CONISBOROUGH.—The U.D.C. has approved of a scheme estimated to cost £6,550, which comprises the erection of a new fire station, attendant's house, and six firemen's houses.

CONWAY.—The Guardians are to erect a children's home at Llandudno Junction, at a cost of over £11,000.

COULSDON AND PURLEY.—New roads are being planned on the Kenley Park Estate and the U.D.C. surveyor is negotiating regarding the development of the Coulsdon Council Estate.—A sub-committee has been asked to report as to a recreation ground for Purley.—Messrs. Haynes & Amsden have submitted skeleton plans of buildings in Whytecliffe-road, and the U.D.C. is considering the fixing of the building line.—Plans passed: Six shops, Brighton-road, Coulsdon, for L. Hartley; bungalow, Britton Hill-road, Sanderstead, for E. G. Mills; house, Pondfield-road, Kenley, for F. L. Barnard; new street, off Hayes-lane, Pondfield-road, for Edward Maufe; house, Promenade de Verdun, Purley, for Mrs. C. Moore; cottage, Britton-hill, Sanderstead, for Mrs. E. E. Behm; house, Warwick-road, Coulsdon, for Gerard Jensen; house, Woodland-way, Purley, for R. O. Sewell; house, Purley-hill, Purley, for Charles A. Adams; house, Old Lodge-lane, Purley, for Mrs. R. J. Everett; house, Hook-hill, Sanderstead, for Percival H. Newman pair of houses, Grasmere-road, Purley, for S. C. Kirby; new street, adjoining Arkwright-road, Sanderstead, for August Wm. Vesterling; house, Oakwood-avenue, Purley, for Montague Daire; three houses, Downs-road, Purley, for H. Thomas; house with garage, Green-lane, Purley, for W. R. Roach; house, Woodcote Valley-road, Purley, for R. D. Taylor; house, Smitham Downs-road, Purley, for C. Wootton; house, Purley-hill, Purley, for A. E. Showell; house with garage, Woodcote-lane, Purley, for J. B. Wright; house with garage, Peaks-hill, Purley, for H. L. Clark; parish hall, St. Mark's Church, Purley, for Church Council; new street, extension of Northwood-avenue, Purley, for Densham & Lambert; four pairs of houses, Woodmansterne-road, Coulsdon, for H. Hemmings.

CROYDON.—The T.C. has decided to build a school for 850 elementary children, at Long-lane, Woodside.

DARWEN.—The Lancashire C.C. have under consideration the construction of a new road from Darwen to Bolton.

DIGGLE.—The Saddleworth E.C. propose to erect a new elementary school for the district, to accommodate 250 scholars, estimated to cost £5,500.

DONCASTER.—The R.D.C. have approached the local B.G. for their approval to a scheme of alterations to the surveyor's and relieving officers' rooms at Nether Hall. The estimated cost is £800.

DORCHESTER.—An improvement is to be carried out at the market by means of a new exit to alleviate street congestion. The Housing Committee has been asked to consider the provision of non-parlour houses.

DUKINFIELD.—Plans approved by the T.C. for proposed erection of a pair of detached houses in Dewsnap-lane, for Mr. G. Clegg.

DUNDEE.—Plans and sections of proposed new buildings, &c., in Dundee have been lodged at the office of the City Engineer:—Blackness-road and Blackness-avenue, house for Dr. George Murray; Hyndford-street, villas for H. Hollingworth and W. Pitkeathly; Oxford-street, sub-station for the Corporation Electricity Supply Dept.

EAST HAM.—Private enterprise is developing in the district, and the Borough Council has passed the following plans: Shop and dwelling house, Caledon-road, H. Evans-Jones; store and office, Gloy Factory, Eighth-avenue, F. W. Hingston; 43 houses, 27, Caledon-road and 16, Holland-road, H. Evans-Jones; 77 houses, 14 Caledon-road, 22 Holland-road, 11 Caledon-road, and 30 Burges-road, H. Evans-Jones; 106 houses, 80 Eustace-road, 26 Haldane-road, Leyton Building Co.; 14 houses, Caulfield-road, T. B. Goodwin; five houses, St. Stephens-road, Harapath Bros.—The Council has passed revised plans prepared by the B.S. for the extension of the vapour baths, at an estimated cost of £3,000.

See also our List of Contracts, Competitions, etc.

EDINBURGH.—At a sitting of the Dean of Guild Court, a petition by the Edinburgh E.C. to erect a Roman Catholic school at Hamilton-terrace, Portobello, was granted. The new school, which will be known as St. John's Roman Catholic School, will extend to two flats, comprising twelve class-rooms, a large central hall, and a janitor's house. The cost, it is estimated, will be approximately £20,000.—Of the forty-three cases on the roll, 19 were full petitions. The 13 granted included the following: Hibernian Football Club, stand to seat 4,500 persons, gates exits, and embankment, at Easter-road; Colinton Mains Hospital, administrative offices; Geo. Cook, two-storied house at Granton-road; Alex. Forbes, bungalow, at Hillview-terrace, Blackhall; D. R. Gray, two semi-detached villas at Saughton Hall-avenue; Messrs. L. S. Hide, bungalow at Dovecote-road, Corstorphine; M'Kendrick & Co., four houses at Saughton Hall-avenue.

ELLESMERE PORT AND WHITBY.—Plans passed: Semi-detached villas, Poultown-road, for Mr. John Jones; sports pavilion, Rossmere-road, for Messrs. F. A. Frost & Sons; villas in blocks of four, in Chesterroad, for Messrs. Salter Bros., Ltd.

ESTON.—Sanction has been received by the U.D.C. to borrow £43,000 to purchase land in connection with the Grangetown Garden Village scheme.

FAILSWORTH.—It is proposed to appoint a subcommittee of the U.D.C. to consider the question of the proposed erection of public baths, wash-houses, &c.

FARNWORTH.—The managers of the Hippodrome, Moses Gate, are proposing to paint and redecorate their building, and tenders will be invited.

FECKENHAM.—The R.D.C. has decided to carry out a scheme for new sewage outfall works at Astwood Bank. The estimated cost is £8,000; plans have been prepared by Messrs. Wilcox & Raikes, consulting engineers.

FLAMSTEAD.—The Herts. E.C. proposes an expenditure of £440 on improvements at the elementary school.

FLEETWOOD.—Plans for 52 houses for railway employees were approved by the D.C.—The M.H. have given sanction for the erection by the Council of 81 additional houses.—Permission from the M.H. has been received, and the sum of £17,845 is to be borrowed for the construction of an open-air bath.

FOLESHILL.—The U.D.C. announced that the M.H. had sanctioned the borrowing of a sum of £52,245, for the purpose of advances to the Coventry Colliery (Keresley) Industrial Housing, Ltd., the loan to be repaid in a period of thirty years.

GLAMORGAN.—The Merthyr Tydfil Libraries Committee is considering a scheme for erection of a new central library, at estimated cost of £18,000.—The Gellygaer U.D.C. proposes to spend £6,200 on resurfacing and improving roads at Pengam and Ystrad Mynach.—The Merthyr Tydfil Guardians are to obtain premises suitable for conversion to use as a children's home.—In view of the medical officer's condemnation of certain houses the Merthyr Tydfil B.C. is to consider erecting 20 houses at Gellideg. The Council is to erect houses at Troedyrhiw, and the architect is to report on a site between Castle Pit and the Vicarage, Troedyrhiw. It is reported that the G.W.R. and L.M. & S.R. Co's propose to jointly erect a central station at Brynamman.—The Penarth U.D.C. has obtained sanction to proceed with its scheme for the erection of 44 houses, and will invite tenders for the work.—The County E.C. has given statutory notice of intention to build schools as follows: At Llantrisant, new infant's school, for 150; at Cymmer, new school for 320; at Dunvant, new school for 250; at Llanharran, new school for 600; at Pencoed, new boys' school for 250; at Porthcawl, new school for 400; at Pontlliw, new school for 100; and at Bridgend, new boys' school for 400.

GOSPORT.—The T.C. has arranged for the purchase of "Rostellan," for conversion into a school clinic.—The T.C. has agreed to plans, submitted by the B.E., showing the widening of Portland-place, in order to give proper access to the new baths, the cost of which he estimated at £350.—The unhealthy areas between North-street and Harbour-road and between South-street and Trinity-view are to be dealt with after the views of the M.H. have been ascertained. Loans as follows are to be obtained: £400, model yacht lake, footbridge; £2,700, Esplanade, Stokes Bay; £1,000, swimming bath; £2,500, depot, Westfield-road.—Plans passed: House, Privett-road, for G. R. Blake; house, Grove-road South, for Mr. Locke; house, Privett-road, for C. W. Hobbs; house, Grove-road South, for W. Hetherington; house, St. Edward's-road, A. H. White & Sons; new public house, "North Star," Fareham-road, for United Breweries.

GREENOCK.—The Harbour Trust have agreed to proceed with the scheme for the extension of the Garvel Graving Dock. Messrs. Lithgow's, Ltd., shipbuilders, Port Glasgow, had offered £25,000, and the Government Unemployment Grants Committee would contribute £11,000 conditional upon the work proceeding at once. The estimated cost is £67,000.

HALIFAX.—Plans have been prepared for the erection of new banking premises for the National Provincial Bank, Ltd. The architects are Messrs. C. F. L. Horsfall & Son, of Halifax. Tenders for the work are being invited.

HANWELL.—An additional housing scheme is under consideration by the U.D.C. A town-planning scheme for the detached area of the district is to be prepared. A plan for widening the corner of Boston-road has been approved. In connection with a proposal to rebuild the "Red Lion" public house, the Council is negotiating for the surrender of land for street widening.

HARBORNE.—The congregation of St. Mary's R.C. Church are raising funds for the renovation of the edifice, estimated to cost £2,000.

HARTLEY WINTNEY.—The Hampshire E.C. is purchasing a site for a new elementary school.

HASLINGDEN.—Renewed application has been made to the M.H. that the B.G. should be allowed to proceed with the erection of the new maternity home and the proposed new nurses' home.

HEBBURN.—The U.D.C. has obtained sanction from the M.H. to build 11 houses. A loan is being sought for £4,060, the estimated cost.—Messrs. Deuchar, Ltd., have intimated their intention of building a number of houses at Hebburn Colliery.

HECKMONDWIKE.—The Heckmondwike and District Co-operative Society propose to erect 16 houses in Princess-street, for which plans have been prepared by Mr. H. Stead, architect, Heckmondwike.—The Surveyor to the U.D.C. has been instructed to lay a new 4 in. water main at Kilpinhill, and a new 6 in. water main up to the Stubley Farm Housing Estate, for which work a sum of £2,830 is being asked for sanction to loan.

HOYLAKE.—The Board of Management of the Hoylake and West Kirby Cottage Hospital has secured about 1 acre of land adjoining the hospital, with a view to the extension of the building, estimated to cost £9,000.

HUDDERSFIELD.—The B.C. have again considered the proposed new public library and art gallery scheme, which is estimated to cost £50,000. Towards this cost the Carnegie Trust will make a grant of £11,550.

HURST.—The Council is seeking sanction for the borrowing of £2,000 for the construction of a new playground, which includes the provision of a pavilion and conveniences, &c.

ILFRACOMBE.—The U.D.C. has decided to erect 24 cottages at Cove.

INCE.—The D.C. have agreed to enclose portion of the footpath leading from Derbyshire House Yard to George-street, owing to extensions to the buildings, proposed by the Central Waggon Co., Ltd.

KIDDERMINSTER.—Plans passed by R.D.C.: House at Wannerton, for Mr. A. E. Bond; bungalow at Wribbenhall, for Mr. J. Godfrey, of Birmingham.

KIRKINTILLOCH.—Plans for the erection of the first portion of their slum clearing housing scheme were approved by the T.C. The Council proposes to erect 100 houses.

KIVETON PARK.—The R.D.C. has applied for sanction to borrow £3,600 for sewage works at Dunnington, £1,000 for sewage works at Anstone, and £185 for sewage works improvements at Wales.

KNUTSFORD.—Plans and estimates have been submitted to the M.H. for approval for the proposed erection of a new nurses' home.

LEEDS.—Plans have been prepared and approved for the erection of new tramway shelters to be erected in Briggate to take the place of the existing uncovered barriers. Tenders are to be obtained. The business premises of Messrs. Hitchens & Sons at the corner of Briggate and Kirkgate are to be rebuilt; this will be a very extensive undertaking.—The Waterworks Committee has given its approval to the construction of two new reservoirs in the Laver Valley, above Masham, for the purpose of augmenting the city's water supply.

LITTLE HEATH.—Herts County Surveyor has prepared plans for a caretaker's house, to cost £900, at the Elementary school.

LIVERPOOL.—The parishioners of the West Derby Parish Church are proposing to erect a new permanent mission church on a site off Queen's-drive, Club Moor for which funds are being raised.—The Housing Committee have offered the Parks Committee 2¼ acres of land on the Springwood Estate for development as a playground.—Plans for a new school for the Sacred Heart parish have been passed by the B.E.

LLANELLY.—Estimates for the proposed additional central schools accommodation, by the B.C., have now been presented to the E.C. The cost of improving Larkfield School is placed at £2,550, and the conversion of Coleshill terrace School at £1,134 15s. The estimate of cost of removing and re-erecting boundary walls at Coleshill Schools so as to take in additional playgrounds, &c., is estimated at £2,585.—The T.C. is considering the building of a new public library. The Carnegie Trust has offered £3,000 toward the cost, which is estimated at £15,000.—The Council proposes to consider estimates for a scheme to provide public swimming baths.

LLAY.—The Colliery Co. have invited tenders for the erection of 60 additional houses for the village.

LONDON (BERMONDSEY).—Ten cottages, Rotherhithe-street, Culpin & Bowers, for the B.C.

LONDON (HACKNEY).—Plans passed by B.C.:—Salmond, W., bungalow, 159, Stamford Hill; J. & B. Connelly, storage premises, 4 and 6, Broadway, London Fields; J. Garey & Son, two houses, Grove-lane.

LONDON (ISLINGTON).—The M.H. has sanctioned a loan of £61,250 for the erection of dwellings on the Tyndale-street site. The B.C. has no objection to the erection of six houses in Petherton-road.

LONDON (SHOREDITCH).—A factory is to be erected at the rear of 2 and 4, Queen's-road.

LONDON (STOKE NEWINGTON).—It is suggested that the B.C. should provide a swimming bath for the borough. Tenders are to be invited for the extension of the public library. The B.C. offers no objection to plans by Mr. H. J. White for seven houses in Woodberry-road.

LONDON (WANDSWORTH).—Plans passed by B.C.:—Mr. G. Barker, store, Burston-road, Putney; Messrs. Holliday & Greenwood, Ltd., bottling depot at Messrs. Curtis Bros. & Dumbrill's Dairy, Valley-road, Streatham; Messrs. Swain & Selley, nine houses, Ravensfield-road, Balham; Mr. W. Davies, five houses, Upper Tulse Hill, Streatham; Messrs. E. Midmer & Sons, four houses, Tankerville-road, Streatham; Mr. R. Emerson, house, Hereward-road, Tooting; Messrs. Harrison Smith Buildings, Ltd., house, Mount Ephraim-lane, Streatham; Mr. A. G. Jenkins, 16 houses, Fishponds-road, Balham; Mr. F. W. Surridge, stables, Wharf-road; Mr. L. S. Rogers, four shops, Longley-road and Tooting High-street; Mr. W. E. Writer, house, Ullathorne-road, Streatham; Mr. J. Clarke, shop, 45, Tooting High-street; Mr. O. Kennard, house, Chartfield-avenue, Putney; Mr. [illegible] Boothman, house, Abbotsleigh-road, Streatham; Messrs. F. T. Wooding & Sons, 32 houses, Crickdale-avenue, Streatham; Messrs. Humphreys & Allen, 10 houses, Gateside-road, Balham; Messrs. Swain & Selley, 30 houses, Hebdon-road, 42 Fishponds-road, and 42 Ansell-road, Balham; Messrs. F. J. Moreton & Son, showrooms, offices and workshops a premises of Messrs. Yeatman & Son, Smallwood-roa and Garratt-lane.

LONDON (WESTMINSTER).—It is proposed to enlarg the St. Martin's School of Art, at a cost of £7,900.

LOOE (CORNWALL).—The U.D.C. has passed plans fo the erection of a private hotel at Hannafore, two house and a bungalow.

LOWESTOFT.—A site in St. Margaret's-road has bee acquired for a new secondary school.—The T.C. ha decided to provide a recreation ground on the Denes.— Plans passed: House, Oulton-road, for Mr. P. J Searle; house, Beccles-road, for Mr. E. J. Calver two houses, Avenue, for Mr. C. E. Day; house, Carlto road, for Mr. J. C. Edgar; house, Hall-road, for Messrs Dyer & Balls; house, Warren-road, for Messrs. Knigh & Weaving; house, Corton-road, for Mrs. J. Cook.

LYTHAM ST. ANNES.—Funds are to be raised fo levelling and draining the parish church graveyard.

MANSFIELD.—Plans passed by T.C.: Louisa Trou bridge, bungalow, Southwell-road; C. W. Chadburn two houses, Chesterfield-road; H. Baggaley, tw houses, Bottle-lane; E. Ward, house, Intake-avenue J. Handby, house, Frank-avenue; P. Lander, two houses, Oxford-avenue; A. Gutteridge, house, Sutton road; L. Radford, bungalow, Clifton-grove; M. H Renshaw, house, Sutton-road; W. Gamble, house Norfolk-drive; L. C. Revis, house, Robert-avenue William Green, house, Intake-avenue; Dr. Daniel house and garage, Nottingham-road; Reg. Lucas showroom and garages, Nottingham-road; F. J Johnson, house, Little Barn-lane; Mason & Whiting two houses Intake-avenue; James Rowell, house Westfield-lane (amended plan); Thos. Lamin, house Southwell-road.

MARKET HARBOROUGH.—Plans passed by U.D.C house, Lubenham-hill, for Mr. W. Wright; two houses Springfield-street, for Mr. T. Martin; a public conveni ence is to be erected in Church-square.

MERIDEN.—Plans passed by R.D.C.: Bungalow Allesley, for Mr. W. A. Boneham; two cottages Allesley, for Dr. J. Orton; two cottages, Corley, fo Mr. T. Richardson; house, Meriden, Mr. H. Bartlett house, Berkswell, Mrs. Edmunds; bungalow, Allesley Mr. W. Kirk; house, Berkswell, Mr. J. Dodwell; tw villas, Berkswell, Messrs. J .G. Tommy & Sons.

MILNROW.—The Surveyor to the R.D.C. has bee instructed to prepare plans and estimates for th construction of a main sewer from Peppermint Bridg to Whitehead-street, New Hey. The members of th Ogden Baptist Chapel are proposing to paint an redecorate their buildings, for which tenders will b invited.

MONMOUTHSHIRE.—The Tredegar U.D.C. is t proceed with a scheme to supply water to high leve districts.—The Rhymney U.D.C. proposes to construc improved Council offices premises.—The Bedwellt U.D.C. has received sanction to erect further house the Ministry suggesting that batches of 50 houses be embarked upon.—The Mynyddislwyn U.D.C. is to spend £1,000 in laying out the open space at Oakdale It has been reported to the Council that the Tredegar Iron & Coal Co. is to build 101 houses in the area.

NEWBURY.—The T.C. is to discuss with the R.D.C the desirability of a town-planning scheme for th town and surrounding districts.

NEWCASTLE.—The T.C. has decided on scheme prepared by Mr. Cross, architect, to cost £4,736, fo providing public cloakroom accommodation and o covering in the bath ponds, &c., at Heaton and Walke Baths.

NORTHFLEET.—Mr. G. Halton, the clerk, ha informed the Council that it is likely that the neigh bourhood of Northfleet and Tilbury will be selecte for the proposed lower Thames tunnel.

OLDHAM.—A proposal for a bigger and more imposin town hall is to be considered by the Finance Committe of the Corporation.

OTLEY.—The U.D.C. is to erect 24 houses at Newal Carr-road Estate, at a cost of £10,860. Plans passed Café, Bridge-street, for Mr. Whitaker; works, nea Bondgate, for Kepec, Ltd.; printing works, Station road, for Mr. Charles Walker.

PAIGNTON.—Plans passed by U.D.C.: Flats, Grea Headland-road, for Mr. J. Martin; pair houses, ne road, off Coombe-lane, for Messrs. Maunder & Son making-up portion of back Seaway-road, for th Paignton and District Land & Development Co Ltd.; house, The Triangle, Dartmouth-road, for M A. Rowe; house, West Hill (off Oldway-road), fo Mr. F. P. Inman; house and two shops, Manor-road for Mr. S. E. Clay; pair houses, Alta Vista-road, fo Messrs. Collings & Ellis; bungalow, Clennon Park, fo Mr. E. Couch; bungalow, Barcombe Heights, for M P. Maltby. The U.D.C. is to approach the M.H regarding the scheme for the provision of an abattoi The Council is urging the Devon C.C. to purchas Shaldon toll bridge, and to improve or rebuild it.

PENRITH.—The Surveyor of the U.D.C. has pre pared plans for the improvement of the markets.

PENZANCE.—Plans have been prepared for improvin the accommodation at the Cattle Market. The Tow Clerk has been asked to report comprehensively wit regard to the preparation of a town-planning schem

PORTLAND.—The U.D.C. has decided to construct convenience at a cost of about £250. Plan passed fo bungalow in New-street, for Mr. Pearce.

PRESTON.—The Board of Management of the Roy Infirmary have adopted a scheme of extensions to their institution which includes a new patients' wi of three wards, and a children's ward, estimated cost £25,000. The architect, Mr. A. C. M. Lillie, Bamber Bridge, is preparing plans. The R.D.C. h received sanction from the M.H. for the erection 300 houses.—The War Memorial Committee ha decided upon a site for the war memorial, the plans Sir G. Gilbert Scott having been adopted.

PRESTWICH.—The U.D.C. has decided to develo the Ostrich-lane housing site. Further tenders f six houses at Cromwell-road are to be invited. Pla passed: Lay-out of Woodhill Estate, for Mess

K. Sambrook; three houses, Aveton-road, for Clegg; two pairs of villas, Hereford-drive, J. Buckley; 24 houses, Lincoln-drive, for Mr, kley.

SBOTTOM.—Plans approved: Pair of semi-ed houses in Longsight-road, for Mr. F. Berry.

ALER.—The C.C. are to be recommended the truction of the Cwmystwyth to Rhyader road, s in length, at an estimated cost of £16,235.

HDALE.—Plans have been approved for rebuild-use at 57, Duke-street, and for the proposed n of two bungalows and four houses.

THERHAM.—The Corporation proposes to proceed the £50,000 scheme for reconstructing the Jail and erecting a river wall.—Plans passed: . A. E. & E. A. Sides, Corporation-street, building es: Mr. J. Glasper, St. Leonard's-road, house; G. Sidwick, Old Wortley-road, house; Mr. T. Cart-Cottenham-road, four bungalows; Mr. F. Brunswick-road, pair of semi-detached houses; H. Treherne, proposed new road, from Broom-the Broom-valley.

OMBE.—The U.D.C. has decided to carry out at art of a scheme for improving the water supply, includes the construction of a new reservoir to 0,000 gallons. Application is being made to the or power to borrow the money required.

ORD.—Applications to the Corporation for sion to proceed with the development of land e erection of buildings, as follows: Detached Park-lane, Broughton; two semi-detached Cavendish-road, Broughton; two semi-detached Lancaster-road, Pendleton; detached house, hire-road, Pendleton; four semi-detached Dronfield-road, Pendleton; detached houses, all-road, Broughton; development of part of ont Estate, Pendleton, and lay-out of street, ows: Extension of Doveleys-road between eld-road and Caldy-road; new street, Manor-onnecting Doveleys-road and Eccles Old-road; reet, Lullington-road, connecting Doveleys-nd Manor-road; new street, Buckland-road, ing Lullington-road and Manor-road; detached Eccles Old-road, Pendleton; two semi-detached at junction of Cavendish-road and Limefield-Broughton: erection of homes for old people, ane, Pendleton; two semi-detached houses a-road, Pendleton.

P.—A new post office is to be erected at Wel-Salop); the site has been acquired.

BACH. The Improvement Committee have red a scheme for sewering Sandbach Heath, ne, and Coldmoss Heath, and the surveyor epare plans. An application is to be made to employment Grants Committee for a contribu-wards the scheme.

RIHGEWORTH.— Plans passed by U.D.C.: ow, Brook-road, for Mr. J. Adams; bungalow igh Wych-road, for Messrs. Thomas Rivers & td.; bungalow at Spellbrook, for Mr. Tyler, of Weald.

BOROUGH.—The T.C. has approved a scheme for onstruction of a portion of the old part of the which, together with the building of a number of elsewhere, is to cost £131,000.

TH CROSSLAND.—Plans passed: Bungalow in nt-road, for the Misses Garside.

THEND-ON-SEA.—Plans passed by T.C.: Two . Southsea-avenue, R. J. Emery; bungalow, -road, Mrs. Mitchell; shop and two flats over, road, Mr. Clare; bungalow, Parkanaur-avenue, . Manners; three houses, Marguerite-drive, ire & Bass; house, Crosby-road, C. W. Ardley; rsion of house into flats, 67, Cotswold-road, D. Barham; conversion of house into shop, London-road, H. B. Dixon; two bungalows, n-road, Leigh, A. Hood; conversion of house op, 583, London-road, W. Huntley; conversion se into shop, 631, London-road, W. Newbery; ungalows, Lonsdale-road, W. Christopher; ow, Crosby-road, A. J. Cross; bungalow, er-road, Hammerton & Co., Ltd.; house and Burlescombe-road, H. Norman; lock-up shop, ondon-road, E. Kingston; shop, London-road, Drawater & Son; two bungalows, Glenbervie-E. H. Brewer; stables, caddies' room, &c., Hall Golf Club, A. Burges; house, York-road, hergold; bungalow, Woodfield-gardens, W. A. ; bungalow, Cumberland-avenue, W. Hoare; and flat over, Westborough-road, A. Turnell; ungalows, South-avenue, Denny & Wilson; nd shop, London-road, J. Quinn; conversion of use into three shops, St. Helen's-road, H. Balen; ow, Queen Ann's-drive, R. Davison; new pre-The Broadway, Leigh-on-Sea, Metropolitan ny of Music, Ltd.; house and garage, Victoria-. A. H. Adcock; house, Lansdowne-avenue, gle: bungalow and garage, Electric-avenue, Eastty; two houses, Dawlish-drive, T. G. ford & Son; house, Crosby-road, A. & T. Riley; ges, Queen's-avenue, J. Snell; two flats, West-venue, A. Markwick; church and presbytery, oad, F. W. Gilbert; three houses, Leigham rive, J. Quinn; shop and house, Elm-road, Nowell & Nowell; bungalow, Durham-road, . J. Mitchell; two houses, Sandown-avenue, Woodbridge; house, Burlescombe-road, South-Sea Estates Co., Ltd.; two houses and garage, mouth Park-road, Upson & Bentley; con-of house into flats, 41, Anerley-road, J. Taylor; Burlescombe-road, C. Horsley; house and shop, and store, Trinity-road, J. W. Cox; house and Westborough-road, A. J. Mullord; bungalow, od-road, E. J. Phillips; five lock-up shops, r. and garage, London-road and Station-road, A. A. Robinson.

H SHIELDS. — The E.C. has resolved to erect a ants' school on a three-acre site.

SFORTH (SOUTH YORKS).— Plans have been d for the erection of a new Roman Catholic ; the site has been purchased.

YBRIDGE.—In connection with the reorganisa-heme, the E.C. have under consideration the adapting of West Hill as a boys' school, erection of a new school for girls, and adapting the Central Schools for children.—A sub-committee of the E.C. has been appointed to examine a site in Grey-street as a site for a proposed elementary school and playground.

STANLEY (YORKS).—Plans passed: Two houses at Ruskin-avenue, Wrenthorpe, for Mr. J. H. Mitchell; house at Aberford-road, for Mr. R. C. Jones; and semi-detached house at Lingwell Gate-lane, for Mr. Oldroyd. A 10 in. water main, 170 yds. long, is to be laid in Potoven's-lane, Kirkhangate.

STOCKBRIDGE.—Hampshire C.C. has decided to provide additional accommodation for 90 scholars at the elementary schools.

STOKESLEY.—Plans passed by the R.D.C.: House at Nunthorpe, for Mr. H. R. Ronnebech; house at Swainby, for Miss Shilbeck; cottage at Worsall Grange, for Mr. F. Swan.

SWANSEA.—Plans passed by T.C.: House, Middle-row, for Mr. E. Jeffreys; two houses, Cwmgwyn Estate, for Messrs. T. & E. Spragg; house, New-road, for Mr. G. H. Wilding; six houses, St. Peter's-road, for Mr. Edwin Davies; bungalow, Gorse-road, for Mr. C. S. Gilbert; house, Hillside-crescent, for Mr. J. R. Down; house, Clydach-road, for Mr. A. Arnold; house, Myrtle-crescent, for Messrs. Jones Bros.; house, Town-hill-road, Cwmgwyn Estate, for Messrs. T. & G. Spragg; mission hall and workshop, Prince of Wales'-road, for Mr. C. Gustavus; house, Vicarage-road, Morriston, for Mr. Bert Buckley; four houses, Tycoch Estate, for Mr. Alfred Lodge; house, Penrice-street, for Mr. R. Leyshon; two houses, Tycoch Estate, for Messrs. Ace & Mansel; house, Heolgerrig, for Mr. Ed. Matthews bungalow, Tycoch Estate, for Mr. J. Bowyer; house, Tycoch Estate, for Mrs. Mary Ann Wheatland; two houses, Manor-road, for Mr. J. O. Watkins; three bungalows, Tycoch Estate, for Mr. E. E. L. Tucker; two houses, St. Peter's-road, Caswell, for Mr. Edwin Davies; house, Western-lane, Mumbles, for Mr. G. Hoppe; two houses, Belle Vue-road, Norton, for Mr. W. S. Davie; house, Clydach-road, for Mr. T. T. Davies; two houses, Gower-road, for Mr. W. G. Connick; house, Mynydd-cadle, for Mr. Philip Phillips; house, Carmarthen-road, for Mr. A. Hoyles.—The following are to erect houses under the Small Dwellings Act: Harold J. Daniel, Caswell-road, Newton, Mumbles; William H. Perrinton, "Cranmore," Hendrefoilan-road, Sketty; Arthur T. Davies, 47, Gwydr-crescent, Swansea, Glanbrydan-avenue; Evan J. Rees, 5, Cross-street, Swansea, Pentregethin-road, Manselton; Mrs. Gladys Jenkins, Ventnor Bungalow, Limeslade, Mumbles, Limeslade, Mumbles; Mrs. Hannah Watkin, 7, Knoll-avenue, Hendrefoilan-road, Sketty; Agnes E. Downer, 9, Trafalgar-place, Brynmill Tycoch Estate, Sketty; A. Joseph Downer, 2, Penbryn-terrace, Brynmill, Tycoch Estate, Sketty; A. B. Mears, Barton House, Sketty, Tycoch Estate, Sketty; W. F. Ewens, 89, Manor-road, Manselton, Cecil-street, Manselton.—It is proposed to erect another 50 houses on the Townhill housing estate.—A scheme is suggested for the provision of municipal washouses.

SWINTON.—The U.D.C. are considering new sewerage and sewage disposal works for their district. The consulting engineers are W. H. Radford & Son, of Nottingham.

SWINTON AND PENDLEBURY.—Plans passed: Bungalow, Folly-lane, for Messrs. Evans & Walker; parsonage, Moorside-road, for the Ecclesiastical Commissioners; lay-out of Clovelly Estate, for Mr. T. H. Eggington.

THORNABY.—Plan passed: Bungalow, Millbank-lane, for Mr. W. Yates.

THORNTON.—Plans approved by U.D.C.: Eighteen houses, Crystal-road, for United Alkali Co., Ltd.; pair of semi-detached bungalows, School-road, for R. Riley; bungalow, Henley-avenue, for Mr. Goddard; two semi-detached houses, Coronation-road, for Mr. Eastwood; pair of houses, Springbank-avenue, for B. W. Roskell, Ltd.; bungalow, Crabtree-road, for Mr. and Mrs. Swarbrick; two pairs of bungalows, Gordon-avenue, for R. Lancaster & Sons; house and garage, Queen's-road, for Mr. W. Hargreaves; pair of semi-detached houses, Slinger-road, for Mr. Ayros; bungalow, Lawson's-road, for Mr. J. Riley.

TOTTINGTON.—Plans passed by the Committee: Six houses, Hilda-avenue, Lomax & Ormerod; two houses, Bury-road, Mr. C. Warburton.

TURTON.—The D.C. are to prepare a scheme for the erection of houses in this district, and submit same for approval to the M.H.

UNSWORTH.—It was reported that the management of the Pilsworth and Unsworth Garden Village, Ltd., have in hand a scheme for the erection of further houses on the Garden City Estate.

WALLSEND.—Thirty-six more houses are to be erected for the T.C.

WALMSLEY.—Funds are to be raised to defray cost of decorating and renovating the parish church day schools. Building operations have commenced at Red Hall Farm where several bungalows are to be erected.

WANDSWORTH.—The L.C.C. Education Committee propose to proceed with the erection of a new technical school at an estimated cost of £58,600, and tenders are to be invited, and a new secondary school at Beechcroft-road, at an estimated cost of £45,644.

WARWICK.—Plans passed by T.C.: Bungalow at Emscote, for Mr. T. Whittle; house at Emscote, for Mr. L. Middleton.

WEST BRIDGFORD.—Plans passed by U.D.C.: House, Willoughby-road, for Mr. H. F. Scotton; house, Valley-road, for Mrs. Auchterlonie; pair of houses, Pierrepont-road, for Mr. H. A. Wright; bungalow, Gertrude-road, for Mr. H. Greenwood; house, Valley-road, for Mr. W. S. Walters; house, Dovedale-road, for Mr. W. J. Furse; house, Dovedale-road, for Mr. G. P. Jarratt; house, Rutland-road, for Mr. Chappel; house, Blake-road, for Mr. Wood.

WEST BROMWICH.—Plans have been prepared and approved of for the erection of a new technical school. The first instalment of the work will comprise departments in engineering, carpentry and foundry workshop. The estimated cost is £11,500.

WHITBY.—The U.D.C. has applied for a loan of £2,200 for houses, the erection of which has been approved by the M.H.

WIGAN.—The Parochial Church Council of St. George's Church, are proposing to build a choir vestry, erect a semi-chancel with oak screens and choir stalls, and improved lavatory accommodation to their edifice. Funds are to be raised to defray cost.—The B.S. has been instructed to prepare detailed plans and get out estimates for the proposed erection of public baths at Pemberton.

WILLINGTON.—The tender of Mr. Stanley Miller, Newcastle, has been accepted for the building of a new maternity hospital and nurses' training centre at Rosehill, Willington Quay, for the Northumberland County Nursing Association. The plans, which show a well arranged and equipped hospital, were prepared by Mr. J. A. Bean, County Architect, Newcastle, and the cost will be between £5,000 and £6,000.

WINCHESTER.—Plans passed by R.D.C.: Cottage, Twyford, Miss Bayford; bungalow, Twyford main-road, E. H. Watling; bungalow, Fair Oak, H. Harland; house, Fair Oak-road, S. F. Balch; house, Itchen Abbas, F. Ledwick; residence, Fair Oak, Major Eastmead.—The Catholic congregation are raising funds towards the cost of the proposed new church, to be erected on the site of "Milner's Chapel."

WITHNELL.—The C.C. have under consideration the question of purchasing Withnell Hall and converting it into a hospital with provision for 50 patients.

WOKING.—Steps are to be taken to compel riparian owners to cleanse the River Bourne. Complaints as to flooding having been made. Subsidies voted:—Mr. H. Salter, house, Walter-road; Messrs. Barker, two cottages near Worpleston Station; Mr. P. H. Woolnough, house, Manor-road; Miss Fulford, bungalow, Kingfield Estate; Mr. C. M. Mitchie, house, Kingfield Estate; Mr. G. A. Gettings, house, Kingfield Estate; Mr. J. H. Tucker, house, Broadway; Mr. Halden, bungalow, Sutton-grove; Mr. C. R. Pinder, cottage, Russell-road; Mr. G. Snelling, cottage, Manor-road; Duke of Sutherland, three cottages, Blanchard's Hill. Plans passed: House, Ashwood-road, for Mr. A. E. Jones; house, Abbey-road, for Mr. C. T. Osman; house, Russell-road, for Mr. C. R. Pinder; house, Manor-road, for Mr. G. Snelling; house, Kettlewell-lane, for Mr. S. Silk.

WOLVERHAMPTON.—A special committee of the Corporation recommends the erection of a public hall in North-street.—The Upper Penn, Woodfield-avenue School is to be enlarged by 320 places.—Plans passed: E. M. Bartlett, house, Park-avenue; L. Timmins, house, Compton-road; A. Minors, house, Compton-road; J. Patton, two houses, Richmond-road; Richards & Son, two bungalows, Finchfield-road and Richmond-road; T. Medley, house, Penn-road; The Chillington Tool Co., Ltd., new welding shop, Hickman-avenue; J. W. G. Starkey, house, Park-road; C. N. Parkin, house, Chetwynd-road.——The T.C. has adopted a recommendation to provide a public hall at a total estimated cost of about £80,000.

WOMBWELL.—The U.D.C. has decided to erect 74 additional houses, and application is to be made to the M.H. for sanction to borrow £27,400 for the purpose. The building contracts have been let to Messrs. A. Taylor & Sons and Messrs. W. Johnson & Sons, local firms.

WORCESTER.—The E.C. has decided to carry out a scheme for the erection of an open-air school at Rose Hill. The estimated cost is £3,000.

WREXHAM.—The R.D.C. have obtained sanction for the proposed erection of 150 houses on land belonging to the Council and new sites to be acquired.

YIEWSLEY.—Two shops, High-street, for Messrs. Hancock Bros.

YORK.—Plans passed by T.C.: H. De Burgh, two houses, Stockton-lane; F. W. Woolworth & Co., shop, 2, 4 & 6, Spurning-street.

FIRE.

LINCOLNSHIRE.—Hainton Hall, the Lincolnshire residence of Lord Neneage, was the scene of a disastrous fire recently. The damage amounts to many thousands of pounds.

Motor Bus Station at Wembley.

The new London General Omnibus Station at Wembley, just completed, is capable of handling 260,000 visitors a day. It is situated at the south-west entrance in a forecourt two acres in extent, which provides easy ingress and egress for the 1,000 buses in thirteen services which serve the Exhibition daily. The plan, which is the design of Major C. H. Holden, F.R.I.B.A., of Messrs. Adams & Holden, architects, consists of eight parallel platforms each seventy feet long, four of which are roofed in, and each platform has accommodation for two buses. The station is so designed that the levels of the platforms and the motor bus steps are approximately the same, thus facilitating boarding and alighting. To simplify the operation of the services, illuminated indicators have been installed in conspicuous positions, thus enabling the public to locate at a glance the platform from which their bus starts; and it is possible to despatch a bus every fifteen seconds. Approximately, 50 per cent. of the visitors to the Exhibition pass through this station.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—E

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£	s.	d.
Best Stocks	4	3	6
Second Hard Stocks	3	18	6

Per 1,000. Delivered at London Goods Stations.

	£	s.	d.
Flettons, at King's Cross	2	13	3
Do. grooved for plaster	2	15	3
Do. Bullnose	3	8	3

Best Stourbridge Fire brick:—

2½ in.	8	11	0
3 in.	10	3	0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	22	0	0
Headers	21	10	0
Quoins. Bullnose and 4½in. Flats	28	10	0
D'ble Str'tch'rs	30	10	0
D'ble Headers	27	10	0
One Side and two Ends	31	10	0
Two Sides and one End	32	10	0
Splays and Squints	30	0	0

Best Blue Pressed Staffs. 9 5 0
Do. Bullnose .. 9 15 0
Blue Wire Cuts 7 5 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s.	d.		s.	d.
2 in. per yd. super	2	1	3 in. per yd. super	2	11
2½ in. „	2	6	4 in. „	3	6

	s.	d.	
Thames Ballast	10	6	per yard.
Pit Sand	14	9	„ „
Thames Sand	15	6	„ „
Best Washed Sand	15	6	„ „
¾ in. Shingle for Ferro-Concrete	14	0	„ „
½ in. „	15	0	„ „
¾ in. Broken Brick	10	6	„ „
Pan Breeze	7	6	„ „

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0	10	0
Super Cement	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
„ „ Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
„ „ White	3	12	6
„ Fine	5	12	0
Sirapite, Coarse	3	9	0
„ Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	11	9
Best Ground Blue Lias Lime	2	4	6
Hair	17	0	0
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s.	d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2	9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2	11½
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4	4
Do. do. delivered on road wagons at above stations, per ft. cube	4	5

White basebed, 3d. per ft. cube extra.
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ¼d. beyond 30 ft.

HOPTON-WOOD STONE.
Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over „	17/-
Sawn two sides „	27/-
Sawn three or four sides „	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.	s.	d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5	3
6 in. rubbed two sides, ditto „	5	9
3 in. sawn two sides slabs (random sizes) „	2	1½
2 in. to 2½ in. sawn one side slabs (random sizes) „	1	5½
1½ in. to 2 in. ditto, ditto „	1	3

HARD YORK—
Delivered at any Goods Station London.

Scappled random blocks Per Ft. Cube	5	6
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5	4½
	6	0½
6 in. rubbed two sides ditto „	2	10
4 in. sawn two sides slabs (random sizes) „	2	5
3 in. ditto. ditto „	7	11
2 in. self-faced random flags. Per Yard Super		

ARTIFICIAL STONE.

Delivered in London Area in full van loads.	s.	d.
Plain per ft. cube	6	6
Moulded „ „	7	9
Cills „ „	8	3

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/-	1¼	33/6
⅞	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
⅝	17/6
¾	21/-
1	26/-

BATTENS s. d.
¾ × 2 2 6 per 100 ft.

SAWN LATHS.

Per bundle					0	2 8
Dry Wainscot Oak. per ft. super, as inch	0	2	0	to	0	2 6
¾ in. do.	0	1	6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9	to	0	2 6
Cuba Mahogany	0	3	0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per load	45	0	0	to	50	0 0
American Whitewood planks, per ft. cube	0	14	0	to	0	16 0
Best Scotch Glue, per cwt.	4	10	0	to	—	
Liquid Glue, per cwt.	4	7	0	to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	6	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

	Per 1,000 f.o.r. London.
Best machine-made tiles from Broseley or	£ s. d.
Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£	s.	d.
R. S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
„ Stanchions	17	10	0
In Roof Work „ „	20	10	0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
⅜ in.	16	10	0	5/16 in. to ½ in.	13	10	0
⅛ in.	14	10	0	⅝ in. to 2½ in.	13	0	0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28¾%	35 %	45 %
Steam	22½%	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. „	1/9½	1/4	2/0½
3 in. „	2/1½	1/8	2/5½
3½ in. „	2/6½	1/11½	2/10½
4 in. „	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. „	3 6½	2 5½	3 3½
3 in. „	4 2½	2 8	4 0½
3½ in. „	4 7	3 3½	4 8½
4 in. „	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. „ „	6 3	6 8	11 4
5 in. „ „	7 6	11 6	18 2
6 in. „ „	8 10	14 4	23 5

Per ton in London.

IRON—	£	s.	d.		£	s.	d.
Common Bars	13	10	0	to	14	10	0
Staffordshire Crown Bars—good merchant quality	14	10	0	„	15	10	0
Staffordshire "Marked Bars"	17	0	0	„	18	0	0
Mild Steel Bars	12	10	0	„	13	10	0

METALS (*Continued*).

	£	s.	d.		£	s.	d.
Steel Bars, Ferro-Concrete quality, basis price	13	0	0	..	14		
Hoop iron, basis price	16	10	0	..	17		
„ Galvanised	31	0	0	..	32		
Soft Steel Sheets, Black— Ordinary sizes to 20 g.	15	0	0	..	16		
„ „ „ 24 g.	16	0	0	..	17		
„ „ „ 26 g.	18	0	0	..	19		
Sheets Flat Best Soft Steel, C.R. & C.A. quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21	10	0	..	22		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22	10	0	..	23		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24	10	0	..	26		
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21	0	0	..	22		
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21	10	0	..	22		
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23	10	0	..	24		
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23	10	0	..	24		
Best Soft Steel Sheets, 22 g. and 24 g.	24	10	0	..	26		
Best Soft Steel Sheets, 26 g.	26	0	0	..	27		
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20	10	0	..	22		

METAL WINDOWS—Standard sizes suitable for plete houses, including all fittings, painting coats, and delivery to job, average price abou to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£
LEAD—Sheet. English, 4 lb. and up	43
Pipe in coils	43
Soil Pipe	46
Compo pipe	49

NOTE—Country delivery, 30s. per ton extra: lots 3 cwt., 2s. per cwt. extra and over 3cwt. and u cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt.e

Old lead, ex London area, at Mills per ton	30	0	0 ..
Do., ex country, carriage forward per ton	31	0	0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per c

NEW RIVER PATTERN SCREW DOWN STOP COCKS UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per

NEW RIVER PATTERN SCREW DOWN MAIN FERR

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per do

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per do

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES. S

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per

DRAWN LEAD P. & S. TRAPS WITH BRASS CLE SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-	101/- pe
8 lbs. S. traps	35/-	45/-	66/-	126/-

COPPER—	£	s.	d.
Strong Sheet per lb.	0	2	3 ..
Thin „ „	0	2	4 ..
Copper nails „	0	2	3 ..
Copper wire „	0	2	4 ..
TIN—English Ingots „	0	2	2 ..
SOLDER—Plumbers' „	0	1	1 ..
Tinmen's „	0	1	3 ..
Blowpipe „	0	1	4 ..

PAINTS, &c.

	£
Raw Linseed Oil, in pipes per gallon	0
„ „ „ in barrels „	0
„ „ „ in drums „	0
Boiled „ „ in barrels „	0
„ „ „ in drums „	0
Turpentine in barrels „	0
„ in drums (10 gall.) „	0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	57

GENUINE WHITE LEAD PAINT—
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered 80

Red Lead, Dry (packages extra) per ton	52
Best Linseed Oil Putty per cwt.	0
Filocol per cwt.	0
Size. XD Quality fkn.	0

[*Concluded on next page.*]

* The information given on this page has been c compiled for THE BUILDER and is copyright. Our this list is to give, as far as possible, the *averag* of materials, not necessarily the highest or lowest. and quantity obviously affect prices—a fact which be remembered by those who make use of this infor

URRENT OF MATERIALS *(contd.)*

GLASS.

SHEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.		Per Ft.
hs .. 3½d.	32 oz. fourths	8½d.
s .... 4½d.	32 „ thirds	10½d.
hs .. 5d.	Obscured Sheet, 15 oz.	4d.
s .... 6½d.	„ „ 21 „	5½d.
hs .. 6d.	Fluted 15oz. 6½d., 21oz.	9½d.
s .... 7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

according to size and substance for squares stock.

ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
plate	4½d.
rolled	5½d.
rolled	5½d.

Rolled, Oxford Rolled, Baltic, Oceanic, , Stippolyte, and small and large

sh white	6½d.
to, tinted	9d.
Sheet	6d.
olled Cathedral	5½d.
do.	7½d.

Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £	s.	d.
h	Outside	0	14	0
.....	ditto	0	16	0
.....	ditto	0	18	0
.....	ditto	1	0	0
Carriage	ditto	1	4	0
.....	ditto	1	12	0
sh	Inside	0	18	0
Paper	ditto	0	18	0
Cabinet	ditto	1	2	6
Flatting	ditto	1	0	6
g Oak.....	ditto	0	18	0
Drying Oak	ditto	0	19	0
Varnish	ditto	1	0	0
.....	ditto	1	2	0
.....	ditto	1	12	0
Gold Size		0	10	0
Japan		0	10	6
hogany Stain (water).....		0	12	0
Black.....		0	7	6
k		0	14	6
patent)		1	5	0
Brush Polish		0	17	0
ers in Terebine.....		0	9	0
k Enamel.....		0	7	0

TRADE NEWS

f of Messrs. Oscar Moenich & Co., Ltd., vitation of the directors, recently the fiftieth anniversary of the firm, founded in 1874 by Mr. Oscar Moenich, ursion to Windsor.

e received from the National Radiator teresting pamphlet dealing with their l" hospital radiator. It mentions that heating surface it occupies much less than other types. The space between is is 1⅜ in., which gives great facility g, and allows for ample room beneath

ual sports of Messrs. Waygood-Otis, held recently at Whitefoot-lane, A record number of entries was nd the cup presented by Mr. H. C. the greatest aggregate of points was by S. Piper. Mr. Green, acknow- ote of thanks, said he did not think eting could have been better managed Bridge. Mr. C. H. Day paid special Messrs. Plumridge and Hopkins, who, re mainly responsible for the success t. Among those present were Mrs. er, Mr. and Mrs. R. H. Thorpe, Mr. l. Harmsworth, Mrs. C. H. J. Day, Mrs. Norman, Mr. and Mrs. and Mrs. F. W. R. Scott, Mr. and ncaster, Mr. and Mrs. B. P. Walker, s. L. A. Day, and heads of depart-

Obituary.

h took place recently of Mr. George uilder, Sunnyside, Merthyr-road, . The deceased, who was 82 years had lived in Pontypridd all his life, of the schools, chapels and churches ypridd and Rhondda Valleys area.

THE SCOTTISH BUILDER

PRINCES STREET

THE Lord Provost's Committee of Edinburgh Town Council recently approved of a scheme by the City Architect, Mr. J. A. Williamson, for improving the traffic facilities at the junction of Princes-street and the Mound. The difficulty of any widening scheme is the R.S.A. Galleries, with the long steps which form a feature of the front elevation.

The City Architect's proposal is that the corner of the steps at each end should be removed. By this means the narrow neck formed by the projection of the corner will be removed. It is also a part of the scheme that the footwalk should be raised to the level of the lowest step, giving an added breadth of 1 ft. 9 in. to the footwalk, a similar strip being taken off at the other side and thrown into the roadway. In this way the space between the outer tramway rails and the new kerb line would be increased to about 12 ft. The present narrow strip of roadway between kerb and tramway lines, owing to the treatment of the corners, would be reduced in length by about 50 ft. The new kerb line would require to be raised to about 8 in. or 9 in. above the street line, the pavement being graded back to the bottom line of the second step of the Galleries.

The scheme, so far, has received the approval of H.M. Office of Works. A further suggestion, which is under consideration, is that the subsidiary steps, inserted at three points in the main steps fronting the platform on which the pillars rest, should be removed. This point has been referred to the Board of Trustees and the President and Council of the Royal Scottish Academy. It is also suggested that beacons should be placed at the four points which will be formed on cutting away the corners of the front steps. It is suggested that these should be about 9 ft. high, and carry lights, and that they would serve as a guide to traffic, and be of such a character as to harmonise with the buildings. It is also proposed that, when the footway is raised, the pavements should be formed with flagging laid down in a geometrical or tessellated pattern, stone slightly differing in colour being used to carry out the pattern.

NEW BUILDINGS IN SCOTLAND

New Monkland.—SCHOOL.—Plans are to be forwarded to the Scottish Education Department by the Lanarkshire Education Authority for alterations at the New Monkland Primary School, the estimated cost of which is £1,870.

Kingseat.—HOSPITAL.—The Kingseat Mental Hospital Committee of Aberdeen District Board of Control has accepted tenders for extensions at the mental hospital. The amount of the tenders is £26,866.

Coatbridge.— COLLEGE.— The Lanarkshire Education Authority Property Committee has under consideration the question of a site for a new technical college in Coatbridge.

Forrestfield.—SCHOOL.—The Property Committee of the Lanarkshire Education Authority has instructed the master of works to proceed with the erection of a new school and schoolhouse at Forrestfield.

Dundee.—HOUSING.—Messrs. J. & E. Shepherd have prepared a scheme for the erection of 5,000 houses on four sites.

Keith.—HOTEL.—At a sitting of the Licensing Court of the Upper District of Banffshire, held in Keith, plans of proposed alterations to the Central Hotel and at the Seafield Arms Hotel, Keith, were approved.

Glasgow Exhibition.

Glasgow Corporation has arranged to hold a Domestic Welfare Exhibition in the Kelvin Hall during the three weeks commencing October 13. It will be run on the same lines as the former Housing and Health Exhibitions, but more importance will be concentrated on the interior decorations and furnishings of the home than to the construction of the buildings. The classification of sections will include house furnishings, lighting, heating and labour-saving appliances, and house decoration.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plasterers' Labourers.
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½	
Airdrie	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Alexandria	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½	
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½	
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½	
Blairgowrie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—	
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Coatbridge	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dumbarton	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Dumfries	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½	
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½	
Falkirk	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½	
Hamilton	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Hawick	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2	
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½	
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2	
Kilmarnock	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Kirkcaldy	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
Leith	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Motherwell	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 1

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2: 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1⅛ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1⅛"	1¾"	2"
Two-panel square framed	per ft sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	per foot cube		

		1"	1¼"
Plain deal jamb linings framed	per ft. sup	1/8	1/
Deal shelves and bearers	"	1/5	1/
Add if cross tongued	"	2d.	2d

STAIRCASES.

	1"	1¼"	1½"	2"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/

Housings for steps and risers		eac
Deal balusters, 1 in. × 1¼ in.	per ft. run.	
Mahogany handrail; average 3 in. × 3 in.	" "	
Add if ramped	" "	
Add if wreathed	"	

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges letting in to floor	
Casement stays	1/2	making good	
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cw
Plain compound girders	"
Do. stanchions	"
In roof work	"

RAIN-WATER GOODS.

		3"	4"	5"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/
Ogee Do. Do.	"	2/4½	3/1	3/
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/
Do. nozzles for inlets	"	2/2	2/7	3/

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt	
Do. Do. in flats	"	
Extra labour and solder in coated cesspools	each	
Welt joint	per ft ru	
Soldered seam	"	
Copper nailing	"	

	½"	¾"	1"	1½"	2"
Drawn lead waste per ft. run	1/1	1/9	1/11	3/5	4/2
Do. service "	1/8	2/2	2/7	3/10	
Do. soil "					3/3
Bends in lead pipe each	1/2	1/8	2/1	2/10	3/6
Soldered stop ends "	11d.	1/-	1/3	1/11	2/4
Red lead joints "	2/10	3/6	4/-	4/11	6/6
Wiped soldered joints "				14/7	19/6
Lead traps and cleaning screws "	6/4	9/7	15/4	41/-	
Bib cocks and joints "	15/4	17/2	25/8	64/-	
Stop cocks and joints "					

PLASTERER.

Render, float and set in lime and hair	per yard su	
Do. Do. Sirapite	"	
Do. Do. Keen's	"	
Add sawn lathing	"	
Add metal lathing	"	
Portland cement screed	"	
Do. plain face	"	
Mouldings in plaster	per 1 girth	
One-and-a-half granolithic pavings	per yard su	

GLAZIER.

21 oz. sheet plain	per foot su
26 oz. Do.	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
¼ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per yard su
Knotting and priming	"
Plain painting 1 coat	"
Do 2 coats	"
Do. 3 coats	"
Do. 4 coats	"
Graining	"
Varnishing twice	"
Sizing	"
Flatting	"
Enamel	"
Wax polishing	per foot su
French polishing	"
Preparing for and hanging paper	per piece 2

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DING EDUCATION IN YORKSHIRE

Yorkshire Educational Association for ling industry held its first annual out- York recently.

evening meeting the President, Coun- eeves Charlesworth, F.I.O.B., of Shef- ferred to the efforts which the Associa- l made during the past year to assist oving the work now being done in the l schools in Yorkshire and in bringing rk to the knowledge of the building in- n the same county. On several issues l been able to record definite and satis- progress. Some of the proposals which l agreed to that evening were intended ie further channels of progress, and rly intended to encourage within the a better knowledge of, and a much use of the facilities offered to them chnical schools for the efficient training ung men now entering the industry. direction in which they hoped that gress might eventually be made lay -ordination of the work of the various of instruction now existing in York- the present time, owing to compara- ight differences, it was difficult to the more gifted students to centres ey could undertake more advanced able work, and he hoped that the on would be instrumental in obtain- oved transfer facilities.

an W. H. Birch, J.P., of York, also preciatively of the work which the on was doing to arouse a keener on the part of this great industry in which was being done on the side tion. In addition, he was sure that T. Whincup, who had been mainly le for the instruction in building sub- York over such a long period of years. was with them that evening, would him (Alderman Birch) in expressing tion for the interest which the Asso- had shown in their own efforts at He hoped that the day was not so far when, with greater support from local tatives of the industry and with the l facilities in technical education ey hoped soon to have, York would scheme of instruction for students of which would satisfy their require- n all but the most advanced work.

C. F. Smith and J. Leask Manson the members for the opportunity of them that day. They noted with that both building employers, build- eratives, educational administrative principals of technical institutions and teachers formed the constitution of ociation and were in active co-opera- urthering the important work of build- cation. They thought that such an tion was unique, and anticipated that, those responsible for building educa- e in such intimate contact with the of the building industry, the activities Association would be most successful.

e conclusion of the proceedings the teachers who attended the recent Education's course at Bradford made tation to Dr. R. E. Stradling, Director ling Research, and Messrs. F. L. F. A. Maddock, and C. K. Nicholls, e responsible for the Course.

Building Education.

ixth of the series of short full-time for teachers of building subjects which arranged in recent years by the Board tion will be held in London from July 21 st 2. There has been a record number ications from building teachers in schools to attend the course, and over ave been selected to attend—again a mber. For the third time in succession hers will be housed and most of the will be given at the Westminster Train- ge.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

ANDOVER.—For erection of new offices at Newstreet Girls' School, for the C.C. Mr. A. L. Roberts, County Architect, The Castle, Winchester :—

*F. Beale & Son, Andover	£549 8

BARNSLEY.—For the erection of 12 houses at Carlton, for the R.D.C. :—

*J. Mellor, Darton	£5,000

BARNSLEY.—For laying water mains for new houses, at Carlton, for the R.D.C. :—

*J. Snowden & Sons, Barnsley	£372 10

BARNSLEY.—For conversion of privies into water-closets in the Carlton-lane area of Smithies, for the T.C. The Borough Engineer, Fairfield House Offices :—

*A. H. Ward, Barnsley—*Plumbers' work.*

BEDFORD.—For decorations, painting and repairs to the Bedford School, for the Governors of the Harpur Trust. Mr. G. P. Allen, F.R.I.B.A., architect, 79, High-street, Bedford :—

F. Gale	£478 0
Perkins & Son	461 15
S. Foster, Ltd.	386 0
*H. S. Manning & Son	325 0

All of Bedford.

BEDFORD.—For alterations and reconstruction of a studio at No. 1, Harpur-place, for Mrs. Horne. Mr. G. P. Allen, F.R.I.B.A., architect, 79, High-street, Bedford :—

H. Bowler	£183
J. Corby & Son	138
*S. Foster, Ltd.	125

All of Bedford.

BEDFORD.—For alterations and additions to No. 6, Harpur-place, for Dr. Pollard. Mr. G. P. Allen, F.R.I.B.A., architect, 79, High-street, Bedford :—

H. Bowler	£563 0
C. Negus	552 0
W. Laughton	539 12
S. Foster, Ltd.	538 0
J. Corby & Son	534 0

All of Bedford.

BENFIELDSIDE.—For road improvements, for the U.D.C. :—

D. Crombie	£32,207 12 0
Sir W. Prescott & Sons, Ltd., London	29,923 9 9
Improvement Roads Construction, Ltd., Newcastle	27,760 19 0
*Tarslag, Ltd., Stockton	25,310 1 10

BIRKENHEAD.—For improvements to the St. Mark's Church, for the Rev. T. G. Pattison. Plans prepared by Mr. B. H. Miller, architect, Prenton :—

*Griffiths & Co., Liverpool.

BRADFORD. For the construction of pressure filter house at Thornton, near Bradford, for the Waterworks Committee of the Bradford Corporation :—

*John Dickinson & Co., Ltd., Bolton £11,886

BRADFORD.—For the reconditioning of mill floor at Valley Mills, Valley-road, Bradford. Messrs. Saml. Robinson & Sons, architects, Cheapside, Bradford :—

Concretor's Work—
*Crabtree & Berry, Great Horton, Bradford.

Asphalter's Work—
*Tunstall's Rock Asphalte Co., Ltd., Leeds.

BRIERFIELD.—For erection of a brick wall in connection with the widening of Colne-road, for the District Council :—

*H. Millar, Brierfield	£179 11 6

CHADDERTON.—For the erection of a senior elementary school on a site at Park-street, North Chadderton, for the E.C. Plans prepared by Messrs. Taylor & Simister, F.R.I.B.A., Oldham :—

*Ogden Bros.—Builder's work.
*S. & J. Whitehead—Mason's work.
*Samuel Ashton (Oldham), Ltd.—Joinery.
*Edward Pearce—Plastering.
*J. Brierley & Sons, Ltd.,—Plumber's work.
*John Heywood & Son—Painter's work.
*W. Henshall & Sons—Slaterer's work.

All of Oldham.

CHESTER.—For street works for the T.C. :—

*W. Turner (Ardwick), Ltd., Manchester—	
Christleton-road	£1,317 3 0
Watergate-street	888 4 9

CHESTER.—For alterations at 22 and 24, Northgate-street, for the T.C. :—

W. Vernon & Sons, Ltd.	£360

CHESTER.—For alterations at Bishop Graham's School and adapting premises for Maternity and Child Welfare Centre, for the T.C. :—

*J. Mayes, Son & Co., Chester—£869 (with condition as to increase of wages).

CONGLETON.—For erection of 40 houses on the West-end site, for the B.C. The Borough Surveyor :—

*Young & Co., Macclesfield	£18,235

DONCASTER. For the reconstruction of the Larger Bridge at Hexthorpe Flatts in reinforced concrete, for the Estates Committee of the Corporation :—

*Hodkin & Jones	£150

DONCASTER.—For water supply works for Barnby Dun with Kirk Sandall, for the R.D.C. :—

C. Fletcher, Doncaster	£1,776 12 9
W. Wilson & Co., Newcastle	1,660 17 6
Provincial Construction Co., Sunderland	1,650 0 0
A. Storey, Doncaster	1,584 0 0
J. L. Rodger & Son, Castleford	1,425 11 7
Leadley, Firth & Whittington, Ltd., Doncaster	1,351 5 3
John Walling, Spalding	1,241 0 0
Squires & Son, Selby	1,212 0 3
Porter & Sons, Barnby Dun	1,189 0 0
*Clements, Button & Clements, Barnby Dun	1,021 6 9

EXETER.—For construction of sump at electricity works, for the T.C. :—

*Soper & Ayres	£273 3

GOSPORT.—Extension of cemetery lodge, for the T.C. :—

*John Croad	£310

HAWICK.—For relaying of High-street with ridged granite setts, for the Hawick R.D.C. :—

*Improved Roads Construction, Ltd., Newcastle-on-Tyne	£16,000

HERTFORD.—Internal decoration at Special Residential School, for the Herts C.C. :—

*Shepherd & Co.	£280 5

KNEBWORTH.—For the enlargement of London-road Council School, for the Herts C.C. :—

*R. Ginn & Son, Hertford	£5,130

LONDON.—For the erection of public convenience at Salisbury-street, for the St. Marylebone B.C. :—

*Tavener & Son	£2,154

LONDON.—For repairs, &c., at Crawford-place Dwellings, for the St. Marylebone B.C. :—

Druce & Co., Ltd.	£250 12
H. A. Brown	240 0
C. Tavener & Son	216 0
J. W. Buckingham & Sons	210 0
Fredk. Mark	198 10
*J. H. St. John & Sons	196 0

LONDON.—New shop front and rebuilding front of premises, at 224, Fore-street, Edmonton :—

Groves & Son, Tottenham	£293 0 0
W. T. & E. Yates, Edmonton	292 9 2
J. Beale, Tottenham	288 15 4
A. Drake, Enfield	276 5 10

LONDON.—For painting work at cemeteries, for the Wandsworth B.C. :—

*H. Somerford & Son	£301

LONDON.—For external painting and internal cleaning, distempering and repairs at the L.C.C. Tramways Offices, Victoria-embankment, W.C.2 :—

*Triggs & Co., Lambourn Works, Mackay-road, Clapham, S.W.4	£856

LONDON.—For alterations to 102, Elmbourne-road, in connection with widening for the Wandsworth B.C. :—

*J. Potterton & Sons'	£786

LONDON.—For supply of 80 tons of Portland cement to the Wandsworth B.C. :—

*H. J. Greenham, Ltd.—£2 11s. per ton, less 2½ per cent. with a further discount of 2½ per cent.

LONDON.—For pulling down and rebuilding entrance gates at Ellenborough House, for the Wandsworth B.C. :—

*Jas. Carmichael (Contractors), Ltd.	£195

LONDON.—For the execution of repairs to the paving of Blackwall and Rotherhithe Tunnels, for the L.C.C. :—

G. J. Anderson, Poplar	£2,585 16 11
W. H. Wheeler & Co., Ltd., S.E.	2,490 10 7
*W. Peters, Stepney	2,433 11 6

LONDON.—For decorative and structural repairs to superintendent's house, Deptford pumping station, for the L.C.C. :—

*J. Buxton, Battersea, S.W.	£160 15 6

LONDON.—For erection of 102 flats on Tyndale-place site, Upper-street, N.1, for the Metropolitan Borough of Islington. Mr. E. C. P. Monson, F.R.I.B.A. Architect to the Council, Finsbury Pavement House, 120, Moorgate, E.C.2. Quantities by Mr. F. N. Falkner, 11, Princes-street, Cavendish-square, W.1. :—

Rice & Son, Stockwell, S.W.9	£67,070
Chessums, Ltd., Tottenham, N.15	66,687
Billings, Ltd., Victoria-street, S.W.1.	66,436
Bovis, Ltd., Berkeley-square, W.	65,750
Patman & Fotheringham, Ltd., Islington, N.	65,526
*Thos. Shillitoe, Islington, N.	63,625
Geo. Bollom, Acton, W.	59,721

LONDON.—For the erection of secondary school in Beechcroft-road, Balham, for L.C.C. Education Committee :—

Holliday & Greenwood, Ltd.	£43,967
James Carmichael (Contractors), Ltd.	43,665
Prestige & Co., Ltd.	42,306
Allen Fairhead & Son	42,125
G. Godson & Sons, Ltd.	41,420
Thomas & Edge	40,980
G. E. Wallis & Sons, Ltd.;	40,752
Higgs & Hill, Ltd.	40,444
Douglass Halse & Co., Ltd.	40,418
G. Parker & Sons, Ltd.	39,875
J. Garrett & Sons	37,694
F. & H. F. Higgs, Ltd.	39,532
F. & T. Thorne	37,199
‡J. & C. Bowyer, Ltd.	38,750
Chessums, Ltd.	38,292

MIDDLESEX.—For erection of new county school for boys, at Chiswick, for the E.C. of the County Council of Middlesex, from plans prepared by Mr. H. G. Crothall, F.R.I.B.A. :—

Ferris Bros., Acton	£38,499
W. Lawrence & Sons, Ltd., Finsbury-square	36,251
W. Lacey, Hounslow	35,835
Y. J. Lovell & Sons, Gerrard's Cross	35,345
C. J. Newby & Bros., Southgate	35,300
A. Monk, Lower Edmonton	35,280
H. Knight & Son, Tottenham	34,388
Wm. Daley & Co., Acton	34,250
Geo. Challis, Brentford	34,250
Geo. Bollom, Acton	34,200
W. J. Dickens, Ealing	34,000
*G. Godson & Sons, Ltd., Kilburn	33,870

READING.—For decorative and other work at Infirmary blocks, for the Board of Guardians :—

*H. C. Gill	£899 10

ST. ALBANS.—For external repairs and renovation of stonework, &c., at the Court House, for the Herts C.C. :—

*J. D. Hobson & Co., Adelphi, W.C.	£507

SALTBURN-BY-THE-SEA.—For erection of 19 (parlour type) houses, for the U.D.C. Mr. T. Young, Surveyor, Council Offices :—

J. T. Tarran & Son, Hutton Rudby	£11,024	8	0
Jas. Nixon, Saltburn	10,466	1	3
Jos. Loxley, Saltburn	10,316	0	0
John. F. Bainbridge, Redcar	10,078	0	0
J. J. Hodgson, Saltburn	9,890	0	0
W. Randall, Saltburn	9,880	0	0
C. Hebditch, Loftus	9,726	2	0
*John McCreton, Ltd., North Ormesby	(a)8,570	0	0
Surveyor's estimate	9,500	0	0

(a Including the provision of drainage, footpaths and fencing.)

SOUTHEND-ON-SEA.—For painting of schools, for the T.C. :

*John Bros.—Brewery-road	£220	11	8
*Meadows & Sons—West Leigh	226	17	6
External painting—			
*Carter & Finn—Hamlet Court-road	142	10	0
*Carter & Finn—Bournemouth Park-road	165	5	0
*H. R. Hughes—Hamstel	145	0	0
*H. R. Hughes—High School for Boys	145	0	0
*Meadows & Sons—High School for Girls	135	5	0

STANSTEAD ABBOTS.—For rebuilding bridge, for the Herts C.C. :—

A. J. Arnold	£10,654	0	0
L. J. Speight, Ltd.	8,500	0	0
J. Garrett & Son	8,110	0	0
Baldry, Yerburgh & Hutchinson	7,600	0	0
Yorkshire Hennibique Contracting Co.	7,100	0	0
K. Holst & Co.	7,015	0	0
G. E. Wallis & Sons	6,650	0	0
*W. & C. French	6,307	4	9

WALSOKEN.—For proposed police cottages, etc., for the Norfolk C.C. Messrs. Lacey & Upcher, architects, Upper King-street, Norwich —

J. Youngs & Son, Ltd., Norwich	£3,239	0	0
R. W. Dye, King's Lynn	3,137	0	0
H. Rands & Son, Ltd., Wisbech	2,625	0	0
*E. R. Lankfer, Walsoken	2,341	15	6

WALTON (SURREY).—For conversion of buildings at Elm-grove into lavatories, for the U.D.C. :—

*E. Patterton	£367

WINKFIELD.—For improvements to Cranborne Council School, for the Berks E.C. :—

*V. J. Berry, Cranborne	£1,060	12	1

YEADON.—For carrying out the whole of the rock asphalte work required in connection with the reconditioning of various floors at the Green-lane Dyeworks, for Messrs. Naylor, Jennings & Co. Messrs. Chippindale & Edmondson, architects, 1A, Hustlergate, Bradford :—

*Tunstall's Rock Asphalte Co., Ltd., Leeds.



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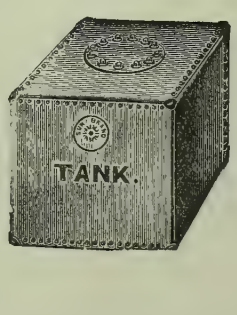
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THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

CXXVII.—No. 4252. AUGUST 1, 1924.

THE EDUCATION OF THE ARCHITECT

THE sense of inefficiency in education generally must be present in the minds of all who think seriously about it. Whatever be our object in life we must all feel that it would have been better served if that object had been earlier and better revised. Unfortunately, few of us are able to elect without qualification or fear what is to be our especial vocation, or, if we can, it is probably too late to lay a really efficient groundwork and foundation for our efforts. The desire to be an architect is often founded on a totally inadequate conception of what should be the ideal qualifications. It is well if the realisation of this is made clear enough to those who lack the somewhat unusual combination of mental equipment which is needful if one is to fully reap the advantages of a satisfactory architectural education. We have progressed far on the way to systematised intelligent education for architects during the past half-century and we may point with some satisfaction to the results. We may take it that the old system of pupilage is dead or dying, but we must not forget that the system was in some respects a good one, both for architects and pupils, though, as Mr. Waterhouse points out, whilst it had some great merits in certain offices, it was rather a bad thing in others. Nowadays the student has to look for inspiration and knowledge to the teacher or professor rather than to the practising architect and with all due deference to professors the stimulating value is not altogether so good in the former case. The apprentice or pupil who is keen to be useful to his master is sure to be helped along, for as he begins to make himself of value his encouragement and help are certain. The change from pupilage to school or university means a delay in the creation of value and earning capacity to the student, and architects cannot be expected to make use of the services of those who know little or nothing of office routine. It will be seen from the papers read at the Conference this week that a great change has come over the methods and aims of those who wish to create a body of well-educated, responsible architects, and that in all civilised countries some very definite steps are being taken to that end. It should be the duty of all architects to help forward in every possible way the attainment of knowledge and good character amongst the younger members of the profession; it is likely enough that even from a selfish point of view it will be worth their while. The discussion of educational problems, moreover, helps to focus our opinions and keep alive within us the right principles and aims which should guide us all.

The papers read at the Conference do not disclose any suggestion for drastic alteration in existing conditions. One thing to note specially in the paper by Professor Defrasse is the apparently severe ordeal of the entrance examination for the École des Beaux Arts. Out of some four hundred and fifty candidates, the numbers are eliminated down to sixty. The examination is a stiff one, and would not appear to offer much chance to a student whose sympathies are mainly artistic and emotional. The written examination in mathematics, the test in descriptive geometry and the oral examination in science, would probably be a heavy task for one whose great ambitions lie in the artistic expression of building materials. If art is to make the dry bones live, it would almost suggest that it is only likely to happen in the case of a Wren or a Michael Angelo. Before passing in the second examination, a student has to face examinations in science, descriptive geometry, algebra, statics and stereotomy. In the first-class examination the chief business is competitions in architectural compositions, but there is also examination in physics and chemistry, building by-laws and regulations. It will thus be seen that the type of mind which can face all these tests in practical matters is not that which we are accustomed to associate with artistic intuition. The professors appear confident, however, that such training as is to be found in France will lead to results both scientific and artistic, whether the tendency be towards traditional expression or distinctly modern interpretations.

The apprentice system is likened by Dean Bosworth to a pernicious and cantankerous old man subject to no influence but economic ones. That was at its worst; but at its best he describes it as the most glorious system of education evolved by man. The direct influence from master to pupil or apprentice was of a nature which the association of professor and pupil cannot be expected to supply, and we shall never quite reap the advantages which accrued when an architect and his pupils were in close and sympathetic association, now that pupilage is practically a thing of the past.

Mr. Curtis Green deals graphically with the position of education in this country and speaks hopefully of the work of the schools. He stresses the importance of students aiming for the Associateship of the Institute. He thinks architects have been more impressed with the necessity of securing good draughtsmen for their own purposes than with the slow process involved in the making of well-equipped architects. If a student cannot spare the time to follow a proper systematic course of architectural education, he is obviously left in something of a backwater, and though he may attain a facility and usefulness as a capable draughtsman, he will fail to reach the status of a thoroughly well trained architect. It is at least well that those who enter the profession should fairly face the issues and realise the importance of their ultimate subject. At the same time, they have to remember that the production of clever drawings and the winning of prizes does not necessarily mean that they will be of any very great value in the conduct of an architectural practice.

At the annual prize distribution of the Architectural Association (see p. 163) Mr. Goodhart-Rendel pointed out to the opponents of academic training that the kind of genius which could not break through any academic hedge was better kept under. At the Conference Mr. Waterhouse said the present system of academic instruction was not really a break with the past. It seldom happened that a school student found himself at the end of his course in sole command of an immediate practice. As often as not his career as a graduate in architecture began or continued in a draughtsmanship. As an assistant, he would experience that happy comradeship with an elder which the abolition of pupilage might have seemed to extinguish. Friendly rivalry among fellow students had been and always would be one of the greatest incentives to progress. That was the reason why a large office full of pupils was in the Victorian days a better training ground than a small one. The schools provide that rivalry to perfection, and thus give by their very nature what under office pupilage could only come by chance.

If we add to all the other virtues and accomplishments necessary or desirable to the architect that one suggested by *The Times*, "a sound working knowledge of human nature," we may well conclude that the thoroughly educated architect must indeed be a *rara avis*.

All things considered, we are driven to the conclusion that the modern architect, if he is to hold his own in the world of affairs, will need to be more and more a product of the school and the university, with what useful adjunct of artistic inspiration he can lay hold of. The average architect of the near future may come to be more or less of a highly-trained supervisor whose multifarious accomplishments may include a capacity for turning out a passably good building, perhaps better than most of the new buildings which are springing up in our cities to-day.

But for something which shall inspire us through its nobility and dignity, which shall add to the living beauty and delight of life, shall we have to look beyond the resources of the schools? Whilst we can probably create tolerable numbers of highly efficient designers of buildings, we cannot manufacture artists. We must never lose sight of the one signal value which the artist alone can supply—we would not be thought to decry for one moment the valuable efforts being made all over the world towards a higher standard of education, but we do feel that amongst the myriad marvellous efficiencies of modern life we are apt to lose sight of the great end we have in view by dwelling altogether on the means by which we are to reach it.

NOTES

The Amalgamation Scheme. As was expected, the extraordinary general meeting of the Society of Architects, which was held last week at King George's Hall, Caroline-street, Tottenham Court-road, W.C., unanimously approved, ratified, and confirmed the provisional agreement for amalgamation between the Society and the Royal Institute of British Architects. The resolution will be submitted for confirmation as a special resolution to a second extraordinary general meeting, to be held on August 8, at the office of the Society, 28, Bedford-square, W.C., after which a petition will be submitted to the Privy Council embodying the proposals, and as there is now no opposition to them the scheme should be approved by the opening of the session 1924–5. The new session should be an unusually interesting one, and the position of the Institute and the profession much improved by the amalgamation.

The Secretary of the Society. THE interesting dinner which was held on Thursday last week at the Café Royal, Regent-street, and was arranged by some of the friends of Mr. C. McArthur Butler, Secretary of the Society of Architects since 1898, to celebrate the twenty-fifth anniversary of his secretaryship, was no doubt timed to follow the vote of members of the Society at the extraordinary meeting referred to above, and a very agreeable little function it proved to be. Mr. E. J. Partridge, the President, took the chair, and referred to the great work which Mr. Butler had carried out for the Society and the cause it represented. In the course of a happily-worded speech, he presented Mr. Butler with a cheque for a substantial amount as some small recognition of his life work on their behalf, as well as a ring from past and present Presidents to Mrs. McArthur Butler for her sympathy and help. In the course of a charming and witty reply, Mr. Butler said the Society had earned a reputation for fair dealing which any society might envy. Their educational and Parliamentary work would be carried on and their members would be just as loyal to the Institute as to the Society. There can be no doubt that the success of the Society owes much to the indefatigable efforts of Mr. Butler, and this little tribute of affection and esteem was as well timed as it was appropriate.

Density to the Acre. IN our leading article last week we referred to the restriction of the number of houses to the acre, and we admitted that in certain cases it is not feasible to restrict the number of houses to 12, or very likely to 20, to the acre. Red-tape must be avoided at all costs, and where exceptional density is desirable there should be machinery for allowing it. This ought to be provided by the Minister retaining power to allow exceptional density in exceptional cases; but this power is too dangerous to be exerted by the majority of local bodies. We must prevent the greed of individuals or the ignorance and apathy of the less responsible local authorities from allowing houses to be overcrowded upon a site. Mr. Wheatley's solution seems to be the right one. Let the Minister of Health reserve the discretion of allowing more than the eight or 12 to the acre, but let him first satisfy himself that there is a reason for departing from the standard in the case in question.

Non-Brick Houses. HAS the subject of the cheapest possible form of building been yet sufficiently explored? There are many who think not and, consequently, Lord Middleton has given notice to move on committee in the House of Lords on the Housing Bill that an immediate inquiry be set on foot by the Government as to the possibility of building houses of other materials than bricks which may be erected more rapidly and at less cost. The difference when discovered will pro-



From the Exhibition at Grosvenor House.

An Office Building. By LOUIS N. ROSS (Harvard University).

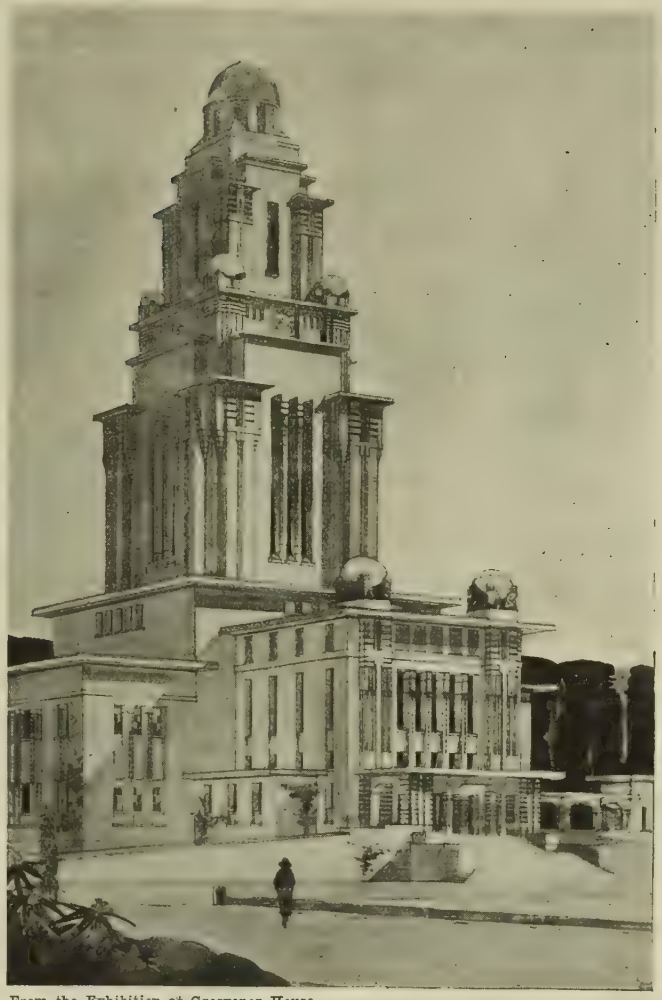
bly not seriously affect the economic ficulties of the Bill, but the inquiry is rth while.

chitecture and the Crafts.

THERE is need to give attention in the subjects discussed at the Conference on Architectural Education to the portance of a better appreciation of iftsmanship. So often the architect, ccessful in his planning of mass and portions, fails when he comes to craftsnship to distinguish between the real, product of vision and a personal atment, and the substitute, which is king in both. It is sometimes asserted t it is because he finds it so difficult to the right appreciation of architectural ds from the craftsman that he designs ll himself, leaving only to be registered precise copy-like fashion what he has so igned—more often without knowledge he resources of the material for which has designed it. The ability to work ough other minds, to draw forth the ies of personality with which to engthen his own work, is one which he en neglects, and architecture suffers n the poverty of the single mind which the inevitable consequence of such lect. There are architects to whom credit is due for their appreciation of advantage of this collective strength h for architecture and the arts as a ole, and we should like to see some erence during the Conference to the vantage of architecture raising the ndard of its appreciation in this direcn and depending less on the conventional ducts of a pseudo-craftsmanship, touched by individuality and genuine atment.

rchitects and Gardens.

THE leading article, "The Literature of Landscape Gardening," in the *Times Literary Supplement* of y 22, followed on June 4 by *Punch's* dener of the old school: "What! 't like geraniums, calceolarias an' elias?" offers a fruitful field to student cynic. Is what we call taste only a ter of vagary, and is the artistic mode the hour as simple and infectious as k-eye at a preparatory school? We not attempt an answer to these specuons, but we do say definitely that most itects (and all young ones of spirit) eve themselves to be specially enred with the instinct of garden design. ortunately, when an opening arises, r professional conscience interferes, client is warned of limited experience actual practice, and as a result the cialist is summoned from his lair; and annex to last spring's Olympia or lsea bursts into ready-made existence. ideal combination must be client, st and gardener; if the young archi is approached he should not venture assist—let him plunge. In this way y shall we achieve interesting gardens.



From the Exhibition at Grosvenor House.

Drawing by J. VAN DER STEUR (Technical College, Delft).

Gasometers.

THE gasometer is an ugly creature, but need it stand out as gaunt and conspicuous in its ugliness as it does? The gas industry is outstanding in its enterprise, and we suggest that much might be done to tone the gasometers into their surroundings by treating them as we did our merchant ships during the war, and camouflaging them to blend in with their surroundings. Even the crudest colours can perform wonders, and a one-coloured gasometer that now stands out conspicuous for miles would vanish from view if it were painted in stripes and patterns of different colours. Perhaps the British Commercial Gas Association will suggest these possibilities to the various gas companies.

"Stucco Shams."

"THE STAR" of July 25, in an article dealing with Regent-street entitled "Home Truths for Cranks and High-brows," informed us that the new buildings are "a financial and artistic gain." The interest in architecture which such articles demonstrate is all to the good, and we welcome it wholeheartedly, even when the sentiments expressed are hardly architecturally reasonable. We here find a comparison instituted between "the imposing piles of white Renaissance palaces with those heavy, low-ceilinged frontages and the two rival colonnades at the south end . . . the rapidly departing atrocities of Nash." The article not being signed we have no gauge as to the competence of the author to speak on the subject, but there are many members of the architectural profession who would prefer the old Regent-street to the new.

The Liverpool Cathedral Interior.

AMONGST the many illustrations published of the interior of the Liverpool Cathedral, it may have been noted by those who have studied the building itself that nothing has yet appeared which quite gives the full impression produced by its great height. The view we publish this week was sketched in the Cathedral a few weeks since by Mr. Davison, and aims to give something of the impressiveness produced by its emphasis of height and its simple breadth and dignity. Whilst it is decorated by a wealth of beautiful and delicate detail the breadth of plain surfaces and strong unbroken lines of articulation are only emphasised and in no wise disturbed by the variety and interest to be found in the carving, modelling and tracery.

GENERAL NEWS

Professional Announcements.

M. Marcel Péchin has been awarded the Grand Prix de Rome for architecture by the French Academy of Fine Arts.

Messrs. Mackey & Curtis, AA.R.I.B.A., have removed to 27, Buckingham-gate, Westminster, S.W. 1.

Peterborough Cathedral.

The Bishop of Peterborough has signed an appeal issued by the Peterborough Cathedral Restoration Committee, asking for £10,000 to restore the roof of the Cathedral, which has been found to be damaged by the death watch beetle.

Royal College of Art.

At the recent distribution of diplomas at the Royal College of Art, South Kensington, Mr. M. A. Halim was awarded a Diploma in the School of Architecture.

Memorial to Sir G. Newnes.

A memorial to Sir George Newnes, Bart., has been erected in St. Bride's Church, Fleet-street. It has been designed by Sir Edwin Lutyens, R.A.

Liverpool Cathedral.

The Liverpool Cathedral Committee, in a statement to the press, express the hope that it may be possible to proceed at once with the erection of, at any rate, the great central space under the tower (to an interior height of 170 ft.), with the western transepts adjoining it. It is estimated that these will cost, approximately, £300,000, in addition to the funds which the committee have in hand, and for this an appeal is now made. The sum named will not cover the cost of the tower above the great central space, or of the nave beyond the western transepts.

Obituary.

The death took place recently, at the early age of thirty-seven, of Mr. William Thorne Wilmot Ching, M.C. (former A.R.I.B.A.), youngest son of the late Thomas Ching, of Auckland, N.Z.

The death took place recently of Mr. A. Y. Nutt, M.V.O., for many years resident architect at Windsor Castle. Mr. Nutt executed many etchings of places of interest in the neighbourhood of the Castle; also the annexe of Westminster Abbey prepared for the Royal wedding; and the Royal Mausoleum.

Mr. Josiah Goodchild passed away on Sunday, July 13, at his residence, Hampstead-way, N.W., in the eighty-third year of his age. He was long associated with his father, who had a practice as a surveyor, acting frequently for the late Mr. Penrose, and in the early days of the London County Council. Mr. Goodchild was elected District Surveyor of North Islington, one of the first under the new conditions, and this post he held (having N. St. Pancras as well part of the time) until his resignation a few years since. He was President of the District Surveyors' Association just before his resignation.

Mestrovic Exhibition.

In view of the continued interest in the Mestrovic sculpture, the Exhibition now on view in the Galleries of the Fine Art Society will remain open for another week.

British School at Rome.

The designs prepared by the candidates who competed in the Final Competition for the Rome Scholarship in Architecture, 1924, and the R.I.B.A. Henry Jarvis Studentship, 1924, will be on exhibition in the R.I.B.A. Galleries from August 5 to August 15 (inclusive), between the hours of 10 a.m. and 6 p.m. (Saturdays, 1 p.m.).

Paisley War Memorial.

This memorial is situated at The Cross, Paisley. The sculptor of the bronze group is Mrs. Meredith Williams, of Edinburgh, and the casting of the group was executed by Messrs. J. Singer & Sons, Ltd., Frome, Somerset. The builders were Messrs. Neil McLeod & Sons, Ltd., and the carving was carried out by Messrs. Allen & Sons, both of Edinburgh. Mr. John Wornell (clerk of works, Paisley Abbey) acted as clerk of works. The pedestal, wing walls, and paving are of granite from Shap Fells, Westmorland, supplied by the Shap Granite Co., Ltd. The memorial is illustrated on p. 159. Sir Robert Lorimer is also architect for the completion of Paisley Abbey.

New Bridge for York.

The York Corporation are proposing to build a bridge over the Ouse at Clifton Scope, at a cost of £73,500.

Incorporation of Scottish Architects.

At the last monthly meeting of the Incorporation of Architects in Scotland (Mr. John Keppie, president, in the chair), it was resolved to send congratulations to Sir G. Gilbert Scott, R.A.—There were presented by Mr. A. F. Balfour Paul four framed illustrations of work by the late Sir R. Rowand Anderson to be hung in the premises.—The new regulations for architectural competitions recently issued by the R.I.B.A. were directed to be printed by the Incorporation in Scotland.

The London Building Acts.

The London County Council, at its meeting on July 29, decided that its architect, Mr. G. Topham Forrest, should visit America in the early autumn of this year in connection with the suggested amendment of the London Building Acts and the revision of the Regulations with respect to the construction of buildings wholly or partially of reinforced concrete. The Building Acts Committee expressed the opinion that in the public interest the Council should have the most up-to-date information and advice upon modern methods of construction, particularly in regard to buildings of reinforced concrete and steel-framed construction, and they therefore considered that their architect should visit America to investigate and report upon the subject.

COMPETITION NEW

Selby War Memorial.

The committee, out of five sets of plans s mitted by architects for the proposed new W Memorial Hospital, has accepted the des submitted by Mr. Leslie T. Moore, F.R.I.B. London.

Kovno.

The following premiums have been awar in the competition for the Lietuvos Bank bu ing at Kovno :—

First (1,000 dollars).—Messrs. Gasc & Bul Paris.

Second (700 dollars).—Ernest A. Serck, Be

Third (500 dollars).—M. Peveris, Kovno.

Cambrai and Soissons.

The Director of Works informs us that last day for applications in this competition the same as for Betune and Armentieres, January 1, 1924.

London Hotel.

Designs for a row of shops, with an hotel Premiums of £150 are offered for the sele designs. Particulars from Mr. H. Wald Imperial Hotel, Russell-square, W.C. 1.

Public Baths, Newton-in-Makerfield.

The Council has appointed Mr. A Thornely, F.R.I.B.A., assessor in this petition. Applications not later than Jul Sending-in day, September 30. Condi can be seen at this office.

Other Competitions.

Other competitions still open include following (the dates given are, first the sen in date, and second the issue of *The Build* which full particulars were given):—Ross-S Memorial (Sept. 30; Feb. 21). Harrogat firmary (Sept. 30; May 30). Hamilton Memorial (Sept. 1; May 30). Glasgow School Memorial (Sept. 30; June 13). Ma Memorial (Aug. 22; June 13). Bexhill E tainment Hall—Banned by R.I.B.A. (Sep May 30)



An Italian Exhibit at the Exhibition at Grosvenor House.

SWEDISH AND DUTCH DRAWINGS

BY HOWARD ROBERTSON.

understand the work of the foreign schools Grosvenor House without knowledge of methods of training is impossible. A school receive its students after a preliminary in- tion in the workshop, another may receive its, as is generally the case here, direct from ol: in each case the system will affect the od and the result. Of the systems adopted oth Sweden and Holland we know a little, will shortly know more; but under the nt circumstances criticism of the drawings bited is bound to be slightly superficial.

e exhibition of Swedish work from the l Academy of Stockholm stands out, side de with that of one or two other schools, as rating the truth that in architecture it is uilding and not the drawing which should e aim of the architect. There can be no ger antithesis to the work of some of the merican schools than this display of quiet ns which reveal their quality only to the observer. This impression of discretion not depend on the fact that the drawings epresented only by small photographic ductions—some of the American schools epresented in similar fashion and are at an disadvantage—but derives very largely a sense conveyed that the drawings are not ch projects for buildings as drawings from ings which are erected. Every architect s that some of the finest work is defective, the display standpoint, in its portrayal by ing. There is apt to be an absence of r, of brilliant spots which sparkle with the r flick of a soft pencil point; so much so designers, wise in their knowledge of human ness, are prone deliberately to prepare over- rated competition drawings with a mental ration that, if and when the job is secured, runing knife will be set to work. The ish designs represent the " after-pruning " d, they reach that stage of study when nation has been called upon as a design

er the magnificent display of work recently ited at the R.I.B.A. it would be ungracious mplain of these rather slight photographic ductions. But our friends the Swedes not grumble if the hurried architect, eager filling meal of buxom temples on luxurious grounds, hurries past the delicate *hors re* which they have provided,

is precisely in this delicacy of handling that er might seem to be lurking for the Swedish nt. A feeling for refinement so cultivated, se of nicety in design so stressed, might ivably result in an eclecticism almost ish—merely because these traits would be oped at too early a stage. It is conceivable agine—one, in fact, often experiences—that of mind in which there is present an intense e to be coarse and brutal in the face of ate restraint. What induces such thoughts e suspicion of the precious, the supercilious, ffeminate. There is, in the writer's opinion, a suspicion that these traits may develop e Swedish art, at the expense of breadth frankness of treatment.

far as one can judge from the photographs, wedish teaching must be thorough and well ed to their conditions. A strong feeling aftsmanship is evident; apparently many e students must have received some first- experience of manual training. There is od deal of maturity noticeable in the ing of various materials, a feeling for priate forms and treatment. The con- ion drawings are simple, almost naïve, but so also are the plans and elevations of the ete buildings. We have seen at the .A. photographs and models of buildings d from such plans, and they have the same nt quality. One imagines that it is all tly adequate.

photographs range through six years of g. The first and second year work deals with designs for buildings on a modest scale. There are no drawings of the Orders, no sheets to explain the teaching of historical periods and study of tradition. One sees charming drawings, of delicate *métier* portraying designs discriminating in their proportions and studied in their effect as buildings. A small library and a little week-end cottage are typical examples, designed in a spirit of genial refinement. The third-year work aims higher. Designs for an apartment house (31–35), two courtyard schemes, a dwelling-house, (46), and a country house (40–45) are each full of character The courtyards have a slightly archaic flavour spiced with Percier and Fontaine, but the country house deserves careful study. It has a charming plan and elevations, influenced, one imagines, by Mr. Ahlberg, and the rooms are delightfully and simply shaped. Not a competition scheme this, but one to be built. Sketches—a floor design, a fountain, a standard —show similar influences, and all are good in quality.

The Fourth Year is still more ambitious, and perhaps a shade less stimulating. There is a scheme for Popular Baths (52–55), and a " Guild Building in Upsala," interesting especially by its study in a model. Indeed, the Swedish seem to use the model to great effect; for in the Fifth-Year " School of Arts and Crafts " and the Sixth-Year " Railroad Station in Stockholm " (97–106) every aspect of the design seems very seriously to have been considered in the round. This latter project is very interesting to those who have studied the Stockholm Town Hall. It is extremely carefully schemed to harmonise with, and yet provide the proper foils to, Ostberg's splendid masterpiece. The Fifth and Sixth-Year work generally is considerable in scope—town planning on a good scale and large buildings—but generally the monumental designs are less intriguing than the handling of smaller subjects and details. We cannot conclude this review without mentioning the measured drawings (71–73) of old Swedish buildings. The photographs show the most sensitively-handled interior studies and the most delicate patterning imaginable. What a pity the original drawings are not available!

Through the doorway, in the adjoining Room 2, we find one of the best organised exhibits in the Congress, that of the Technical High School at Delft, now under the able directorship of Dr. Slothouwer. Here we see a school which is working on lines more obviously parallel to those of the English training centres. There are the same five-year course, the same groundwork preparation in geometry, construction, technique, and expression, with diversity of aim and results only where one would naturally expect them, namely, in the design section.

The impression gained from a study of the Delft work is that of great thoroughness and very excellent technical equipment. One feels that these young architects would capably handle an engineering problem—in fact, we understand that in the early stages of the course both architects and engineers receive a preliminary training. It seems indeed that the constructional side may have been developed to some extent at the expense of creative imagination in design. The Delft School must not be confused with the Reijks Academy in Amsterdam. At the Architectural Association some eighteen months ago we were interested in and somewhat astonished by these modernist Dutch designs which had so much power and not a little crudeness. There was, however, manifest in that work an effort towards a fresh expression, an attempt to revert to simplicity of mass and obtain effect by the elimination of the inessential. We confess to a feeling of disappointment that more of this effort is not evidenced in the work from Delft. It is all so excellent in technique, so conscientious in presentation, so careful and so thorough, but somehow lacking in design interest and " salt."

In the First and Second Years we see the technical preparation, and the beginnings of an interesting course in decorative art. And in the Third, Fourth and Fifth Years the development of the design training. The Third-Year work is mostly domestic, clean and sensible, but suffering from hesitation in the adoption of any style or expression. We prefer, for example, the definitely exaggerated gables and steep red roofs of the " small country house " to the semi-English type above it on the wall. Worthy of note is the delicate drawing of the plans and sections of the latter scheme (Nos. 18 and 19), and also the excellent execution of the detail sheets. In the Fourth Year there is a school (16–18)—a little dull, but with an interesting fenestration—an attractive coloured interior for a chemist's shop (No. 5), and a still more interesting Banking Hall (No. 1). This latter scheme with its patterned bronze grille is really suggestive of modern design possibilities.

In the Fifth Year the most interesting drawings are those for a congress building, with a semi-oriental massing and a far-away suggestion of the later manner of Sir John Burnet in the handling of planes and recessions. The detail, however, is uninspired and distressed, with a flavour of Otto Wagner, rather faded, saved, however, in the drawing by a broad and vigorous rendering. Schemes for a casino worked on squared paper appear well planned, with some confusion in elevation—less interesting than the Kurhaus on another wall, with its long green roof and good contrast of horizontal and vertical.

All the Delft drawings are worth examination, not the least interesting being those contained in the admirably arranged stand portfolios. An exhibition so well planned as this is a delicate compliment to the Institute which one feels sure will be appreciated.

We must not conclude without mentioning three casts of modelled subjects. Simple, vigorous, and interesting, this work is decorative and promising. It is of the type which sends the critic away with the feelings that, after all, work may sometimes be play.



Paisley War Memorial. SIR ROBERT LORIMER, R.S.A., Architect. (*See p.* 158.)

CORRESPONDENCE

The Dispute in the Building Industry.

SIR,—I would like to make a few observations arising on your Editorial comment of July 25, on the dispute in the building industry, and on the article, "Some Reflections on the Building Trades Dispute" contributed by me to *The Builder* of the same date.

I agree with you in thinking that had the Building Trades Parliament (the Joint Industrial Council for the Building Industry) been in existence to-day, we might have been spared the present unfortunate dispute. The causes of its practical dissolution are well worth considering. In the opinion of the writer, for what it is worth, the real underlying cause was the nature, in the employers' view, of some of the proposals embodied in the Report of a Committee of the Building Trades Parliament which, though concurred in by some employers, was regarded with the utmost alarm by the majority. Notwithstanding that this Committee had done most useful work, and that the employers were in thorough sympathy with many of its proposals for the good of the industry, yet the features of the rest of the Report alienated the great majority of the employers. The result was that employers and employed only met to consider wages and conditions (on the Wages and Conditions Council), and grading and disputes (on the local Conciliation Boards). This was their only business with each other.

Now, what would become of a business if the partners met only to discuss the division of profits, and not the conduct of the business so as to secure and make profits? It may be argued by some that employers and operatives are not partners, and that there is no analogy. But I think it has come to be recognised that there is a quasi partnership (though not in a strict legal sense) between them, and that the best results come from such a recognition. It is around the terms of the partnership that differences have arisen, that is to say, the basis on which profits are divided, the share of the workers being the wages paid for their share in the works, and as to the hours of their attendance at the business. It is just this idea of partnership between employers and employed, and their working to mutual advantage, which is at the bottom of harmony between them, and which underlies the Whitley Report and the establishment of the Joint Industrial Councils recommended by it.

In the case of the building trades, the master has been frequently originally a tradesman operative himself, whose business has extended so that he has associated with himself other tradesmen operatives employed by him on wages, the underdog—if he may be so termed—being the unskilled "labourer." Then we have the builder in a large way, employing masons, bricklayers, carpenters, painters, plumbers, &c., all of whom unite to produce the complete building. Thus, the idea of partnership as applied to the building trades has a foundation. The advantages of meeting to consider and discuss the common interests and concerns of the trade seem obvious, but the occasions for such meeting are now regrettably absent.

W. H. STOKER.

Barry, Pugin and Brooks.

SIR,—The Royal Institute of British Architects has done well in recently exhibiting some of the beautiful designs and drawings of Sir Charles Barry and of James Brooks.

The article in *The Builder* of July 11, 1924, under the heading of "Exhibition Notes," and the subsequent letters of Mr. C. F. A. Voysey, Mr. Arthur T. Bolton, and Mr. Maurice B. Adams afford most interesting reading; and I think Mr. Maurice B. Adams has expressed the feelings of all of us, to-day, by the words, "Rightly judged, Barry and Pugin ought to rank as joint Architects of the Houses of Parliament."

I am only "butting in" now by expressing the hope that the beautiful drawings of Sir Charles Barry and of James Brooks have been seen, and studied, by architects, old and young. The virile designs and drawings of Brooks must have delighted all real lovers of ecclesiastical art, particularly his designs for Liverpool Cathedral. Barry's drawings are astounding by the skill and patience shown, reminding one of what must have been a dreadful strain upon the eyesight in executing Japanese cloisonné.

As the writer of the article above referred to observes, "the drawings supply an eye-opener to those who, in these days, affect a slipshod style." The section through the Central Hall of the Houses of Parliament, and the drawing showing an elevation of the Victoria Tower, are really marvellous. Brooks, Barry and Pugin re-create in me a love of real Gothic, with an accompanying distaste of "original thought" in that style. One cannot play with Gothic Architecture! WM. WOODWARD.

The Architectural Association.

SIR,—I made a point of being present at the A.A. prize distribution last Friday, as one of the seniors, Sir Aston Webb and Mr. A. H. Kersey having been elected with me in 1867. There is a name in the list (1861), but as it appears in no other list I conclude that the gentleman has passed away. I took part in the 'eighties in the efforts made to give better teaching in the A.A., and I think that few of us dreamt that in 1924 we should have such a splendid school and a noted politician to attend our prize giving. Long may it prosper!

HENRY LOVEGROVE.

THE SOCIETY OF ARCHITECTS

MR. E. J. PARTRIDGE (President) occupied the chair on Thursday last week, at an extraordinary general meeting of the Society of Architects, held at St. George's Hall, Tottenham Court-road, for the purpose of considering a resolution approving and ratifying the provisional agreement for the amalgamation of the Society with the Royal Institute of British Architects.

THE PRESIDENT said the object of the meeting was explained in the notice, and the resolution was put forward by the Council with the fullest confidence. They had been considering the subject with the Institute very carefully during the past nine or ten months, and had come to the conclusion that it was the best course to pursue for the purpose of advancing the interests of the profession at large. The Council had received 537 proxies, and of these 527 were in favour of the resolution. The Council did not anticipate that any amendment would be proposed, but if anyone desired to do so he would rule that voting could only take place on a direct negative. It would be a straight vote, for or against.

MR. A. J. TAYLOR, in proposing that the agreement be confirmed and that the Council be directed to carry it into effect either with or without modification, said the only reason for the Council placing the resolution before the members was contained in clause 6 of the agreement, viz.: "When and so soon as this agreement shall have become absolute the Royal Institute shall forthwith promote and use its utmost endeavours to carry through a Registration Bill until it becomes the Act of Parliament and for this purpose forthwith and before the Society goes into liquidation to appoint a Registration Committee. The Society shall have the right to nominate one half of the members of such committee." In other words, the proposal if carried through would enable the Society to fulfil the promise that if the R.I.B.A. would take up registration in earnest it would step aside and give the Institute its support. Amalgamation was merely a means to an end, and in this case they j justified in accepting the means in orde attain the end. The Council was satisfied the most certain and, in fact, the only wa obtain registration was for the two bodie become one and become the most represent and powerful organisation of its kind in world. The larger number of members of Society practised in the provinces, and k the need of a real accomplishment of this obj and the practical unanimity with which th ey received the proposal justified the anticipa that those present would go one better give a unanimous vote in support of resolution. He thought the Society had g an object lesson to other institutions as to w could be accomplished by individual collective loyalty and support given to th who were chosen to look after the administra of its affairs. He trusted they would cast asid questions of self interest, and with a unanim voice give the Council power to carry out agreement as it stood. He wished to exp the appreciation of the negotiating comm at the way in which they had been met by representatives of the R.I.B.A. Agree had not been come to easily, and frank v had been exchanged, but throughout Institute had shown a keen desire to deal the matter on fair and equitable lines an try and arrive at a mutual understanding.

MR. C. H. MEAD seconded the resolution said he was satisfied as to the absolute fai of the whole thing. Consideration had given not so much to the individual as t profession as a whole, and that was a which everyone must bear in mind. The not possess the status of the doctors and lawyers, but there was no reason why they sh not. They would not, however, until obtained Registration. When Registratio granted they would stand in greater favour the public; they would be dubbed "archit and that word would have a real meaning

MR. G. LOVELL said he claimed to have in the past one of the most strenuous oppo of amalgamation. The Society had bee leaders of every progressive movement i profession in the past 20 years, and it was reflection to him to feel that the strong po they had held would pass away. What soled him was the knowledge that they w still have the support of the Secretary o Society in carrying forward the schem registration. He hoped they would still their premises in Bedford-square as the ho the Registration Section of the Institute, they knew Mr. Butler was at the head o would give them a stronger sense of security if they went to Conduit-street.

MR. E. BARE supported the resol Registration, he said, was the object o Society when it was formed and now the the chance of the object being consumate must all feel thankful.

MR. A. J. MURGATROYD (Manchester) s had been in touch with architects in the towns in the North for 20 years and he that the clause in the agreement with reg registration settled the whole thing.

The resolution was then passed unanim

MR. LOVELL proposed a vote of thanks Council for the work done.

MR. W. H. MAY (Plymouth), in seconding that in the West of England architects practically unanimous as to the need for tration. London architects were not probably, of the kind of competition the in the provinces, and the sooner regis came the better for the public.

MR. H. BRANCH said he was an o member of the Society and one could not the past without recognising that it had r its manhood, and he was hopeful for the The reason why architects had attain position they had to-day was becaus dealings with the public were based on —they had the spending of other p money, and charged them for doing so.

The vote was carried, and the PRE briefly replied.

AMERICAN SCHOOLS OF ARCHITECTURE

By Professor C. H. REILLY.

The American schools of architecture have ade a very fine display at Grosvenor House. ey have paid us the compliment of treating e Congress we have called together very iously. Being older institutions than our own nools, they have perhaps more experience in lecting work for exhibition purposes and in termining the form in which it is shown he great New York School of Columbia Univer- y, for instance, has gone to the trouble of aking one large frame for the space allotted it. In the centre of this is a large drawing what appears at first sight to be the plan of cathedral. In the bays of this are written symbolised the various subjects of study ring this course. The whole plan is indeed t the plan of their work, very decoratively d appropriately shown. As the space given this school does not allow of complete draw- gs, round this plan are grouped small repro- ctions of drawings, and then in larger panels, ecimen sheets. Enriched mouldings divide e panels, and the whole is on a grey cloth ckground. I mention this to show the expense d care to which our American friends have t themselves so that we may understand at they are doing.

A whole wing of the ground floor of Grosvenor ouse is given up to the American work, and impressive show it makes. In spite of the e of the country, there is a continuity and nilarity about the work of the American nools not to be found in that of the English nools at Devonshire House. This is largely e to the efforts of the American Beaux Arts stitute of Design. Most of the schools seem compete for its recognition by attacking the oblems it sets. The same programmes there- re appear time after time, and you can compare, y, the solutions of the Boston "Tec." with ose of Harvard or those of Pennsylvania with ose of Washington. There is, for instance, set of delightful schemes for the decoration a cabaret which have come from all parts the Continent. It is obviously a subject nich has appealed strongly, and each school s felt it, and it has called forth work worthy exhibition. Another favourite subject has en a tall office building on the lines of the cent *Chicago Tribune* competition. Our own stitute Prizes have been kept out of the schools they might have produced similar results. hether we desire, however, our English nools to be as uniform in outlook and in sult as the American appear to be is other question. What, however, we may all nestly desire is an equally high standard of aughtsmanship and presentation. On the hole, then, things are very much better in e American section of Grosvenor House than ey are with us at Devonshire House.

Perhaps, though it is very difficult to decide hen many are so nearly equal in merit, Boston stitute of Technology—"The Tec.," as it is town all over America—has the finest show. must be admitted that it does this largely eliminating the work of the early years. is applies to several of the schools. Of course, s Boston School has a long tradition behind The great Depradelle was teacher of design en I knew it first, and to-day they maintain ir high standard of draughtsmanship, as well their rather French outlook, by having in pradelle's place M. Ferrau, who won the Grand x de Rome in 1914. Harvard, which is hung posite, also has a Grand Prix professor in Haffner, the 1919 winner, and French uence is beginning to be very apparent in ir work, too. I say "beginning to be" nuse the Harvard School for many years lout against France and sided with England, ne can use such terms. At present she ns to be hesitating between the two modes, is in the danger of the person who tries to n two stools. One of the finest renderings, ever, in the whole exhibition is to be seen scheme for a tall office building shown nst a stormy sky.

The University of Illinois, in the same room, exhibits some excellent nine-hours sketches, particularly one of a reviewing stand; but it also shows a tall obelisk-like building called a "Beacon of Progress," too near to Depradelle's famous design to rank as original work.

On the back of the large centre screen, occupying a similar space to that of the Boston "Tec.," is the work of the Washington School. Although this school shows some especially clever renderings, such as the drawing of trees, as Wilson Steer might draw them, its design does not appear to me to reach as high a standard as does that of some of the others. After all, even at a school of Architecture, rendering is not the end but the means, and it is because a certain ex-English professor felt this so strongly and was, in consequence, led to make an attack on certain English Schools that the Congress came into being. I feel he might draw some useful arguments from the Washington exhibit, though I think he would approve of the catholicity of the work, which seems to range with equal facility over Romanesque, Gothic, Classic and Renaissance motives.

The Carnegie Institute of Technology at Pittsburg, with which in its early days that magnificent draughtsman and very successful competition expert, Mr. Hornbostel, of Hornbostel & Palmer fame, was associated, shows on another wall of the same room a very fine series of designs, mostly, however, in elevation only. There is a library design in the later manner of Mr. Cass Gilbert, which is one of the pleasantest things in the exhibition. A museum front is well shown in a different scheme of rendering, and there are the usual gay designs. This School has a very attractive exhibit.

Cornell, which is in the same room, has been more strict in carrying out the instructions of the committee in trying to show examples of the various stages of its course. With the small space allotted to it, however, this has meant that it has had to show in the mass of its work small reproductions instead of original drawings. It has made one glorious exception. There is a magnificent sketch of a very fine subject—a floating grand stand for a regatta—which not only exhibits great skill in the rendering but much power of design.

Sad to relate, the Pennsylvania School, under its famous professor, M. Paul Crêt—the only French professor, it is said, who has settled down and gained a great practice in America—is banished to a narrow corridor. This is probably because the School did not go to the expense of mounting its drawings. Liverpool, at Devonshire House, though it did not thereby lose its rooms, suffered in the same way. Architects, however, should not be deceived in the result. They will not be if they look carefully into the Pennsylvania drawings, particularly the coloured ones for the cabaret and other interiors. These show astonishing skill in rendering as well as power in design. Yale University, the Georgian School of Technology, the University of Michigan, all have small exhibits which, if they were from any of the smaller English or Scotch Schools, we should think very good indeed. Our standard though for America is higher than for ourselves. With her schools we expect accomplishment and get it. What we do not find, and what perhaps is not to be expected in so vast a country, which in many ways has not yet found itself, is any indication that a national type of design, such as a small country like Holland or Sweden can show, is growing up. With a vast continent like America I am not even sure that it is desirable. We all know this, that the general standard of work in American cities is extraordinarily high, much higher than with us, and for that standard the American Schools of Architecture with their carefully-planned curricula, their professors of international fame, and their keen inter-school competition, are responsible.

FRENCH AND OTHER FOREIGN SCHOOLS

By H. P. Cart de Lafontaine.

One of the most interesting exhibitions which has been arranged under the auspices of the R.I.B.A. is the collection of drawings illustrating the work of students of architecture in the chief schools of Europe and America now on view at Grosvenor House. The object of this exhibition was to enable delegates attending the international Congress on Architectural Education to compare the results of training in the various countries of the Old and New Worlds, and for this purpose each of the schools invited was asked to send a representative collection of drawings illustrating as far as possible the progress of the architectural student through the whole course of instruction.

This lends a particular interest to the exhibition and demonstrates the influence of school traditions, national characteristics, and the development of the power of architectural composition which results from the exercise of the student's natural capacity during the period of training.

Taking the exhibition as a whole, one observes that, although not very fully represented, the French National School is remarkable for two things, the attention given planning—that is, the effective disposition and proportion of the various elements of the composition and their co-ordination into a harmonious whole—and the attention given to draughtsmanship as a means of expression, always subordinate to the idea to be expressed and not as an end in itself.

An excellent example of this is seen in the set by Mr. Henri Defrasse, illustrating his scheme for a "Floating Island in the Atlantic." The general idea is well shown in the large coloured perspective, with its subtle harmony of blue-green and purple. But the detail drawings in black and white are perhaps even more interesting, with their impression of colour and distance and suggestion of the architectural features of the decorative treatment which is worth studying.

The work sent by the Ecole Nationale des Beaux Arts, in Rooms 3 and 4, represents the two classes into which the school is divided, the Second and First Class, which may be taken as roughly corresponding to the first and second, and third and fourth years of the English school programme. There are also some examples of work for the *Grands Concours* which represent the "post graduate" course of other schools, and include such prizes as the Chenevard, Rougevin, Godebœuf, Labarro, Prix des Architectes Americans, &c. For the last-named M. Aublet shows a fine plan for "A Sanatorium," worked out in considerable detail, and also illustrated by a section and elevation.

For the *Concours Godebœuf*, M. Labbe shows a detail which is worth studying both for its harmonious proportion and careful rendering. Two *esquisses* for a "Grand Stand on a Racecourse," by MM. Labatut and Cazalis, are excellent in their clever indication of the essential features of the design in a rapid sketch, and a good design for a bridge, by M. Mendelsohn, reminds one of a similar subject in a Rome Prize competition of recent date. In the Second Class, in Room 3 (showing the most elementary work and the *projets de construction*) there is a good set for a *Caserne de Sapeurs-Poupiers* with a well-schemed plan and simple elevation. Two construction subjects, "A Diorama" and an "Open-air Swimming Bath," should be noticed. There are also one or two good decoration compositions and some excellent *projets d'archæologie*, including one from the Strasbourg Regional School.

Some of the most interesting work in the exhibition is that sent by the Technical College at Delft, in Room 2. Here one is struck at once by the modern note and by the vitality of the school; study of the past is allied to practical considerations of the present, and the working drawings are capable and business-like studies of interesting problems in design, treated with imagination and originality.

This is well exemplified in Mr. L. Van Straatin's

set for a "Sea-side Casino," which really looks like a casino, and has been given an interesting silhouette which suggests the sea front with ts wide open space.

The Towers, by M. J. Van der Steur, is also an excellent study and has an effective grouping of the subordinate features leading the eye upwards to the central mass.

The many good designs shown in the portfolios should not be missed, as they are all interesting and well drawn, and mention should be made of the one or two examples of measured work which are well drawn and rendered.

In Room 1 the most interesting exhibit is that sent by the Austrian schools—The Academy of Fine Arts, Vienna, the Technical High School, Vienna, and the Technical High School, Graz. Here the German influence is well marked, but there is considerable originality in the reproductions of sketches and models sent by the Vienna School. All these have the characteristic of visualising architectural design in the solid, and the skilful use of timber construction to obtain an unusual effect with a touch of the bizarre in the design, by Herr Langer, for a "Farm House in Franconia," should be noted. There is also a clever study of a wooden screen with a rich colour effect, by Herr Mengelhart

The remaining exhibits in Room 1 illustrating the work of students in the Royal Academy of Fine Arts, Copenhagen; the Royal Academy of Arts, Stockholm, and the Polytechnic of Norway Trondbjem, are disappointing, and do not call for special notice. The exhibits are for the most part small sketches, and do not show much architectural knowledge or ability.

In the Entrance Hall, however, there is a good show of work from two of the schools of Italy—the Royal High School of Architecture, Rome, and School of Architecture, Milan; in the latter case the exhibits are mostly small scale reproductions, but they are well worth studying, and show ability in composition and interesting detail—this is especially the case in Sig. R. Moretti's set for the "Headquarters of a Touristic and Sporting Association."

In the exhibits from the High School of Architecture, Madrid, one is attracted by a delightful water-colour sketch of a Romanesque church, and an excellent study with a fine plan, by Senor L. Bravo, "Proyecto de Eremita para S. Isidoro"; this design is illustrated by a delicate and beautiful rendering. There are also some good measured drawings, while on the opposite wall in Room 6 is a collection of excellent student's work from the Polytechnic at Budapesth.

BOOK REVIEW

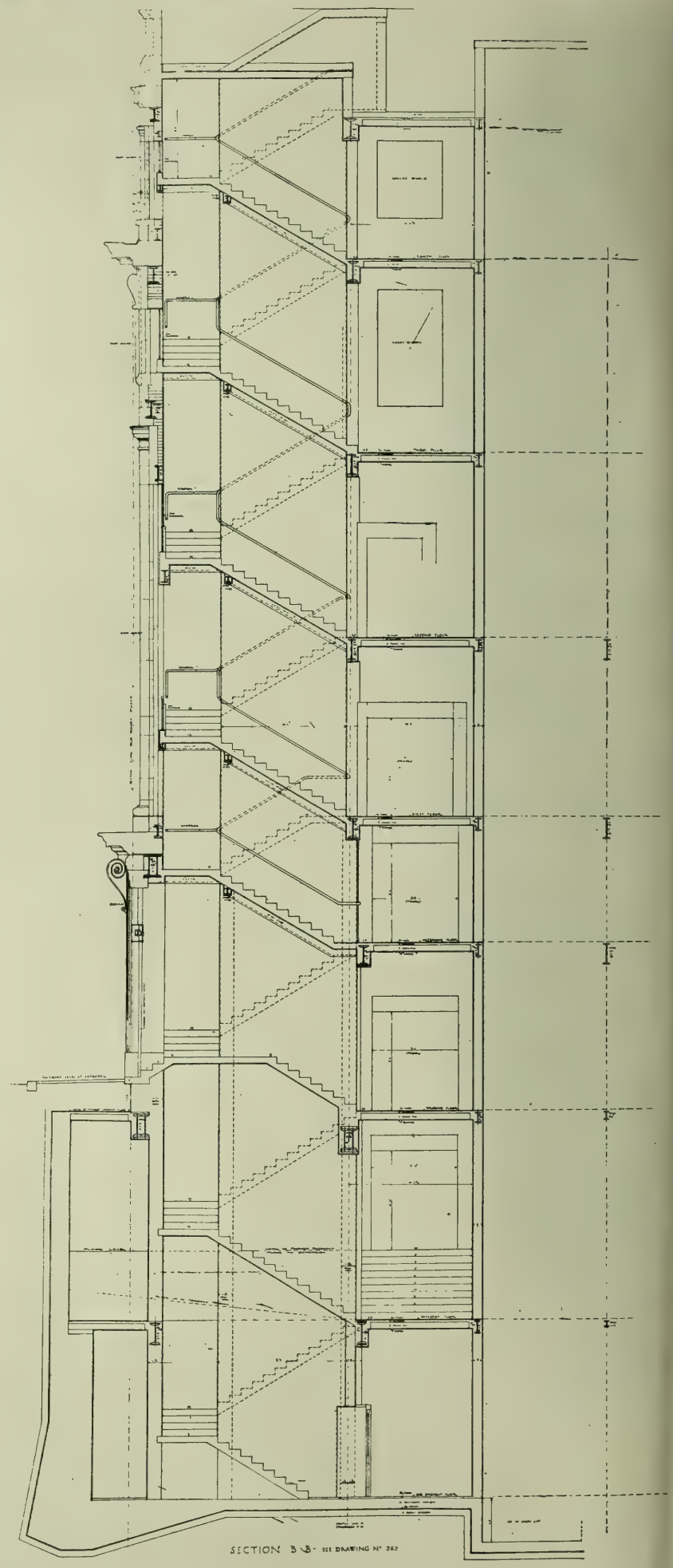
National Housing: A Proposal for a National Municipal House Building Service, with an Examination of the Housing Bill, 1924. By MAJOR HARRY BARNES. (London: Ernest Benn, Ltd.) Price 2s. 6d. net.

This little book begins with the paper read by the author before the R.I.B.A., on March 27 last, with the comments of the four principal contributors to the subsequent discussion. It then proceeds to an examination of Mr. Wheatley's Housing Bill, and gives housing data taken from the report of the Building Industry Committee, concluding with a table showing the maximum housing charges per annum on the Exchequer and local rates. The book is, therefore, a handy little reference work that includes under one cover the arguments for National Housing, and the author's main objections to Mr. Wheatley's Bill. He has the laugh over the Minister when he speaks of the "cohesiveness of the holy combination" between employers and employed.

Books Received.

HEATING AND HOT WATER WORK. By FREDERICK W. DYE. (London: E. & F. N. Spon, Ltd.) Price 8s. 6d. net.

MASTERS OF ARCHITECTURE: FISCHER VON ERLACH. By H. V. Lanchester; and MCKIM, MEAD AND WHITE. By C. H. Reilly. (London: Ernest Benn, Ltd.) Price 10s. 6d. each net.



New Premises, High-street, Kensington.

Façades, by SIR REGINALD BLOMFIELD, R.A.; Interior, &c., by MR. H. L. CABUCHE, F.S.A.



Annual Prize Distribution.

On Friday last week, Mr. H. S. Goodhart-Rendel (President) occupied the chair at the annual prize-giving of the Architectural Association, at 35, Bedford-square, W.C. 1, when the Right Hon. Winston Churchill was the principal guest and Mrs. Winston Churchill distributed the awards.

In opening the proceedings, the President said every year which passed since the war was a very important landmark in architectural education, because systematic architectural education in this country was on its trial. Until the beginning of the twentieth century England stood alone in having no systematic architectural education; there were evening classes, but most young architects got their experience from the blood of their first clients; they paid money to be in someone else's office and picked up what they could, which was generally precious little. The object of the school system was to make a sort of fool-proof training, which at the worst could only produce mediocrity but at the best could bring out the very best that was in a man. Opponents of academicism said school training checked genius, that it built up a hedge all round a student which he could not get outside; but he maintained that the kind of genius who could not get through any academic hedge was better kept under. They were trying to get a really good jumping-off ground for everybody entering the profession, and he thought every year was producing better results, and would go on producing better results until in times of adversity and times when perhaps there might not be available such inspiring teachers as the A.A. was fortunate enough to have at the present time, the system would go on without a break.

Mr. Winston Churchill said there was no doubt whatever about the importance of architecture and structure and their influence on human character and action. Take, for instance, the House of Commons. The whole character of British Parliamentary institutions depended upon the fact that the House of Commons was oblong and not a semi-circular structure. There would be no party difficulties at the present time if the House of Commons had been an amphitheatre, as were nearly all the American and Continental models. In a chamber of that shape every shade of opinion found its exact sector, and members could move from the most extreme left to the most extreme right without a single shock, without a violent transition of any kind, but by a series of most beautiful gradations of political thought. But, owing to what might in the long run turn out to be a fortunate accident, the House of Commons was oblong, and it had a gangway up the centre, which constituted a considerable, though not necessarily impassable, abyss, on each side of which political opinion was grouped in more or less extreme and organised forms which in proportion as they were extreme diverged farther and farther from reason and from the exact requirements of individual opinion. They made their buildings, but afterwards the buildings made them—their buildings regulated the course of their lives. Referring to the housing question, he said the old methods of building had fallen into the control of various restrictive processes, for which both capital and labour had their share of responsibility, and from which the general public was suffering at the present time. But new methods were coming along, and he had recently seen models of a system of building cottages of steel and timber which was claimed to be both cheaper and quicker than the usual methods. That was an illustration of the fact that when the needs of a community were blocked and barred by some obstruction it was certain that human ingenuity would find a new outlet. He had no doubt whatever that in the near future new methods of cottage construction would increasingly compete with the older methods. It seemed to him that one of the most essential impressions which a course of architectural education would have on a student would be in regard to the care of details, which was the maxim on which the great German military machine was built up, and which would carry its application into other spheres of life. From their studies they would also derive the idea that art and utility were not separate schemes of thought, that they belonged to the same unity, and that nothing should appear in a structure which had not some practical serviceable use. There they would find contact with the rudiments of logic and the rudiments of argument, where it was taught that one should never use more arguments than were necessary to prove a case. If the whole scheme of a building or an argument were known from the beginning, if the whole thing had been envisaged as a whole and not merely picked up step by step, an excellent case, or an excellent building, would result as easily as pouring water out of a jug. There was no excuse for opportunism in architecture. Another valuable acquirement they would derive from their studies was a sense of proportion. Everything in life depended upon proportion.

The prizes and studentships were then distributed by Mrs. Churchill.

In proposing a vote of thanks to Mr. and Mrs. Churchill, Mr. Robert Atkinson said it had been stated that new methods of building could not long be delayed, and he believed that among the younger architects there were the men capable of handling these materials. Young architects would not be lacking in appreciation of new materials provided they were given the opportunity of using them. If 50 or 60 years ago architects had been trained as they were being trained to-day, and had the faculty of analysis which they were endeavouring to instil into the students at the schools at present, the housing problem would not be nearly so acute, because the problem would have been tackled logically and sympathetically many years ago. Housing might be called "political architecture," and factory building and some other of the activities of the architects could be classified under the same heading. It was well known that the bulk of the unrest at the present time was largely brought about by the bad working conditions in factories. Possibly the manufacturers were to blame, but so also were the architects of the past who had not insisted on the buildings being sanitary and providing the best possible working conditions. As they were now looking forward to a period of industrial activity in factory construction, the power of the architect in analysis and in foreseeing the future would have a very great bearing on the political outlook of a great many factory workers in the future.

Mr. Philip Tilden seconded the motion, and said politicians could help architects a great deal. First of all, architects wanted to be given chances to build great buildings in great places, to hang their pictures upon the walls of the public streets; they did not want any Tom, Dick, or Harry to be able to build anywhere at any time. Another thing politicians could do for architects was to save the old buildings which were being pulled down or which were threatened with demolition; because a building had been in existence for hundreds of years it became more beautiful in the eyes of the architect, not only for its intrinsic beauty but also for its associations.

The following is the list of prizes and studentships for 1924:—

Public School Entrance Scholarship (value £63): J. A. Ritchie (Charterhouse).

Open Entrance Scholarship (value £63): D. R. Burles (Municipal School of Arts and Crafts, Southend-on-Sea).

A.A. Essay Prize (value £10 10s.): R. F. Orfeur.

First Year Course: 1st prize ("Howard Colls" Travelling Studentship, value £15 15s.): H. H. Goldsmith; 2nd prize (books, value £5 5s.) L. H. B. Roberts; art subject (value £3 3s.): H. H. Goldsmith; general progress (books, value £2 2s.): H. Cholmondeley.

Second Year Course: 1st prize (A.A. Travelling Studentship, value £26 5s.): J. Breakwell; 2nd prize (books, value £10 10s.): W. R. Brinton; Hon. Mention: C. Green and J. V. Hamilton; art subjects (books, value £5 5s.): J. Breakwell; Hon. Mention: Miss N. Nickalls; general progress (books, value £3 3s.): D. C. Saunders; scholarship tenable for one year in third-year course (value £63): C. W. Sully.

Third Year Course: "Holloway" Scholarship, tenable for two years (value, £300): D. H. Beaty-Pownall; 1st prize ("Henry Florence" Travelling Studentship, value £50): R. C. Erith; 2nd prize (books, value £21): W. E. Trent; 3rd prize (books, value £15 15s.): Mrs. B. S. H. Fisher; general progress (books, value £5 5s.): E. F. Goldsmith; "Alec Stanhope Forbes" prize for best colour work during the year (books, value £5): R. C. Erith.

Fourth and Fifth Years: Design: 1st prize (value £6 6s.): E. W. Lewis; 2nd prize (value £4 4s.): Miss A. Sleigh. Town-Planning: 1st prize (value £6 6s.): Miss E. Moseley; 2nd prize (value £4 4s.): T. S. Barnes. Construction: 1st prize (value £10 10s.): Divided, Miss E. Scott and Miss E. Meikle. Decoration: 1st prize (value £6 6s.): E. W. Lewis; 2nd prize (value £4 4s.): F. E. Bennett.

Architectural Association Diploma: T. S. Barnes, R. E. Enthoven, L. R. Hiscock, J. K. Parker, W. Percik, G. W. Silk, Miss E. Scott, Miss J. E. Townsend.

The following students qualified for the Diploma, subject to completion of six months' office experience: H. Braddock, G. G. Grant, Miss A. F. Jones, Miss E. Meikle, Miss E. Moseley, D. F. Martin Smith, H. A. Pakington.

Medal presented annually by the Société des Architectes Diplômés par le Gouvernement to the best Diploma student of the year: R. E. Enthoven.

R.I.B.A. "Henry Jarvis" Scholarship (value £50): J. W. Wood; Hon. Mention: F. L. Preston.

Architectural Association Measured Drawing Prize (value £10 10s.): H. H. Goldsmith.

A.A. Design Club Prize (value £5 5s.): G. H. R. Heritage.

Architectural Review Prize for the best holiday sketch and sheet of details (value £5 5s.): Divided, W. R. Brinton and C. E. Green.

Architecture and the Eisteddfod.

At the Welsh National Eisteddfod, to be held in August, at Pontypool, it has been decided that the subject of discussions to be introduced at the meetings of the Honourable Society of Cymmrodorian shall be "The Teaching of Art and Architecture in Wales." At the initial meeting the president will be the Right Hon. Lord Treowen, and the Lord Bishop of St. David's will preside at the second session. Amongst those who are to take part in the debate are Sir W. Goscombe John, Sir George Frampton, Dr. Mortimer Wheeler (director of the Welsh National Museum), and Messrs. T. Alwyn Lloyd, W. S. Purchon, A. Trystram Edwards, and D. Lleufer Thomas (chairman of Welsh Development Association).

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ILLUSTRATIONS

Liverpool Cathedral.

The view of the interior of Sir G. Gilbert Scott's Liverpool Cathedral is referred to on p. 157.

Messrs. John Barker's New Premises.

The façades of the new premises now being erected for Messrs. John Barker & Co., Ltd., in Kensington High-street, have been designed by Sir Reginald Blomfield, R.A., the remainder of the architectural work being carried out by Mr. H. L. Cabuche, O.B.E., F.S.Arc.

The foundation work is being carried out in two sections: (1) A retaining wall and raft over the site, for which Messrs. P. & W. Anderson are the contractors; and (2) reinforced concrete work carried out by Messrs. Considere Constructions, Ltd.

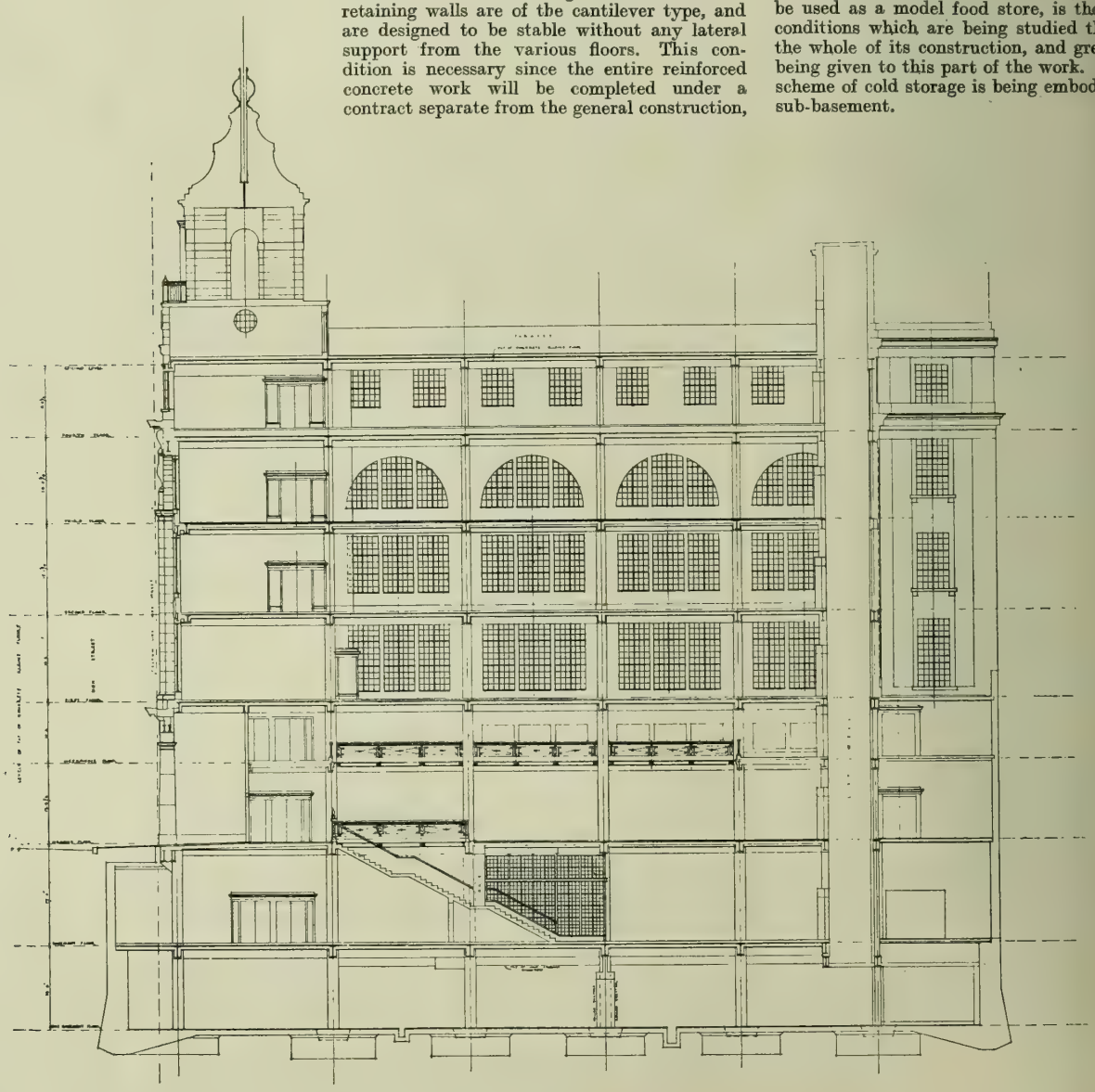
The total height of the external retaining walls is 31 ft., with a maximum excavation depth below ground of 35 ft. The horizontal thrust given by the earth and retained by these walls amounts to a total of 4,000 tons. The reinforced concrete wall has a maximum thickness of 3 ft. 6 in. at sub-basement level, diminished to 18 in. at ground level. These retaining walls are of the cantilever type, and are designed to be stable without any lateral support from the various floors. This condition is necessary since the entire reinforced concrete work will be completed under a contract separate from the general construction, and may, therefore, be completed before the floors have been constructed.

One of the principal difficulties to be contended with in the design of this work is the presence of water, which percolates at various heights and has a hydrostatic head above the basement level of 5 ft. This gives an upward pressure on the whole of the reinforced concrete raft of 3,500 tons, and the reinforced concrete raft slab and column bases have been designed to resist this upward pressure. In addition, the raft slab and column bases have to withstand very heavy column loads, amounting in some cases to 612 tons. The total amount of earth to be excavated in order to construct the above work is 36,000 cub. yds.

The steelwork is in the hands of Messrs. A. D. Dawnay & Sons, Ltd.; stonework by Messrs. F. J. Barnes, Ltd.; floors by Messrs. Kleine Flooring Co., Ltd.; lifts by Messrs. Waygood-Otis, Ltd.; heating and ventilating by Messrs. Jeffreys & Co.; asphalte by Messrs. Limmer & Trinidad Asphalt Co., Ltd.; casements by Messrs. H. Hope & Sons. A window of the "Austral" pattern is being introduced owing to its special facilities for ventilation.

Contracts for the remaining work will be placed in due course.

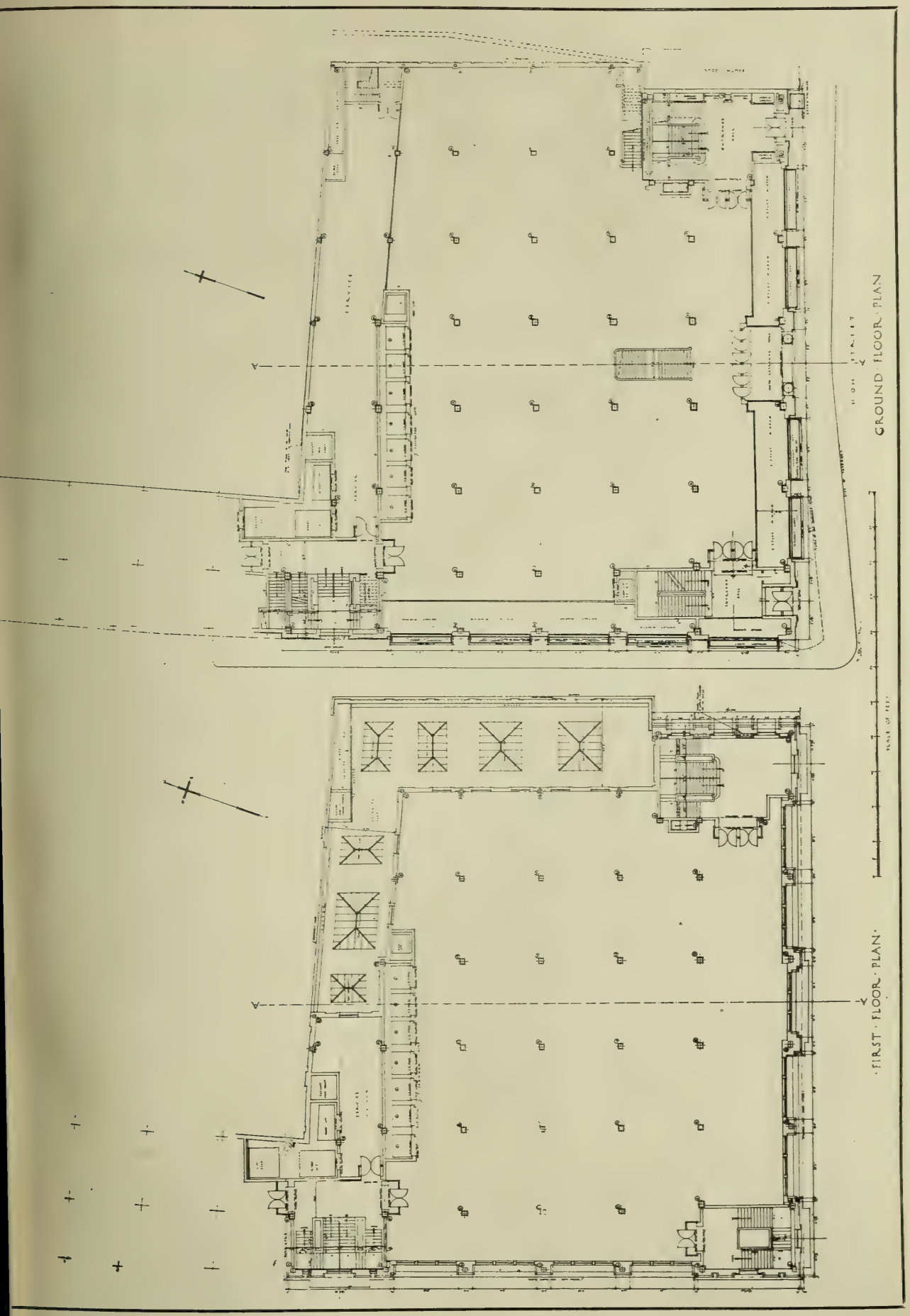
A special feature of this building, which will be used as a model food store, is the hygienic conditions which are being studied throughout the whole of its construction, and great care is being given to this part of the work. A special scheme of cold storage is being embodied in the sub-basement.



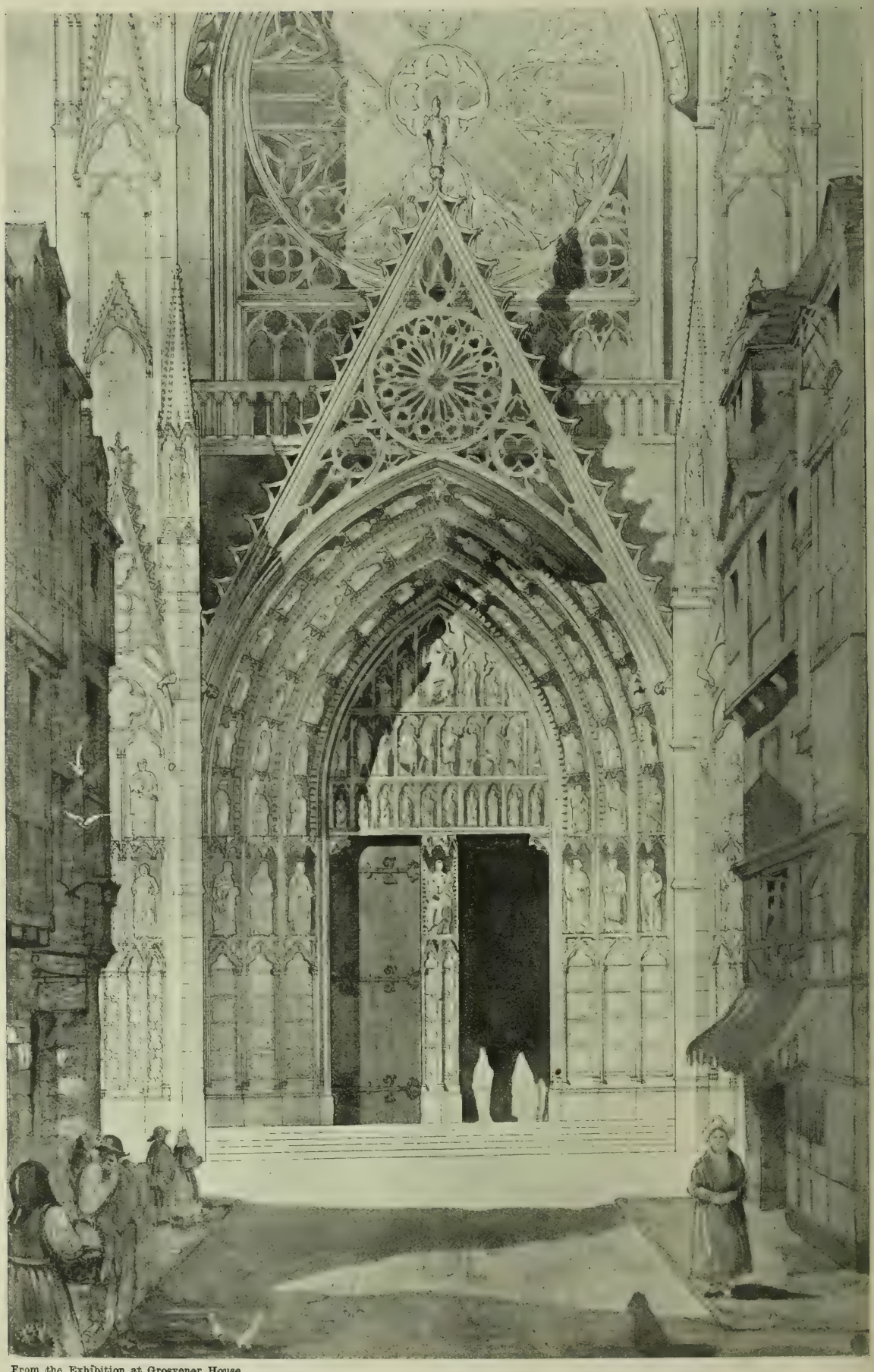
·SECTION · A · A·

New Premises, High-street, Kensington.

Façades by Sir Reginald Blomfield, R.A.; Interior and construction by Mr. H. L. Cabuche, F.S.Arc.

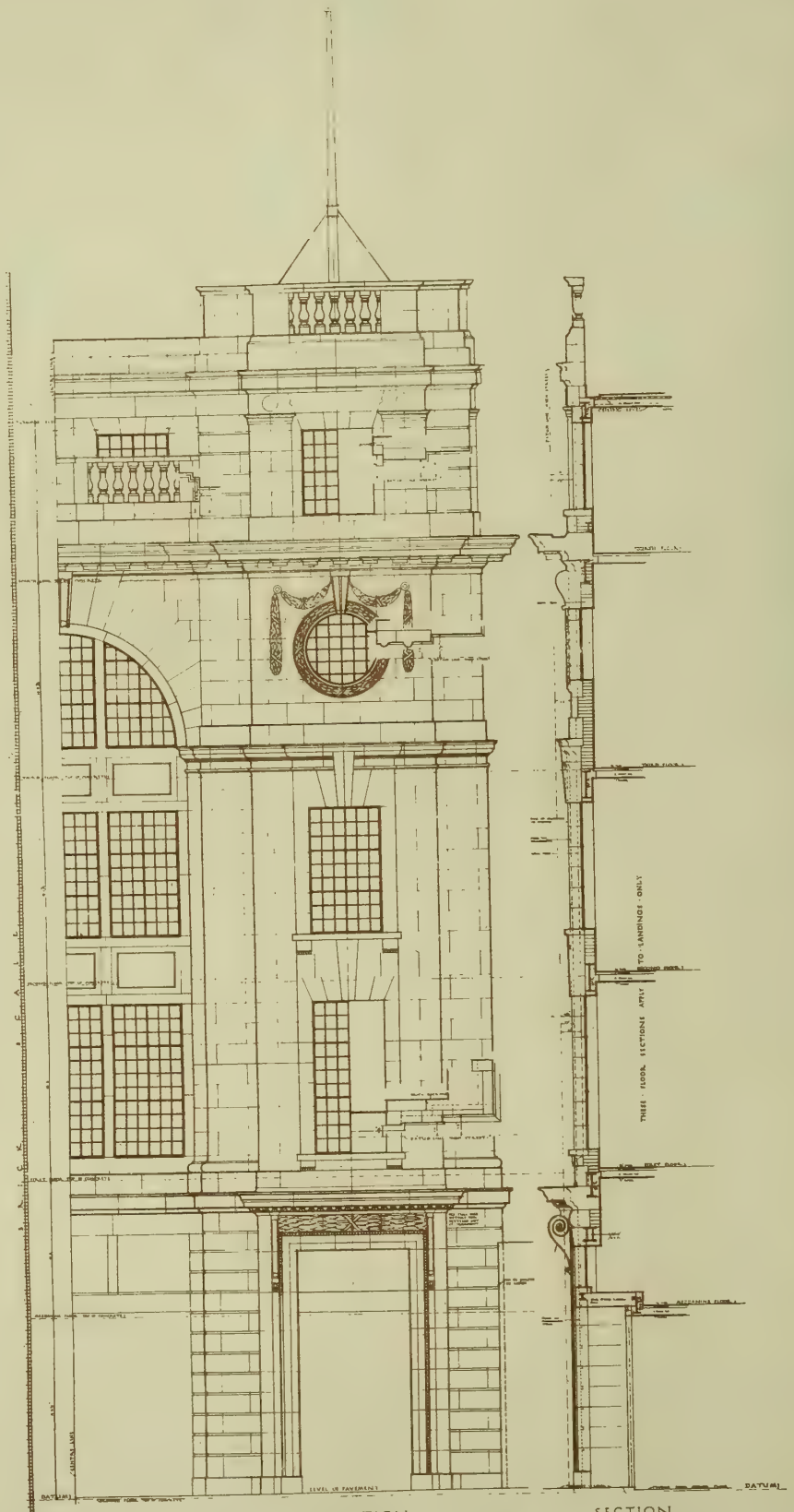


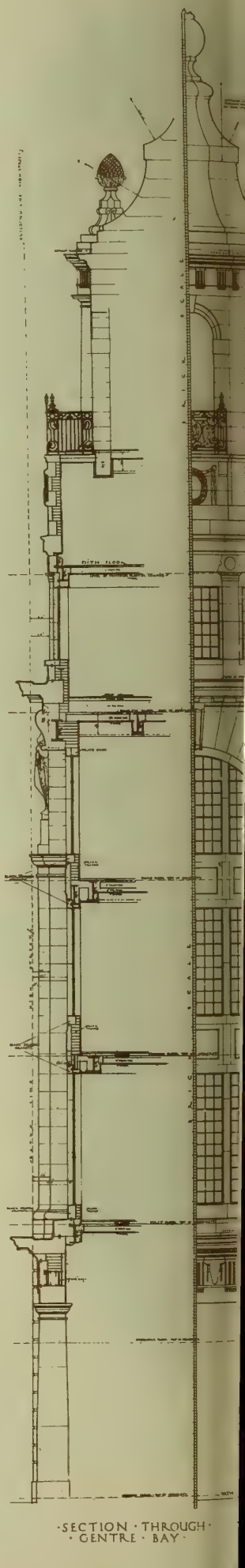
New Premises, High-street, Kensington. Façades by SIR REGINALD BLOMFIELD, R.A.; Interior and construction by MR. H. L. CABUCHE, F.S.Arc.



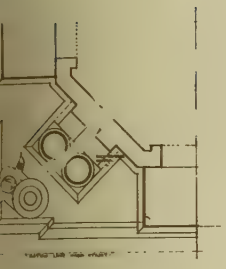
From the Exhibition at Grosvenor House.

A Church Entrance. By ROY JANIS (Washington University).

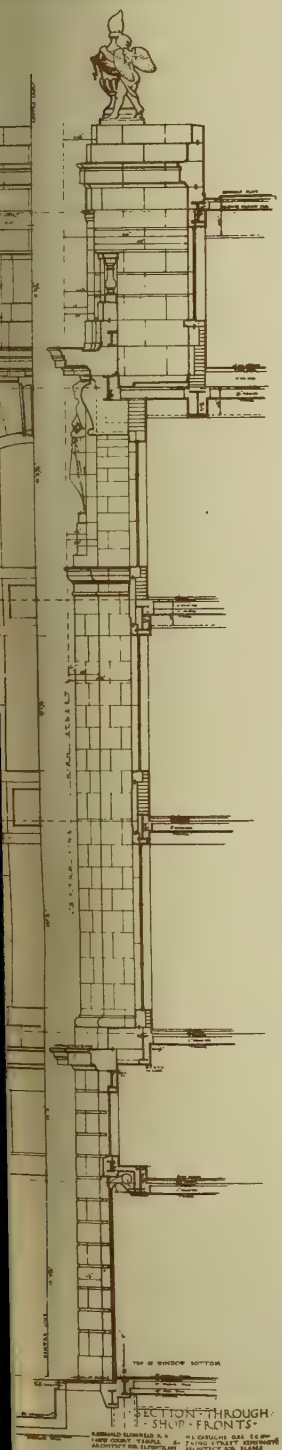




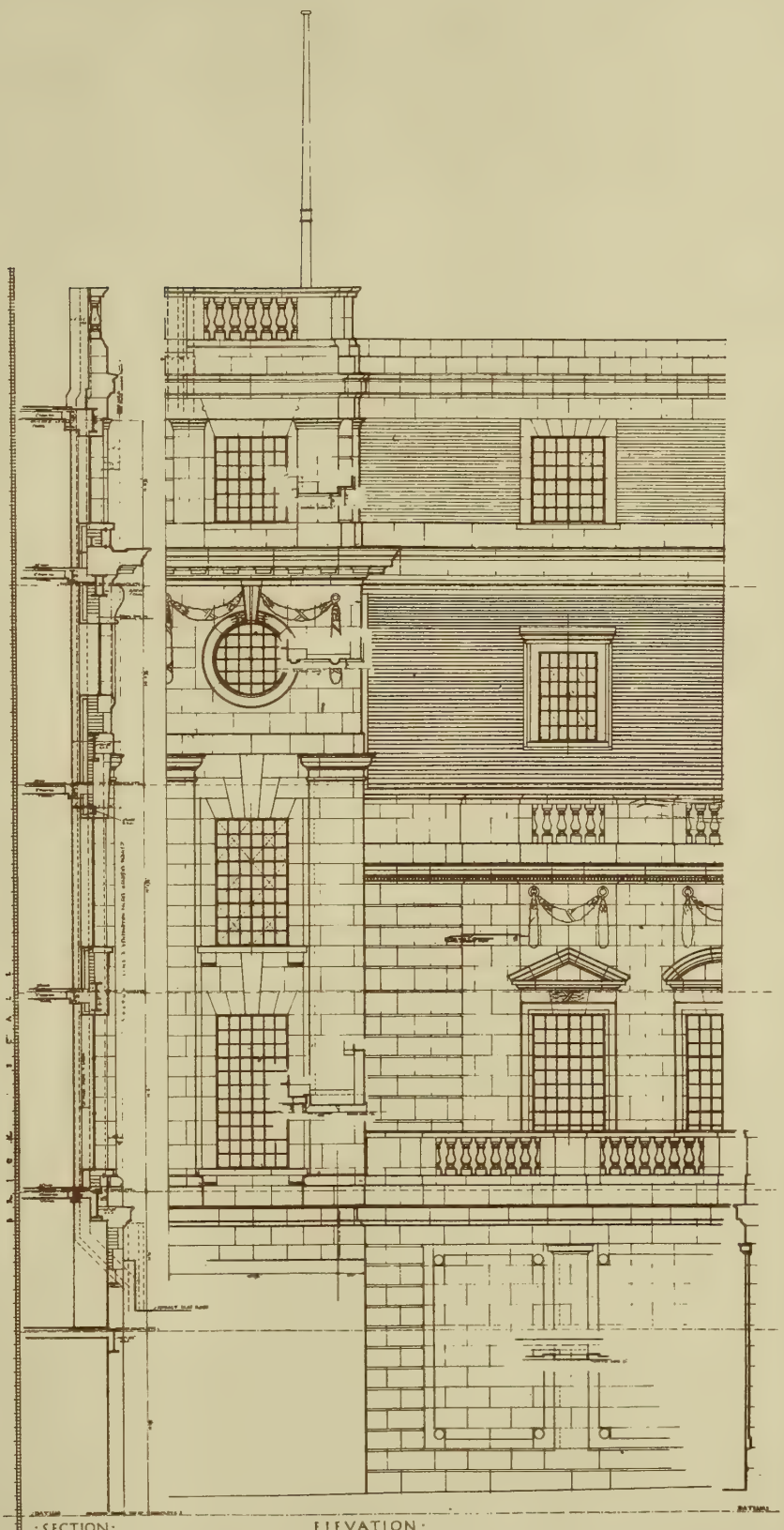
DETAILS OF EAST PAVILION.



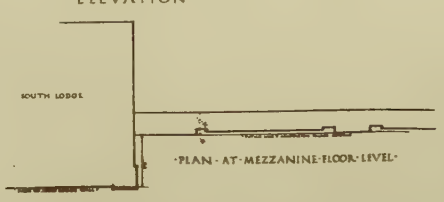
LAN THROUGH TOWER.



·SECTION THROUGH SHOP FRONTS·



·SECTION· ELEVATION·



·PLAN·AT·MEZZANINE·FLOOR·LEVEL·

DETAILS OF PALACE GARDEN FRONT.

SINGTON.





From a drawing by Mr. T. Raffles Davison, Hon.A.R.I.B.A.

Liverpool Cathedral: Interior. Sir G. Gilbert Scott, R.A., Architect.



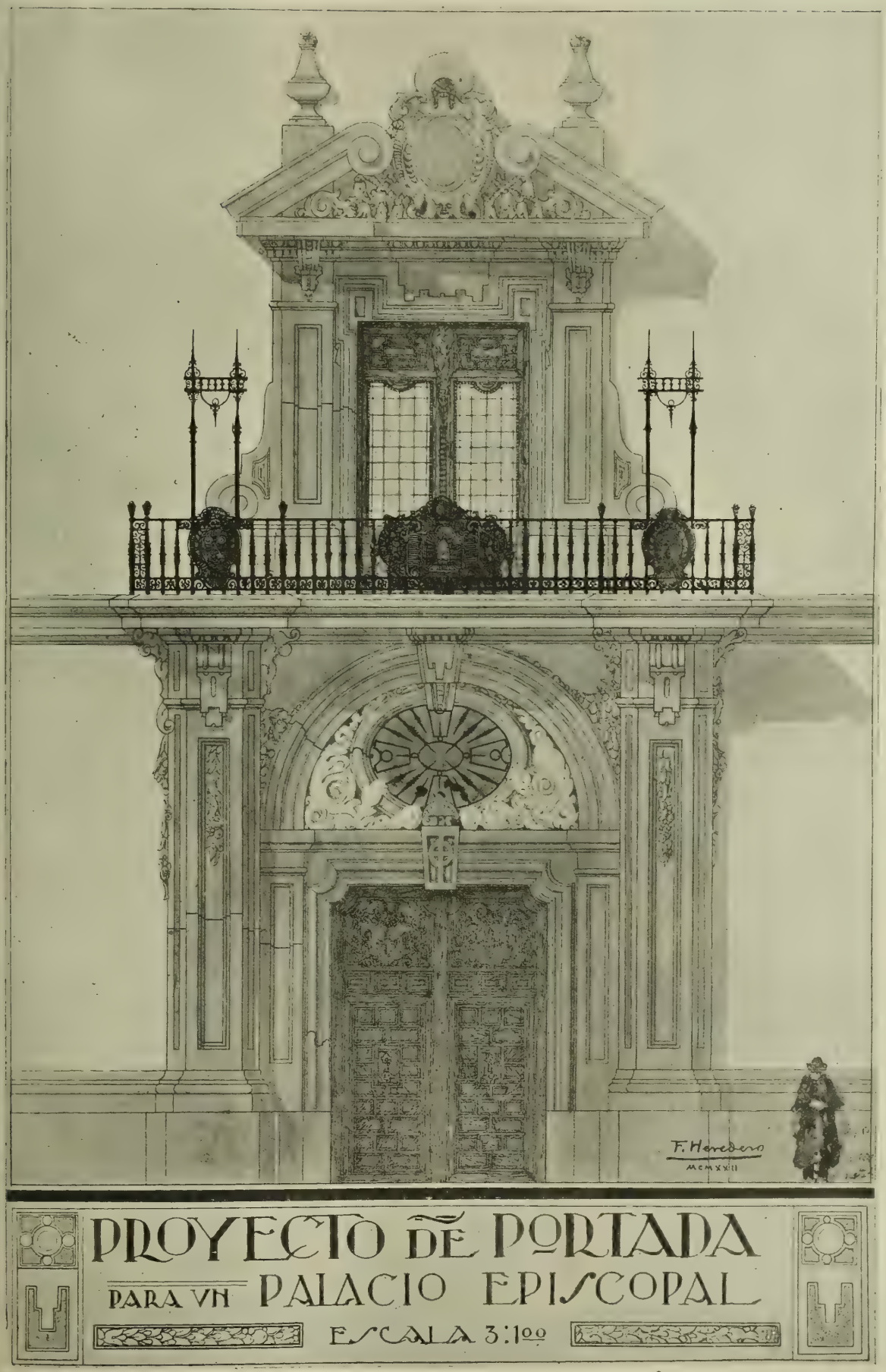
NEW PREM

FAÇADES BY SIR REGINALD BLOMFIELD, R.A.; I



NGON.

York by Mr. H. L. Cabuche. F. S. Arc.



From the Exhibition at Grosvenor House.

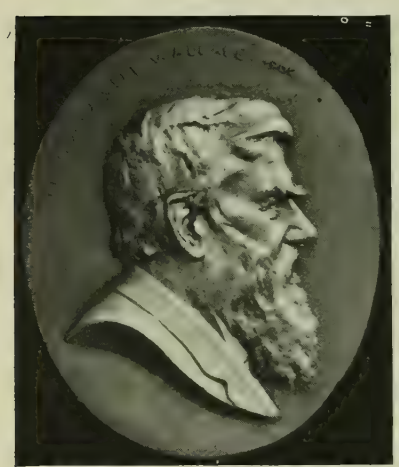
An Exhibit of the Spanish School. By F. HEREDERO

THE WORK OF THE LATE ALBERT BRUCE-JOY

(*See p.* 169)



Miss Mary Anderson as "Galatea."
[Marble Bust in the Shakespear Memorial Theatre, Stratford-on-Avon.]



Dr. Russell Wallace Memorial in Marble in Westminster Abbey.

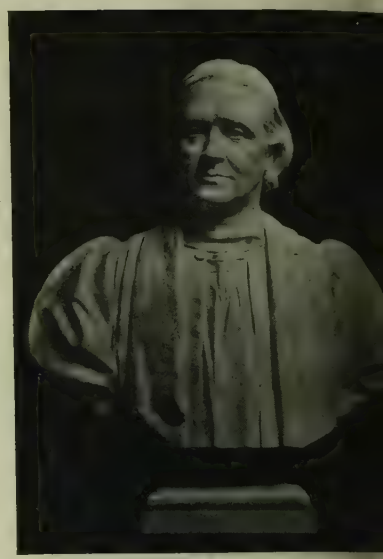


Bronze Statuette of Edgar Seligman (Fencing).

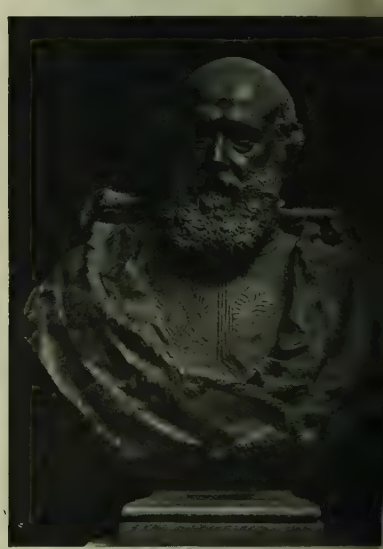


Bronze Statuette of C. B. Fry, the Cricketer.

[The illustrations on this and the following pages, and the article by Mr. Ditchfield, were prepared some time before the death of Mr. Bruce-Joy, which took place last week.]



Marble Bust of Archbishop Benson Lambeth Palace.



Bronze Bust of the Marquis of Salis in Eton College.
[This bust is the original model of t marble in the Mansion House, Lond unveiled in 1888.]



"The Forsaken."
[Bronze Group shown at the Paris Interna Exhibition of 1878, and awarded one c three medals given to Great Britai Sculpture.]

HE SCULPTURE OF ALBERT BRUCE-JOY

By P. H. DITCHFIELD, M.A., F.S.A.

art of sculpture has made wondrous
s during the last half-century. It has
the fashion of some modern critics to
verything Victorian, its art, its poetry,
nting and literature. While much of
ort of criticism is decidedly uncritical
cking in truth, bred of the bombastic
ces of lesser men who imagine them-
to be great geniuses, the brilliant mas-
f the arts of a new age of mighty
ment, nevertheless the hard words that
een said of the sculptors' art of mid-
nth century are more or less justified.
itor of the official guide of the Fine Art
s of the Exhibition of 1862, the late
Palgrave, of "Golden Treasury" fame,
d to sculpture as "the forlorn hope of
art," and could only grieve over the
in national taste, and the entire ab-
of that healthy severity and earnestness
it in which sculpture flourishes.
my privilege to write of one who has
ly lived through the period that marks
owth and survival of English sculpture,
ho has himself by his genius and skill
uted to the advancement of the art he
so well. The period of the professional
of the late Mr. Bruce-Joy was between the
1866 and 1916, but allusions have been
to the colossal statue of Queen Victoria,
e bust of Lord Morley and a few other
as they have been brought before the
since the latter date. A distinction
e drawn between the modern sculptor
reserves the academic spirit throughout
reer and those who prefer to rely upon
their own individuality. The latter are the more important class, and to this class certainly belongs the name of the subject of this appreciation, Mr. Albert Bruce-Joy. His individuality is shown in all his works. Undoubtedly it may be said that he is one of our best-known sculptors, and his works have been exhibited and placed in all parts of the Empire and in America.



The late Albert Bruce-Joy.

Mr. Bruce-Joy was born in Dublin in 1842 and thus it will be seen that the artist reached the advanced age of fourscore years. He came of Huguenot stock. In 1612 his ancestor sailed from Barnstaple in Devon to Ireland, Captain Thomas De Joye accompanying Sir Arthur Chichester, the ancestor of the Donegal family, and settling in county Down. Francis Joy in 1737 was the founder of the *Belfast News Letter*. His father, Dr. W. Bruce Joy, was a brilliant physician and scholar, very learned in his profession, and towards the end of his life Senior Member of the Royal College of Physicians in Ireland, and one of the most prominent writers on medical subjects. His mother's maiden name was Vance, the chief representative, with her brother Patrick, of the Irish branch of the de Vaux family of Baux Castle, near Avignon.

Mr. Bruce-Joy was sent at the age of nine to the "Real Schule" where five hundred scholars were educated, at Offenbach, near Frankfort. After two years at this school he went with his family to Paris, where his studies were continued for about four years under a tutor. Returning to England, he was for two years educated by Dr. Hill—afterwards head master of Magdalen College School, Oxford—and then attended lectures at King's College. He manifested such a keen love of art and beauty that his parents sent him at the age of seventeen years to the Kensington School of Art, where he was successful in winning all possible prizes, including the National Medallion. In 1862 he became a pupil of the sculptor Foley, who had then risen to the height of his genius. Foley lived to see the advent of a new spirit, and his equestrian statues of Lord Hardinge and of General Outram in Calcutta were two of the earlier works to show a clear trace of the return to the observation of nature which was necessary if the English sculptors were to follow the lead given by the French School. He entered the Royal Academy Schools in 1863, but, beyond doing his probation work and attending anatomical lectures and those on architecture, he never did anything there, as Foley advised him to give all his time to his work, under his own supervision, during the four years, to modelling and carving in marble. Foley was a most conscientious teacher, and after a time he set his pupil to model and carve. Finally he began, in the clay, several of Foley's large statues, and also the heads, and thus gained much valuable experience. Foley tried to persuade him to attempt some original work, but the young sculptor was too diffident to do so for a long time, and was distrustful of his own powers. However, at last he modelled his first bust from Nature—"Sunshine." This work was exhibited in 1866 in the Royal Academy together with his group in relief, "Moses uplifting the Brazen Serpent." This bust is one of the best specimens of the sculptor's art, and is remarkable for the radiant sweetness of smile which lights up the finely cut features.

Still striving after greater perfection he went to Rome, where he spent three valuable years, studying from the antiques and in a life school. After this he went every year to



ize Figure of Queen Victoria at the Age of 24.

figure, 13 ft. in height, is placed in front
e Houses of Parliament, Victoria, British
Columbia.]



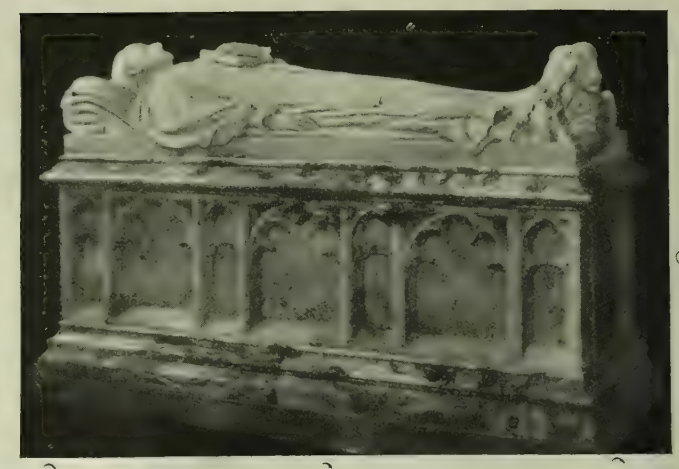
"The First Flight."

[Shown in Plaster and in Bronze at the Royal Academy.]

Paris to see the Salon and other exhibitions, as well as his friends among the leading French artists and fellow students, spending much time in studying the finest work of the leading sculptors in France. As was his wont, he worked hard, and always made a point of exhibiting some of his sculptures in the Royal Academy every year.

And here I may record some of the extraordinary accidents that have befallen Mr. Bruce-Joy. Fate has not always been kind to him. In his third year in Rome he caught Roman fever (malaria) in a virulent form, which entirely stopped his work for two or three years. Nor was this his only misfortune. On one occasion, in 1895, when he was staying at Barbizon, returning home from the Forest of Fontainebleau in the dusk of a summer evening he was shot and severely wounded by a man who mistook him for a stag. He was in bed for three months, and on crutches for two years. How he escaped with his life is a mystery. Fate had still some arrows more to harass and impede his career. His studio at Hindhead was burned to the ground and much valuable work destroyed. A few years ago he narrowly escaped losing his sight. He was hurrying to his home and took a short cut through a hedge, when the sharp point of a holly leaf struck his eye. Inflammation set in, and only the skill of a distinguished oculist of the day saved him from blindness.

After his recovery from malaria he worked at producing medallions at Oxford, Cambridge and Dublin, slowly regaining his strength. Not long after he was invited to compete with other artists for the erection of a colossal statue in memory of Mr. John Laird, of Birkenhead, the first builder of steel ships. He sent in two models which were judged to be the first and second out of the sixteen exhibited. The statue is in bronze, and stands in Hamilton-square, Birkenhead. It was pronounced to be a perfect likeness and a wonderful work of art, and the artist had but one photograph, of the head only, to guide him. In the same year (1877) the "Dr. Graves" statue was unveiled in the Royal College of Physicians, Dublin, by the Lord Lieutenant, the late Duke of Marlborough.



Memorial to Bishop Berkeley in Cloyne Cathedral.

It was said to be a most admirable work, the likeness being very striking.

His medallion of the Countess Przezdziecka attracted attention at the Academy of 1869, and was specially commended for its delicacy and tenderness. His medallions in the Academy of 1871 were much admired and also an ideal statue of "The Young Apollo," of Keats' "Hyperion," was deservedly praised; of this the *Times* critic stated that "he has given a true and tender expression of sorrow to the conventional Greek mask of Apollo, and is very happy in the composition of the figure, which is original, and feelingly as well as gracefully modelled." Mr. Bruce-Joy, we may add, especially delighted in ideal subjects, although it was his fate to be called, mainly, to immortalise the figures of distinguished men.

The only occasion when Mr. Bruce-Joy ever again entered into competition was for the Tercentenary Memorial Statue of Harvey, when he was invited, together with two other sculptors (members of the Royal Academy) to send in a model. His sketch was chosen, and he produced a statue that is a fine work of art. It was said of it "the man was worthy of the statue, and the statue worthy of the man," and that it added another laurel to those already won by the artist. It stands at the end of Castle Hill-avenue, Folkestone, near Dr. Harvey's birthplace, and is of colossal size, in bronze, representing the discoverer of the circulation of the b in the dress of the perio Charles II, and wearing academic robe of Padua at anatomical school of w Harvey studied.

Mr. Bruce-Joy had the teresting experience of portra four generations of our R Family. He was the only o our sculptors whom our late Edward honoured with sit for any bust or statue. He a wonderful bust of His Ma for the University of Manche and no less than eleven re have been executed by him marble and bronze), and they stand in the following other sites: The Mayo Mem Hospital at Lahore, the P Palace at The Hague, the wich Memorial Hospital, the Chamber of Commerce, un by the English Ambassador Royal Chelsea Hospital, and the G Chamber of Commerce. The bust at La represents a part of the Great Memori King Edward VII, which was subscribe entirely in India. The late King himself delighted with this work.

A very imposing statue of Queen Vic thirteen feet in height, was made by Bruce-Joy for the Government of B Columbia. It is erected in front of the liament House in Victoria, British Colu and was unveiled by the Governor-Gene Canada in 1921. The last time I saw it in the Royal Exchange, London, where it deposited during the war until the seas open again for its travelling to its destin He also made a medallion of H.R.H. the Prince Leopold, Duke of Albany, befor death. In 1916 he was asked by H.R.H Prince of Wales to execute his statuet bronze as he appeared at the age of sixte the Carnarvon Coronation investiture Garter robes. This work is now in the session of H.M. the Queen in Buckin Palace.

It is impossible in this sketch to enum the vast number of works that have from Mr. Bruce-Joy's studio, but me must be made of the most important. most among them is the colossal statue o Gladstone that stands in front of Bow Ch London, East. It is in bronze, and i excellent likeness of the statesman, w



View of the Gallery at Mr. Bruce-Joy's Studio at West Kensington in 1883.

[*Centre*: "The Laird," Colossal Statue in Hamilton-square, Birkenhead. *Left background*: The "Graves" Statue at the Royal College of Physicians, Dublin.]



View of the Gallery of Mr. Bruce-Joy's Studio at West Kensington in 1883.
[*Centre*: Model of the Gladstone Statue, executed in 1882.]

aid at the unveiling that "Seldom, if has the hand of a sculptor succeeded in cing so admirable and faithful a like- It seems to breathe the deep earnest- the dignity and intellectual power of the man whom we used to call the "Grand Ian."

ningham quickly followed the lead of n, and John Bright became his next Mr. Bright was greatly pleased with atue of himself, and when Manchester l to commemorate him Mr. Bruce-Joy gain chosen as the sculptor, and this stands in front of the Town Hall. A marble statue of Bright by him is in the of Commons.

less successful is the fine portrait bust late Marquess of Salisbury in London's on House, in marble. It is an admir- ikeness, and was presented to the City e Lord Mayor and Corporation. In the Office is this artist's memorial bust of te Sir Robert Montgomery, G.C.S.I., ., and in the library of the House of ons is a noble bust of Lord Farn- h, better known as Sir Thomas Erskine for many years the Clerk to the House. e Speaker said at the unveiling, "the of the artist has managed to stamp the marble something of the spiritual gence of his subject." Additional interest en to this bust by the fact that Sir rick Leighton, P.R.A., was the artist er on the Committee, which consisted of Members of the House of Commons. es these we find in the Law Courts and ncoln's Inn the memorial busts of Lord s.

Bruce-Joy is well known in America. ust of Senator Chauncey Depew is in the Club, New York; that of Mr. Frederick ver, of New York, so well known in ca and elsewhere, and of the Hon. Loudon len (formerly Ambassador to Greece and , in Philadelphia, and the colossal marble part of the monument to Dr. J. C. Ayer l, near Boston. This monument also s of an ornamented sarcophagus of , weighing in all 30 tons. Mr. Bruce- ad twice toured America and Canada. l of his works were shown at the In- onal Exhibition at New Orleans, , in 1885. He also made a medallion Hon. Whitelaw Reid, the late Ameri- mbassador, and of Lieut. Andrew t,* U.S.A., in bronze, which is in the States ship of war, the "Sterrett." v mention also the medallions of n Miller, the Californian poet, and

*t. Sterrett distinguished himself in fighting the Tripoli pirates more than a century ago.



The Harvey Tercentenary Statue, Folkestone.
[A colossal bronze statue unveiled in 1881 in the presence of The International Medical Congress.]

Frank Griffin, of the *Cosmopolitan Review*, New York. Also a medallion of Mark Twain done from a sitting on his last visit to England.

Other notable examples of Mr. Bruce-Joy's work are mentioned in the following brief list: The Sir Humphry Davy medal, executed for the Royal Society, and given in the form of a medal annually; the Dr. Longstaff medal, executed for the Chemical Society of England; the Professor Malden medal, executed for University College, London; medallion of the late Sir Frederick Burton, Director of the National Gallery; Oscar Browning, of Cambridge; Sir George Gabriel Stokes, F.R.S.; General Sir Edward Hutton, K.C.B., K.C.M.G., late Commander-in-Chief, Australia; Archdeacon Palmer, Christ Church, Oxford; Professor Max Müller, Oxford, bronze bust and medallion; Frederick Locker-Lampson, the poet; the Rev. Canon Hamilton, D.D.; Mrs. Scott Siddons; Percy Fitzgerald, the author; the Rev. Humphrey Lloyd, D.D., Provost of Trinity College, Dublin, marble bust; Rev. Dr. Phillips, President of Queen's College, Cambridge; Sir Richard Jebb; Dr. Hill, Headmaster of Magdalen College School, Oxford; monument of Sir William Siemens, F.R.S., near the memorial of the artist's father in Kensal Green Cemetery; the busts of George Meredith and Joseph Chamberlain, and a small silver statue of the Maharajah of Nepal; the memorial bust of John Couch Adams (the astronomer), in St. John's College, Cambridge; the Cranmer Memorial in Jesus College, Cambridge.

As I have said, Mr. Bruce-Joy rejoiced more in ideal work than in portraiture; though, as a very popular sculptor, he had been in great demand for the latter. One could almost wish that he had had more time for indulging in his imaginative creations, but those that he had accomplished were very charming. I have already mentioned one of his earliest, "Sunshine," and also "The Young Apollo," and his earliest of all, "Moses and the Brazen Serpent." A very important one is "The Forsaken." The subject is taken from Bürger's ballad, "The Rose of Taubenhayn." A forsaken and betrayed mother, in a fit of insanity, has killed her babe by stabbing it with the pin that held her hair. The moment chosen is when the mother has just awakened to consciousness and sees her murdered infant lying beside her, exclaiming "Jesus, my Saviour, what have I done?" The incident is depicted with much dramatic force, and the agony and despair of the mother form a striking contrast to the almost smiling face of her babe. For this piece of sculpture the artist was awarded one of three medals

granted to England at the great Paris Exhibition of 1878, the other two being awarded to Sir Frederick Leighton, President of the Royal Academy, and Sir Edgar Boehm, R.A.

A very delightful ideal work is "The First Flight," representing a life-size figure of a young girl holding in her left hand a nest of young larks, while with her right, raised over her head, she offers its liberty to one of the nestlings poised on two of her fingers. It is a very fine example of poetic sculpture. It was exhibited in America with other works, and was shown in plaster at the Royal Academy and afterwards in bronze. "The Pets" is a portrait study of the young daughter of the late Mr. Thomas Moss, of Liverpool, and represents a beautiful child with her favourite dog. "The Fairy Tale" is a life-size statue of a girl reading a story-book, a daughter of Lord Cranbrook.

Mr. Bruce-Joy made a speciality of athletes, and besides his statuette of Mr. C. B. Fry, the famous cricketer, he has executed a statuette of Mr. Seligman, for many years the champion fencer of England, and one of Mr. Eustace Miles, a former tennis champion, and a much admired "Boy Scout," and others. An interesting history is connected with the Hornby colossal statue at Blackburn. A workman in Mr. W. H. Hornby's factory, who became a foreman, saved a large sum of money and left it in his will for the erection of a statue to the memory of his employer and benefactor. This sum amounted to over £3,000, and Mr. Bruce-Joy executed the work. Mr. Hornby died in 1884, and was the first Mayor and M.P. for the borough.

An important work tinged with unhappy memories is the statue of Lord Frederick Cavendish, the victim of the Phœnix Park murder, erected at Barrow-in-Furness, in bronze, a very fine work, both dignified and impressive. A marble statue of heroic size stands in Liverpool University Buildings to the memory of Christopher Bushell, who wrought great service for the cause of education in that city. I must not omit to mention the very fine colossal statue of Lord Kelvin, executed in the year before the war, which stands at the entrance of the Botanic Gardens in Belfast, and which was shown at the Soirée of the Royal Society, London, in that year—in spite of the great weight of the bronze, which made it necessary to prop up the floor where the statue stood. The memorial statue in marble of Lord Justice Fitz-Gibbon, unveiled in the summer of 1914, in St. Patrick's Cathedral, Dublin, is placed close to this artist's statue of Chief Justice Whiteside, the very distinguished Irish Judge. And also in St. Patrick's Cathedral is the memorial of Dr. George Salmon, the great mathematician. The very charming and important marble representation of the beautiful Miss Mary Anderson as "Galatea" is in the Shakespeare Memorial at Stratford-on-Avon. In Canterbury Cathedral is his fine marble medallion of Dean Farrar; in Westminster Abbey his memorial of Adams the astronomer; and that of Russel Wallace placed beside that of Darwin, his friend; and in St. Paul's Cathedral, of Admiral Sir Edward Codrington, stands beside Nelson's tomb; in Rugby School chapel Archbishop Benson; in that of Harrow, Mr. Pratt; at Bombay, Mr. Wadia, the Parsee merchant. In Cloyne Cathedral is the beautiful recumbent memorial of Bishop Berkeley, the philosopher; a medal commemorating the expedition which H.E. Dr. Frits Holm, G.C.G., formerly of the Danish Navy, commanded into Northern China and his discovery there of the Nestorian Monument, was exhibited in the Royal Academy last year.

Mr. Bruce-Joy had many distinct besides the general recognition of his tal and genius. For the International Colle of Numismatics shown in the great Bru Exhibition of 1910 he was appointed to re sent England on the foreign committee, in 1913 he represented this country on International Jury for Numismatics at the hibition of Ghent. In 1896, at the P Salon, he was given the only award for h in that year when he exhibited the fine of the Marquess of Salisbury, to which I referred, and a very striking one of Balfour Fergusson, of Dundee. In 188 the Antwerp Exhibition, he was appointe Lord Salisbury, then Prime Minister, as only representative for Great Britain on International Jury, when both painting sculpture were under his charge.

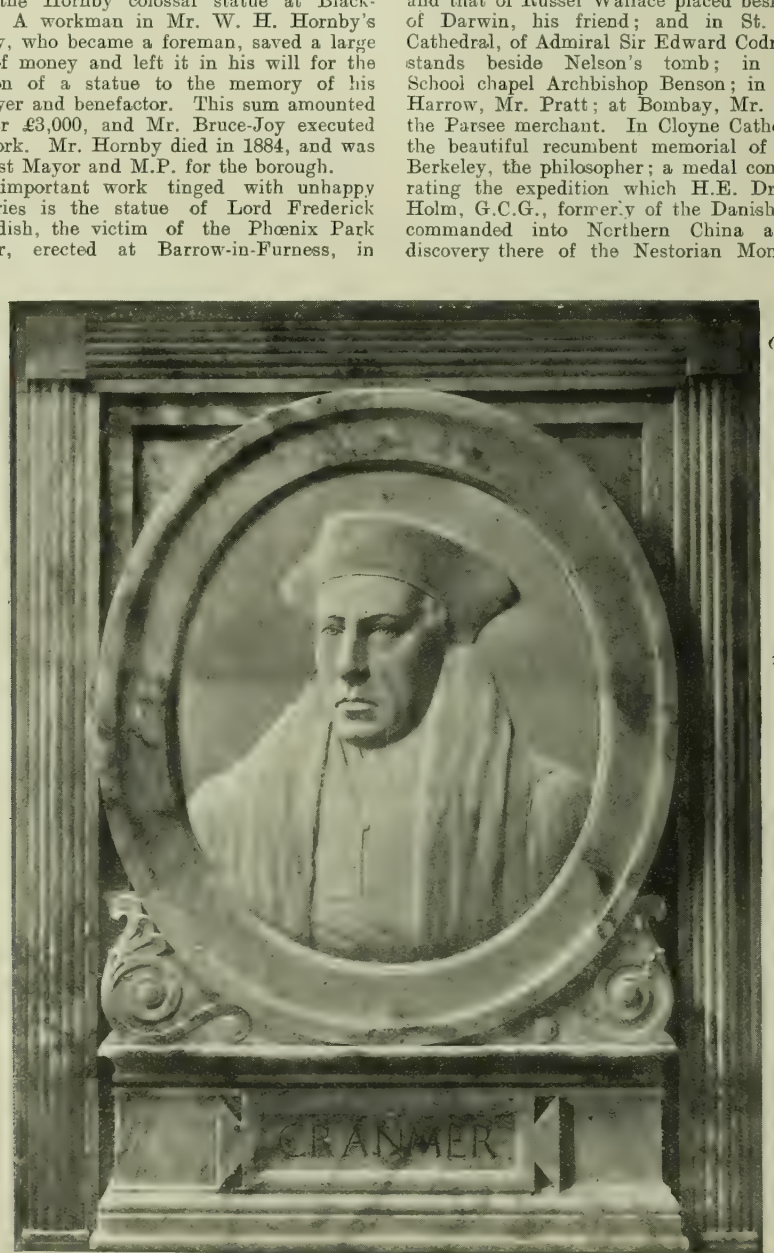
The very large number of important w exhibited by him at the Royal Academy the Paris Salon during his long professi career, dating from 1866, proclaim his ar ing industry as well as his genius. Amo other honours he was appointed Corresp ing Member of the Royal Academy of To Spain.

One of the secrets of his success that source of all gifts—a true and living stinct as to the character of those whom portrayed, and a quite marvellous power giving life and animation to the features. expert once said about him: "The thing we cannot tell the cause, but this circ stance does not lessen one's pleasure in effect—when that is superlatively good, thus we can be content to leave it a mys as to how Mr. Bruce-Joy contrives to m his statues live in their eyes as much as oil-painter has ever contrived to do canvas." More than thirty years ago sculptor built his house in the beautiful re of Hindhead. Two examples of his work w being exhibited last year (1923) in the R Academy, as well as some in the Paris Sa He could reflect on a long life of great acti and success, of wonderful achievement, of tercourse and companionship with the grea and most illustrious men and women of age, of those who looked

"Beyond this strange disease of modern
With its sick hurry, its divided aims.
Its heads o'ertaxed, its palsied hea
and strife,"

to find at length the City Beautiful.

And therewith he was content, recoll ing all the changes and chances of this mo life, his triumphs, his trials and vicissitu and happy memories.



The Cranmer Memorial in Jesus College, Cambridge.

[Executed in 1912.]

Town Planning Institute.

The sixth annual country meeting will be at Leeds from October 10 to 12, inclusive. meeting will open on Friday, October 10, members will travel down on Thursday ever October 9. A detailed programme will be is in due course.

South Wales Institute of Architects.

The South Wales Institute of Architects the South Wales Institute of Builders held combined summer meeting recently. rendezvous was Pencoed Castle. The p included Messrs. A. Gibson, Percy Thomas S. Purchon, and A. W. Julian, from the Ca area, and Messrs. A. Jenkins, Col. Fawckner W. Parfitt from the Newport centre. Afte inspection of the Castle buildings Mr. J. Fletcher, Newport, delivered an address o history, tracing its development from the British settlements through the Norman pe to its greater building in the boom days follo the Wars of the Roses until the present structure was erected in the Tudor pe Considering the number of Tudor mansions i district, he said, it caused one to wonder v builders of those days got so ready a supl labour. Mr. Percy Thomas proposed a vo thanks to Mr. Fletcher, which was carried

RCHITECTURAL EDUCATION CONFERENCE

THE WORK OF THE SCHOOLS

The Architectural Association School.

By A MEMBER OF THE A.A. STAFF.

HEN a member of the teaching staff of an itectural school writes of the work of that ol he lays himself open to charges of bias, even to the more heinous crime of what Americans call "boosterism." Safety ld seem to lie in a mere detailed description he works exhibited at Devonshire House, little result would be accomplished, for the true way to gather a true and full impression building or a drawing is to go and see it for self. The aims of teaching can, however, set down in writing, with some indication hose sections of the work in which such aims most clearly exemplified.

is a truth, scarcely controvertible, that no unt of influence and pressure can create large group of students an artistic expression ch is not somewhere latent in the mass sonality of that group. Architecture is the ression of a human idea, of a creation arising a problem and evolved from the per- lity of the person who is dealing with that blem. Given a human being who has been ght up amid certain conditions, and who been moulded not only by inherited ten- cies, but by exoteric influences of present-day lisation, you will find a field ready for ivation, and in which will flourish that kind rchitectural growth most native to its soil. ne of the main tasks of teaching, therefore, bring out and develop natural thought and ression, and cause to bear on them the lessons xperience, so that the development will be only humanly natural, but of a nature guided logic. Many of us feel to-day, in architec- l creation, an inward urge towards an itecture which has its roots in the past, which definitely expands and develops in direction of fresh forms and fresh ideas ing from fresh problems and fresh tech- l methods of solving them. We feel that ect to tradition is best served by adopting litional forms in those types of buildings ch have scarcely changed in function, and refore logically in expression, throughout the ier periods of history. But to attempt to row and imitate, to twist and alter old forms, h the desire to subject them to new uses for ch they were never created, is gradually to respect for the beautiful through a subtle cess of degradation and vulgarisation. aim of the system of teaching, therefore, is ake the modern human personality, and train t personality to create a modern architecture. the accomplishment of that process the ool plays an important part, but it can only im, or claim to hope, that it sets the students' ps firm on the right road.

n the effort towards this end a system or hod of teaching gradually evolves, imperfect ever modified as experience is gained. method is composed of an atmosphere, the osphere of the School, and direct detail ruction, the results of which are seen im- liately in drawings produced. The less gible atmosphere will be absorbed, and in r practice will form the basis of subconscious uises in architectural design. Perhaps only ome ten years' time will one see the true lts.

o judge of the drawings is not so difficult. e are ready comparisons, and obvious ments on technique, power of composition, tructional ability, acquaintance with the t architecture of the past. At Devonshire se we see the scheme set out. Only a few year drawings, a wider range of second-year ies, and then a fuller selection of third, fourth fifth-year designs. More of these have been n because the interest of a school lies in ence of its tendencies in design and of uate preparation towards a technical equipment; and in the later years also there is the added interest of the approaching period of office work and ultimate practice.

The Architectural Association believes in construction and in working drawings. Not in the preparation of show plates or "Snyder's Details," but in drawings which describe and explain the job. The small house problem forms a complete constructional text-book in itself.

The course which a Diploma Student follows in the Architectural Association Schools is best exemplified by examining the exhibition series of the work of one student throughout the school. Mr. R. E. Enthoven's work is above the average in quality, perhaps, but not in range of subjects. Space forbade the exhibiting of all his drawings; but even if those shown were fully representative, one may experience pardonable pride in this accomplishment. One feels that at the lowest appreciation there is evidence of a step forward from previous educational methods and every ground for confidence in the future in the Architectural Association's organisation of a school for architects governed and directed entirely by architects.

The Liverpool School.

By PROFESSOR C. H. REILLY.

THE School of Architecture of the University of Liverpool was founded in 1894 and is by a few years the oldest day school in the country. The authorities in charge of the Congress have allotted to it two of the best rooms on the main floor of Devonshire House, which provide it with a hanging space as large as that devoted to any other school. This compliment encourages me, therefore, to explain in a few words the aim of the School and the choice of drawings for its exhibition.

The Liverpool School differs as far as I know from any other British school of architecture in two main respects. The first is that, while like others of the larger schools it has lengthened out its courses to five years, it has at the same time differentiated its fourth and fifth year students into three separate classes. These classes are those who aim at a degree or diploma with honours in design, those who aim at the same thing with honours in construction, and those who aim at a pass degree or diploma in which those subjects are more evenly balanced. Either of these three is accepted by the R.I.B.A. as equivalent to its final examination for Associateship, with the exception of a paper on professional practice, but in the first two at least Liverpool believes it has set a considerably higher standard in the directions indicated. By differentiating among its students in this way it is felt that all students are not driven through the same mill; that, for instance, those who by inclination and ability are better able to solve constructional problems have a chance of further exercising their skill. As has been pointed out by external examiners and others, it has been found at Liverpool that such students, far from lagging behind the others in design, when it comes to their final thesis design, which they have to prepare by themselves, often reach as high or even to a higher level than those who aim at distinction in design. I think this comes about from the fact that while they have the same design criticism from the same tutors, their work in construction makes them view their detail with a closer eye to economy of effect. Their final thesis design having to be carried to the stage of working drawings becomes a very practical and real thing.

In the room devoted to fourth and fifth year Liverpool work two of these thesis designs, one of either type, are shown. That by Mr. Gabr, of the constructional type, consists of a set of sixteen working drawings for a large theatre suited to Cairo; that by Mr. Fry, of the honours in design type, consists of a recreational centre at the sea-side—a subject set for the final round of the Rome Scholarship. These are the two main exhibits in this room. The former is shown with all its drawings to make clear the scope of the final test required from a Liverpool student. It might have been more interesting to have shown less drawings by one man, but we felt by showing these two theses we best explained the aims of the school curriculum.

The other way in which the Liverpool School differs from other schools, or used to differ, is that at Liverpool the students are not encouraged to seek exotic modes of expression in design. In the main they are kept to what may be called the central position; that is to say, they work out their problems making use of Classical and Renaissance forms. It is felt that this gives the best grounding for the average student. In his life when he leaves the school he may and probably will develop more personal forms of expression. He will not, we hope, with such a grounding, however mediocre his ability, produce vulgar or over-individualistic work. Looking at American buildings we feel that this is where the chief value of the great American schools has laid. Genius will always break through the academic hedge, and will be no worse for the process. The ordinary man, however, in his youth requires the protection of the hedge so that he can study fully all that lies within the garden. Later, too, when he walks abroad he will have some idea of his bearings.

The hedge, though, is not such a very high one at Liverpool that the student cannot occasionally peep over it. The series of six-hour sketches that is shown, both in the fourth and fifth year room, and in that devoted to the three earlier years, is evidence of this. From these it will be seen that as soon as the student has anything to express he is encouraged to express it. Every Monday, from 10 o'clock to 5, with an interval of an hour, he is set a subject the main object of which is to fire his imagination. It is found that these Mondays at sketch designs not only help to give the student greater facility in his draughtsmanship, but break the monotony of the long continued study required by the larger schemes or by making a set of working drawings.

With regard to these latter the Liverpool School has of late years made a great point of each student turning out before he finishes his third year, and again before he finishes his fifth, two complete sets of working drawings, the former of a small subject, the latter a large. It may be argued that this is often work which the student should learn away from the school. That I know is the American practice. In the absence of quantity surveyors the American standard of working drawings is very high. With us it is not always so. We cannot be sure that the student will learn this very necessary part of his work outside the school. We therefore include it in the curriculum, and as stated above we find it has a distinct educational value. The work at once becomes practical, and the design thereby improves. The aim of the Liverpool School, as its prospectus says, is "to provide a full professional education at a University standard." All who obtain the Liverpool degree (B.Arch.) must reach this standard. It is one I hope of knowledge, efficiency, and good taste. Beyond that the young architect, as any other artist, must develop unfettered and by his own genius.

London University Department of Architecture, University College.

By PROFESSOR A. E. RICHARDSON.

IN 1926, University College will celebrate its centenary. The School of Architecture, however, is comparatively youthful, for from the time of its inception under the direction of

Professor Donaldson to the present, it totals in years little more than three score and ten. On such a count as the foregoing it ranks as the oldest school of its type in the country, with the exception of the Royal Academy School. The Department is an integral part of the organisation of the University of London and is closely allied to the other sections of University College. It is because of such close associations with departments that specialise in subjects indispensable to the training of architects that the school can claim unique advantages. On the one hand it is in close collaboration with the Slade School, and on the other it enjoys facilities for study and research offered by the famous School of Engineering. In addition there are the Departments of Egyptology and Archæology and many other sections of research which in some measure are bound up with architectural training.

It has come to be recognised that although architecture is a fine art in its supreme aspects, having both intellectual as well as emotional qualities, it is also largely a scientific art, demanding close application as well as a study of many auxiliary subjects. Of all the branches of knowledge and attainment, therefore, it can be claimed that building, using the term in its highest sense, reflects social conditions both exactly and in a great measure permanently. Writing of the system under which the students work, it can be said that the regulations have been framed to include factors ranging from scholarship to those concerned with realities of the present day. This, to be precise, is the determining policy of the school. The freshman, on entering, is required to furnish evidence of a high status of preliminary training and general culture. From the outset he is led to appreciate the fact that he is a member of a college possessing traditions, and, further, he is encouraged to acquire a view of life which proves in after years to be of the utmost value to him in his dealings with his fellows.

The courses are arranged in three distinct groups, which run concurrently and to some extent on parallel lines. These courses can be summarised as follows:—

(*a*) The Certificate course, which extends over three years, on the termination of which the student, subject to passing the requisite examinations, is entitled to exemption from the Intermediate Examination of the Royal Institute of British Architects.

(*b*) The Diploma course, which continues for four years, namely, four years in the school and six months in the office of an approved architect or in the works department of a contractor, supplemented by evening work in the atelier.

(*c*) The Degree course of five years, which in some respects corresponds to the Diploma course, but for which matriculation is essential.

The two latter courses, with the exception of one examination, enable students to qualify for Associateship of the R.I.B.A. The Degree course, however, has the additional value to the successful candidate of a B.A. degree. There are also special courses for students who are already proficient in some branches of the subject of building, but who may desire intensive training during a shorter period than the courses usually arranged for beginners. It is one of the features of modern methods of training, and one that has received the approval of the Royal Institute, that every school shall proceed on its own peculiar and particular lines. It is a factor of extreme importance, for it admits of individuality in the training and precludes stereotyped development in the work, which, if all schools proceeded on similar lines, would be productive of a certain monotony of result. In this sphere of individuality the Department of Architecture at University College is fully represented, the aim of the instruction being to encourage good taste and to develop the latent powers of students of different temperament. At the same time, the scientific aspect of the vast subject is held closely in view. An intending student who desires to follow the profession of an architect in the first place must show that he has taste as well as ability to draw; it is also essential that he be gifted with the power to concentrate on continuous study. When admitted to the College such a one, in the preliminary stages of his training, attends lectures and demonstrations on the elementary principles of building, such as simple construction and the properties and nature of materials. He is exercised in drawing, both mechanical and free, and joins a group under the care of an instructor who superintends his work in the studios and in the national museums. This feature of instruction is continued during some part of each of the succeeding years, so that the education of the student in drawing and presentation is continuous on an ascending scale and proceeds side by side with affairs of a more technical nature. From the beginning the historical aspect of building is given prominence. There are lectures on pre-Classic and Classic, followed by others dealing with mediæval, Renaissance and modern developments. The training is of the broadest. It is schemed to include a knowledge of the art of all countries, but at the same time the student is led to think of building as a scientific art responding to definite conditions. The system of training has resulted from years of tradition and experience of other systems abroad. The view-point of the Department is the catholic one which has the merit of placing building above style and fashion; but the student at a very early stage perceives the differences between mere building and building which is articulate and representative. It has been recognised that better results can be obtained from students by allowing them freedom to reason rather than counselling them to accept ideas without regard to the appropriateness of the idea chosen for the work in hand.

It is not long before the student appreciates the three-dimensional viewpoint and thinks of his work as a structural entity rather than a decorative pattern. The building up, stage by stage, of a species of intellectual scaffolding eventually fits the student to undertake subjects of a more ambitious nature. He proceeds in time from comparatively simple subjects to those of a more complex character, demanding closer application and study.

The main issue is that the courses are of a progressive nature, having for their ultimate objective the fitting of a student for the realities of practice.

Since the amalgamation of the Department of Architecture with the school formerly at King's College, and essentially during the past five years, the curriculum has been reorganised in every branch. There is now an evening department including an *atelier* and special classes for construction. The *atelier* is primarily for the benefit of Degree and Diploma students taking the fifth-year course, which is partly worked in an approved office. The *atelier* is also open to external students who can furnish evidence of artistic and technical ability. In all branches of the Department it has been found expedient to concentrate on subjects coming within the range of daily experience, and this without sacrificing or disregarding the value of idyllistic essays.

To assist in this departure, there is being formed in the *Archives* of the Department a collection of modern working drawings and designs, as well as scientific data, which corresponds in bulk to the research work of other departments. By such means it is hoped to establish a collection of drawings showing modern work which, in so far as data is concerned, will be authentic and invaluable.

Although students are encouraged to study historical examples of building, undue stress is not given to any particular phase of design; rather attention is directed to logical planning and an appreciation of scale, as well as an understanding of the quality of past masterpieces. It is now being realised that style cannot be forced on a student, but it is also being understood that even buildings projected on paper will have inherent style if planned logically to assure definite conditions. The difficulty before teachers is to establish the resistance necessary to design, which is ever present in practice, but not in the case of school work.

At the end of the course of five years, both Degree and Diploma students have spent one year in an office. They have attained to a appreciation of the conditions governing modern architecture, and at this stage they are capable of assisting a practical architect

Department of Architecture, Cardiff Technical College.

By W. S. Purchon.

This is one of the newest of the schools and is only of moderate size, having been started rather more than four years ago, and having during the past session 46 students in all, 18 being full-time day students, 19 part-time day students, and 9 architects' assistants attending an evening design class.

Better immediate results for exhibition purposes might conceivably have been obtained had we fitted our scheme to the prevailing pupil-system and limited our activities for some years to the part-time students; or on the other hand, we had devoted our energies entirely to a full-time three-year course. It was felt, however, that notwithstanding the numerous difficulties involved, it would be in the best interests of architectural education in Wales if we attempted the task of building up, year by year, a complete five-year course, consisting of a three-year full-time day course, followed by two courses of six months, each spent in the College, the intervening six months being spent in architects' offices. At the same time we considered it our duty to provide already as adequately as possible for pupils in architects' offices by including a part-time day course, and for architects' assistants by arranging an evening *atelier*. It should also be mentioned that in the first two years of the existence of the school there were a number of ex-Service students all of whom, it is pleasant to record, have since obtained suitable appointments (as have also those full-time students who left at the end of their third year). Two of the ex-Service men held the R.I.B.A. Henry Jarvis Service Travelling Studentship, and benefited much by the opportunities it gave for study in Italy, France and England. It should further be stated that in arranging the courses the object in view was not the obtaining of rapid results, but rather the laying down of a systematic scheme on broad educational lines the results of which may not be obvious in the early work of the students but which can hardly fail to be of value to him in later years.

So far, of course, only four years of the scheme have been at work; next year the fifth year course will be started, and then for the first time in Wales there will be a full five-year scheme of architectural education available. Four students have qualified to enter this fifth-year, and five to enter the fourth year next session.

The more obvious results so far achieved by the adoption of the methods indicated above are that a number of the ex-Service students obtained their Associateship of the Institute, several of the part-time students passed the R.I.B.A. Intermediate examination, eleven full-time students have obtained the College Certificate, and that this certificate awarded at the end of the three-years full-time course has been accepted by the R.I.B.A. in lieu of the Intermediate. Among the less obvious results may be mentioned the fact that the scheme for the award of degrees to students of architecture has been agreed to by the University College of South Wales and Monmouthshire, and the means of bringing this scheme into action are being considered by the bodies concerned.

In view of the difficult times through which the country has been passing, the school was distinctly fortunate in being able to obtain, after about one year of its existence, a full-time lecturer; Mr. R. H. Winder, M.

.I.B.A., was appointed to this post, and tever the degree of success so far achieved he school may be it is largely due to his ity and energy. At the end of the third Mr. Eric Page, A.R.I.B.A., was ap- ted as a part-time assistant, and as he since accepted another appointment his e is to be taken next session by Mr. Lewis n, B.Arch., A.R.I.B.A. In addition to its staff, the School of Architecture has the at advantage of assistance from other De- tments in the College, the students attend- courses in the School of Art, the Engineer- Department, the Department of Industrial emistry, and the Department of Mathe- ics.

he South Wales Institute of Architects is close touch with the school, which it vely supports. It has handed over its ry to the school, its President (Mr. Percy mas, F.R.I.B.A.) acts as design critic, with a number of other leading architects, ding Mr. T. Alwyn Lloyd, F.R.I.B.A., Mr. H. Teather, F.R.I.B.A., assists in in of the lecture courses. In appointing first external examiner, the school was cularly fortunate in obtaining the services Ir. Paul Waterhouse, whose wise counsel friendly criticism have been invaluable in building up of the school.

versity of Manchester School of Architecture.

By Professor A. C. Dickie.

IE total number of students in this school ages about thirty, and examples of the of nineteen students are hung at the bition; the exhibit is therefore repre- tative of the general standard. The sets rawings illustrating the various designs incomplete, as the restricted wall space ssitated a somewhat arbitrary selection. e earlier design studies consist of assem- parts into a simple structural whole in particular style chosen, a reasonably free being allowed within the phases through h the style has passed. Later, simple lems in modern subjects are tackled, and develop as the course proceeds. Time- ch subjects are frequently set.

re is taken, particularly during the first years, to bring the student up to a good dard of draughtsmanship and rendering, at the risk of becoming mechanical. Up he third year time-sketches are not too iently set, in order that the bad habit ose draughtsmanship shall not be acquired. care taken serves a double purpose, as, e establishing a habit of careful draughts- ship, it also fosters scale exactitude. -inch and full-sizes form an important of the work from the first year onwards. o method adopted aims to produce one hed subject a term, but this is not always enforced where it is found to be unsuited to the individual, in which case the routine is modified. Such elasticity produces quite satisfactory results in small classes, sometimes ending in an absolute turnover of relative class standards in the final years. In addition to these more complete studies, the time-sketches constitute more particularly exercises in modern planning, co-ordinating as they do with lectures on theory of design. These exercises are invaluable in developing facility in grasping the essentials for a programme and in readily committing ideas to paper.

A short course in town planning at the end of the second year gives an idea at this early stage of the value of fitness and environment. The third-year subjects of design are chosen from buildings occurring in the lay-out of the previous year.

Lectures and exercises in building construction are co-ordinated with the subjects set in design and, in the earlier stages, with lectures on history of architecture. During the fourth and fifth years tutorials are given in the particular problems arising out of the set subjects in the design studio.

Instruction in measuring is given at the end of the first year, and all measuring and plotting are done during the vacation.

The official working hours of the school are thirty hours per week for the session of thirty-two weeks. The school is, however, open practically at all hours, a privilege of which full advantage is taken. The library is always open, and a free use of books and plates in the studio is allowed.

In general the aim of the system in operation is to encourage appreciation of form as distinct from style taught on the basis of tradition as exemplified in styles.

Royal West of England Academy School of Architecture, Bristol.

By G. D. Gordon Hake.

We are a young school, probably the baby of the Exhibition, but we represent an interesting educational experiment on the "sandwich" system. We combine the system of pupilage with the modern methods of architectural education.

At present the student, on signing his articles, enters the school in the preliminary course. He devotes about a quarter of his time to the school and three-quarters to the office. In some cases the student spends a greater percentage of his time at the school. Thus, with the exception of a few whole-time students, the practical work in an architect's office enables the student to concentrate more particularly on the theoretical and more academic side of his training. The school is affiliated to the Architectural Association in London and models its curriculum and terms more or less on the lines of the A.A. schools.

Founded early in 1921 by the Bristol Society of Architects, the school was officially opened by H.R.H the Prince of Wales in June of that year. Until 1923 the work was directed from the Architectural Association by Mr. H. Chalton Bradshaw, and later by Mr. Gordon Holt. This pioneer work did much to develop the imagination and enthusiasm of the students. At the beginning of the session 1923-4 it was decided that the progress and future development demanded the appointment of a resident master. At the beginning of the session 1924-5 the staff was augmented by the appointment of Mr. E. H. Button, who, as senior student of the school, gained the Dame Janet Stancombe Wills Travelling Studentship and won the Ashpital Prize with distinction in thesis last year.

The staff of the school is as follows:—Advisory Director of Education: Mr. Robert Atkinson, F.R.I.B.A. (Director of Education at the Architectural Association, London); Head Master: Mr. G. D. Gordon Hake, A.R.I.B.A.; Assistant Master: Mr. Eustace H. Button, A.R.I.B.A.

The curriculum is as follows:—There are two Courses, (*a*) Preliminary, (*b*) Advanced. Each course is sub-divided into two grades.

The subjects of the curriculum include:—*Preliminary.*—Drawing: Freehand, geometrical, isometric, perspective, projection of shadows, elementary stereotomy, lettering. Colour: Properties, theory and application, rendering in wash. Modelling. Mathematics: Geometry, theoretical construction, projections, conic sections. Construction: Elementary applied, walls, foundations, doors, windows, floors, roofs, materials, properties and uses. Design: Pattern design, elements and theory. History: Lectures, analytical studies, classical detail. Expression: Oral and written observation.

Advanced.—Design: Application of elements and theory, planning, sketch designs with and without reference, two-hour problems, studio work and lectures, embracing domestic, interior decoration, monumental and civic problems. Construction, Advanced: Working drawings based on designs, problems with and without reference, materials, nature and application, specification, professional practice, hygiene, etc. History: Lectures, analytical study of plans and decoration, sketching and measured work. Mathematics: Advanced theoretical construction, stereotomy. Draughtsmanship—Architectural presentation and Graphics: Both (*a*) as a means, *i.e.*, a language for expressing the design, and (*b*) as an end, *i.e.*, working drawings; application of projections and conic sections, realisation of designs in perspective, sciography, modelling and drawing from the life. Colour: Decorative schemes, advanced theory and application. Expression: Oral and written, observation.

ARCHITECTURAL EDUCATION IN THE PAST

he first day for discussion at the Inter- onal Conference on Architectural Education, nised by the Royal Institute of British itects, was held at 9, Conduit-street, on day, when the subject for discussion was chitectural Education in the Past."

ie chair was occupied by the Earl of Craw- and Balcarres, who in his opening statement it was due to the scholarly intuition of ssor Beresford Pite that they were able ar the papers about to be read.

FRANCE.

Architectural Education in the Past in ce" was the title of a paper by Mr. Paul (Directeur des Beaux Arts), who said for centuries the teaching of architecture ance had left no other evidence but the ments themselves. They merely knew names of the great schools established two thousand years ago in the cities of oman Gaul; they knew that Romanesque ecture thrived under the shelter of cloisters and was taught there in the same way as all the liberal arts. It seemed to be firmly established now that masters of Gothic works, though laymen, received their education in monasteries. In their turn they had a large number of pupils. The building yards of cathedrals were living schools. The "house of work," the "lodge," the "marking room," were the agency, the studio, the office of the architect. There was besides, nothing in common between the modern builder and the mediæval master, who was of the same origin as the workmen he employed. Like the workmen, he passed through a period of apprenticeship, and served some time as journeyman. The art remained combined with the craft, the management with the undertaking. The teaching was not imparted from a chair. Processes were transmitted, recipes communicated—non-official advice, rather than official subjects; experience was gained in the building yard. There was besides no intention to divulge the results: the plans, sections, elevations and models were intended for the executants and for them only. They were not documents comparable with our drawings. The album of Villard de Honnecourt did not contain either measurements or dimensions; general indications were sufficient for the craftsmen trained to recognise, by habit and by instinct, the suitable dimensions for each part of the building. The method of learning by apprenticeship, maintained through so many centuries, had left deep traces on modern teaching, in spite of its abolition. The architect, in the sense in which we understood that word, dated really from the Renaissance. To the new name corresponded new functions. He no longer belonged to a corporation; he was an artist brought up more on theoretical studies than trained in the practice of a craft. Whilst the master builder had difficulty in writing his signature, the architect received the benefit of the bourgeois education. He read treatises; he could in his turn write them. He gave orders to corporations without having belonged

to them; he no longer took direct part in the undertaking.

ITALY.

A paper prepared by Messrs. G. Giovannoni and P. D'Achiardi stated that the marvellous continuity of Italian architectural tradition which had endured now for over twenty-seven centuries found its direct explanation in the continuity of thought and feelings of the race; that was to say, in a widely diffused architectural education for which the surviving monuments formed concrete elements of record and derivation. But as regarded the specific preparation of architects and kindred workers, though there were some examples of institutions having their roots in the past, such as the Art Corporations of the Middle Ages which possibly represented a continuation of the old "Collegia," it could not be really asserted that there was a regular and direct connection such as between the links of a chain.

Up to a comparatively recent time there was never a real true unity in the professional figure of an architect and in the methods of teaching him, so that the very title of architect was frequently confused with other titles, and his activity with other artistic or constructive activities.

AMERICA.

Professor Wm. A. Boring (Columbia University) said history of architecture in America did not reach back to a past crowded with historical associations of the great periods of art which flourished in Europe. When other countries were building luxurious monuments of art, the beginners of the American Republic were building log cabins for protection against the elements, and surrounding them with stockades of tree trunks to save them from the arrows of the redskins. Their first buildings with any claim to beauty were modestly copied from good English and Dutch examples modified to suit the climate, and confined to that simplicity which limited resources demanded; a style was thus worked out which reflected the Renaissance with a pronounced meagreness in detail, but with great refinement and a delicate sense of proportion withal.

America, like England, had no established Government school for teaching architecture. Unlike France, where they had had a successful system of national art schools for two hundred years, they left higher education almost entirely to private institutions. In America there seemed to be, on the part of legislators, great distrust of architects in private practice. Employment of distinguished architects was looked upon as a great extravagance, and the debate was usually not on the ability and integrity of the architect, but on the sum of money he was to be paid. If the Government were to foster the education of architects, that attitude would probably change for the good of public buildings and the advancement of art.

In the early days of instruction engineering seemed more important than design, and that had had a strong influence on architecture. There was a time when mathematics were employed to test systems and members of construction was the main idea stressed in teaching how to build. Now they tried to teach students to feel construction by considering the building as something alive, existing in equilibrium, because every bone in its body was quietly doing its work. The graphic method of analysis of forces seemed to impart this sense of construction to students.

Their buildings were framed in steel, a really terrible material in its possibilities for ugliness, and yet it was the basic idea they could not escape. Masonry was only the flesh-like covering of the structure of steel, which could go to any height and span any void. Vaulted forms were no longer functional. Tall structures were putting them to the test on that problem. And should they develop a satisfactory style under present conditions, what were they going to do when rustless steel and other unchanging metals were used, with smooth-welded joints in the buildings? Could beauty of form follow in true expression the leaps and bounds of science?

ENGLAND.

"A Note on Architectural Training in the Past, with Special Reference to England," was the title of a paper by Mr. Paul Waterhouse, who said there were many reasons why—whatever be the methods of refining education in craft—the ancient system of learning by being a practising junior under a practising senior should never be left out of account. Systematised academic training in architecture was a product of the last hundred years at most. Its history was very interesting. It had been rapid in growth and successful in results. With all his enthusiasm for academic schooling, he was aware that there was no school but experience that made a man safe in architecture—and by safe he implied, not merely able to build what would defy gravitation and weather, but sure of being able to produce what he was able to draw. Experience could only be gained by working as an architect on actual buildings. For those buildings someone must be responsible. Happy and few were the beginners who could shoulder responsibility alone without first practising on a responsibility shared.

After referring to the great architects from the time of Wren, he said what pupilage was in the days of Queen Victoria most of them knew by tradition, repute, or experience. That it differed enormously between office and office there could be no doubt. That, in some cases, it was a farce was, he was afraid, true; that in many it was a very glorious discipleship was equally and honourably true. In all cases the amount of learning to be gained from it must have varied, not only with the character of the master, but also with the opportunities which the master's clients provided. If a leisured office gave the master the best opportunity of individual teaching, a busy office probably afforded, by the brisk friction of stirring practice, the most animated encouragement. Be that as it might, they had amongst them at this time survivors of the Victorian training, whose work and character testified to the force of those training grounds not less clearly than did their spoken reminiscences of the great men of their fathers' time.

What the Institute did at the close of the last century in setting up first the tentative voluntary examination, next the obligatory, and, finally, the three-fold system, was nothing more or less than to force and to foster the hands of the new race of educators. The parallel growth of the Architectural Association as a teaching body and the gradually increasing efficiency of the classes under professional guidance at University College, King's College, and South Kensington, worked together for good in the same direction and became with one other force the irresistible origins of our present system.

That one other force—one easily forgotten but not lightly to be ignored—was the cheerful willingness of the senior architects of those days to hand over to schools and classes the young men who, to speak quite plainly, had been a fruitful source of revenue in premiums and sometimes of most valuable office help occasionally unpaid or underpaid.

Let them learn and remember one or two things which were of real importance to the study of that really great subject. The present system of academic instruction was not really a break with the past. It seldom happened that a school student found himself at the end of his course in sole command of an immediate practice. As often as not his career as a graduate in architecture began or continued in a draughtsmanship. As an assistant, he would experience that happy comradeship with an elder which the abolition of pupilage might have seemed to extinguish. Friendly rivalry among fellow students had been and always would be one of the greatest incentives to progress. That was the reason why a large office full of pupils was in the Victorian days a better training ground than a small one. The schools provided that rivalry to perfection, and thus gave by their very nature what under office pupilage could only come by chance.

In the days of the eighteenth and for h the nineteenth century, foreign travel w almost invariable prelude to successful cu practice. What was the object of that tr Sometimes, as in the case of Robert Adam to the Adriatic, it was actual discovery digging out for oneself of architectural which no book-learning in England could s Sometimes it was the mere seeing for self of the grandeur which no record, no dra no picture, could transfer. Always it wa contact with masterpieces which meant delight and possession. To-day, the ledge of every accepted work of art was sible by means of books, photographic trations, and measured drawings. The sc an architect's study of the past was wider than ever and more rapidly ach Their debt to the men who had reduc black-and-white documents the inform which of old had to be sought by trav immense. But the letter killeth; and a happy reflection that no learners of tecture and no teachers could avoid the dis that actual personal vision of building indispensable to the appreciation of what tecture was and meant. Quite apart fro fact—a most important and pregnant that drawing from a building, it conscien done, was the finest and deepest form of there remained the wonderful realisatio the presence of perfect architecture had the architect a direct, a magic, an in influence which no learning could expla no logic could deny.

DISCUSSION.

The discussion following the paper was by M. VICTORA HORTA (Academie Ro Belgique).

Professor BERESFORD PITE, who fo said architectural education had not nec gone with the Renaissance; they we actually in the Renaissance to-day. methods and subjects, and habits of were those of their Renaissance ar They were, however, beginning to ap to a greater degree the marvels of Egyp In the East there were fields of arch and art hardly yet explored or understo a Congress let them seek to widen their and not confine it to the academic trad Renaissance architecture, or to the sy modern architectural practice. The a of the ancient world were not the pr any school, but of an era, their work th sentation of national life. Their embodied sentiments, chiefly religious were not included in the education architect of to-day. Behind Greek arch was a fundamental religious principle

With regard to ancient architects, th not help realising that the example of infected with enthusiasm the archi Somerset House and Waterloo Bridge. only when they came to the Renaissan its clogging stupidness and artificiality the imitative aspect of architectural they were able to create a system which made their vast and myster which once flowered over the whole s civilisation, the subject of an acaden degree. Architecture was individua siasm; and the word "creative" expr architect. He hoped in the future th not forget the lessons of the Conferen

M. R. BAKU (Russia) mentioned t debt the architecture of Russia owed t

Professor ANONI (Milan) also spok

Lord CRAWFORD, in closing the d said there was one feature every spe endorsed, and that was that in the relation between the architect and was intimate and continuous, that familiar with the process of constru the materials he employed, and the be of handling them. Architecture wo do justice to itself if the architect were from the actual handling of the on which the result of his depended.

ARCHITECTURAL EDUCATION IN THE PRESENT

cond day of the Congress Sir nfield presided. In his opening said they were going to deal that architectural education of the the absence of M. Gustave e called upon Professor Anoni to paper, "Architectural Education Present Time."

ITALY.

VE GIOVANNANI'S paper stated r to arrive at a proper under- he present conditions of teaching e in Italy it was necessary to turn me about fifty years ago, when, definitely become a nation, the higher studies and institutions for so that the interference of local art in such institutions, which moment was paramount, com- l. In the new State regulations, ras, so to say, split into two parts follow two divergent paths. On it was attached to schools of civil which assumed great importance h rank in the field of pure and e, so that for a long time the title ion of architect were absorbed in ed by civil engineers with an hnical training but occasionally ent artistic preparation. On the nstitutes of fine arts, founded in number of various Italian cities, e teaching of architecture with ing and sculpture, thus bringing architectural artists of form more ance, whose excellent training in perspective conception was not upported by technical training building or even by an adequate f general culture.

m had not given entirely satis- . It was true that from the two ols came fine architects, but the emselves insufficiently prepared to problems, possibly more arduous n elsewhere on account of the strong inheritance of monuments nd of the continuity—unique in f their architectural tradition; were those of agglomerations of to the enormous development of ne respect for the environment of , to the necessity of complying litions, and to the new methods of

s, the system followed had not fluce considerable advantages by if not the intensity, of archi- e. In Italy every civil engineer, nary engineer, had a by no means itectural education as he had a ducation; the relations between nd the other arts had, on the other been completely severed; and study, survey, and excavations greatly benefited by this know-

pts to give a full and complete itectural studies and to the title had been very numerous during ars. Special sections for archi- nts were founded at the poly- . They culminated finally in the ion of the High School of Archi- ne, and this school had become n for architectural teaching and he title of architect.

chool of Architecture in Rome y, for admission to which it was e general knowledge similar to schools, together with an artistic to that of the ordinary courses s of fine arts; such training either by official certificates of admission examinations. The years, and the studies were of ic and professional character; that was to say, arranged so as to cultivate progressively the mind and the feeling for art.

In other words, this system aimed at forming a complete architect for whom art should not be an abstraction but should be expressed in concrete positive subjects, and science should not become an arid practice of expedients and forms. And in that way had been overcome the prejudice of incompatibility between the two orders of study, by the re-assertion that the aptitude for the exercise of the profession of architect could only be found in those who could understand and harmonise both.

The curriculum included various "cycles" of subjects: scientific subjects having to do with the science of building (strength of materials and calculation of building plans), which were treated in a thoroughly scientific manner similar to that followed in schools for engineering, though limited to special ends; artistic subjects, first in the field of general preparation, then in that of decoration and of various architectural and ornamental applications; practical and professional subjects; subjects of historical character; finally, architectural subjects proper, among which stood out architectural composition to which all the others converged like several tributaries to a single river. Bearing in mind the principle that it was important to interest the pupils by letting them deal with concrete subjects, instead of making them go through long abstract exercises or copy drawings, composition, in which the student began to exercise his brains and to form his artistic taste, was introduced in the first year. But the first composition dealt with the most elementary subjects as regarded the construction itself and the artistic importance; the composition of the second year chiefly dealt with subjects of stylistic character (proposed within well-defined building and artistic environment) as commentary on the course of history of architecture; in the third and fourth years the subjects became larger both as regarded the constructive part and the special purpose for which they were intended (character of buildings). Finally, the fifth year, besides treating some subsidiary matters, was devoted to the compilation of schemes or plans complete in every detail, with proper artistic, technical, practical, and economic elements.

Commendatore GIACOMO BO SI (Director of the Excavations of the Roman Forum), who also read a paper on Italian architecture, said Roman architecture had followed the track of the victorious legions, but that imperishable monument of glory of the Italian race, having faithfully kept to the traditions of sincerity and honesty, came to life again in the sixteenth century and imparted new splendour and beauty to the most barbarous places in the lands conquered by Rome. The art was unfortunately getting lost at present, as it had been used to produce architectural fakes of *papier màché* or reinforced concrete in the service of the cinematograph industry, which was thoroughly mendacious, and constituted a libel on the Roman name. It was, therefore, necessary to return to a serious and analytical study of the noblest authentic monuments of Roman architecture which had been produced by the great Italian artists of the fifteenth century and the whole of the Renaissance.

AMERICA.

Present-day education in America was dealt with by PROFESSOR D. W. EMERSON (Massachusetts Institute of Technology), who said the present inherited from sixty years of architectural education a vigorous infant standing firmly on his feet; reaching out from time to time, perhaps, to a classic bench, a Georgian mantel or a Louis XVI armchair, for assistance in his early wanderings, but showing withal a natural curiosity as to his surroundings and a certain sturdy independence of spirit.

For the guidance of this promising youngster, two organised systems of education already existed, and they would, he trusted, in addition, always have the services of those devoted individuals whose offices and example might well serve as apprentice schools of the greatest value. Organised teaching was effectively handled by the schools of architecture and by the Beaux Arts Institute of Design. These two institutions varied widely one from the other in their methods and characteristics. At the same time they actively co-operated to the end that satisfactory performance in the one was accepted as a basis for classification or advancement in the other, so that, though approaching their problem from different angles, they united in serving a common cause.

Teaching had to be adjusted to the needs of different groups of students. The first, and probably the largest, included the graduates of high schools; the second was composed of students with a degree indicating that they had completed four years of study in a college or university following their preparatory high school course; in the third group were included special students, namely, draughtsmen of three or more years' practical experience, presumably over 21 years of age, but without sufficient scholastic or collegiate preparation to enable them to pass the required entrance examination.

If there was any one distinguishing characteristic of modern life it was perhaps its complexity—a characteristic possibly even more emphasised in America than elsewhere, and therefore calling for particular recognition in the preparation offered to the American student about to take that crucial step from theory to practice. At the present time they might, therefore, be said to be cleaning house. They were working for one great objective—the more general recognition of architecture as a profession for the practice of which adequate preparation was essential; and to that end for the better use of the time at present at their disposal, together with either a longer undergraduate period or the requirement of a degree as a pre-requisite for entrance to the schools of architecture. With this as their goal what was the nature of their house cleaning? They were eliminating the unessential, getting rid of those undesirable inheritances that for the most part were the result of the engineering environment in which they had grown up. Such mathematics as was valueless outside of the class room was being replaced by history or design. First-year courses in mechanical drawing were now given over to freehand drawing or theory of architecture.

In brief, the major effort was being directed toward:

(1) The teaching of fundamental principles rather than the study of countless details.

(2) The teaching of the orders and elements of architecture in their normal relation to structures rather than as isolated features.

(3) The producing of programmes that were illustrative of modern problems in their own country based upon intrinsically sound principles of composition in plan and decoration.

(4) The adaptation to local conditions of the *atelier* system and with it of that logical procedure in the study of design, for both of which they were indebted to the Ecole des Beaux Arts in Paris; and finally,

(5) The co-ordination of teaching, whether it be of history, construction, drawing or modelling, so that each and all united in emphasising the transcendent value of design as the keystone in the arch of architectural education.

The effort indicated under those five headings was obviously directed toward the achievement of that major objective. The more general recognition of architecture as a profession, for the practice of which adequate preparation was essential, and all five were correspondingly applicable to those three groups of students whose education constituted the problem.

The need of the high school graduate for a broader background, a wider acquaintance with the humanities, including those cultural studies

so essential to an understanding of modern conditions, was already recognised in some schools by the addition of one year to the four years hitherto considered the standard course. The resulting five-year course met the need as well as ensuring that greater maturity of mind and judgment in the graduating student that was so essential to an adequate grasp of his subjects. It condensed into five years spent in one institution what was generally obtained in six, by a combination of academic and professional requirements, in two institutions.

In considering the second group, composed of holders of the degree of Bachelor of Arts, they might admit that the high school graduate, on account of his greater youth, came to his professional studies at a more adaptable and impressionable age than the college graduate; still the latter had in all probability used his added years to acquire a most useful acquaintance with the humanities and had thus secured a broader foundation for his professional work as well as a more mature appreciation of the significance of the name "architect." Hence, for the members of that second group a period of three years was generally sufficient to bring them to a state of advancement, from a professional standpoint, equivalent to that acquired by the members of the first group in five years.

To the third group, composed largely of draughtsmen whose studies ceased with high school, all the schools offered varying facilities for completing their professional training on the basis of the office experience previously acquired. Unless those students made unusual sacrifices and met the standards required of regular students they were never candidates for the degree, but because of their long office experience and earnestness of purpose they formed a valuable element in every student group. It was in particular to meet the needs of the third group that the Beaux Arts Institute of Design was organised, and now, so truly had the Beaux Arts idea of *atelier* work won its way in America, that, without exaggeration, the architectural schools of the country might be classed as *ateliers* of this greater and more comprehensive effort. Many of the schools based their entire teaching in design upon the programme and judgments of the American Beaux Arts Institute of Design. Others did so for certain grades or certain selected groups of their students, and others, again, because of local conditions, only availed themselves occasionally of the opportunity offered; but all profited either directly or indirectly through the better standards resulting from this nation-wide movement. Thus they found the schools, while both helping in and profiting from the activities of the Beaux Arts Institute of Design, interested keenly in its further development and recognising the advantages and opportunities that resulted from association with it. In consequence they saw the work of the draughtsman in his *atelier* placed beside the work of the student in the school. Both were judged by a jury composed of teachers and practising architects, all of whom had a common interest in maintaining the high standards of the judgments, and all of whom alike made that voluntary sacrifice of their time in order that the youth of to-day might benefit from the lessons of the past and might in turn be the torch-bearer of the future.

It might be well to comment on one other feature that characterised the American educational system. He referred to the effort to have as teachers of design as well as the heads of schools of architecture men who had been, or still were, practising architects; men who were in daily contact with the difficulties of the job were much more likely to be patient and understanding critics than those whose chief aim was academic or mere paper perfection.

They might well ask: "How do your students become acquainted with the great architecture of the past?" In so asking, they would touch upon, perhaps, the greatest handicap under which they laboured. The need for acquaintance with the monuments of Europe through personal knowledge rather than through books and photographs was recognised with the creation of their first school of architecture. A new country such as America, with nothing that could by the most generous be called architecture dating back more than 250 years, needed contact with the past. To that end travelling scholarships had been created and now existed in fifteen or more schools. In addition half a dozen more were privately endowed. Those all ensured for the most promising students anywhere from six months to two years of travel and study in France, Italy, England, Greece or Spain as conditions might indicate.

No description of the modern educational system was complete that omitted mention of one feature that was outside the dry bones of their undertaking. That it was that gave to the problem the breath of life, that made architectural education a thing of the spirit as well as the body, that had won the selfless devotion of the teachers of the past—imagination. Imagination was essential if they were to meet the demands of their complex modern life, essential in both student and teacher. No precedent existed for the solution of many modern problems, they were as new as their country, as their civilisation, as even some of the materials with which they must deal. They could only be solved with the help of that type of imagination that could see beyond the written word or evident fact, that could find the great underlying principle without being misled by a myriad of half-truths. Imagination could not be taught, it could only result from that perfect relation between pupil and teacher where the one was as eager to learn as the other was to teach, where the effort to acquire was at least commensurate with the desire to give. Imagination need not mean genius, it meant rather a capacity to see the essentials of a problem without its trappings, to look at the rough sketch with the fresh eye of a discoverer, ready to see with an open mind rather than with the eye of prejudice. It made of an otherwise dull academic routine a joy, a delight—a thing inspired. When added to the normal essentials of an architectural education, it supplied the spark that made their dull efforts glow with enthusiasm. Imagination made of the present study of architecture a thing transformed and glorified, for which no sacrifice was too great.

FRANCE.

M. DEFRASSE, speaking on "Architectural Training in France (Present)," said the teaching of architecture in France was centralised in the *Ecole Nationale Supérieur des Beaux Arts* of Paris; regional schools of architecture existed in the chief towns such as Lille, Rouen, Rennes, Lyons, Marseilles, and Strasbourg, but they were themselves part of the school in Paris, the programmes being the same and the competitions being executed simultaneously in all the centres of training. The designs were sent to Paris, for judgment (under the condition of strict anonymity) at the same time as those executed in the capital: then, after the exhibition in the Salle Melpomène of the Ecole des Beaux Arts, the best of the designs which had obtained awards were exhibited in the various provincial schools.

The course for study in architecture was a long one and comprised four distinct cycles: the entrance examination (admission); the second class; the first class; and, finally, the big prize competitions. There were few cases of any student being able to complete all those stages in less than five years.

All the big *ateliers* and the special *ateliers* prepared students for the tests which formed the entrance examination, which comprised: a test of architectural composition in twelve hours, a drawing test and a test in modelling, each of eight hours' duration; then a written examination in mathematics, a test in descriptive geometry, an oral examination in science, and another in the history of art. The examination was a stiff one: two successive eliminations weeded out the candidates, of whom the number was reduced to 60, 15 being foreigners, from a total of about 450 candidates. Students of the provincial schools also took part in this competitive examination, and the last to be admitted must have gained a number of marks equal to the last candidate to be admitted to the school in Paris tests in science and mathematics corres to the "Baccalauréat de Mathémati l'Enseignement Secondaire."

The student admitted in the second after having negotiated the tests of t trance examination must, before pass the first class, successfully pass a furt of examinations in science, descriptiv metry, algebra, statics, stereotomy, p tive, and construction, and obtain at le "mentions" in tests of architectural c tion, for each of which two month allowed. The course in construction lasted for one year, was the object of divided attention of an eminent pr Monsieur Arnand, who had been able der the peculiar difficulties of his attractive by cinematograph and lanter comprising all the figures of demonst and numerous examples taken from buildings and modern construction.

In the first class, save for an exam in physics and chemistry, and anot building laws and regulations, both o were necessary before the diploma c obtained, students did nothing but c tions in architectural composition, ea ing two months, on programmes of a ture and decorative elements. Med "mentions" were awarded to the b signs: the unit being a "mention "mentions" were required by the stu take part in the test for the diploma concluded the course for architectural t

Students, however, remained on the of the Ecole des Beaux Arts, and mig pete in the *grands concours* until they the age limit, which was 30 before t and which would be progressively red 27 years. These *grands concours* wer which had money prizes attached to th sulting from legacies or foundations this purpose; in some the students the might select the subject, and inclu Grand Prix de Rome, which had been ence for over two hundred years; th petition gave the winner of the first p right to a stay of four years at Ro archæological journeys to ancient Gr Orient, and the colonies of the old Empire.

The course in science was given in ture theatres of the school itself, but work of forming the young archit carried out in the *ateliers*, where *projets de composition* were stud worked out. Students, in a twelve- ting *en loges*, and without assista their professor, prepared a sketc to a small scale of some subject w described in detail in a written pr The sketch fixed the general arrang idea of the composition, from w student was not allowed to depart; b two months in which to study the s all its details and subsequently to for exhibition and a judgment, whi mined the relative merit of work se was in the study at the *atelier* tha fessor took his part; he took his hand to correct faults, he discusse solutions of the problem, and from change of ideas in a common res student, while keeping his own p impregnated his mind with advice experience. Thus the tradition of go tions and beautiful forms, of inge rangements, was transmitted and pe

Three professors, appointed by had their *ateliers* in the Ecole d Arts; in addition, twelve or fifte (where the students themselves sel professor) worked outside the sch was one of the reasons why, in Fra was no official architectural educa why all shades of thought were repr the free choice of a professor by th themselves.

There existed some *ateliers spéci* only prepared students for the entra nation of the Ecole des Beaux Arts *Spéciale d'Architecture* transforme

rchitects in a three-year course; the des Travaux Publics also trained en- architects or builders in a three-year

currents of opinion, very distinctly nt, existed in educated minds; some the rules of harmony were immutable, e beautiful proportions inherited from ssic period and renewed with the Re- nce, that the proportion of parts and were already found, and that the artist find the expression of his personality the framework defined by a healthy nal style the sure guide of good taste. considered the use of new materials modify the ancient forms and propor- that the precursory signs of an architec- evival, of a new style, were showing lves, and they revolted against the s resulting from tradition; no more ly schemes for them, form should result from calculations and scientific

re was truth? It must be admitted he first attempts at applying that theory decoration of façades or interiors were ppy. Brutal shapes emerged, with no tion between the different parts of the g, with no search for harmony between fferent elements which went to make whole.

dents gave at least five years of their to the study of architecture. These artists who had already proved their others followed them. All, moulded althy tradition, were able to scheme and without constraint in the domain of con- n. Some had resolutely attacked the roblems, and, guided by their profes- they had become the necessary artisans ould know how to combine the sobriety ly modern lines with something of the ess and beauty of the classic past.

n that, in the search for some expres- f modern needs and ideas, they saw the shapes of the early essays becoming supple; new relations in proportion were ing themselves and would find their harmony; they were not perturbed for ture of architecture in France. Im- problems remained to be solved, and the ts which they formed would not be al to the task which lay before them.

the evolution which was taking place was the part of the professors, of the des Beaux Arts, and what was their Their first care was to be alert to the es of the hour: they must not encroach minate over the personality of their nts, but they must be their reliable s, no matter what might be the ten- s which distinguished them, whether inclined towards the past or whether directed towards the problems of the . The professor must, therefore, be ic in his teaching of architectural com- on, he must welcome with impartiality tendencies, which joined sooner or later, e could not make a mistake if he based dvice on logic, on the severe criticism of s which were not based on an irre- hable reasoning.

hitecture in France was the direct re- n of the studies made by the architects Ecole des Beaux Arts. They should not tonished, therefore, to find in the build- f the early part of this century examples ed by the great periods of architecture, chers, on the contrary, corresponding to forms with the application of new ds and materials. These buildings were rthy of a careful and unbiassed examina- in order that their respective qualities be rightly appreciated. They must also e that in modern architecture one found dy of the improving hygienic conditions e: more air, light, pure water, trees and ght.

ENGLAND.

. CURTIS GREEN, on present education in and, said the present was a time of extra- ary interest and of development in archi- ral education; forces were at work which, as the younger men came into their own, would profoundly affect thought and achievement. He did not wish to be misunderstood; he did not predict super-architects. It was impossible to conceive higher ideals than those that had been borne aloft by their forbears, or than those held by the leaders they were proud to follow to-day. He did not anticipate greater achievement than theirs. What he foresaw was that for which the professors and masters in the schools were working, fostered and helped by the Board of Architectural Education—namely, the raising of the general standard and general understanding of architecture.

For sixty years there had been an examination for the Associateship of the Institute, and for forty-two years that examination had been compulsory. For twenty years the Board, established by men whose names were honoured in this country, had been in charge of the system. They were to-day in a transition stage; many students following the old road as articled pupils, getting such school training as might be available outside their office hours. There was no control over the quality or numbers that entered the profession in that way. There was at present no means of guiding their work other than by the examination system. One had heard of the faults and virtues of this system; they were in the main those common to any other that had as its immediate object the passing of examinations. It was, he thought, true that it was now unsafe for any young architect to neglect to obtain the "A.R.I.B.A."; his livelihood might depend upon his holding that recognised qualification.

The students and the examinations to which they submitted themselves were one of the concerns of the Board; the examinations themselves were the subject of constant supervision and improvement; the impossibility of dealing adequately with architecture by examination was fully recognised. Any stereotyped system tended to mediocrity and encouraged cramming, the use of books in wrong ways, and in the early impressionable years created a scale of wrong values in the mind of the student.

Such virtue as remained in the apprenticeship system lay with the master, aided by outside classes. Unfortunately, the rush of modern practice made the personal supervision of the principal practically impossible, or very rare. An apprentice was left to pick up what he could from the assistants in the office. He might see a great many fine working drawings made, and learn the routine of an office. He might see very little of specifications and kindred matters. He saw the results of his master's talent and experience, but learnt little or nothing of the principles or theory that had gone to the making of them. He became the follower, and carried on the tradition of a man and his work rather than of architecture in the wider sense. The old system was unfortunately still favoured for financial reasons by many architects, who sacrificed the future architect to the immediately useful draughtsman.

The new factor in the situation was the school of architecture either attached to a university, a school of art, or independent of either. There were at the present time seven such schools having a full five-year course of study, the later years combining some office training; the completion of the course to the satisfaction of the school authorities and of the Institute, who were represented by two external examiners, together with the passing of an examination in professional practice, gave the student exemption from the Institute examinations, and he became an Associate of the Institute. There were sixteen schools with exemption from the Institute Intermediate Examination. The number of students recently in the schools were: First year, 189; second year, 217; third year, 131; fourth year, 99; fifth year, 50—a total of 686. The schools were situated at the great centres of population and were gradually covering not only the British Isles but the Dominions overseas. They were new, and they were young. They showed the qualities of their condition, but they had, he believed, come to stay. One of the earliest pioneers of the schools, Professor Reilly, who had devoted the best years of his life to the founding and building up of the school system in general and the Liverpool School in particular, was of the opinion that it was a little early to pull them up by the roots to see how they were growing, or to expect much fruit from them; he agreed that the tree must be allowed time to establish its roots, but the fruit was not by any means negligible. It might be seen, for instance, in some students who had in recent years returned from the British School at Rome. The winners of that blue ribbon had without exception been products of the schools. It might be seen, too, in the results of recent competitions, notably in that for the Holt building at Liverpool. He spoke for himself, and he believed for the Board, in expressing the profoundest belief in the schools and in their future. The Board had recently appointed some of its members to make periodic visits to the schools to take counsel with the staffs and with those in authority as to how their needs and those of architecture might be best served, having regard to the locality and the students. The object was to help the schools in their special difficulties, not to standardise them. He thought they could not over-estimate the value of the freedom they had achieved by the exemptions granted to them from the examinations, a privilege that would be most jealously watched over by the Board.

The differences between the schools was a notable and valuable fact. They must have some standard of achievement, but it was not desirable that the system should be standardised. They wanted the teachers of the schools to visit other schools and learn what they could from them. Differences of thought, of ideals, of methods, were as marked in the schools as they were outside them; it was by what had been achieved and not by what had been said that posterity would ultimately value what was now being done.

There were architects who objected to the schools: some because they did not understand what they were doing and objected to a jargon which had unfortunately been adopted in some few schools when the use of the King's English would have aroused no feeling; others, and they must receive serious consideration, because they regarded the schools as too bookish and too theoretic; a few because the old system of apprenticeship was a pleasant source of income and comfort, and because they did not turn out immediately useful assistants. There was a time when young men left the schools with an exaggerated view of their attainments and value. They obtained a good salary and were found useless for the work for which they were paid. That, he believed, was becoming a thing of the past. A boy entering an office for the first time, unless he was engaged on the preparation of competitive drawings, realised that he was a new boy making a new beginning, his first duty being to get his master's ideas into material shape through the medium of the drawing board, a duty requiring accuracy and patience. On the other hand, the principal was finding that at the end of a year or six months such an assistant was more useful and had a greater grasp of the content and meaning of architecture than had the office-trained man.

In the education of an architect the question was: Are we awakening enough enthusiasm to carry the man through the drudgery to power and to freedom? In the early impressionable years of a boy's training and development there was, in his mind, no question of where the balance of advantage lay. In the one case he entered an office where he could take no useful part, nor was he capable of understanding the activities or interests of his fellows. In the other he entered a great school perhaps with ten, twenty, thirty or forty other freshmen. He was set to work with them in an ordered sequence of study, with a mind unconfused by factors and values relevant only to the prac-

tising architect's office. He had the healthy competition of students of the same year. The elements of draughtsmanship, design, construction, and history followed in an orderly procession, properly correlated and developed so that he might seize on their meaning and purpose. The strength of the schools lay chiefly in the method of teaching; in the personnel of the staff, who were mostly young and enthusiastic men, all of whom were actively engaged in private practice; and in the fellowship of the students of the same and of the senior years.

The school system at its best, as he had personally seen it at the A.A., at Liverpool, at Manchester, at Bristol, and he hoped and believed at many other schools which he had not yet had an opportunity of seeing, was the teaching of architectural design and construction concurrently in stages from the first year to an honours course in the fifth year. It was interesting to note that at Liverpool, where there was an honours course for fifth-year students that could be taken in either design or construction, those who took it in construction produced the best designs.

The method of teaching design had as its origin the great French school. The method adopted was that of M. Guadet, whose elements and theory of design and composition had been applied with so much success to the great school of modern architecture in the United States of America. It was noticeable that those schools which produced the best results were just those who encouraged by lecture and by quick, rough, small-scale sketches the study of design from the first year to the last. Every fortnight a programme was issued for some subject, large or small; the larger the subject the less the detail required; the first sketch was criticised. A number of such studies taught the student the right approach to a problem in design, to read the programme, to seize on the essential factors, and to arrange them harmoniously. It was only in the last years that a student worked out in detail a design for a building of any size.

There were few if any finished designs having initial and fundamental mistakes such as were so often seen in competition work. The students were taught the grammar of the art they were going to follow, so that they might hope to achieve that harmony of form running throughout each composition, both in plan, section, and elevation, that alone entitled the result to the name of architecture.

The schools, quite rightly, he thought, took up what might be described as a central position. They regarded the classics as the gold standard. The student was taught to look to these, Classical or Gothic, as the forms of utmost perfection. They were shown to be the forms to which they all constantly returned, and which, on returning, they always found more perfect than they thought. While he was being taught to delineate these forms he was being taught their application and the methods by which they were built. At the same time he was being lectured to upon the sources of art.

Some of the schools perhaps did not insist enough upon direct contact with the noble forms they held up to the student, because the school was not in a favourable position to do so. Like the schools in America, they had to fall back to a great extent upon books. He believed the professors of architecture held the view that the elements of architecture could best be studied from actual building and that composition could best be studied from books; the observation of the one teaching the relation of those parts that the eye could embrace, and of the other the beauties of composition in plan, section, and elevation, focussed into plates.

Sir Reginald Blomfield had said: "The reading of books will not make architects, his proper study will always be buildings." He (the speaker) did not believe there was any short cut in the matter; the study must be from buildings, and their beauty gradually unfolded to the student by his making his own measured plans, sections, and elevations.

It was interesting to note the difference of thought in the different schools; each school was working out its own salvation. Students' work to-day—in spite of the bewilderment that was felt at their lack of enterprise in entering for the great studentships and prizes which used to be so hotly contested—was in a far healthier and more lively state than it had ever before been.

Discussion.

Professor Richardson said the ideals of architecture changed from day to day. The architecture of buildings could be looked at from two points of view—the two roads. There was the road of tradition and the road of reason. Ultimately the two roads became as one, for reason was as intensive as tradition. The tendency of the present time was to encourage paper facility at the expense of the knowledge of realities. There was need for more discipline. Vital building must be the object of architecture. The training in architecture must be cultivated from the many activities that made up modern life. The chief objection to modern training was the subjects given to students during the first three or four years of training. The present system was making draughtsmen and not architects.

Mr. T. P. Bennett said those who were in charge of architectural education were in the position of selectors. They had to start their students with equipment which was sound and capable of development. They must have an intensive knowledge of construction and a clear appreciation of the properties of materials. In all periods, construction and design went hand in hand. Had they been contemporary with Gothic or Roman architects, they would have had to take construction as a basis of their work They could not attempt design without knowing the possibilities of materials. He would emphasise the composite nature of architecture. There was room for the play of almost every faculty—science, construction, law, &c.

After Mr. H. K. Stabell had spoken, Mr. P. L. Marks said he was very much against using foreign names when English could be used. With regard to development and construction, the principles of design remained the same, even with the use of steel and concrete. Dealing with the pupilage system, Mr. Marks said many architects used the system apart from the question of money.

Mr. Howdell said they were trying to bring architecture and construction together. The best way of training young men to-day was to begin with construction and alongside it study architecture.

Professor Beresford Pite said the opportunity ought not to pass without their telling their French brethren the great debt England owed France for her great traditional system and how much they admired it. But the efforts now being made by schools of English architecture weakly to copy and achieve badly motives of the great French method of national tradition was not worthy of their architecture. The results of attempting to do badly in England what was well done in France could be seen in the exhibition galleries. A few weeks back, in those rooms, drawings could be seen made by the masters of the great English schools of architecture of the last century. They were well worth careful attention. He was recently looking at a series of folios done by a Dutch School, and Mr. Slothouwer told him that after the first year students were forbidden to study work from the antique. Their foreign friends still had the view that Englishmen had their heads reversed—past instead of the future. Let them put the study of antiquity on a proper basis, and get to the motives that compelled the production of the Greek, Roman, and Gothic masterpieces. In these, the motives were intellectual. Let them come to a clear idea of where they stood, and see whether they could not employ similar motives. Let them study the problems of factory, town, and commercial architecture. Then they might find minds refreshed for spiritual buildings. Let them clear their minds of the cant of imitating the antique and their French neighbours. Then let them have a new heart and new ideas, and architectural education was not superfi fundamental.

Professor Anoni and Messrs. Howard R and Martin S. Briggs took part in the dis

Sir Reginald Blomfield, in conclusi he was glad to note that Mr. Emers stated architectural education should n mence too soon. Students often can educated or not educated at all. Mr. had given a clear definition of the Bea and it had produced brilliant architect buildings. But it was not suited country. They were different from the He would venture the criticism that architecture was a little mechanical, cold. Thirty years ago the Institute stirr on behalf of education, and came to the sion that apprentices and articles had h day. They should be more careful courage boys who had no qualities suit architecture. They would never rais tecture to its real height unless they v quality.

RECEPTION AND VISITS.

The Conference officially commenced on Monday, when the President and of the R.I.B.A. held a reception at street. Amongst those present were: H. V. Ashley, Harry Barnes, C. McArthu T. P. Bennett, H. T. Buckland, Wil Boring, Sir John Burnet, Messrs. Joh L. H. Bucknell, Martin S. Briggs, Bradshaw, Carl Brummer, L. B. Arthur C. Bossom, The Earl of Crawf Balcarres, Messrs. H. C. Corlette, W. E. Crompton, H. P. Cart de Lafontaine Davies (Board of Education), Arthur J Sir Banister Fletcher, Messrs. H. M. Cass Gilbert, W. Curtis Green, E. Stanle Vladimir Jezek, Francis Jones, Gilbert Arthur Keen, Walter M. Keesey, H. chester, E. Lallerstedt, Sir Edwin Messrs. Ian MacAlister, Oswald P. M T. Morison, Messrs. Ellis Marsland, Moira, E. C. P. Monson, Ragnar Ost Muguzuza Otano, E. J. Partridge, W. S. Sir Cooper Perry, Messrs. W. L. Black (P Penns. Chapter, American Institute tects), C. H. Reilly, Howard Robert John W. Simpson, Mr. L. S. Sullivan, Sir Selby-Bigge, Messrs. Evelyn Shaw Seager, Sir John Sulman, Messrs. C Skipper, J. C. Squire, D. F. Slothouwer, Sciortino, Jesper Tvede, Sir Brumwell The President of the Société des Ar Diplomés par le Gouvernement, Paris, T dent of the Royal Hibernian Academy R. Unwin, Frank Verity, J. H. Wor Edward Warren, Paul Waterhouse, Warwick, Sir Charles Walston, Messrs. E. Webb, Herbert A. Welch.

The conferences, some of which are this week, were held on Tuesday, We and Thursday mornings, the remaind time being devoted to visits to places of

On Tuesday the President and Coun Architectural Association entertained cheon those members of the confere were visiting the A.A. School of Arc and the Bartlett School of Architecture University, and at 2.15 p.m. a visit to the A.A. School. A series of films of processes, specially taken for the arch students, were shown. Afterwards the proceeded to the Bartlett School o tecture. From 4.30 to 6.30 a garden p held at Grosvenor House.

On Wednesday afternoon member conference travelled by river from Pier to Greenwich to see the work and Inigo Jones, and were conducted Royal Naval College by Mr. T. C. Architect to the College.

Yesterday afternoon a visit was pa British Empire Exhibition at Wembl

In the evening the Congress banquet at the Victoria Hotel.

To-day the members are to pay a visit to Cambridge, and for to-morrow day of the Conference, visits have been to St. Paul's Cathedral, the City chur British Museum, and Westminster A

COMPETITION OF NDUSTRIAL DESIGNS

RIVATE view was held on Friday last week North Court of the Victoria and Albert m of the designs received in competition e prizes offered by the Royal Society of or Industrial Designs. Particulars of this etition were issued and widely circulated end of 1923, and the prizes and subjects l extend over a wide field of industrial s. These prizes include Travelling Scholar- money prizes and " Owen Jones " medals. y large number of designs are exhibited, ny, in fact—there are more than a nd—that it is hardly possible to do more notice, here and there, a few examples of l interest. In the printing section a of title pages are shown which illustrate provement that has taken place in type- over recent years. No. 100, to which e of £10 10s. is awarded, though a good le, is not quite successful in the spacing e letters. The first three letters of vity " are detached from the more closely capitals of the remainder, giving the divided appearance, nor is the capital R d design. The awards are on the whole ctorily made, though the prize winners ot distinguished by any very decisive nce of merit from other examples not ng awards.

he Cadbury Bay, No. 220, by Miss Saul, active, but the advertisements as a whole ry poor. In the furniture (Sub-section 2) 9, R. F. Norton, shows " without reference ditional style " an interior treatment is successful. In Sub-section 3, No. 292, ch a prize is awarded, is lacking in dis- n. On the whole, the simplest designs s section are the best. The exhibition us that gramophones and wireless cabinets t easily lend themselves to sympathetic

Cadbury's Bay the Owen Jones' medal is ed to F. Hilder for a spirited drawing of wich Park, which shows appreciation and ent. Sub-section 3, Textiles, presents h a large variety of designs for cretonnes, on the whole are very much what we are to seeing—a craftsmanship but little d by art and personal feeling. We d as agreeable in colour and design 77, Miss F. Gaskell, and 554. No. 29 ts all the opulence of Victorian Birds of ise and Victorian poppies, and the stuffy ations they connote.

he " Miscellaneous " Sub-section, No. 133 ut the best, but we cannot attribute discovery to the chocolate boxes shown, onfess to finding much of this section rdinarily tedious. In Bay No. 37, Nos. 34, 532, 524, 362 should be noticed, some embroidery exhibited being very charm- A nicely embroidered tea-cosy may be since we must suffer these domestic s. The exhibition is in a sense dis- ting, and as is to be expected, much ed by the fashion of the time, and reflects aracter. Chocolate boxes and advertise- for chocolates not affording, perhaps, for more than this. It cannot be said his exhibition gives evidence of any new us, but is rather the reflection of its own and its present influences. Encourage- of art appears to come in other ways through such competitions, though they ave their use in stimulating the young to ty. We shall be nearer to understanding roblem when we appreciate how difficult There appears a levity almost in such ement as that which follows—we quote the Draft Report—" The regrettable gulf has opened between art and manufacture be bridged without delay." But how ? man by searching ?—If we seek the right , set out hearts to care for them, there ns no problem about art, nor any gulf to , because it will come of itself, being only xpression of life lived and employed in oblest ways. So long as we hold back part of the price will the gulf remain, and pious phrases do not help us. Perhaps in thinking more and organising less there may come to us a new witness for art, which our hurry to regain " pre-eminence in commerce " hardly aids us towards.

Among the prizes awarded were the following :—

Textiles.—(£10 10s.): E. E. Taylor (School of Arts and Crafts, Battersea Polytechnic).

Furniture.—(£10): H. S. Froude (School of Art, Goldsmiths' College) (No. 429); E. H. Hill. The Travelling Scholarship of £125 was awarded to E. H. Hill.

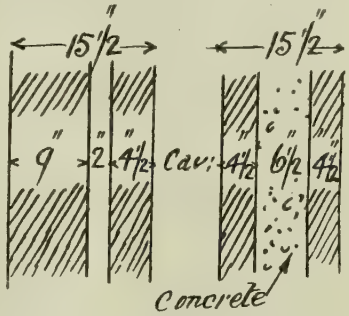
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

***** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Cost of Building Hollow Walls.

SIR,—Could any of your readers answer the following questions :—What is the comparative cost of building the two walls shown in the diagram ? What is the cost of building an 11 in. cavity wall as compared with an 11 in. wall



with 2 in. of hygeian rock instead of a cavity ? I presume that, with the concrete filling, ties would be necessary, but not with the hygeian rock. Is this correct ? How would the use of special bonding bricks instead of iron ties affect the cost of building a hollow wall ?

" M. D. R."

Housing Subsidy.

SIR,—We have a house on which a subsidy has been granted under the Housing &c. Act, 1923.

The purchaser to whom the subsidy has been granted is unable to take it up owing to unforeseen reasons. We have applied for the subsidy to be transferred, but this the local authority are unwilling to do.

Is there anything in the Act prohibiting the house being occupied for a short period by the original purchaser after granting of subsidy amount and then being disposed of to any other purchaser ? " PERPLEXED."

Cowhouse Floors.

SIR,—The best arrangement is to provide a concrete platform raised about 4 in. to 4½ in. above the general floor level, the step being under the tails of the cows with a shallow gutter running along under same and draining into stable gullies. The portion next the trough, for a width of about 2 ft., should be of soft material, such as earth or peat, so as to avoid bruising the beasts' knees when lying down, the remainder being paved with granolithic laid to falls and grooved for drainage and foothold. " PAVIOR."

Architects and Local Authorities.

SIR,—I am a member of an Urban Council, and as such I am a member of the Sanitary and Highways Committee which deals with plans. As architect, on behalf of clients, I often have to submit plans to this Committee, and the Clerk informs me that as I am an interested party I am not allowed to take part in the discussion on these plans, nor yet am I allowed to vote in any way. I would have thought the Clerk was right *re* my not being allowed to vote, but I am of opinion that I should be allowed to join in the discussion. I shall be glad to have your opinion on this matter.

[REPLY.]

[We are unable to trace previous rulings upon the subject, but we are not aware of any law limiting the powers of interested members of Urban District Councils, once elected. As a matter of public policy, however, we should have thought a Committee man would be very careful to take no more active part in the discussion of his own plans than is open to any ordinary member of the public.]

Artificial Daylight.

SIR,—Can any reader inform me of the best form of artificial daylight that can be produced for the " trying-on " rooms in a large high-class drapery establishment ? " DESIGNER."

Contract Forms.

SIR,—With regard to the R.I.B.A. Model Form of Agreement and Schedule of Conditions, I find it somewhat puzzling to fill in the blank spaces, especially paragraph 30 (certificates and payments), from the words ' until the balance in hand " to the end of the paragraph. I wonder if any reader will kindly give an example to an assumed contract amount of, say, £1,130.

Also, what would be a reasonable figure to fill in in paragraph 26, " If the contractor shall fail for . . ." ?

Further, what lengths of time is reasonable for the blanks in paragraph 31, A and B ?

" RAJAH."

Ceiling Lining.

[REPLY TO P. W. A.]

SIR,—P. W. A. should get in touch with a good firm of asbestos goods manufacturers, who will be able to advise him of some form of their material that will meet his purpose.

" M. A."

Insulating.

[REF. H. N. I.'s LETTER.]

SIR,—Further to H. N. I.'s letter upon the above subject, though I do not think for a moment that the original querist will have been misled by my statements, I should like to explain that in referring to the air in a sealed cavity as " stagnant," I intended the term as relative only to the pronounced circulation in a ventilated cavity. Similarly as to its non-conductive qualities, I did not suggest that alone it was a thoroughly sufficient insulator, but merely a very useful auxiliary to the properly constructed insulating shell of the wall. A cushion of air does check the transmission of heat, and this fact is the secret of the warm feather bed. " L. X."

Provisional or P.C. Amounts.

In fixing a provisional, or P.C., amount of, say, £20 (in an architect's specification) for certain goods to be obtained from a specified firm, whose name and address is given, would the architect be responsible to that firm for payment, supposing that goods had been ordered by the builder and yet not paid for by him, even if the final certificate of payment to the builder had been made for carrying out the contract work? I have been given to understand that specifying P.C. amounts or provisional sum and the name and address of the firm to whom the builder must purchase from, makes the architect liable if the builder has not paid the firm's account.

" ARCHITECTUS."

PROGRESS OF THE HOUSING BILL

THE Housing Bill passed the third reading in a small House by a majority of 95. It is, of course, inevitable that in the House of Commons the discussion must proceed upon political lines, but in a measure such as this politics really tend to obscure the main issue, as every objection is treated as only raised to further one or the other political end.

There are objections to this Bill which are in no way political, and the main objection is that it indicates an end to be attained, but fails in any way to supply the means. The old Jingo war cry of some forty years ago "We've got the men, we've got the ships, and we've got the money too," paraphrased and applied to this Bill, would run "We've got no men, we've got no bricks, but we'll vote the money through." There is the great objection to such a measure that it upsets the market, it tends to render money and material dearer, and yet in the immediate future it cannot be put into useful operation for the lack of men and materials.

It is an emergency in which, to carry on the nautical phrase, "all hands should have been piped on deck," but although some slight amendment has been made in the Bill during its passage through the House, private enterprise has been neglected and scoffed at. The Parliamentary Secretary to the Ministry of Health is reported as having said that the logical way of dealing with the housing problem on the lines of private enterprise would have been to repeal the Rent Acts and allow rents to rise, but the former Government had lacked the courage to do this; and the Minister spoke as though private enterprise was only greedy enterprise requiring to be controlled. Private enterprise was put in fetters early in the war by rent restriction, and despite its fetters it has given an excellent account of itself under the Act of 1923, and it certainly has not been making excessive profits.

Mr. Wheatley in the debate adopted the same tone towards private enterprise, and is reported as having said that the figures given by Sir W. Joynson-Hicks with reference to the Act of 1923 were most misleading, but our readers will be able to judge of this by the figures given by Mr. Wheatley himself, which we published in our article of July 4, which showed the important part played by private enterprise under the Chamberlain Act.

The real gravamen of the Minister's charges seems to be that under that Act no houses were offered to tenants under agreements of letting, but how could they be when rent restriction continues to place rents on an artificial basis owing to the competition of restricted houses. The Government talk as though they were restraining the greed of private enterprise and restoring economic rents to the nation, but what they are really doing is merely to subsidise houses for the working classes at the expense of the tax and ratepayers over a long period, and thus further to close the open market and to create a new class of privileged tenants. If the end to be secured was to provide houses for letting this could surely have been accomplished in connection with the existing Acts, and on a scale which did not commit the nation to so vast an expenditure over so many years at a time when it is impoverished.

If the Bill is to become law we wish it well and trust it may be more successful than we imagine will be the case, and it certainly is now a somewhat different measure in minor respects to what it was when it was first introduced, but without any hostility we have felt compelled to criticise in its passage through Parliament and to combat the attacks which have been made on private enterprise in building which, we predict, if given a fair chance, will still prove the best and most economic agency for the production of the much-needed houses.

In continuation of our review of the proceedings in Committee on the Housing Bill, we may note that on July 18, in proceedings reported after our last issue went to press, other amendments were accepted in connection with Clause 3.

The Minister accepted an amendment that in the letting of houses built by the local authority reasonable preference should be given to large families; also an amendment setting forth the special conditions applicable to houses erected by private enterprise and public utility societies. An amendment was also accepted that "the appropriate normal rent" charged shall be exclusive of rates. The Minister also accepted an amendment which provided that the rules made under Clause 3 sub-clause (3) with respect to "normal rent" should be laid before both Houses of Parliament as soon as may be after they are made, and that if an address be presented by either House within twenty-one days praying that a rule should be annulled, His Majesty in Council might annul the rule without prejudice to anything previously done thereunder.

Before passing to the proceedings in Committee on Clause 4 we will refer to one or two new clauses introduced at the sitting of July 21 to meet pledges given at previous sittings. The Minister moved the following new clause: "In any case where the Minister certifies that a local authority has failed to take the necessary steps for promoting the construction of houses under the Housing, etc., Act, 1923, or this Act the provisions of Section 3 of the said Act of 1923 shall apply to persons willing to undertake the construction of houses in the area of the local authority in like manner as they apply to the societies bodies of trustees and companies therein mentioned and the provisions of this Act relative to such societies, bodies and companies shall extend to such persons." This clause was read a second time, but Sir C. Starmer moved an amendment to it making it retrospective by bringing in persons who had already commenced building houses but were unable to complete them because they could not get the subsidy owing to the local authority failing in its obligations, and this amendment was carried against the Government.

On July 21, when the Committee resumed its sitting, clause 4 was considered, and on an amendment moved by Sir G. Macrae giving the Government power to withhold the contribution "in the absence of adequate arrangements for the necessary increase in the supply of labour and materials at reasonable prices," the Minister made a long statement in which he began by admitting that he did not question the statement of the mover of the amendment that we had not an adequate supply of men and material to ensure the desired number of houses, but added that he was concerned that the means should not be magnified into greater importance than the end. But surely this is an example of putting the cart before the horse, and in connection with a scheme of colossal magnitude involving huge sums and effecting the whole credit of the nation? Why has such an ambitious scheme been framed at this time, when the means to carry it into execution are entirely in the air? The scheme was put forward as an assured scheme, adequate provision having been made both for its continuity and for the provision of men and materials, but the whole speech of the Minister showed how far this was from being the case. The guarantee for fifteen years to the building trade which was promised was not contained in the Bill as originally framed, and has now entirely gone by the board, for the Minister accepted an amendment to clause 4 enabling the Government contribution to be withdrawn in the event of the specified number of ho not being built "whether the deficiency is to the absence of adequate arrangements the necessary increase in the supply of bu ing labour (including any necessary augme tion of the number of apprentices employ or for the necessary increase in the suppl materials at reasonable prices or from other causes whatsoever," so where is necessity of this grandiose programme bin the nation for some sixty years? What assurance had the Minister to offer that scheme would ever be carried out? He c only assert that he hoped a more speedy t ing for apprentices could be devised, and more bricklayers' labourers would be avail but on this latter point he had, he said data which would justify him in presentin estimate to the House. The rest of his spe as reported, only amounted to pious hopes better methods of production could be fo and he even mentioned some new system was about to inspect.

We sympathise with the Minister, wh doubt is placed in a position of difficulty with unemployment so with building, his p came into office with the assertion that had remedies cut and dried for both probl and something had to be done. They co trated on building, and produced a Bill in nature of a pageant which should dazzle eyes and stimulate the imagination, but it comes to be applied to existing facts seen to be more suitable to the cinema to actualities of existence. The sch depends entirely upon the possibility of curing men and materials under present ditions. The subsidy is based upon those ditions, and it is no use hoping that new and new methods may be discovered to m it a possibility. Measures involving expenditure carried on over generations ca be launched on visionary principles, an they are they are foredoomed to failure. can the House of Commons vote large sum money and pledge the credit of the authorities for years to come, when admit the actual conditions do not admit o scheme being carried through, and it can be possible if any new methods of con tion can be found? These new methods go to the very root of the principle on the proposed subsidies are based, and if argued that after all the scheme is but e mental and can be abandoned, what be of what has been asserted all along to b basis of this scheme, the long guarant the building trade which was to offe incentive for the members engaged in that to be increased? Before embarking up long term programme, as is the case embarking upon a war, the men and materials must be assured. It may be r that in the late war we were forced to e with neither assured, but we may remin Government of the result—conscription to be resorted to. They have cer shown no signs of desiring to resort to scription in the building trade, or ev induce the trade unions to relax their so as to increase the number of men; a Government has really done so far is t the money.

In the debate Sir W. Joynson-Hicks that the Birmingham Housing Committe scoured the country and could not procu labour to erect the houses they had a authorised, yet under the Chamberlain some 50,000 houses only were being buil also stated that he had inquired fro Ministry of Health how much extra lab would take to build another 100,000 h and the reply had been 50,000 brick 7,000 plasterers, and 1,700 slaters. A ficient comment on these figures is a by the Bill, which schedules the num houses to be completed in 1925-6 at 1 and in the years 1928-9, 255,000. The s depends on two-thirds of the number of being completed (a period of three yea the two years last preceding and in res which contributions are payable set o

res for two years contained in the . Even the apprentices will not be ntil the year 1928.

ning to the proceedings in Committee, clause moved by Sir C. Cobb was to the effect that "any expenses by the London County Council under and under section 2 of the Act of mended by this Act shall be defrayed ses for general county purposes," the ing to secure that the City of London ntribute its proper share to the main scheme for London.

clause proposed by Mr. Masterman Minister of Health should in future h a condition that a trust or combine formed by shutting out foreign com- in building materials, and that no should be placed upon the provision s by any new and cheaper material se at present used, was not pressed Minister said he intended himself clause the effect of which would be freedom of purchase in the cheapest t home or abroad, and that if the of Health was satisfied that a par- ind of material was suitable for house and local authorities insisted upon with the older and more expensive the unnecessary expenditure incurred t rank for subsidy.

clause moved by Sir H. Nield for sion to County Councils of the powers upon local authorities by the Act of accepted by the Minister.

inister desired to accept a new clause by Mr. Paling to the effect that where provided by a colliery or other for which a subsidy was given was by a person in the employment of the the latter should not be able to ossession by notice to quit or re-entry e payment of an increased rent by f the tenant ceasing to be in their ent. This proposal was made at a g, and would seem to suggest dreams t restriction Bills, but the House was ugh awake to reject the clause by a of 96.

Report stage discussion took place on dment, designed to prevent tenants et with the consent of the local authority king anything in the nature of "key and a clause introduced by the Govern- that in giving or withholding such regard shall be had to any payment or other consideration received, or to be received by the tenant," it was contended did not go far enough, and an assurance was given that the effect of this clause would be further considered as the Government was in full agreement with the House on the point involved.

An addition was made to the amendments already passed on Clause 4, enabling the Minister to withhold contributions in cases where the deficiency of houses was due to the absence of adequate arrangements for the obtaining of funds at reasonable rates of interest to finance the provision of houses. Clause 4, subclause (3) was amended on the motion of the Attorney-General. The clause reads: "When any such order (that is, an order that no further contributions shall be made) has been made the Minister . . . shall not be liable to make or to undertake to make any contributions in respect of houses which have not been completed before the date specified in the order," but the amendment adds the words "other than a house which is completed not later than eight months after the specified date in respect of which the Minister or Board is satisfied that the failure to complete the house before the specified date was due to circumstances over which the local authority, person or body constructing the house had no control."

The report stage of the Housing (Financial Provisions) Bill was taken in the House of Commons, on July 24.

In order to give effect to a promise he had made in Committee to Lieut.-Col. Fremantle and others, Mr. Wheatley moved the following new clause: "It shall be the duty of a local authority, on submitting proposals for the provision of houses for the purposes of this Act, to satisfy the Minister (*a*) that they have taken into account the requirements of any town-planning scheme likely to be made in respect of or in the neighbourhood of the area in which the houses are to be provided; and (*b*) that the rate of density of the houses, ascertained in such manner as the Minister may determine, will not, except with the consent of the Minister, exceed eight per acre in an agricultural parish and twelve per acre elsewhere."

Mr. Greenwood, Parliamentary Secretary to the Ministry of Health, explained that it was clearly the intention of the clause to give the Minister power, where there were special circumstances and where it would be practicable to build more than twelve houses to the acre, to do so. There were no legal powers of compulsion on areas of less than 20,000 inhabitants in regard to town-planning, but this clause would promote town-planning in the smaller towns, and the Ministry would do all it could to help in the matter.

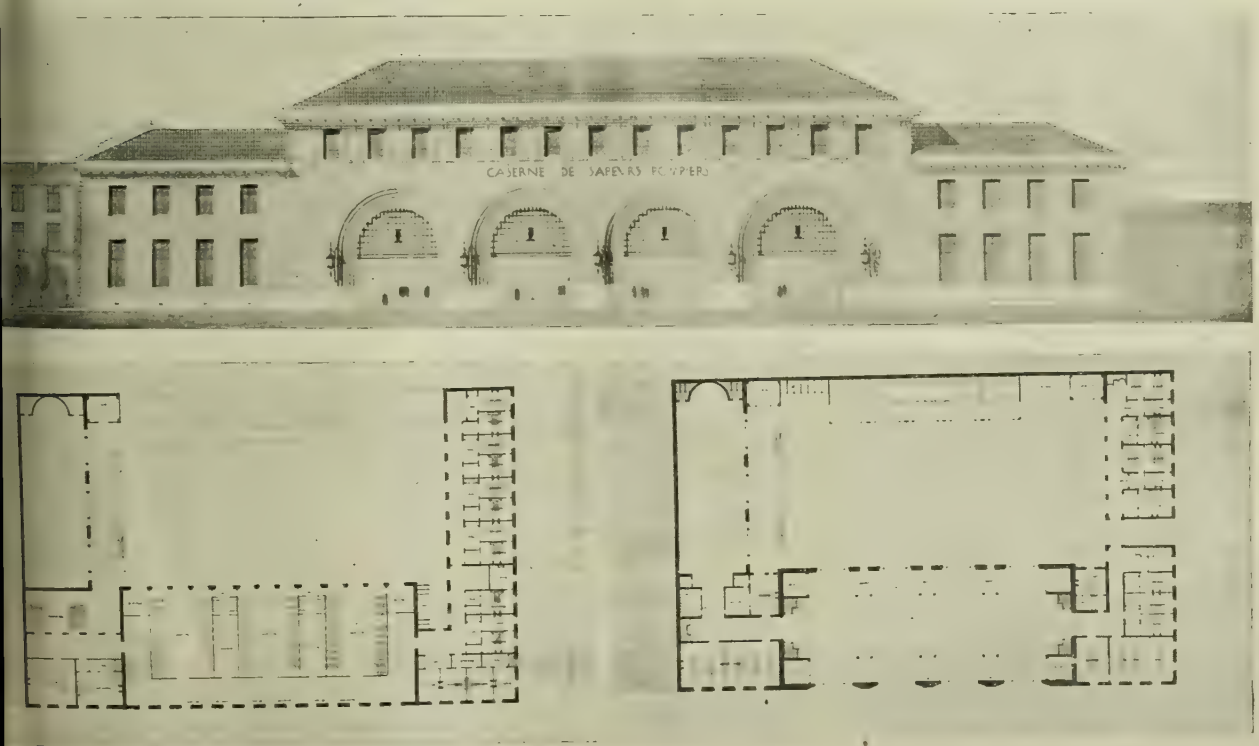
The new clause was agreed to.

The following new clause, moved by Mr. P. Harris, was agreed to: "Where the Minister approves the proposals of a local authority in relation to the provision of houses in the area of another local authority, and any difference arises between those authorities with respect to the carrying out of the proposals, such difference may be referred by either authority to the Minister, whose decision shall be final and binding on the respective authorities."—Mr. Gilbert, who seconded, said the new clause particularly applied to London, where the L.C.C. had to go outside the county in order to put up housing estates. The standards of many of the local authorities were quite different from the standard of the L.C.C., and, as had happened in the past, it was very desirable that arbitration should be allowed as proposed by the new clause.

On Clause 1, Mr. Wheatley, in fulfilment of a promise given in Committee, moved an amendment giving local authorities power to purchase houses from persons who had erected them before the passing of the Act without having gone through the ordinary process of a contract with the local authority. When the Bill became law, he would issue a circular to local authorities, drawing special attention to this provision.

The amendment was agreed to, as was also another amendment moved by Lord E. Percy providing that where proposals were submitted to the Minister which, in consequence of the adoption of new materials or new methods of construction, involved a reduction in the cost of each house substantially greater than the equivalent of £4 10s. per annum for forty years, the Minister might reduce the contribution by such amount as he thought just and reasonable, provided that such reduction should not be so great as to impose any burden on the local rate, or on a society, body of trustees, or company providing the houses.

A further amendment agreed to was moved by Sir C. Cobb to enable Borough Councils in London carrying out small schemes of slum clearance to enter into agreements with the L.C.C. for the building of houses in which to re-house the people who were evicted.



A French Exhibit at Grosvenor House.

An amendment dealing with the sub-letting of houses was agreed to. It provided that the local authority, in giving or withholding consent to sub-letting, shall have regard to any payment or other consideration received or to be received by the tenant. This was designed it was explained, to prevent sub-letting at a profit.

Another amendment was moved on Clause 3 by Mr. Greenwood. It lays down that the rent to be charged by public utility societies, companies and other bodies shall not exceed the appropriate normal rent, together with a sum equivalent to the average excess, if any, above the appropriate normal rent which could be charged by a local authority for the houses provided by them.

After discussion, the amendment was agreed to.

On Clause 4 Mr. Franklin moved an amendment entitling the Minister of Health to make an order withholding the subsidy in cases where the deficiency in the number of houses was due to the absence of adequate arrangements for the obtaining of funds at reasonable rates of interest to finance the provision or acquisition of houses. After the words "or acquisition," which Mr. Wheatley said were unnecessary, had been deleted, the amendment was agreed to. The mover explained that the amendment would be a warning to local authorities not to go beyond a certain point in competing for money for housing schemes and a notice to those lending the money that there would not be a constant rise in the rates due to competition.

The Attorney-General moved to add to the end of paragraph (3), which provides that when an order has been made under this section, the Minister shall not be liable to make contributions in respect of houses which have not been completed before the date specified in the order, the words :—"other than a house which is completed not later than eight months after the specified date in respect of which the Minister or Board is satisfied that the failure to complete the house before the specified date was due to circumstances over which the local authority, person, or body constructing the house had no control." The amendment was agreed to.

The Bill was then recommitted in respect of certain amendments dealing with agricultural parishes. Ultimately, on the motion of Mr. Wheatley, an amendment was agreed to altering the definition of an agricultural parish which will rank for the higher subsidy of £12 10s. from one in which the net value of the agricultural land exceeds one-third of that in the parish to one in which it exceeds 25 per cent. of the total net annual value.

The Bill, as amended, was then reported to the House and the report stage finally concluded.

The third reading was taken on Friday, July 25. The rejection of the measure was moved, on behalf of the Unionists, by Mr. S. Roberts, as follows :—"That this House declines to give a third reading to a Bill which calls for a greatly increased subsidy without any security that it will provide houses at rents which can be paid by the poorer section of the community, and which purports to arrange for the erection of greatly increased numbers of houses without any guarantee that the necessary additions of labour and materials will be forthcoming." Sir P. Pilditch seconded, and the Unionist criticisms chiefly followed the lines of the motion. Sir J. Baird, the former First Commissioner of Works, suggested that the Minister of Health might well turn his attention to new methods of construction, and appeared to be in favour of a scheme of national production of houses by unskilled labour on the lines on which the shell shortage was solved.

Sir W. Joynson-Hicks made a strong defence of the Chamberlain Act, but this was severely criticised by Mr. Wheatley, who, replying to the debate, stated that the present housing shortage was worse than when the Chamberlain Act was passed last year. In answer to a suggestion that he should offer an attractive prize for the people who could do something in the way of producing the right type of house, the Minister said that one of the things he proposed to do immediately the Bill became law was to organise an exhibition of housing so that everyone might have the opportunity of showing to the nation what he could do in the way of building houses. In conclusion, the Minister admitted that the country was not yet ready for Socialism, and, in the meantime, he had to take things as he found them. He had submitted a Bill which he believed would succeed in solving the housing problem.

The third reading was carried by 226 votes to 131—Government majority, 95.

The Bill was formally read a first time in the House of Lords the same afternoon.

The Bill was read a second time without a division in the House of Lords on Tuesday. The Committee stage has been fixed for next Monday.

An interesting suggestion was made during the debate by Lord Weir, who advocated the principle of standardisation. He said that the most suitable materials for the main structure of houses would be a combination of timber and steelplate. The use of these materials would eliminate the bricklayer, while a multiple production of timber units, with the use of gigs and other methods, would make them independent of the skilled joiner. The inner walls and partitions would be lined with wood or composition board, and no slaters would be required. The use of either metallic shingles or asbestos sheets for roofs would not involve the employment of plasterers. By standardising the layout, all the pipes and electric wiring could be produced by factory methods, independent of the plumber and electrician. By the standardisation of equipment and fittings, the problem of baths, sanitary conveniences, &c., would be rendered much simpler. Thus the middleman would be eliminated and costs reduced. These principles of production had been applied with complete success in war time, and he had no hesitation in saying that if his scheme were applied on a sufficiently large scale, a three-roomed house, with scullery and bath-room, but exclusive of lands, roads, drains, could be erected at a cost of under £300. The Government should lay down an auxiliary scheme to provide 500,000 houses in the next five years by a system of standardized production.

Lord Middleton gave notice that, on the motion for going into Committee on Monday, he would move that the Government institute an inquiry into alternative methods of building.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Progress under 1923 Act.

Mr. Wheatley informed Sir W. Joynson-Hicks that the following statement showed the position of housing schemes under the Housing &c., Act, 1923, on the under-mentioned dates :—

(I) Houses authorised by the Minister of Health, up to July 9, 1924 :—

To be erected by local authorities..	52,198
To be erected by private enterprise..	96,685
Total	148,883

(II) Houses included in definite arrangements, on or before July 1, 1924 :—

Schemes of local authorities—	
No. of houses included in contracts or in approved direct labour schemes	32,793
Private enterprise—	
No. of houses included in undertakings given by the local authorities under Section 2 (3)..	62,492
No. of houses approved by the Minister under Section 3 and included in contracts..	4,842
Total (included in Table I)..	100,127

(III) Building Progress at July 1, 1924 :—

	Foundations completed.	Roofed in.	Total under construction.	Con
Schemes of local authorities.. ..	8,222	6,126	14,348	6
Private enterprise	16,120	14,182	30,302	11
Total houses (included in Table II)..	24,342	20,308	44,650	17

The Addison Houses.

Mr. Wheatley informed Mr. J. Jone the numbers of houses completed in eac from 1919 to 1923 under schemes auth by the Housing Acts of 1919 were as follo 1919, 100 ; 1920, 15,711 ; 1921, 86,669 ; 89,001 ; 1923, 15,679 ; total 207,160.

Of these 167,922 were built by local auth and 39,186 by private enterprise

Hoardings for Bill-Posting.

Mr. R. Wilson asked the Minister proposed to introduce legislation to m illegal to erect hoardings for bill-posting w the consent of the local authorities, an to give these local bodies power to requ removal of existing hoardings deemed undesirable.

Mr. Wheatley said there was already before the House to give local auth greater power in regard to hoardings, a could not undertake to introduce any f legislation on this subject at present.

Building Lines.

Lieut.-Commander Kenworthy aske Minister of Transport whether it was pr to prohibit the building of houses, &c., a certain distance of the new arterial and whether he would consider taking to prevent the sides of new roads bei figured in the country districts by adverti hoardings and signs.

Mr. Gosling said in the present state law it was impossible to ensure the prescription of adequate building lines, was considering in conjunction with the M of Health what additional powers were re for this very desirable purpose. As re unsightly hoardings, he believed a Bil the House of Lords aiming at an exten the powers of local authorities in this was now before one of the Standing Com of the House.

Charing Cross Bridge.

Mr. Gosling informed Viscount Curz he was acquainted with several proje a new bridge at Charing Cross. The mat one of great importance and would be c studied by the Advisory Committee to up under the London Traffic Bill.

School Building Survey.

During the discussion on the Board of tion Vote, Mr. Trevelyan, the Presider he was having a complete survey made, the autumn he would make clear what buildings would be allowed only a limite of existence. Some would have to demned outright, and others recons Our greatest need was more school bui

A Suggested Inquiry.

Sir K. Wood asked the Prime whether he would cause an inquiry to into the charge that building employ recently added to building contracts, May 1, the equivalent of an increase i which, in fact, had not been paid ?

Mr. Greenwood said it was not thou any good purpose would be served by inquiry. It would be very lengthy reaching, and it is very doubtful whether lead to any definite results. He was that the prices in building contracts wi knowledge of the Ministry of Health months of March-June inclusive did not any such action generally on the part tractors as was suggested.

Single-room Tenements.

Mr. Greenwood informed Mr. Ald according to the 1921 Census, which f the most recent figures available on the there were 317,417 private families in and Wales occupying one room or les the aggregate number of rooms occupied being 317,260.

THE BUILDING TRADE

SUGGESTED METHOD OF OBTAINING STABLE BUILDING COSTS

By "ESTIMATOR."

s is no doubt there is considerable action with the position of labour in ding trade to-day. The workmen are ing that the sum total of their wages cient, and the employers grieve at the t of production. It would, therefore, be an urgent problem to discover some which the worker can receive higher d the employer lower or more stable fter all, it cannot matter what system nt is in vogue so long as the workman ts the higher wages and the employer isfactory costs.

thirty years ago there was a good deal gossip in some districts with regard to rd cost of production. In one place erers were discussing what should be lard rate of production per hour. The en were about 9d. per hour, and it was l by some of the men that the standard yard super of "render, float, and set," e 9d., *i.e.*, one hour per yard. To this ployers demurred as the piece-work he above mentioned type of work was l. The matter ended, as all gossip oes. The opinions canvassed were not tive, merely local, and no importance e attached to them.

s seem that in the case of buildings of ion character there is no reason why rd cost of labour should not be fixed arious items in housing by the parties d, the employers through their associa- d the workmen through their unions. ll be no advantage to either employer yed in such a case unless the workmen higher wages and the employers lower stable costs. Under an agreed system lts could be achieved.

andard rate of work being settled, if were done in less time the workmen t all the difference as extra wages over ve the standard rate, and in the event uantity of work falling short of the that would be the employers' loss, vorkmen would be paid the standard ages in any event. To put the matter s, if the standard rate of bricklaying per day and the craftsmen laid 900 in e, he would receive in addition to his wages the value of laying 100 bricks schedule rate. Thus, the workman et higher wages and the employer t some approach to uniformity in his costs. Both would have one common view.

lowing abbreviated or skeleton schedule ve some indication of the lines on which lard rate of production would have to ıt and agreed.

EXCAVATOR.

Excavate to form trenches and fill into cart.
Add for wheeling.
Labour mixing concrete and filling into trenches and levelling.
Labour mixing, spreading, and levelling concrete over site 6 in. thick.

BRICKLAYER.

Reduced brickwork left for plastering.
Do. faced one side with red facings.

Raking out and pointing brickwork in cement.
No. 1. Bedding and pointing door or window frame.
No. 1. Fixing and setting stove in chimney piece.

CARPENTER.

Ft.	
— cube	Labour fixing ground joists.
— ,,	Do. fixing first-floor joists.
— ,,	Do. fixing roof timbers.
Squares.	
— sup.	Laying 1 in. flooring and cleaning off at completion.
	No. 1. Hanging door and fixing hinges.

PLASTERER.

Yds.	
— sup.	Render, float, and set on brickwork.
— ,,	Do. on lath.
Ft.	
— run	Labour arris.

The appropriate rates to be paid for labour for the particular items are not stated, as they would depend in a measure upon local conditions, and would be required to be settled between the local employers' association and the unions or body of workmen concerned.

When rates are definitely fixed there should not be any alterations allowed for a definite period. This would give the workmen some guarantee that if they did their best to give a large output they would not be subsequently victimised by having the standard rate almost immediately fixed against them unless, of course, some new method were invented of doing the work.

This system would involve some measuring up of the work performed which could be done by the employer at settled periods, say, once a week or once a fortnight. If the work were of a repetition character when once a unit or house was measured it would probably suffice with few variations for a whole estate. In the event of the workmen objecting to the measurements offered, the employers' association could have a rota of recognised surveyors who would adjust the matter, and the fees—which would be very small, as the amount in question would not be large—would be paid by the party in fault. The workman himself would get the standard rate of wage in any event, and therefore could not possibly lose anything by some such system.

In a job where several men of the same trade had to be employed they would have to share with the bonus, and this would also apply to the labourers.

As before mentioned, the agreed rates for labour would have to be arranged to suit local conditions and the particular job in question. For instance, some brickwork jobs would require the attendance of one labourer to each bricklayer, or perhaps two labourers to three bricklayers, and in exceptional cases it may be found that one labourer would serve two bricklayers. The workmen would probably dislike having anything to do with measurements, but this could no doubt be arranged provided their interests were safeguarded as indicated above.

Again, it may be asked why should the workmen getting an assured standard rate of wages trouble himself to work harder with a view to receiving a problematical bonus. This may be the real difficulty in the matter, and could probably be met by the employer conceding an additional penny per hour to men who were undertaking the standard time work. The employers would probably object to the latter suggestion as they would not know where it would lead.

Some objection may be raised to the whole scheme on the grounds that it would offer a bonus to the young and vigorous mechanic and probably penalise the older man. This would not happen in practice, as the older men have usually a niche of their own in the trade which newcomers do not fill. If some such scheme were adopted for houses it would be probably difficult to apply to commercial buildings, which would have to be dealt with separately.

That there is need for some such standard of output for labour is evident when it is stated by employers in some districts that bricklayers are only laying 300 bricks per day while builders in other districts have workmen who are laying 1,000 per day. In some trades outside the building trade (textile and others) there is a schedule of prices fixed for the various detailed operations connected with industries, which is subject to increase or decrease as the wages rise or fall, and if it is possible to fix such a schedule in other trades, why cannot an attempt be made to introduce the arrangement to the building trade ?

These schemes do not debar the workmen from striking, and they could still do so for the various reasons for which strikes are arranged at present, but the desire to strike would be lessened.

The above-mentioned method has been tried in the past and has been found to work satisfactorily. When a standard rate of production has been fixed something must be done to grade workmen according to their skill in the industry and pay them in accordance, as the skilled craftsman is getting tired of being paid at the same rate as the inferior workmen, and this is undoubtedly the cause of a great deal of the present unrest.

L.C.C. and the Housing Bill.

The Housing Committee of the L.C.C. suggest that, in the event of the Housing (Financial Provisions) Bill becoming law, steps should be taken to enable effect to be given to the proposals in the Bill. They ask the Council to agree to a capital estimate of £500,000 in order that the construction of 20,000 houses may be proceeded with, as and when opportunity affords and supplies of labour and materials are available, subject to the Council receiving a State subsidy of £9 a year for forty years in respect of each house, and to the loss in respect of each house being limited to £4 10s. a year for a similar period. The committee also recommend that the development of land in the Ilford section of Becontree should be proceeded with, the cost being put down at £521,850.

Strand Widening.

The L.C.C. Improvements Committee recommended last Tuesday that application should be made in the next session of Parliament for compulsory powers to acquire the principal interests in the block of property between George-court and Villiers-street, and extending from the Strand to York-place, in order to continue the Strand widening. The estimated cost of acquiring such interests, other than those already acquired by agreement, is £450,000, a substantial portion of which would, however, be recoverable by the sale of surplus lands. It has been the practice of the Westminster City Council to bear one-sixth of the net cost of widenings in the Strand, and the Committee proposed to communicate with that body with regard to these proposals. The removal of the property will enable the Committee to bring that part of the Strand to the new width of 80 ft.

Development at Scarborough.

Purchased some time ago, the Scarborough Aquarium is to be remodelled by the Corporation. The total estimated cost is £104,170. The scheme includes the provision of medical, Turkish, slipper, and two swimming baths; the remodelling of that portion of the original building which is under the roadway; providing a concert hall and theatre, cafe and shop; and constructing public lavatories and a permanent beach-bathing establishment, which will necessitate the construction of a new sea-wall.

THE BUILDING TRADE DISPUTE

By S. STRANKS (*Organiser, Amalgamated Union of Building Trade Workers.*)

[While we are pleased to give publicity to the operatives' opinions on the present dispute, we do not necessarily agree with all Mr. Stranks says in this article.]

It is said strikes settle nothing. As wars between nations mean a resignation to the use of power as against that of reason, justice is not the deciding factor in the settlement; rather the so-called victory to either side is not a victory in the real sense, but an accumulation of revengeful feelings and longing for the time when the defeated may become the victor. Consequently the reliance on force produces no finality. So it can be said of industrial conflict; a resignation to the idea of strike or lock-out produces the same conditions; we may have among all sections individuals pursuing their ambitions by playing upon patriotic or prejudiced feelings and the baser side of our natures, yet who with a claim to a proper conception of the line of true progress resign themselves to the cultivation of force in these matters as being the wisest and most humane course to follow?

In the light of industrial history, coupled with my experience of modern relations between employers and employed, in spite of holding strong pacifist views, force of circumstances have resigned me to support that unfortunate weapon of the strike as a medium for assisting in adjusting differences in the building industry. What is more, absolute unanimity obtains in the operatives' ranks as to this policy. It is to be regretted this is so, but I will endeavour to prove that this spirit is the logical sequence of events.

At the time of writing the atmosphere is pregnant with mistrust and militancy which present an unenviable task to those entrusted to secure a settlement. But a settlement must be arrived at sooner or later, and it behoves all to consider the situation with a desire to come to terms and by pen or speech to do nothing to jeopardise the achievement of this object. Consequently, I claim the indulgence of the readers of *The Builder* to receive any statements I make, however unpalatable they may be, as being conceived with the desire to put what I consider to be the operatives' view in the hope of assisting rather than retarding a settlement.

We are living in an age of stunts; there is a tendency to influence public opinion by using stock phrases when it suits. I note in the ranks of the builders they have one or two experts in this practice: "The unions are breaking agreements," they say; "The unions are unduly interfering with managerial functions." These are stock charges alleged against us. With all due deference to those affected, I claim this is the policy of those responsible for the conduct of the employers' affairs.

My memory goes back to innumerable conferences held between the years 1917 to 1920, when the employers said the operatives should never go back to 1914 conditions. "We pledge our word," they said, "that if bad trade comes we will not use our economic power to depress wages or conditions." At the merest signs of bad trade appearing, however, they commenced to press for reduction of wages, and in this policy strained the letter of our agreements. The fictitious wages which were the outcome of the war we knew had to be adjusted, but six reductions of wages occurred, only two of which were due to variations in the cost of living. The others made a deep inroad into the standard of life of the worker. Take a labourer in London. His possible earnings per week are £2 15s.; deduct insurance, holidays, time lost through inclement weather, and casual nature of his work, at a very liberal estimate the actual earnings cannot be more than £2 8s. per week. Is this adequate? On the question of hours, overtime, and general conditions, in our opinion the employer did not carry out his promise.

The employers were repeatedly warned that the policy complained of was causing a deep resentment in the minds of the operatives, who were bitter not only against the employer, but also against his officials; he became sullen against any authority whatever. Some of the leaders of the federated builders imagined this condition favoured their side. But what a delusion! When, in the course of my duties, I visited some of those fine buildings in Regent-street and the City and noted the immense amount of money being expended on them while the workers were being paid starvation wages, and mess room and lavatory conditions were not up to those of a savage race, I knew in my most depressed moments that a reaction would set in. We have got it, and at whose door should the onus be laid?

Take the Liverpool position. Originally, employers and operatives in that town contracted out of the national agreement; is it to be wondered at, in view of the effects on his fellow-workers in other parts of the operation of the national agreement, that the Liverpool operative sticks to his local conditions, which are a higher standard than elsewhere? Efforts have been made to get him to conform and have regard to the general interest of the industry, but when this meant binding him to a machine which has been less merciful to his fellow-workers in other centres, it was more than human to expect him to respond.

Any machinery such as the Wages and Conditions Council scheme embodies, backed by a short-sighted policy, and lacking some of the more humane spirit that should inspire its working, is bound in its influence as indicated to produce a want of confidence. The lengthy period of negotiations made our representatives appear a laughing-stock in the eyes of their fellow-members, but what did the builders care? They pursued a line of delay which again increased that want of confidence among the operatives.

It is said that by ignoring the employers' claim for a 46½-hour week we broke the agreement. I know this view is held in many responsible quarters, but in London we claim that on account of the attitude taken up by employers we are right in standing by the 44-hour week. In the first place, let us examine the Fraser award. During the inquiry over which Sir Hugh Fraser presided, the employers put in evidence showing certain parts of the country did not honour the 44-hour week; on the other hand, we submitted evidence showing that some parts did honour it, and London was included in the latter. The Fraser award on hours was, in our opinion, founded on this divergence in evidence—hence the proviso which stipulated that the 44-hour week could be perpetuated by mutual consent. Subsequent events again demonstrated the mind of the employers, who issued a circular advising their local associations to oppose a 44-hour week. In London we anticipated a conference to discuss the situation, but when we met the employers it was to be practically informed the L.M.B.A. had decided to institute a 46½-hour week, and this meant the final word had been said. We came to the conclusion that if this kind of attitude was to prevail then the whole basis of relations between employers' and operatives' associations had gone. Consequently, on the question of hours, I contended, and still contend, we no more broke the agreement than the L.M.B.A.

It is not true that we have broken the agreement on overtime. All we have insisted upon is to have an equal right with employers to interpret cases of urgency so far as overtime was concerned. Is it to be understood that if we differ from them we break an agreement? Is an agreement only valid when we go into the council chamber and say "yea" to all the employers desire? If so, where is mutuality? It is not true to state we opposed reasonable grounds for overtime. masonry: for at least a quarter of a centu case for overtime has been well establish acted upon, and only within the last y two just one or two employers have t break through this well defined positio

The fear of the unions is that in conse of the time limits on contracts, due building owner and others wanting to co the building as quickly as possible, the w of the overtime rule under modern con would legalise systematic overtime. The much higher output in masonry to-day say, 20 years ago; but also the mason is much harder. Why, then, should called upon to work longer hours? I lea question of the fear of unemployment, is a factor contributing to his opposit overtime.

I am conscious of the need of all o avoid becoming entangled in our prej and thus ignore changes which reflect situation and require reasonable handlin account of certain phases, we suggested conference with architects, builders, an selves, to consider this question of con The builders agreed one day, but later on pooched the idea. Why?

The more overtime permits were gran more the applicants increased. The ope had ground for fear. Overtime is cost moralising, and tends to undermine effi it also tends to keep wages low and s long hours. For years we contested w employers who were wedded to the overtime. They gave way eventuall most old-established builders will ad were right. I do not agree with takin negative position on every occasion, have a right to examine and determi policy on these matters equally wi ployers, and it is time this cry of b agreements should stop.

Let us trust that before long, in spit differences, more reasonable counsels v vail. It is not for me to say upon wha the final settlement of the dispute w It is safe to say at least 60 per cent operatives are working for higher wag offered by the Wages and Conditions and where 46½ hours obtained prior to the hours being worked elsewhere are 4 and payment for loss of time through ir weather is recognised. The builders face these facts and try to settle on t of same. I feel no settlement is of unless the rank and file of the operati the final voice on the matter. We revive their confidence: this will pr cheapest in the end.

I cannot conclude this article witho ence to the suggestion by Mr. W. H. K.C., in your issue of July 25, on the of whether the Joint Industrial Counci Building Trades can be revived. Th good deal to be said for it; in fact, ov ing reasons can be advanced in fav with your permission I would like to this in the next issue of *The Builder*.

Victoria and Albert Museum.

The Victoria and Albert Museum has two pieces of English furniture from t tion of the late Colonel H. H. Mulline consist of a small commode of serpenti enclosed with folding doors, veneered w wood and rosewood, and decorated wit and trophies of musical instruments other woods. The angles are fitted wi modelled mounts of gilt metal. Thi furniture was made by Chippendale English cabinet-makers about the y and follows to a certain extent the Fr of Louis XV. The second object i dressing-table from the same per veneered with panels of satinwood and i classical vases, festoons, foliage, &c., i various colours. The lids of the dr inlaid with heads of a man and Eastern costume. The feet are m brass, chased and gilt.

E BUILDING TRADE NEGOTIATIONS

e suggestion of the Minister of Labour, oned in our last issue, a prolonged e took place on Monday between atives of the national organisations ilding trades employers and operatives, was arranged that the Minister of hould invite the same organisations he Liverpool employers and operatives er conference to be held as soon as The following official statement was fter the meeting:—

esentatives of the building trades s and operatives met at the Ministry r this afternoon, under the chairman- ir David Shackleton. After a gen ral n of the position, it was agreed that stry, acting upon the conclusions of t of Inquiry, should invite representa- he national organisations of employers, with representatives of the Liverpool s and operatives, to a conference."

roposal of a conference was agreed to le at an early stage of the discussions, is stated, difficulty was experienced a form of words acceptable to the two he employers were of opinion that the t of the difficulty at Liverpool must edence of the consideration of the other n dispute. Mr. George Hicks, on the s' side, expressed the opinion that the difficulty was insoluble by the national

Barron, on behalf of the operatives, that "independent of a settlement rerpool difficulties, a conference of the representatives of employers and s be convened at a convenient date. readjustment of wages, the 44-hour d general conditions of employment be d with a view to trying to effect a t of the present national dispute." loyers would not agree to this, but that the Liverpool situation must lealt with.

nference broke up at this point. One eratives' representatives, it is stated, an employer as "a slippery eel," od deal of heat developed. The em- eft the conference as a protest against essions used on the other side of the he decision announced in the official had, however, already been taken. Ministry proceeded to issue invitations conference.

TRADE NEWS

egistered office of Messrs. Brook & n, Ltd., builders' merchants, has been ed to Smitham Siding, Smitham Coulsdon (telephone, Purley 1928).

memoration of the centenary of the n of the firm, Messrs. Chance Brothers Ltd., of Smethwick, have issued a describing the history of the l containing many excellent illus- of the different uses of glass and uring processes.

ward Anson, Bart., has joined the the Birmingham Guild, Ltd., and in on with Mr. C. A. Ll. Roberts, he will e business of the company in London rners-street, W.1.

ngineering department of Messrs. & Colls, Ltd., has issued the first of Bulletins, the object of which is to useful data of permanent interest. deals with water towers, and subse- ues will deal with such structures as . retaining walls, viaducts, bridges, and reinforced concrete frames of Copies will be sent to architects ution.

Builders' Estate.

n Dallow, Blackheath, retired builder actor. Net personalty, £7,040; gross,

. Bower, of Leeds, builder, left estate £39,434 (net personalty, £1,027).

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/-
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
E. Glam. (Mon. Vall.)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/6½	1/6½	1/6½	1/6	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 193.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders: and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

AUGUST 2.—**Glasgow.**—PAVILION.—Erection of pavilions, &c., at Bellefield Sanatorium, Lanark, viz., (1) slater work; (2) tile work; and (3) electric light. Office of Public Works, City Chambers, 64, Cochrane-street, Glasgow.

AUGUST 2.—**Lenham.**—COTTAGES.—For the erection of eight cottages, in four pairs, at the Sanatorium, Lenham, for the Kent C.C. Mr. F. W. Ruck, County Architect, 86, Week-street, Maidstone. Deposit £1 1s.

AUGUST 2.—**Rhondda.**—MANSE.—For the erection of a manse at Trealaw, Rhondda, for the Trustees of the Wesleyan Methodist Church. Messrs. Thomas & Morgan & Partners, architects, 23, Gelliwasted-road, Pontypridd. Deposit £2 2s.

AUGUST 4.—**Birstall.**—PREMISES.—For new branch premises at the corner of Cambridge-road and Leyland-road, Birstall, for the Birstall Industrial Co-operative Society, Ltd. Architect's Department, Co-operative Wholesale Society, Ltd., 1, Balloon-street, Manchester. Deposit £1 1s.

AUGUST 4.—**Cudworth.**—WALLS, &C.—For the building of a bandstand base, and walls for tennis courts, for the Cudworth Miners' Welfare Scheme. Mr. J. A. Haigh, Architect, Council Offices, Cudworth.

AUGUST 4.—**Edinburgh.**—CRAFT ROOM.—For the erection of a craft room at the Royal High School, for the E.A. Mr. John Stewart, S.S.C., Executive Officer, Education Offices, Edinburgh.

AUGUST 5.—**Glamorganshire.**—VARIOUS WORKS.—(1) Duffryn House, Mountain Ash: conversion into a secondary school; (2) Barry Boys' Intermediate School: Temporary class-rooms; (3) Barry Boys' Intermediate School: Repairs; (4) Gelligaer Boys' Intermediate School, Pengam: Handicraft-room; (5) Gelligaer Boys' Intermediate School, Pengam; Remodelling classrooms; (6) Bargoed Boys' Council School: Remodelling offices; (7) Bargoed Boys' Council School: Remodelling classrooms; (8) Fochriw Mixed Council School: New porch; (9) Whitchurch Infants' Council School: New playshed; (10) Gwyndy Infants' Council School, Caerphilly: New cloakroom, &c.; (11) Gwyndy Infants' Council School, Caerphilly: Repairs to latrines, &c.; (12) Tonyrefail Girls' Council School; New latrines and improvements to playground; (13) Groesfaen Farm, near Bargoed: repairs; (14) Wern (Ystalyfera) Council School: Replacing barge boards and altering windows; (15) Abercregan (near Cymmer) Council School: New playsheds, &c.; (16), Rhigos (Hirwain) Council School: Erecting coal place, &c. Mr. T. Mansel Franklen, Secretary of E.C., Glamorgan County Hall, Cardiff.

AUGUST 5.—**Manchester.**—REPAIRS.—For repairs to greenhouse at Alexandra Park, for the T.C.: City Architect, Town Hall, Manchester. Deposit 10s. 6d.

AUGUST 5.—**Newry.**—HOUSES.—For the erection of 42 workmen's dwellings at Chapel-street, for the U.D.C. Town Surveyor's Office, Town Hall, Newry. Deposit £1.

AUGUST 5.—**Plymouth.**—ADDITIONS.—For alterations and additions to sanitary accommodation at Mount-street Schools, for the T.C. Mr. J. Wibberley, Borough Engineer, Municipal Offices, Plymouth. Deposit £2 2s.

AUGUST 5.—**Portslade-by-Sea.**—REPAIRS.—For repairs to St. Andrew's Schools, Portslade-by-Sea. Headmaster of St. Andrew's School.

AUGUST 5.—**St. Helens.**—HOUSES.—Erection of 20 houses at Windlehurst, for the County Borough of St. Helens. Mr. Arthur W. Bradley, M.Inst.C.E., Borough and Water Engineer, St. Helens. Deposit £1.

AUGUST 5.—**Southend-on-Sea.**—HOUSES.—Erection and completion of 55 houses, comprising 22 parlour and 33 non-parlour type, in blocks, for the Corporation of the county borough of Southend-on-Sea. Mr. Robert H. Dyer, Borough Engineer, Southend-on-Sea. Deposit £2.

AUGUST 5.—**Teddington.**—TILING.—For the tiling of the roofs of the Cemetery Chapels, for the U.D.C. Mr. Marshall Hainsworth, surveyor, Elmfield House, Teddington.

AUGUST 5.—**Timahoe.**—REBUILDING.—For the rebuilding of the Timahoe Police Barracks. Mr. Francis Bergin, B.A.I., 36, Westmoreland-street, Dublin.

AUGUST 5.—**Wrexham.**—HOUSES.—For the erection of 28 houses at Broughton, for the R.D.C. Surveyor, Argyle Chambers, Wrexham. Deposit £10.

AUGUST 6.—**Barnet, Herts.**—COTTAGES.—Erection of six cottages at Bells Hill, Barnet, subject to the confirmation of the Minister of Health, for the Guardians of the Barnet Union. Messrs. White, Son & Pill, 13 and 15, High-street, Barnet.

AUGUST 6.—**Bradford.**—HOUSES.—For the erection of eight houses on the Wyke Mills Estate, Upper Wyke, near Bradford. Mr. G. R. Oddy, surveyor, Ward's End Chambers, Halifax.

AUGUST 6.—**Liverpool.**—ALTERATIONS.—For alterations to No. 8, Brougham-terrace, for the West Derby B.G. Mr. Ernest B. Bailey, F.S.I., 9, Cook-street, Liverpool. Deposit £1 1s.

AUGUST 6.—**Llantrisant.**—FOOTBRIDGE, &C.—For the construction of a footbridge and for the fixing and painting of w.i. seats, for the P.C. Messrs. Thomas & Morgan & Partners, civil engineers, Pontypridd, Glam. Deposit £1 1s.

AUGUST 6.—**London, W.C.**—PAINTING, &C.—Internal painting and treatment of hardwood at the Royal Courts of Justice, London, W.C., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

AUGUST 6.—**Moville, co. Donegal.**—EXTENSION.—For extension to Alexandra Hotel. Mr. J. P. M'Grath, architect, Derry.

AUGUST 6.—**Sheffield.**—PAINTING.—For external painters' work required to be done at the following, viz.:—(1) Norwood Estate, 268 houses; (2) Walkley Estate, 184 houses; (3) Wincobank Estate, 206 houses; (4) Wincobank Estate, 196 houses; (5) Wadsley Estate, 42 houses. Mr. F. E. P. Edwards, City Architect, Town Hall, Sheffield.

AUGUST 6.—**Wanstead, E.11.**—WOOD BLOCK PAVING, &C.—Laying of about 5,700 yards sup. of 4 in. wood block paving, together with works of kerbing and drainage for the Wanstead U.D.C. Mr. F. R. Gibbins, B.Sc., Surveyor to the Council, Council Offices, Wanstead-place, E.11.

AUGUST 6.—**Widnes.**—PAVILION.—For erection of pavilion on Secondary Schools Playing Fields, for the Lancashire C.C. Mr. H. Littler, County Architect, Preston. Deposit £2.

AUGUST 7.—**Bournemouth.**—NEW POST OFFICE,—Erection of a new Post Office at Winton, Bournemouth, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary.)

AUGUST 7.—**Dublin.**—PAINTING.—For painting work at Thomas-street Fire Station, Tara-street public baths, Kevin-street library, Weights and Measures Office, Harry-street, and No. 3, Cork Hill, for the T.C. Housing, Workshops and Supplies Department, Exchange Buildings, Lord Edward-street, Dublin.

AUGUST 7.—**Huddersfield.**—PAINTING.—For painting and decorating the interior of the Municipal Offices (three separate contracts), for the T.C. Mr. H. Sutcliffe, Borough Architect, 26, Ramsden-street, Huddersfield.

AUGUST 7.—**Manchester.**—ALTERATIONS.—For alterations to the kitchen block at Monsall Hospital, for the T.C. City Architect, Town Hall, Manchester. Deposit £1 1s.

AUGUST 7.—**Winchester.**—ADDITIONAL INFIRMARY WARDS.—Erection of additional Infirmary wards and the extension of the Nurses' Quarters at the Winchester Union, for the Guardians. Mr. B. D. Cancellor, architect, Queen Anne Chambers, Winchester. Deposit £3 3s.

AUGUST 8.—**New Seaham.**—PAINTING.—For painting and colouring at New Seaham Workmen's Club and Institute, Ltd., New Seaham, Co. Durham. Mr. J. Smith, Secretary, 49, Hall-street, New Seaham.

AUGUST 8.—**Woking.**—HOUSES.—For the erection of 28 pairs of cottages, for the U.D.C. Mr. G. J. Wooldridge, Surveyor, Council-Offices, Woking.

AUGUST 9.—**Coychurch (near Bridgend).**—RENOVATIONS.—For renovating the interior of Coychurch parish church. Rectory, Coychurch.

AUGUST 9.—**Doncaster.**—MORTUARY.—For the erection of mortuary buildings in the Guild Hall Yard, for the T.C. Mr. R. E. Ford, 3, Priory-place, Doncaster.

AUGUST 9.—**Farnborough.**—COTTAGES.—For erection of six cottages, for the U.D.C. Mr. J. E. Hargreaves, Surveyor, Town Hall, Farnborough. Deposit £1 1s.

AUGUST 9.—**Navan.**—SHED.—Erection of storage shed, for the Meath C.C. County Surveyor, Navan.

AUGUST 9.—**Rathmines.**—ANNEXE.—For the erection of an annexe to the Technical Institute, for the U.D.C. Mr. F. G. Hicks, architect, 86, Merrion-square South, Dublin. Deposit £1 1s.

AUGUST 9.—**Teddington.**—PAINTING.—For the painting of the external wood and iron work to the houses on the May's and the Udney Park Estates, for the U.D.C. Mr. Marshall Hainsworth, surveyor, Elmfield House, Teddington. Deposit £1 1s.

AUGUST 9.—**Wallingford.**—HOUSES.—For the erection of sixteen working-class dwellings, in Station-road, for the T.C. Borough Surveyor, 12, St. Martin's-street, Wallingford. Deposit £1 1s.

AUGUST 11.—**Barnsley.**—PAINTING.—For painting railings to the Churchfield frontage to Sackville-street, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—**Cwmamman.**—HALL.—For the erection of workmen's hall, Garnant, Carmarthenshire, seating accommodation about 950. Messrs. H. Herbert & Co., Architects, College-street, Ammanford. Deposit £2 2s.

AUGUST 11.—**Eldwick.**—PAINTING.—For painting, &c., at Eldwick Sanatorium, near Bingley. West Riding Architect, County Hall, Wakefield.

AUGUST 11.—**Rathmines and Rathgar.**—HOUSES.—Erection of 16 houses at Church-place, and works incidental thereto, for the U.D.C. Mr. Edwin Bradbury, F.R.I.A.I., 13, South Frederick-street, Dublin. Deposit £2 2s.

AUGUST 11.—**Watford.**—BRIDGE.—For construction of the bridge over the River Cassiobury Park, for the T.C. Mr. D. Wat Borough Engineer, Watford. Deposit £2 2s.

AUGUST 12.—**Kensington, W.**—PAIN Internal painting at the Post Office Saving Blythe-road, Kensington, for the Commissione Majesty's Office of Works. Contracts H.M.O.W., King Charles-street, London, Deposit £1 1s. (payable to the Secretary).

AUGUST 12.—**London, S.E.16.**—CONVER INSTITUTION.—Conversion of Parish-street In into flats for the Borough Council of Bermonds Fredk. Ryall, Town Clerk, TownHall, Spa-road. Deposit £2 2s.

AUGUST 12.—**Southall-Norwood.**—COT Erection of three cottages (concrete block const at Adelaide Dock, Endsleigh-road, South Southall-Norwood Urban District Council. M Thomson, Assoc.M.Inst.C.E., Chartered Civil E Engineer and Surveyor, Town Hall, Southall.

★AUGUST 12.—**Workington.**—HOUSES, &C.—works required in the erection and drainage houses, as a first instalment of a proposed se five hundred, in connection with the Salterbeck Scheme (Contract No. 2), for the Corporation o ington. Mr. H. B. Williams, Borough Engin Surveyor, Town Hall, Workington. Deposit £

AUGUST 13.—**Goole.**—GARAGE.—For the ere garage, workshops, &c., for the U.D.C. Mr Castle, Surveyor, Council Offices, Goole. Dep

AUGUST 13.—**London.**—EXTENSION BUI Extension of the General Post Office (South) Commissioners of His Majesty's Office of Contracts Branch, H.M.O.W., King Charle London, S.W.1. Deposit £1 1s. (cheques payab Secretary).

AUGUST 13.—**London, N.1.**—FLATS.—Erec 132 flats on a site between Laycock-street and H Station-road, Upper-street, Islington, N.1, Council of the Metropolitan Borough of Islingto E. C. P. Monson, F.R.I.B.A., Finsbury P House, 120, Moorgate, London, E.C.2. Depo

AUGUST 13.—**London, S.W.10.**—DECORATI REPAIRS.—Painting, decoration and repairs Infirm Women's Wards, &c., in the Workho Fulham-road, S.W.10, for the Guardians of th Westminster Union. Mr. W. J. Lickley, Cler Guardians, Guardians' Offices, Princes-row, P ham Palace-road, S.W.1.

★AUGUST 13.—**Tredegar (Mon.).**—BUILDING RIALS.—Supply of building materials, &c., for the erection of new piggeries at the Institu Tredegar, for the Guardians of the Bedwellty Mr. William Hall, Clerk to the Guardians Offices, Tredegar, Mon.

AUGUST 15.—**Dewsbury.**—WALL.—For the lition of property at Hill Head Farm, and building of a length of boundary wall. Mr. H. Borough Engineer, Town Hall, Dewsbury.

★AUGUST 15.—**Tipton, Staffs.**—ALTERA Alterations to the Employment Exchange, 3 street, Tipton, Staffs, for the Commissioners Majesty's Office of Works. Contracts H.M.O.W., King Charles-street, London, Deposit £1 1s. (Cheques payable to the Secre

★AUGUST 19.—**Birkenhead.**—MOTOR BUS —Erection of a motor bus garage and stor in the Tramway Depot yard at Laird-street, head, for the County Borough of Birkenhe Chas. Brownridge, M.Inst.C.E., Borough Engi Surveyor, Town Hall, Birkenhead. Deposit

★AUGUST 19.—**Wigan.**—ALTERATIONS AN TIONS.—Alterations and additions to the P and Sorting Office, Wigan, for the Commiss His Majesty's Office of Works. Contracts H.M.O.W., King Charles-street, London, Deposit £1 1s. (Cheques payable to the Secre

AUGUST 21.—**Birr.**—PLASTERING.—For the plastering of cottages in the Birr No. 1 Rural Secretary, Sailors and Soldiers' Department, Office (Irish Branch), 30, Lower Fitzwillia Dublin. Deposit £1 1s.

★AUGUST 25.—**Hertfordshire.**—COUNTY S Erection and completion of a new County School, to accommodate 120 scholars, at near Stanstead Abbots, for the Hertfords County Surveyor's Office, Hatfield, between of 10 a.m. and 4 p.m., except on Saturdays. £1 1s.

★AUGUST 26.—**Cardiff.**—POST OFFICE.—erection of a head Post Office for the Com of His Majesty's Office of Works. Contract H.M.O.W., King Charles-street, London Deposit £1 1s.

AUGUST 30.—**Annfield Plain.**—WAR ME Prices and designs for erection of war memo Annfield Plain Park between £250 and £4 Secretaries, Council Offices, Annfield Plain.

★SEPTEMBER 6.—**Congleton.**—SCHOOL.—erection of an elementary school for 600 s New-street, for the T.C. Mr. J. H. Walters, Moody-street, Congleton. Deposit £2.

NO DATE.—**Barry (Glam).**—BUILDINGS.—tion of a restaurant and cafe to seat 1,000, six lock-up shops facing the sea front, Bar for the Whitmore Bay Pavilion Syndicate Mr. Frank S. Swash, architect, Westgate Newport (Mon). Deposit £4 4s.

NO DATE.—**Colwyn Bay.**—HALL.—For the a large assembly hall, &c., at Penrhos Colle Bay. Messrs. J. M. Porter & Co., archit Estate Office, Colwyn Bay. Deposit £2 2s.

NO DATE.—**Leeds.**—HOUSE.—Erection of studio, Bracken Edge, Leeds. Mr. H. B. B 62, Woodhouse-lane, Leeds.

NO DATE.—**Llwyngwili (Card).**—HOUSE.— ing, for the Rev. H. Williams, Towyn, a Llwyngwili. Messrs. Deakin & Howar architects, Plas Ynys, Borth, S.O.

Stowmarket.—PREMISES.—For the new Bury-street, Stowmarket. Architect's 99, Leman-street, London, E.1.
—Trowbridge.—HOUSES.—Erection of en pairs, on the Rock Housing Estate, idge U.D.C. Mr. Walter W. Snailum, rch-street, Trowbridge.

URE, MATERIALS, etc.

Portsmouth.—MATERIALS.—For supply the Tramways Department of the T.C. ni, Engineer, Portsmouth.
Birmingham.—KERB.—For large quan- edge kerb, 4 in. by 10 in., and 5 in. by ns, composed of crushed granite and t, for the T.C. Mr. H. H. Humphries, Council House, Birmingham.
.—Eastbourne.—DEAL ENDS.—Supply thoms of first quality yellow Baltic less than 1 ft. in length and 2 in. in he Guardians of the Eastbourne Union. lerk, Guardians' Offices, Eastbourne.
-Litherland.—KERB.—For the supply of f Haslingden kerb to the U.D.C. Mr. Surveyor, Council Offices, Sefton-road,

RING. IRON AND STEEL.

Sandwich.—PILING, &C.—For the con- ng and concrete abutments for a girder zen Salts, for the T.C. Mr. R. Saunders, or, Sandwich.
Wokingham.—BRIDGE.—For construc- d concrete bridge at Embrook, for the H. Prince, Surveyor, Council Offices, Deposit £2 2s.
-Manchester.—TRACK WORK.—For the anent way special track work. Mr. son, General Manager, Corporation Piccadilly, Manchester. Deposit £1 1s.
-Portsmouth.—QUAY WALL.—For the d maintenance in repair for twelve quay wall, for the T.C. Mr. Arthur W. Engineer, Town Hall, Portsmouth.

Clones.—BRIDGE.—For the reconstruc- nderline bridge, between Newbliss and Great Northern Railway (Ireland) Co. ens, Secretary, Amiens-street Station, it £2 2s.
1.—Lochaber.—AQUEDUCT.—For the an aqueduct between Loch Treig and nverness-shire, including fifteen miles el with intake shafts and other works, British Aluminium Co. Messrs. C. S. an, 16, Victoria-street, Westminster, t £5.
9.—London.—STEELWORK.—For supply eelwork for underframe shop, for the ilway Co. Secretary, 91, Petty France, .
20.—Chile.—HARBOUR WORKS.—For n the port of Lebu. Chilean Legation, quare, W. 1.

ANITARY, AND WATER WORKS.

Birmingham.—ROADS.—For the con- gor-road and Crown-road, Bordesley T.C. Mr. H. H. Humphries, City il House, Birmingham. Deposit £2.
Birmingham.—ROADS.—For the recon- nield-street, for the T.C. Mr. H. H. Engineer, Council House, Birmingham.

Cheadle and Gatley.—SEWER.—For the 150 yards of 9 in. sewer in Ack-lane, for the U.D.C. Mr. P. Hewson cil Offices, Cheadle, Cheshire.
Twechar.—SEWAGE WORKS.—For the works for the disposal of the sewage of Twechar, near Kilsyth, for Messrs. Co. Mr. G. Thomson, 164, Bath- Deposit £1 1s.
Glasgow.—ROADS, &C.—For the con- ds and sewers at Low Balornock, he T.C. Director of Housing, Govan

Cardiff.—SEWERS.—For the construction al yards of earthenware pipe sewers, Radyr, for the R.D.C. Mr. William Park House, 20, Park-place, Cardiff.
Cranbrook.—LAVATORY.—For the con- lavatory at the Union House, for the the Union House.
Loughborough.—FLOOD RELIEF WORKS. uction of flood relief works on and ughborough Navigation, for the T.C. er, Borough Surveyor, Town Hall, Deposit £3 3s.
Radyr (Glam).—SEWER.—For laying of rthenware pipe sewers with manholes, Radyr, for the Cardiff R.D.C. Mr. Surveyor, Park-place, Cardiff.
Rochaled.—WATER WORKS.—Construc- ater reservoir and the provision and 5,450 yards of 3 in. cast-iron water R.D.C. Messrs. Berrington, Son & al Chambers, Lichfield-street, Wolver- it £5 5s.
Rickmansworth.—SEWERAGE WORKS.— ion of about 1,780 yds. of 12 in. cast- ver., for the U.D.C. Messrs. W. H. Albion Chambers, King-street, posit £3 3s.

AUGUST 9.—Littleport.—SEWERAGE.—For the construction of a new pumping station and laying pump delivery pipes, &c., in the parish of Little Downham, for the Littleport and Downham Drainage Commissioners. Mr. E. J. Silcock, 25, Victoria-street, S.W. Deposit £5.

AUGUST 9.—Spenborough.—CULVERT.—For the reconstruction of a culvert partly under the Wakefield and Halifax main road at Spenborough, for the West Riding C.C. The West Riding Surveyor, County Hall, Wakefield. Deposit £1.

AUGUST 9.—Torquay.—GAS MAIN.—For laying an 8 in. high-pressure steel gas main between the Hollacombe and Paignton Works of the Torquay and Paignton Gas Co. Mr. C. G. Dawson, engineer, Gas Works, Paignton. Deposit £1 1s.

AUGUST 10.—Skegness.—ROADS.—For street works in Sunningdale and Muirfield-drives, Brancaster-drive, and Sea View-road, for the U.D.C. Mr. R. H. Jenkins, Council Offices, Skegness. Deposit £1 1s.

AUGUST 11.—Barnsley.—ROADS.—For making up Cawley-place, Smithies, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—Barnsley.—SANITARY.—Plumber's work, conversion of privies into water-closets, in the Monk Bretton and Ardsley Districts, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—Glasgow.—ROADS.—Widening the eastern section of Paisley-road extending from the boundary of the City of Glasgow at half-way to Lennox-road, for the Renfrew C.C. Messrs. Kyle & Frew, C.E., 227, West George-street, Glasgow. Deposit £2 2s.

AUGUST 11.—Northwich.—WATER MAINS.—For laying of eight miles of 5 in., 6 in., 7 in., 9 in., and 12 in. cast-iron water mains &c., for the R.D.C. Mr. John Birtwistle, Winnington-street, Northwich. Deposit £1 1s.

AUGUST 11.—Paisley.—ROADS.—Widening the western section of Paisley-road extending from Lennox-road to the boundary of the Burgh of Paisley, for the Renfrew C.C. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £2 2s.

AUGUST 11.—Panteg.—ROADS, &C.—(a) Construction of roads and sewers on the housing estate at Kemy, Fawr, Griffithstown; (b) intercepting sewer, for the U.D.C. Mr. H. R. Davies, Surveyor, Council Offices, Pontymoel.

AUGUST 11.—Whitchurch.—SEWER.—For the construction of a cast-iron sewage outfall drain and other works for the R.D.C. Mr. W. C. Easdale, 1, Victoria-street, S.W. Deposit £2 2s.

AUGUST 11.—Wigton.—SEWERAGE.—For the construction of sewers and sewage purification works at Fletchertown, for the R.D.C. Messrs. Taylor & Wallin, Commercial Union Buildings, Newcastle-on-Tyne. Deposit £5.

AUGUST 12.—Polmont.—ROADS.—For forming new roadway, &c., at Brightons Housing Site, near Polmont Station, for the Stirling C.C. Mr. T. M. Copland, 76, High-street, Falkirk.

AUGUST 15.—Dunmow.—WATERWORKS, &C.—For sinking borehole, supplying cast-iron pipes, and laying 4,000 yds. of stoneware pipe sewers at Thaxted, for the R.D.C. Messrs. Sands & Walker, Milton Chambers, Nottingham. Deposit £2 2s. each of four contracts.

AUGUST 15.—St. Mellons.—ROADS.—For the improvement of the district road, about half-mile in length, between Pye Corner and the Royal Oak public house, Rogerstone, for the R.D.C. Messrs. Thomas & Morgan, & Partners, 23, Gelliwastad-road, Pontypridd. Deposit £5 5s.

SEPTEMBER 5.—Portsmouth.—MAIN DRAINAGE.—For the construction of reinforced concrete duct. suction chamber, laying of cast-iron pipes, &c., at their Eastney Sewage Pumping Station of the T.C. Mr. G. Midgley Taylor, 36, Victoria-street, S.W.1. Deposit £5.

SEPTEMBER 8.—Hong Kong.—WATERWORKS.—Driving and lining of two tunnels, approximately 2,160 ft. and 4,680 ft. in length, through the Smugglers' Ridge and Golden Hill respectively; the construction of an open conduit, approximately 2,000 ft. in length, and contingent works. Crown Agents for the Colonies, 4, Millbank, London, S.W.1.

NO DATE.—Huddersfield.—ROADS.—For the extension of Dingley-road, Edgerton, Huddersfield. Messrs. G. & G. H. Crowther, 38, New-street, Huddersfield. Deposit £1 1s.

Competitions.

(See Competition News, page 158.)

Auction Sales, Tenders, etc.

★AUGUST 9.—Great Bookham, Surrey.—Mr. C. E. Clark will sell, without reserve, at Eastwick Buildings, Lower-road, Great Bookham, Surrey, timbers, new and bright, and builders' effects. Auctioneers, Beddington House, near Croydon.

AUGUST 12.—Hayes, Middlesex.—Mr. F. H. Clark will sell, absolutely without reserve, at the National Filling Factory, Hayes, Middlesex, new and second-hand timber and building material, machines and lorries. Auctioneers, Railway Wharf, York-road, Wandsworth.

★AUGUST 20.—Peckham, S.E.15.—Mr. C. E. Clark will sell, without reserve, at Rollin's Wharf, Canterbury Bridge, Peckham, S.E.15, large quantities of prime new timbers (landed and piled away to length). Auctioneers, Beddington House, near Croydon.

PRELIMINARY ANNOUNCEMENT.—London, W.—Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

★NO DATE.—London, W. 1.—Messrs. Knight, Frank & Rutley will sell corner site in the West End, having a frontage of 73 ft. to Charing Cross, and a return frontage of 218 ft. to the north and east sides of Craig's-court, site area, 19,000 sq. ft., known as Cox's Bank Charing Cross. Auctioneers, 20, Hanover-square, W. 1

Public Appointments.

AUGUST 2.—East Molesey.—Temporary Clerk of Works required by the East and West Molesey U.D.C. for their housing scheme, now in progress. Chairman to the Housing Committee, Council Offices, Dundee Villa, East Molesey.

★AUGUST 8.—Beverley.—JUNIOR ARCHITECTURAL ASSISTANT.—Junior architectural assistant required by the East Riding of Yorkshire C.C. County Architect, County Hall, Beverley.

AUGUST 9.—Bedford.—Architectural Assistant required in the Borough Engineer and Surveyor's Department by the Bedford Borough Council. Mr. N. Greenshields, Borough Engineer and Surveyor, Town Hall, Bedford.

★AUGUST 9.—Leicester.—Chief Architectural Assistant in the Housing Department required by the City of Leicester. Mr. J. S. Fyfe, A.R.I.B.A., Housing Architect, Wyggeston House, 18, Highcross-street, Leicester, endorsed "Chief Architectural Assistant."

AUGUST 9.—Leicester.—CLERK OF WORKS.—Clerk of works required by the Housing and Town-Planning Committee of the Leicester City Council. Mr. J. S. Fyfe, Housing Architect, Wyggeston House, 18, Highcross-street, Leicester.

AUGUST 9.—Stafford.—Town-Planning Assistant required by the Borough of Stafford. Mr. W. Plant, A.M.I.C.E., F.S.I., Borough Engineer and Surveyor, Borough Hall, Stafford.

AUGUST 11.—Birmingham.—Town-Planning Assistant Surveyor in connection with the work of Regional Planning in their area required by the Midland Joint Town-Planning Advisory Council. Mr. Herbert H. Humphries, M.Inst.C.E., Surveyor to the Council, Council House, Birmingham.

★AUGUST 16.—Leeds.—INSTRUCTOR.—Instructor in studio design required by the Director of Education, at the Leeds School of Art, Department of Architecture. James Graham, Director of Education, Education Department, Calverley-street, Leeds.

★SEPTEMBER 9.—London, S.E. 1.—TECHNICAL ASSISTANT.—Technical (engineering) assistant on the permanent staff in the Architect's Department required by the L.C.C. Clerk of the Council, The County Hall, Westminster Bridge, S.E. 1., with stamped addressed foolscap envelope.

SEPTEMBER.—London, S.E.1.—(*a*) Lecturer in architecture and building; (*b*) instructor in brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week. Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1

SEPTEMBER.—Wimbledon, S.W. 19.—Evening lecturer in (a) Surveying, (b) Brickwork and Masonry, to the Standard of Grade 1 City and Guilds Syllabus. The Principal, Technical Institute, Wimbledon, S.W.19.

★NO DATE.—Ceylon.—Assistants (two) required by the Government of Ceylon for service in the Architectural Office of the Public Works Department, for a period of three years, with possible permanency. Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1., quoting M/12945.

★NO DATE.—Surveyor's Clerks required for temporary appointment to a Government Department. Joint Substitution Board (Treasury and Ministry of Labour), Montagu House, Whitehall, S.W.1.

Housing in Paris.

A law has been passed in France prohibiting the transformation of unfurnished apartments into furnished apartments. It is stated that in Paris alone 50,000 holdings, ranging from single rooms to self-contained flats, have been transformed into furnished rooms or furnished flats, while over 2,000 buildings formerly let to tenants possessing their own furniture have been changed into furnished residential hotels.

Eastwoods, Ltd.

The Directors of Messrs. Eastwoods, Ltd., have declared a dividend of 7½ per cent. (less Income Tax) for the year ended March 31. They state the demand for the Company's products is not only maintained, but the whole output of the various works for a considerable time to come is covered by orders in hand, while the sales of general merchants' materials continue to increase, and it is confidently expected that the results of the current year's trading will be even more satisfactory.

London Town Planning Scheme.

A town-planning scheme for South-East London has been approved by the London County Council. A special committee reported that the area of 7,150 acres was situate within the boroughs of Woolwich, Greenwich, and Lewisham, and contained the largest and most compact portion of the undeveloped land in the County of London. Approximately it is bounded by the Shooter's Hill-road on the north and the Bellingham estate and Bromley-road on the south-west. Consent to the scheme must be given by the Minister of Health.—The Housing Committee proposes to spend £300,000 on the purchase of two sites in the Hendon district. One site, known as Burnt Oak, consists of about 223 acres on the west of the Edgware-road, and the other, called Red Hill Farm, consists of 230 acres on the east side of the same road.

PROPOSED NEW BUILDINGS & OTHER WORKS

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ALLENSFORD.—The Durham County bridge is to be reconstructed.

AXWELL PARK (DURHAM).—The C.C. is purchasing and at a cost of £1,400 in connection with the scheme for the erection of a bridge on the Clavering Estate.

BARROWFORD.—Plans passed by U.D.C.:—J. & J. H. Boothman, two houses (A), on Whitty Croft Estate, Gisburn-road; J. & J. H. Boothman, four houses (B), on Whitty Croft Estate, Gisburn-road; J. & J. H. Boothman, two houses (C), on Whitty Croft Estate, Gisburn-road; R. Jaques, house and motor garage in Carr Hall-road.

BATLEY.—The B.E. has sanctioned the erection of extensions to the Heeley Council School. The additional accommodation is for 240 boys. The estimated cost is £3,926.

BEDFORD.—Plans passed by T.C.:—Mr. E. H. C. Inskip, for Mr. A. F. Conisbee, house, Cutliffe-place; Mr. E. H. C. Inskip, for Beds Standard Printing Works, extension, Howard-street; Mr. E. H. C. Inskip, for Mrs. Davies, house, &c., Bower-street; Messrs. Forsythe & Maille, for Churchwardens, boiler-house and heating system, St. Paul's Church; Mr. E. H. C. Inskip, for Mr. R. Grant, conversion to flats, 62, Kimbolton-road; Mr. E. H. C. Inskip, for Mr. P. Dunstall, conversion to flats, 27, Kimbolton-road; Mr. E. H. C. Inskip, house, Kimbolton-road.

BEXHILL.—Plans passed by T.C.: Bungalow, De La Warre Parade, Messrs. Tubbs & Messer; residence, Amherst-road, Messrs. Virley & Heather; pair of semi-detached houses, Amherst-road, Messrs. Virley & Heather; two cottages, Church-hill, Little Common, Mr. J. H. Lye; residence, Westville-road, Mr. C. W. Freeman; 11 detached houses, Plemont-gardens, Mr. J. E. Maynard; residence, Cooden-drive, Mr. J. E. Maynard; residence, Collington-grove, Mr. J. E. Maynard; residence, Collington-grove, Mr. J. E. Maynard; residence, Sutherland-avenue, Mr. W. Parker; residence, Turkey-road, Messrs. Rayson & Rayson; residence, Glyne-ascent, Mr. G. H. Gray; residence, Glasenbury-drive, Mr. W. F. Blagg; bungalow, Plemont-gardens, Mr. D. B. Sceats; house, Holmesdale-road, Mr. W. A. Williams; The T.C. has allocated a site in London-road to the E.C. for the erection of centres. A subway is to be constructed in Terminus-road, at a cost of £2,628. A new road is to be constructed on the Cooden Estate. The T.C. is negotiating with the railway company regarding the Manor-road bridge, the railway company having intimated that a large four-way bridge in ferro-concrete would cost £7,500 and a smaller bridge £6,500. Six houses are to be erected on the Little Common housing estate.

BINGLEY.—The U.D.C. propose to erect ten additional houses at Crossflatts and to construct two new sewage filters at the Dowley Gap Sewage Works. The estimated cost of the latter scheme is £3,000, for which application for sanction to borrow this amount is being made to the M.H.

BIRKENSHAW.—Plans passed: Two houses in Whitehall-road, for Messrs. Joy & Angon.—The U.D.C. propose to lay new water mains in their area; new 6 in. mains are to be laid down Whitehall-road and Bradford-road. Application for sanction to borrow the necessary amount is being made to the M.H.

BIRMINGHAM.—The Baths Committee recommends the Council to agree to the principle of the establishment of a public wash-house when a suitable site is obtained. Extensions and improvements are proposed at the Little Bromwich hospital, at a total cost of £108,000, which includes a nurses' home, for which plans have been prepared by Messrs. Dallas & Lloyd. The purchase of the Quadrant Buildings at the corner of High-street, New-street, and Worcester-street is recommended at a cost of £116,000 for a street improvement. A scheme has been prepared by the Governors for extending the General Hospital, involving the acquisition of St. Mary's Church, the view being that extension will be preferable to moving the hospital from the centre of the city. The Governors will provide a site and build a new church at a cost of £16,000. Suggested relief schemes include the completion of the Nechells Generating Station, £134,000; an embankment at Ham's Hill, £20,000; reservoir at Frankley, £500,000; refreshment rooms, &c., in parks, £14,000. A school for 400 is to be built at Billesley at a cost of £14,566. The Moseley Secondary School is to be improved at a cost of £1,755.——Plans have been approved of by the E.C. and submitted to the B.E. for their consideration for the erection of a new secondary school for girls in Selby Oak-road. The proposed building is designed on a quadrangular plan, and will provide accommodation for 540 girls. The total cost of the scheme, including the caretaker's house, is £42,500. Plans for the adaptation of Baskerville House for the physically defective children have also been forwarded to the B.E. The estimated cost of this scheme is £8,000.

BIRTLEY.—At a cost of about £1,600 a portion of the hospital, at Elizabethville is to be converted into a school to accommodate about 300 children.

BLAYDON.—The U.D.C. is to erect 20 houses at Blaydon, and 24 at Chopwell as soon as it is possible to do so. Three hundred houses are to be built on the Bleach Green Estate.

BRADFORD.—The Markets Committee has recommended to the City Council the acceptance of tenders amounting to £3,230, for the construction of two freezing rooms at the Cold Air Stores.—The Water Committee recommends to the City Council the roofing over of the fresh-water tanks at Gilstead and Thornton Moor Reservoirs, at an estimated cost of £8,400.

CARMARTHENSHIRE.—The Llandilo R.D.C. has approved plans submitted for the proposed new Rhosamman bridge, and has forwarded them to the Ministry for final sanction. Plans have been passed for the proposed new slaughter house at Llandebie, as recommended by the Council's sanitary committee.

CHELMSFORD.—The M.H. has approved of the proposal of the B.G. to erect a new infirmary.

CHESTER-LE-STREET.—The U.D.C. has authorised the preparation of plans and estimates for the remodelling of the sewage works.

CHESTERFIELD.—Mr. Houfton, architect, is to prepare plans for improving and enlarging the New Whittington school. A new school is to be erected at Boythorpe. Land is being purchased from the Duke of Devonshire for a recreation ground adjoining the racecourse. The M.H. is to hold an inquiry into the £80,000 scheme for sewers and sewage disposal. Plans passed: Five cottages, Derby-road, for Brampton Brewery Co., Ltd.; bungalow, Handley-road, for Mr. F. Hubbock; house, Whitecote's-lane, for Mr. G. Revill; two bungalows, Newbold-road, for Messrs. J. Collins & Sons; two houses, Dark-lane, for Mr. F. Holmes; bungalow, Alexandra-road, for Mr. R. Mountney; two houses, Highfield Estate, for Messrs. J. Collins & Sons; shop in Holywell-street, for Mrs. Lomas; rebuilding of "The Alma Inn," Derby-road for the Brampton Brewery Co., Ltd.; shop, Stephenson-place, for Messrs. Eyre & Sons, Ltd.; rebuilding of pickle shed, off Avenue-road, Whittington Moor, for the Midland Fruit Preserving Co., Ltd.; new premises, Stephenson-place and Cavendish-street, for Messrs. Eyre & Sons, Ltd. Messrs. Wilcock, Son, & Cults have been appointed architects for a scheme for 26 houses at Boythorpe.

COLWALL.—An inquiry has been held by the M.H. into the Ledbury U.D.C.'s application for sanction to borrow £1,300, for the purpose of making a new sewer from the Wyche to the entrance of Cowl Barn-lane.

CROYDON.—Plans passed by T.C.:—T. W. Clayton, house, 96, Warwick-road; C. Lewin, bungalow, Addiscombe-road, Bisenden-road; B. C. E. Bayley, house, Pollards Hill South; F. Windsor, motor and lorry depot, Thornton-road; Clout & Tysoe, 12 houses and garages, Galpins-road; A. J. Stannah, two bungalows, 40, Ashburton-road; Young & Macintosh, house and garage, Addiscombe-road; R. W. Carter, three houses, Ingram-road; S. A. Martin, house and garage, Addiscombe-road; W. Smith & Sons, bungalow, Dunheved-road South; L. O. Linfoot, house, Pampisford-road; G. Poulton & Son, 12 houses, Shirley-road and Shirley Church-road; W. A. Goldsock, 12 lock-up garages, Shirley-road; L. White, bungalow, Ham Farm; P. Richardson, five houses, Morland-road, next No. 251; W. G. Boutell, bungalow, Ham Farm; F. Knight, workshops and showrooms, 147 and 149, Beulah Hill; F. T. Wooding & Sons, house, Queenswood-avenue; W. Cook, two houses, Ryecroft-road; F. C. Powell, two houses, Albert-road, South Norwood; C. S. Banks, house, Addiscombe-road; T. S. Town, house, Manor Way; Young & Macintosh, nine garages, 96A, Lower Addiscombe-road; S. H. Laver, 10 houses, Norbury-avenue; H. A. Treble, house, Addiscombe-road; W. M. A. Head, house, Blenheim Park-road.

CUDWORTH.—Plans for the erection of houses submitted by Messrs. J. Beechill, D. Smethurst and H. Shelton have been approved by the U.D.C.

DARLINGTON.—The borough surveyor has been instructed to prepare two alternative schemes for dealing with the sewage at the Harrogate Hill sewage works; Plans have been passed by the R.D.C. for 27 houses at Haughton Back-lane.

DOUGLAS (ISLE OF MAN).—Schemes are to be prepared for widening the Loch promenade at the base of the Victoria Pier, and completing water main renewals. Plans passed: Private patient's wards and maternity wings at Noble's Hospital; house, Peel-road, for Mrs. K. Cowell.

DURHAM.—Plans passed by R.D.C.:—Sherburn Hill Miners' Welfare Committee, concert hall, Sherburn Hill; Messrs. A. Lowery & Son, two houses and shops, Cockhouse-lane, Ushaw Moor; Col. H. L. de Legh, house, near Burn Hall; Mr. J. E. Harrison, house, Hallgarth View, High Pittington; Dormanstown Tenants, Ltd., 104 houses, Metal Bridge; The R.D.C. is making application to the M.H. for permission to erect 20 additional houses on the Ushaw Moor site.

EASINGTON.—Sanction has been given to the R.D.C.'s application for a loan of £50,000 for housing purposes.

FALKIRK.—The Dean of Guild Court has granted to James Wright warrant to erect a villa on ground at Camelon-road, at an estimated cost of £1,500.

FISHBURN.—Durham C.C. has submitted to the B.E. plans for a school for 240, to cost £6,722.

GATESHEAD.—It is proposed to reconstruct the Gas Works bridge, and the road between Dunston and Teams, at a cost of about £20,000, half of which will, it is expected, be borne by the Gateshead T.C.

GLAMORGAN.—The Neath E.C. proposes to erect a central school, and is obtaining a site. The committee has, at the request of the County E.C., chosen a site for a new school to serve the Glyn-Neath district. This is at Lamb and Flag.—The Merth has received estimates of alternative provide new library and physic labo intermediate school, and has approv involving expenditure of £4,800, and h sanction to proceed with the scheme. R.D.C. is to carry out private street w kerry.

GRAVESEND.—The town clerk has that the M.T. agrees as to the need for a tunnel between Essex and Kent, but has as to the location, but will have some to report before Christmas.—The T.C. a subsidy scheme for another 100 houses, and borough surveyor are to deal with King's Farm Estate. Plans passed: Br Echo-square, for Gravesend Co-opera bungalow, Whitehall-road, for Mr. R. S

HALIFAX.—New business premises are for Messrs. Montagu Burton, Ltd. Pla prepared and tenders are being invited tect, Mr. H. Wilson, of Leeds.

HESTON AND ISLEWORTH.—Plans U.D.C.:—Messrs. Dodge & Reid, bung road; Mr. Glenister Woodger, six hous Estate; Messrs. Dodge & Reid, four h road; Mr. Edward J. Wright, house, Mar Mr. C. M. Gibbs, house, Jersey-road; Phillips, two houses, Hounslow-avenue Hodges, house, The Grove; Mr. T. H. Je of houses, Osterley-crescent; Mr. J. H houses, Jersey-road; Mr. A. J. Champin Martindale-road; Messrs. P. Chase Gar seven houses, Bulstrode-avenue; Mess Gardener & Co., two houses with one grove-road; Mr. W. Myring, 14 houses, M Mr. J. P. Blake, house, Jersey-road.

HITCHIN.—House, Deard's End, Kn T. R. Thornton.

HORSFORTH.—A site has been purch purpose of erecting a new Roman Cath at an estimated cost of £5,000.

HOUGHTON-LE-SPRING.—The R.D.C. h invite tenders for the 50 additional hous to erect. These will be built in groups o of the following places: East Rainton Herrington, Shiney-row, and Newbottle. has disposed of its housing site at Fen the Lambton and Hetton Collieries, Ltd erect houses there available for their empl in that district.

KIRKCUDBRIGHT.—At a special meeting artry E.C. it was agreed to proceed with t tion of Kirkcudbright Academy, and pla tions, and estimates were approved. T net cost of the scheme is £11,998.

HOUGHILL.—Two houses are to be er Durham C.C., at a cost of £1,075, at the station.

LEADGATE.—The U.D.C. has arrang Lanchester R.D.C. for a joint sewage dis

LEAMSIDE.—Plans for a new school fo £9,494, have been submitted by the Du the B.E.

LEAMINGTON.—Plans passed by T Northumberland-road, for Mr. Arnol assembly shop, Eagle Foundry, Claren Messrs. S. Flavel & Co., Ltd.

LEEDS.—Included in the supplement for 1925 is an estimate of £166,000 for t purchase of site and erection of a new mil for the Ministry of Pensions. This hosp permanent structure to house all the Minis who are at present temporarily at Beck

LEICESTER.—The City Council, it is u received an offer from a private comp 600 to 700 houses in the city for occupat mas. The City Council is considering of land for housing purposes. The is asking for the consent of the appropriation and use of about 3 acres 2 of land situate on the south side of L for the erection of a new central fir firemen's houses in connection therewit

LONDON.—The E.C. has prepared a gramme involving an annual expendi next three years of £726,000, £920,000, It includes the erection of twelve seconda central schools.

LONDON (BATTERSEA).—The B.C. ha the plans of the Borough Surveyor for a tuberculosis dispensary, at an estim £8,564 0s. 4d.

LONDON (BETHNAL GREEN).—The B.C the scheme submitted by Mr. E. C. F.R.J.B.A., for the erection of 32 dw Parmiter-street site.

LONDON (CITY).—The City of Lo Committee is proposing to erect a pavilion on the new athletic ground a at a cost not exceeding £12,000, and a £1,760 on an approach road thereto. of the memorial and the athletic ground £23,425.—The City Corporation, in conn clearance of the Hutchison-street and Vine-street, Minories, areas, has deci £95,000 in erecting tenement dwellings City to accommodate 600 persons.

LONDON (LEWISHAM).—Plans passed Reynolds & Co., 10 houses, Coniston Thomas, shops and offices, Rushey Gre & Sons, three houses, Fairfield-road; J. for London County Council, 100 hou Estate; H. R. Watt, six houses, Be H. R. Watt, 10 houses, Bellingham-roa

MABLETHORPE.—A M.H. inquiry h into an application by the local autho £1,500 for improving the sewage work

MIDDLESBROUGH.—Extensions to Hinton & Sons, Corporation-road.

MORPETH.—The U.D.C. has passed Ashington Coal Co. for 12 houses to

See also our List of Contracts, Competitions, etc.

nd two in the vicinity of the Old Moor —A plan was also submitted for a pro- and church hall, to be erected at Lyne- ll to give accommodation for 400 people. HIRE.—The Bedwellty U.D.C. is to rs for the erection of 14 houses at Aber- 6 at Argoed. The M.T. has agreed to e undertaking of the Trethomas road stimated cost of £11,050, by the Bedwas ouncils.

—The City Council has approved an me for the demolition and reconstruction hy area in Pilgrim-street. The total is £175,938, comprising £67,000 for the the site; £32,447 for the construction and £76,461 for the erection of dwellings enants, this last figure being calculated house.——In connection with the New- uth coast road the City Council reports n has now been obtained of the whole of ed for the road, except the buildings at the end in the city of Newcastle-upon-Tyne. re in progress with the L.N.E.R. Co. for n of a bridge carrying the Newcastle and ver the road.—The Libraries Committee e erection of a branch library at Scots- portant scheme has been prepared in Pilgrim-street unhealthy area.

SLE OF WIGHT).—The Electric Light Co. establishment of a generating station. are proposed at the "Prince of Wales" s. W. B. Mew, Langton & Co., Ltd. ended: Conversion of old White House, nto stores, for Messrs. Thomas Gates, o., Ltd. The borough surveyor has report as to the erection of another

Bungalow for J. Elliot.

ON.—Plans passed by T.C.: House, S. Smith; house, Clarence-avenue, F. rsion of factory into two premises, ory, Messrs. Wallis & Linnell, Ltd.; ive, J. Jackson; house and carpenter's -avenue, Queen's-park, H. Holloway; t-road, Far Cotton, L. C. Lovell; two -avenue, Messrs. J. H. Welch & Co.; Kingsthorpe-grove and Stanhope-road, & H. W. Chown.——The T.C. has mprehensive road reconstruction pro- £73,000. A storm-water sewer is to be St. Andrews-road, at a cost of £3,000.

HIRE.—The Milford U.D.C. has applied spend £2,200 on laying-out The Rath n ground.—The Fishguard U.D.C. has eyor to report on the cost likely to be e proposed building of a Council stable, house at Market-square. The Council 1,100, approximately, on improving The Council is to borrow £1,200 for

GH.—Plans passed by T.C.:—Houses for Mr. P. J. Fairweather and Mr. se in Harris-road for Mr. A. F. Stevens. additional site of 1,000 sq. yds. has been U.D.C. for the erection of a new infants' orner of the recreation ground; the ex- permit of a southern aspect. Approval to the plans and the estimates. —It is proposed to erect a new secondary Manor House Estate in Hagg-lane.—A accommodate 500 girls is to be erected on Housing Estate.

.—The T.C. has decided to proceed on of another 30 houses at Coton Hill. authorised improvement to ventilation Court, but deferred the question of eased accommodation. Major A. P. S.L.I., Depot, Shrewsbury, has asked erect a war memorial to the men of the ent who fell in the war, in the bay on ce, corresponding to that now occupied African War Memorial. The request ded to, subject to the plans for the approved.

he U.D.C. is negotiating for the and for the improvement of the sewage

t the U.D.C. Mr. Dawson, the architect, ch plans of the new maternity and entre proposed to be erected at the Estate. Amended plans are to be ng slightly larger rooms and providing to be on the north side of the building g Somerset House. Plans have been e surveyor for a small-pox hospital at Plans passed: Foot bridge over Messrs. Henry Mason, Ltd.; new streets d Nab Wood-drive for the Nab Wood td.; house, New Close-road, for Mr. the Governors of Sir Titus Salt's Hos- the services of the Council's architect d at their disposal in the carrying out n of the Hospital. The committee

Plans passed by U.D.C.: House, Mrs. Corrall.—The widening of Wool- under consideration. The Council ction of houses at Manstone-lane. —A school for 300 children is proposed, timated at £5,353. he managers of the Willesby School carry out extensions and improvements cost of £1,000. The T.C. has authorised the borough ced at once with the reconstruction . A sewer is to be laid in Holly-lane 415. Street improvements are to be junction of Halls-lane and the Up- ed: Shop and house at Londonderry- -road, for Mr. J. E. Taylor. s.—The T.C. proposes to extend the l to a junction with the Sunderland- ain road, near Fulwell.

STOCKTON.—The U.D.C. has passed plans:—Bungalows in Yarm-road, Mrs. Brown and Mrs. Moodie.

STOKE-ON-TRENT.—A committee of the Town Council suggest the purchase of a part of the site in the Palais de Danse, Hanley, for £18,000. A public library for the Smallthorne district is advocated. The extension of Stokemarket is being considered. Lloyd's Bank, Ltd., are to submit details of a proposal to alter the banking section of Hanly Old Town Hall. A loan of £6,000 is being sought for gas show-rooms at Hanley. A site at Horton is to be secured for the erection of 25 houses. Twenty-four houses are to be built on the site at Fenton and Hanley. Plans passed: Conversion of premises into offices, Wolfe-street, for Cauldon Potteries, Ltd; pavilion, Cocknage-road, for Longton Cricket Club.

SWINDON.—The Wilts Standing Joint Committee proposes to erect a new police station at Gorse Hill.

TROWBRIDGE.—Plans passed:—Bungalow, Bradley-road, C. H. Goater and S. J. Wood; bungalow, Bradley-road, C. H. Goater and A. Wiltshire.

TYNEMOUTH.—The Union Quay is to be reconstructed, the borough surveyor having been empowered by the T.C. to consult an engineer specialising in this class of work. Plans passed: shops and flats, corner of Hawkey's-lane and Newcastle Turnpike, for Mr. Percy Scorer, by Messrs. F. R. N. Haswell & Son; war memorial, West Allotment, for West Allotment and District War Memorial Committee, by Mr. W. Wright; four houses, Kirton Park-terrace, for Mr. Beautyman, by Messrs. P. L. Brown & Son; two, houses, Kenners-dene, Tynemouth, for Messrs. J. F. Newbold & Co., by Mr. A. K. Tasker; 16 houses, Hunt Hill Estate, for Messrs. Ball Bros., by Mr. W. Stockdale; conversion of dwellings into shops and offices, West Percy-street and Bedford-street, for Mr. J. Vert, by Mr. J. R. Wallace; four houses, Stanwick-street, Tynemouth, for Messrs. B. Peel, Ltd., by Mr. W. Stockdale; semi-detached houses, Cleveland-road, for Mr. W. Bower, by Mr. W. Stockdale. A bridge is to be erected for the Railway Company across Northumberland Dock-road. The M.H. has sanctioned an application by the Corporation for the borrowing of £8,680 for the purchase of land for extensions to the King Edward Council Schools.

WALTHAMSTOW.—Plans passed by U.D.C.:—House, Handsworth-avenue, J. G. Pettit; bungalow, Hillcrest-road, Universal Housing Company; shop dwelling, 229, Higham Hill-road, F. S. Page; 74 houses, Billet-road, Walthamstow Urban District Council.

WELWYN.—The Welwyn Garden City Parochial Committee have been authorised by the R.D.C. to proceed with the preparation of a scheme for a further 200 houses. It has been decided to appoint, as architects, Messrs. Hennell & James.

WEST CARNFORTH.—Plans have been prepared by the Durham County Architect for a new school for 3[illegible] children, at an estimated cost of £5,288.

WEYMOUTH.—Plans for 11 bungalows at Rodwell have been lodged by Mr. K. Openshaw. Plans passed: Villa, Wyke-road, for Mr. J. G. Broomfield; pulling down and rebuilding Nos. 57 and 58, St. Thomas-street, as offices, shop and store, for Messrs. S. Jackson & Sons (for the *Hampshire Advertiser and Echoes*, Ltd.); bungalow, Icen-road, for Mr. J. Cornick; pair semi-detached bungalows, Southlands-road, Buxtons, for Mr. K. Openshaw; bungalow on allotment ground, Alexandra-road, for Mr. S. Jackson (for Mr. H. C. Cornwell). Sanction is sought to an expense of £10,000 for electricity extensions. The borough surveyor has been authorised to construct a sewer in Preston-road.

WHITELEAS.—A school for 270 children is proposed, at a cost of £3,912.

WILLESDEN.—Plans passed by U.D.C.:—Parish Hall, Dollis Hill-lane, Cricklewood, by Mr. W. C. Waymouth, for the Vicar of Neasden; six houses, Herbert-gardens, Willesden, for Messrs. Jermey & Son; house, Oxgate-lane, Cricklewood, for Mr. Walter Jason Wright; eight houses and garages, Donnington-road, Harlesden, Messrs. Done, Hunter & Co., for Mr. A. L. Tolcher; six houses, Hanover-road, Brondesbury, for Messrs. Fricker & Smith; four houses, Holland-road, Harlesden, for Mr. E. Drown; seven houses, Aylestone-avenue, Brondesbury Park, by Mr. F. Stanley Allen, Messrs. Western & Arnell; two houses, Goodson-road, Willesden, by Mr. H. Shaw, for Mr. W. Drinkwater; shop and house, 29, Dudden Hill-lane, Willesden, Mr. H. Shaw, for Mr. Mitchell; house, "Denbigh," Dollis Hill-lane, Cricklewood, for Mr. F. W. Brealy; two houses, Geary-road, Willesden, Mr. G. A. Sexton, for Mr. E. H. Sadler; three houses, 121, Anson-road, Cricklewood, for Mr T. H. Potter; 12 houses, North Way, Neasden, for Messrs. Marks & Gullet.

WIMBLEDON.—Plans passed: House, Hubert-road, for Mr. F. J. M. Bell; house, Mount Ararat-road, for Messrs. W. H. Whitehead & Co.; billiard hall, Merton High-street, for Mr. S. B. Pritlove; house, Pepys-road, for Messrs. Bart, Boulton & Hayward, Ltd.; The electricity sub-station at Downs-road, Cranbrook-road, Home Park-road, Arthur-road, and Ridgway-gardens are to be enlarged. A site is to be secured for the erection of a day nursery.

FIRES.

GRIMSBY.—The premises of Messrs. Lloyd, Dix & Co., Ltd., picture frame and moulding manufacturers, King Edward-street, have been destroyed by fire.

ILFORD.—A fire broke out at the premises of Messrs. Harrison, Gibson, Ltd., a furnishing firm in High-road, last week, and four shops were completely destroyed.

COMPARISON OF PRICES OF BUILDING MATERIALS BETWEEN AUGUST 4, 1914, AND AUGUST 1, 1924

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	July 1, 1924. £ s. d.	August 1, 1924. £ s. d.	Rise or Fall during Month. (Per cent.)
Bricks—					
Best Stocks	1 16 6	3 3 6	4 3 6	4 3 6	—
Flettons	1 14 0	2 7 8	2 13 3	2 13 3	—
Glazed	13 0 0	17 17 6	22 0 0	23 0 0	+4.55
Thames Ballast	5 9	17 0	10 6	10 6	—
Thames Sand	7 3	17 0	15 6	15 6	—
Shingle (¾ in.)	—	15 0	14 0	14 0	—
Portland Cement	1 17 0	3 8 0	2 18 0	2 18 0	—
Ground Blue Lias Lime	1 0 0	2 2 6	2 4 6	2 4 6	—
Grey Stone Lime	1 8 0	2 7 0	2 11 9	2 11 9	—
Bath Stone	1 7½	1 7	2 9½	2 9½	—
Portland Stone	2 4½	2 10½	4 4	4 4	—
Good Sound Building Timber—					
4 in. × 11 in.	16 10 0	53 0 0	34 0 0	34 0 0	—
3 in. × 7 in.	13 0 0	46 0 0	25 10 0	25 10 0	—
3 in. × 11 in.	15 0 0	50 0 0	30 0 0	30 0 0	—
2 in. × 11 in.	—	51 0 0	30 0 0	30 0 0	—
2 in. × 7 in.	—	46 0 0	24 0 0	24 0 0	—
3 in. × 4 in.	—	—	24 10 0	24 10 0	—
Slates—					
24 in. × 12 in.	—	—	37 12 6	37 12 6	—
22 in. × 12 in.	—	—	34 0 0	34 0 0	—
20 in. × 10 in.	—	—	25 12 6	25 12 6	—
16 in. × 10 in.	—	—	17 12 6	17 12 6	—
16 in. × 8in.	—	—	13 15 0	13 15 0	—
R.S. Joists	9 10 0	—	13 10 0	13 10 0	—
Iron—					
Common Bars	9 0 0	16 10 0	13 10 0	13 10 0	—
Mild Steel Bars	9 5 0	21 0 0	12 10 0	12 10 0	—
Steel Bars	9 5 0	19 10 0	13 0 0	13 0 0	—
Cut Nails	11 10 0	29 0 0	20 10 0	20 10 0	—
Sheet Lead	22 15 0	40 0 0	41 0 0	44 0 0	+3.53
Glass—					
15 oz. Sheet	2	7	3½	3⅝	—
21 oz. „	3	8	5¼	5	—
26 oz. „	3¼	9	6	6	—
Raw Linseed Oil	2 4	8 4	3 9	3 11	+4.44
Turpentine	2 6	11 0	6 2	5 9	−4.17
Ground English White Lead	30 5 0	60 10 0	57 0 0	57 0 0	—
White Lead Paint	—	83 10 0	78 5 0	80 5 0	—
Red Lead	28 10 0	47 0 0	52 0 0	52 0 0	—

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.
Flettons, at King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	3 8 3
Best Stourbridge Fire brick:—	
2½ in.	8 11 0

GLAZED BRICKS—

	£ s. d.
Best White Ivory, and Salt Glazed Stretchers	23 0 0
Headers	22 10 0
Quoins. Bull-nose and 4½ in. Flats	29 10 0
Best Blue Pressed Staffs.	9 5 0
Do. Bullnose	9 15 0
Blue Wire Cuts	7 5 0
3 in.	10 3 0
D'ble Str'tch'rs	31 10 0
D'ble Headers	28 10 0
One Side and two Ends	32 10 0
Two Sides and one End	33 10 0
Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.
2 in. per yd. super	2 1
2½ in. "	2 6
3 in. per yd. super	2 11
4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
¾ in. Shingle for Ferro-Concrete	14 0	" "
½ in. "	15 0	" "
¾ in. Broken Brick	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

	£ s. d.
Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5

White basebed, 3d. per ft. cube extra.

NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

	s. d.
Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 3
6 in. rubbed two sides, ditto "	5 9
3 in. sawn two sides slabs (random sizes) "	2 1½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 5½
1½ in. to 2 in. ditto, ditto "	1 3

HARD YORK—

Delivered at any Goods Station London.

	s. d.
Scappled random blocks Per Ft. Cube	5 6
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 4½
	6 0½
6 in. rubbed two sides ditto "	2 10
4 in. sawn two sides slabs (random sizes) "	2 5
3 in. ditto. ditto "	7 11
2 in. self-faced random flags. Per Yard Super	

ARTIFICIAL STONE.

Delivered in London Area in full van loads.

	s. d.
Plain per ft. cube	6 6
Moulded " "	7 9
Cills " "	8 3

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10	1 × 9 £36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅜	21/-	1¼	33/6
½	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
⅝	17/6
¾	21/-
1	26/-

BATTENS s. d.

¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 8

Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2 6
¾ in. do. do.	0 1 6	to	0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6
Cuba Mahogany	0 3 0	to	0 3 6
Teak (Rangoon, Moulmein or Java), per load	45 0 0	to	50 0 0
American Whitewood planks, per ft. cube	0 14 0	to	0 16 0
Best Scotch Glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or	
Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work "	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	⅜ in. to ½ in.	13 10 0
⅜ in.	14 10 0	½ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28½ %	35 %	45 %
Steam	22½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/3½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0		18 0 0
Mild Steel Bars	12 10 0		13 10 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..
Hoop iron, basis price	16 10 0	..
" Galvanised	31 0 0	..
Soft Steel Sheets, Black—		
Ordinary sizes to 20 g.	15 0 0	..
" " " 24 g.	16 0 0	..
" " " 26 g.	18 0 0	..
Sheets Flat Best Soft Steel, C.R. & C.A. qu		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..
Best Soft Steel Sheets, 26 g.	26 0 0	..
Cut Nails, 3in. to 6 in.	20 10 0	..

(under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pa coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	
Old lead, ex London area, at Mills per ton	31 0 0 ..
Do., ex country, carriage forward per ton	32 0 0 ..

NOTE—Country delivery, 30s. per ton extra: 3 cwt., 2s. per cwt. extra and over 3cwt. a cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s.

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	51(

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in
41/6	62/-	92/-	174/-	300/-	588

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per d

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in
10/-	12/-	20/-	24/-	31/-

NEW RIVER PATTERN CROYDON BALL VA

½ in.	¾ in.	1 in.	1½ in.	1
35/-	56/-	98/-	162/-	22

DRAWN LEAD P. & S. TRAPS WITH BRA SCREW.

	1½ in.	1½ in.	2 in.
8 lbs. P. traps	33/-	41/-	56/-
8 lbs. S. traps	35/-	45/-	66/-

COPPER—	£ s. d.
Strong Sheet per lb.	0 2 3
Thin " "	0 2 4
Copper nails "	0 2 3
Copper wire "	0 2 4
TIN—English Ingots "	0 2 4
SOLDER—Plumbers' "	0 1 2
Tinmen's "	0 1 4
Blowpipe "	0 1 5

PAINTS, &c.

Raw Linseed Oil, in pipes per gall	
" " " in barrels "	
" " " in drums "	
Boiled " in barrels "	
" " " in drums "	
Turpentine in barrels "	
" in drums (10 gall.) "	
Genuine Ground English White Lead, per (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT—	
"Father Thames," "Nine Elm	
"Park," "Supremus," "St. Paul	
"Spedol" and other best brands 14 lb. tins) not less than 5 cwt. lots per ton deliv	
Red Lead, Dry (packages extra) per	
Best Linseed Oil Putty per	
Filocol per	
Size. XD Quality	

[*Concluded on next pag*

* The information given on this page has compiled for THE BUILDER and is copyrig this list is to give, as far as possible, th of materials, not necessarily the highest or and quantity obviously affect prices—a fa be remembered by those who make use of

CURRENT OF MATERIALS (*contd.*)

GLASS.

SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
hs ..	3½d.	32 oz. fourths	8½d.
s	4½d.	32 „ thirds .....10½d.	
hs ..	5d.	Obscured Sheet, 15 oz.	4d.
s	6½d.	„ „ 21 „	5½d.
hs ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
s	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

according to size and substance for squares stock.

ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
plate	4½d.
olled	5½d.
olled	5½d.
Rolled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large	
h white	6½d.
o, tinted	9d.
heet	6d.
olled Cathedral	5½d.
do.	7½d.

Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
h	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
Carriage	ditto	1 4 0
.....	ditto	1 12 0
ish	Inside	0 18 0
Paper	ditto	0 18 0
Cabinet	ditto	1 2 6
Flatting	ditto	1 0 6
g Oak	ditto	0 18 0
Drying Oak	ditto	0 19 0
Varnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
Gold Size		0 10 0
Japan		0 10 6
hogany Stain (water)		0 12 0
Black		0 7 6
k		0 14 6
patent)		1 5 0
Brush Polish		0 17 0
ers in Terebine		0 9 0
ck Enamel		0 7 0

K.—BUNGALOWS.—The Upper Renfrewtrict Committee has passed plans for ngalows on a new road off the Grove dvale-avenue, Giffnock, South, for the uilding and Investment Co., Ltd., 30, uare, Glasgow; 31 terrace houses on off the Busby-road, Giffnock Building Co.; bungalow at the corner of Milverand Torrington-avenue, Giffnock, South, . M'Neill Brown, Dumbreck, Glasgow.

NEW BUILDINGS IN SCOTLAND

Annan.—HOUSES.—The T.C. will obtain tenders for the various works in connection with the building of six more houses at Millpark.

Bo'ness.—SCHOOL.—The Linlithgowshire Education Authority has decided to erect a central advanced school at Bo'ness.

Bonnyrigg.—HOUSES.—At the last meeting of the T.C. the Burgh Surveyor reported that plans had been submitted for the erection of 14 houses by private enterprise.

Cardonald.—HALL, &C.—The Upper Renfrewshire District Committee has passed plans for a church hall and annexes at Cockerhill-road, Cardonald, for the Episcopal Church.

Dumbarton.—ALTERATIONS.—Plans have been prepared by Mr. W. A. Macartney, in consultation with the Chief Architect to the Ancient Monuments Board of Scotland, for the restoration of Glencairn House and its adaptation for Council offices. The estimated cost of the work is £4,000.

Kirkintillock.—HOUSES.—The T.C. proposes to erect 100 houses.

Largs.—ALTERATIONS, &C.—Mr. Robert Barr has presented the mansion house and grounds of "Mansfield" to the town for recreation purposes, and has offered to co-operate with the T.C. in the erection of a pavilion in the playing fields.

Scoonie.—CEMETERY.—The Scoonie (Fifeshire) P.C. has approved plans for laying-out an extension of the cemetery.

CONTRACTS, &c., OPEN.

AUGUST 11. — **Renfrewshire.** — ROADS. — Widening the western section of Paisley-road, extending from Lennox-road to the boundary of the Burgh of Paisley, for the Upper District Committee. Messrs. Formans & M'Call, civil engineers, 160, Hope-street, Glasgow.

AUGUST 11. — **Renfrewshire.** — ROADS. — Widening the eastern section of Paisley, extending from the boundary of the City of Glasgow at Half-way to Lennox-road, for the District Committee. Particulars from Mr. James A. McCallum, District Clerk, 15, West George-street, Glasgow.

LDING TRADE WAGES IN SCOTLAND.*

llowing are the present rates of wages in the building trade in the principal towns of Every endeavour is made to ensure accuracy, but we cannot be responsible for errors y occur :—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick- Masons' layers' terers' Labourers.
.....	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
a	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
.....	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½
.....	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½
ie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
e	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
on	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½
.....	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½
ine	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
h	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½
am	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
s	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2
.....	1/5½	1/5½	1/5½	1/8	1/5½	1/5½	1/6	1/1½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7½	1/6½	1/2½
.....	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2
rgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½
.....	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2
ck	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½
.....	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
ll	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
ro(Eastern	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
.....	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½

Information given in this table is copyright. The rates of wages in the various towns in England and given on page 187.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

BATH.—For relaying floors of 34 houses, at Englishcombe Park, for the T.C. :—
*Coles Bros., Ltd. £710

BEDFORD.—For decorations, painting and repairs to the Girls' Modern School, for the Governors of the Harpur Trust. Mr. G. P. Allen, F.R.I.B.A., architect, 79, High-street, Bedford :—

E. Smith	£150 17
Perkins & Son.....	149 12
F. Gale	145 0
*S. Foster, Ltd.	125 0

All of Bedford.

BEDFORD.—For decorations, painting and repairs to the Boys' Modern School, for the Governors of the Harpur Trust. Mr. G. P. Allen, F.R.I.B.A., architect, 79, High-street, Bedford :—
H. Bowler £110 5

BEDFORD.—For the erection of extension of main building at generating station, for the T.C. :—
*Luton Building Co. £7,073

BIGGLESWADE.—For additions to garage, 'Swan' Hotel, for Messrs. Wells & Winch, Ltd. Messrs. Cockrill & Sellek, architects, Bedford and Biggleswade :—
*H. Bull & Son, St. Neots..... £300

CHESTERFIELD.—Erection of 26 A3 type and 24 B3 type houses at Highfield-lane, for the T.C. :—
*Swift Bros. & Haslam, Ltd..... £23,275

CHILTON.—Reconstruction of boundary walls at Council school, for Durham E.C. :—
*Chas. Douglas, New Shildon.... £446 2 9

COCKTON HILL.—Heating engineer's work at school, for Durham E.C. :—
*T. A. Taylor, Chester-le-Street.... £551 11

COCKTON HILL.—Builders' work in connection with heating, &c., at school, for Durham E.C. :—
*T. Manners & Sons, Ltd., Bishop Auckland £309 10

CRAWCROOK.—Repairs and alterations to farm, for the Durham County Agricultural Committee :—
*Tom Coates, Durham £457 10

CROSBY.—For erection of part of a new school, for the Lindsey C.C. E.C. Messrs. Scorer & Gamble, architects, Bank-street Chambers, Lincoln :—

Jackson & Oates, Goole	£18,230
Thornhill Bros., Lincoln	17,632
Dennis Gill & Son, Doncaster	17,500
Bernard Pumfrey, Ltd., Gainsborough	17,325
Thos. Fish & Sons, Nottingham	17,176
‡Wm. Wright & Son, Lincoln	16,547

CROYDON.—Alterations, &c., at West Thornton school, for T.C. :—
*F. M. Bleach, Norbury..... £839 8 5

CROYDON.—Alterations at Sydenham school, for T.C. :—
*F. M. Bleach, Norbury..... £307 6 8

CROYDON.—Painting and repairs, Beddington Farm buildings, for T.C. :—
*H. T. Blandford..... £224 13

CROYDON.—For construction of (*a*) Benshamlane sub-station; and (*b*) Hermitage-lane sub-station, for the T.C. :—
*D. Waller ..... (*a*) £229 and (*b*) £115 10

CROYDON.—For foundations for turbo-alternator, for the T.C. :—
*Foundations Co., Ltd. £2,750

CROYDON.—For painting exterior of Town Hall and Library, for the T.C. :—
*G. Everett & Sons £456

DEAN BANK.—Reconstruction of boundary wall at Council school, for Durham E.C. :—
*T. Coates, Durham £173 19

DURHAM.—For erection of 14 houses at Ushaw Moor, for the Durham R.D.C. :—
*T. Hilton & Sons, Ltd., Bishop Auckland £5,736

EGHAM.—For erection of a billiard hall, and alterations to 159, High-street, for the Constitutional Club. Mr. G. W. Booth, architect, 155, High-street :—

G. Potterton, Weybridge	£2,610
J. Poulton, Addlestone	2,250
T. W. Heath, Ltd., Chelsea	2,445
*W. Beauchamp, Englefield Green	2,104

GRAYTHORP.—Builders' work in sub-structure, Council school, for Durham E.C. :—
*W. Pearson & Son, West Hartlepool.. £747

GRIMSBY.—Erection of electricity sub-station building at Scartho, for T.C. :—
*Hewins & Goodhand £398 10

GRIMSBY.—Reconstruction, with ferro-concrete, of Laceby-road, for T.C. :—
*J. H. Thompson & Sons £33,658

(*Continued on* p. 195.)

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2: 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	1	1
Setting ordinary register grates and stoves	each	1	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backngs and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"	1¼"
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/8	1/9
Deal shelves and bearers	"	1/5	1/7
Add if cross tongued	"	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8

		s.	d.
Housings for steps and risers	each		
Deal balusters, 1 in. × 1¼ in.	per ft. run.		
Mahogany handrail; average 3 in. × 3 in.	" "		
Add if ramped	" "		
Add if wreathed	"		

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges a letting in to floor a	
Casement stays	1/2	making good	
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt		
Plain compound girders	"		
Do. stanchions	"		
In roof work	"		

RAIN-WATER GOODS.

		3"	4"	5"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7
Ogee Do. Do.	"	2/4½	3/1	3/1
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/7
Do. nozzles for inlets	"	2/2	2/7	3/1

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt		
Do. Do. in flats	"		
Extra labour and solder in coated cesspools	each		
Welt joint	per ft. run		
Soldered seam	" "		
Copper nailing	" "		

		½"	¾"	1"	1½"	2"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					3/3
Bends in lead pipe	each					
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6
Red lead joints	"	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws	"				14/7	19/6
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard su		
Do. Do. Sirapite	"		
Do. Do. Keen's	"		
Add sawn lathing	"		
Add metal lathing	"		
Portland cement screed	"		
Do. plain face	"		
Mouldings in plaster	per 1 girth		
One-and-a-half granolithic pavings	per yard su		

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot su		
26 oz. Do.	"		
Obscured sheet	"		
⅛ in. rolled plate	"		
¼ in. rough rolled or cast plate	"		
¼ in. wired cast plate	"		

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard s		
Knotting and priming	"		
Plain painting 1 coat	"		
Do. 2 coats	"		
Do. 3 coats	"		
Do. 4 coats	"		
Graining	"		
Varnishing twice	"		
Sizing	"		
Flatting	"		
Enamel	"		
Wax polishing	per foot su		
French polishing	"		
Preparing for and hanging paper	per piece		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment ch percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The wh

information given on this page is copyright.

NDERS'—(*Continued from page* 193.)

VOOD HALL.—Erection of house at sana-
r the Durham C.C. :—
n & Son, Ltd. £2,435 16

.—For alterations to warehouse premises in
-street, for Messrs. Wilkinson & Warburton,
men, of West-street. Messrs. F. Mitchell &
itects, Leeds :—
rpham, Leeds.

.—For erection of new Sunday schools at
Messrs. Chorley & Gribbon, architects,
, Leeds :—
Simpkins, Hunslet.

.—For extensions to Victoria Mills, Goodman-
unslet. Mr. G. W. Atkinson, architect,

Wright, & Sons, Leeds.

ADY.—For carrying out sewerage scheme,
D.C. Mr. J. Douglas, Clerk, Town Hall :—
s McBride, Londonderry £2,200
rt Boyd & Co., Londonderry 2,198
as Lennox & Sons, Portstewart 2,050
m Holley, Coleraine 1,995

ON.—For asphalte paving in Wells-mews,
rylebone B.C. :—
h Asphalte Co..... 17s. 6d. per super yd.

N.—For overhauling roof and rebuilding
Caxton Hall, for the Westminster C.C. :—
us, Ltd. £1,060 10
sends, Ltd. 445 0
& Russell 440 10

N.—For carrying out improvements at
all, for the Westminster C.C. :—
an & Fotheringham, Ltd. £786
Pearson 700
lly & Co. 660
sends (Builders), Ltd. 648
n Bros. 550
Hook, Ltd. 549
& Russell 505

ON.—For relaying the flat asphalte roof
gate Buildings, for the City Corporation :—
h Asphalte Co. £194 6 0
ge's Patent Asphalte Co. 184 1 0
W. Hobman & Co. 148 4 10

ON.—For internal redecorations at head
the Metropolitan Water Board :—
zor, Ltd. £1,575
& Sons, Ltd. 1,480
& Son 1,387
n & Lumsden 1,319
pson & Sons 1,287
nd & Sons, Ltd. 1,274
enwood, Ltd. 1,231
Loasby & Co. 1,212
nd & Hannen & Cubitts, Ltd. .. 1,176
E. Lea, Ltd. 1,084

N.—For provision of additional accom-
for the storage of documents at the head
he Metropolitan Water Board :—
E. Lea £286 10

N.—For laying mains from Cricklewood to
treet, St. Marylebone, for the Metropolitan
rd :—
Weston & Co., Ltd. .. £161,642 11 5
Mowlem & Co., Ltd. .. 114,436 16 10
aker Ellis, Ltd. 109,184 2 4
n Lovatt & Sons, Ltd. 107,581 7 2
Press & Son 106,522 5 5

LONDON.—For the renovation of the Buxton Memorial Fountain, Parliament-square, for the Westminster C.C. :—

	Including Steam Cleaning.	Including Hand Cleaning.
Kirk & Randall	£775 0 ..	£825 0
G. Barker	756 10 ..	726 10
Bradshaw & Bradshaw	681 5 ..	637 5
R. M. Pearson	605 0 ..	—
Sims & Russell	577 0 ..	—
Steam Brush Co.	570 0 ..	—
Townsends, Ltd.	561 0 ..	—
Catterall & Sons	539 0 ..	489 0
Patman & Fotheringham ..	533 15 ..	531 5
*E. D. Hook, Ltd.	458 10 ..	436 10

LONDON.—For the erection of a new station in place of the existing Peckham-road fire station, for the L.C.C. :—

Douglass Halse & Co.	£10,744
Rowley Bros.	10,189
Prestige & Co., Ltd.	9,988
Thomas & Edge	9,892
Holliday & Greenwood, Ltd.	9,794
John Garrett & Son	9,685
Geo. Parker & Sons, Ltd.	9,597
J. & C. Bowyer, Ltd.	9,523
Thomas D. Leng	9,486
H. Kent	9,340
*Wm. Downs, Ltd., Walworth	9,152

LONDON.—For re-pointing and renewing the stonework to the chapels and lodge at Ladywell Cemetery, for the Lewisham B.C. :—

*Charles Cutler, Hither Green	£192 7

LONDON.—For painting and repairing work at the Town Hall, for the Paddington B.C. :—

*Burdett & Sons	£585 10

LONDON.—For addition to the Tuberculosis Dispensary, 47, Catford-hill, for the Lewisham B.C. :—

*F. G. Rose, Catford	£409 0

LONDON.—For steelwork for Osborn-street substation, for the Stepney B.C. :—

*Joseph Westwood & Co., Ltd.	£342 10

LONDON.—For the supply and erection of wrought-iron fencing at Maryon Wilson Park, for the L.C.C. :—

*W. A. Parker & Co., Workington ..	£1,088 5

LONDON.—For the erection of the superstructure of the Beechcroft-road secondary school (Wandsworth, C.), for the L.C.C. :—

Holliday & Greenwood, Ltd.	£43,967
James Carmichael (Contractors), Ltd.	43,665
Prestige & Co., Ltd.	42,306
Allen Fairhead & Son	42,185
G. Godson & Sons, Ltd.	41,420
Thomas & Edge	40,980
G. E. Wallis & Sons, Ltd.	40,752
Higgs & Hill, Ltd.	40,444
Douglass Halse & Co., Ltd.	40,418
G. Parker & Sons, Ltd.	39,875
J. Garrett & Son	39,694
F. & H. F. Higgs, Ltd.	39,532
F. & T. Thorne	39,199
*J. & C. Bowyer, Ltd.	38,750
Chessums, Ltd.	38,292

LONDON.—For constructing about 690 ft. of 24 in. pipe sewer in Southend-lane, Catford, for the Lewisham B.C. :—

Henry Woodham & Sons, Ltd.	£2,267 0 0
Eastlakes, Ltd.	2,107 0 0
Mears Bros.	2,056 5 0
*John Mowlem & Co., Ltd.	2,047 0 0
W. H. Wheeler & Co., Ltd.	2,037 2 6
Borough Surveyor's estimate	2,070 0 0

LONDON.—Erection of schoolkeeper's house at Middle-row L.C.C. school, Kensington, for the L.C.C. :—

J. E. Billings & Co., Ltd.	£1,520
Rowley Bros.	1,476
A. Roberts & Co., Ltd.	1,469
Lole & Co.	1,446
A. S. Franklin	1,240
J. Garrett & Sons	1,240
J. McManus, Ltd.	1,200
A. Logan	1,771
*F. D. Hidden & Co., Ltd., Brentford ..	900
Architect's estimate	1,005

LONDON.—For painting and /or cleaning of schools, for the L.C.C. :—

Addington-street (Lambeth, N.)—

J. L. Catterall & Sons, Ltd.	£1,165 0
Sims & Russell	1,150 0
A. & F. J. Leather	1,090 0
Thomas Carr	1,063 0
*W. J. Dixon & Son, Blue Anchor-lane	1,020 0
W. Bickerton	1,007 10
Architect's estimate	1,069 0

Ashburnham, The, and Chelsea Central (Chelsea)—

Aldin Bros., & Davies	£2,504 0
J. McManus, Ltd.	2,489 0
A. Roberts & Co., Ltd.	2,479 0
Prestige & Co., Ltd.	2,477 0
James Lenn, Ltd.	2,468 0
*Lole & Co., 12a, Trafalgar-square, Chelsea, S.W.3	2,377 0
Architect's estimate	2,241 0

Bath-street (Finsbury)—

McCormick & Sons, Ltd.	£2,398 0
W. Lawrence & Son, Ltd.	2,372 0
F. Cottrell, Ltd.	2,370 0
The Pitcher Construction Co., Ltd.	2,358 0
W. T. Lawrence	2,357 10
Patman & Fotheringham, Ltd.	2,345 0
*John C. Mather, 38, Northampton-street, N.1	2,320 0
Whitbys, Ltd.	2,315 0
Architect's estimate	2,109 0

Beethoven-street (Paddington, N.)—

G. Godson & Sons, Ltd.	£1,774 0
Bovis, Ltd.	1,738 0
A. & F. Polden, Ltd.	1,674 0
Aldin Bros., & Davies	1,530 0
Payne Bros.	1,483 0
*L. Kazak, Hampstead	1,382 0
H. Meckhonik	1,210 0
Architect's estimate	1,389 0

Brackenbury-road (Hammersmith, S.)—

B. Colley & Sons, Ltd.	£2,363 0
W. Daley & Co.	2,153 0
John McManus, Ltd.	2,100 0
*A. & F. Polden, Ltd., Camden Works, Woodstock - road, Shepherds Bush, W.12	1,978 0
Architect's estimate	1,849 0

Bromley Hall-road (Poplar, S.)—

Clements (Grays), Ltd., ...	£1,646 0
W. S. Sharpin	1,608 10
Turnbull & Son	1,533 0
Griggs & Co.	1,290 0
A. E. Symes	1,290 0
*Vigor & Co., (Poplar), Ltd., Poplar	1,279 0
H. C. Horswill	1,211 0
Architect's estimate	1,204 0

LONDON (KENSINGTON).—Painting lamp-posts, for B.C. :—

F. C. Baldwin & Co.	£2,218 12 0
W. J. Marston & Sons	2,128 15 0
A. Roberts & Co., Ltd.	1,538 4 0
R. Mills & Co., Ltd.	1,378 4 0
Earlsfield Construction Co., Ltd.	1,106 0 0
Allied Decorators	1,000 0 0
Tilley Bros.	970 0 10
S. Pontifex & Co.	908 6 8
Worman & Hussey	788 5 3
‡Norfolk Decorators, Ltd. ..	678 17 8

ON.—For erection of two additional blocks of tenements at Fisherton-street, for St. Marylebone B.C. :—

	Block No. 4 of Dwellings.	Block No. 5 of Dwellings.	Block No. 2 of Coal and Perambulator Stores.	Block No. 3 of Coal and Perambulator Stores.	Pipe Ducts.
s, Ltd.	£16,353 0 0 ..	£16,153 0 0 ..	£428 0 0 ..	£428 0 0 ..	£786 0 0
kner & Son	15,980 0 0 ..	15,980 0 0 ..	468 0 0 ..	468 0 0 ..	786 0 0
& Co.	15,440 0 0 ..	15,440 0 0 ..	444 0 0 ..	444 0 0 ..	758 0 0
Fotheringham	15,121 0 0 ..	15,000 0 0 ..	452 0 0 ..	448 0 0 ..	691 0 0
Slater, Ltd.	13,993 0 0 ..	13,853 0 0 ..	368 0 0 ..	368 0 0 ..	805 0 0
t & Son	14,081 0 0 ..	13,746 0 0 ..	360 0 0 ..	351 0 0 ..	713 0 0
& Sons, Ltd.	13,983 14 3 ..	13,284 10 7 ..	342 19 0 ..	325 17 0 ..	869 4 7

ARCHITECTURAL WOODWORK
PECIAL FURNITURE
• MANTELS •
• CARVING •
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Mr. H. W. BRANT
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BROOK STREET
SAINT PAUL'S
BIRMINGHAM
TELEPHONE:
CENTRAL. 3706
TELEGRAMS:
BEAUTIFY. B'HAM.

LONDON (KENSINGTON).—For adaptation work necessary to render the Women's First Class Swimming Bath suitable for use as a public hall, for B.C. :—

A. Roberts & Co., Ltd.	£899 0
Leslie & Co., Ltd.	811 13
J. P. Williams, Ltd.	755 0
T. W. Heath, Ltd.	685 0
‡G. N. Watts, Ltd.	694 0

MERRINGTON.—Heating engineer's work at Council school, for Durham E.C. :—

*G. N. Haden & Sons, Ltd., Newcastle.. £305

METROPOLITAN ASYLUMS BOARD.—The following tenders for various works have been provisionally accepted by the Board :—

Colindale Hospital—Building single wards and forming cubicles.
†W. S. Sharpin, Bow £2,145 0 0
Grove Hospital—Cleaning, painting and repairs.
†L. Kazak, Hampstead 1,825 0 0
Northern Hospital—Cleaning, painting and repairs.
†L. Kazak, Hampstead 2,175 0 0
Highwood Hospital for Children—Cleaning and painting.
†J. Hocking & Co., Charlton .. 1,220 0 0
The Downs Hospital for Children—Repairs to roofs.
†C. H. Boyd & Son, Ltd., London 317 0 0
Pinewood—Painting and repairs.
†Spear & King, Crowthorne .. 227 6 8
High Wood Hospital for Children—Repairs to roads and paths, &c.
†J. Wainwright & Co., Ltd., London 122 0 10
Head Office—Cleaning, painting and repairs.
†J. Hocking & Co., Charlton.. 387 0 0
Sheffield House—Cleaning, painting and repairs.
†J. Hocking & Co., Charlton.. 227 0 0
Tooting Bec Mental Hospital extension—Fireproof floor.
†Diespeker & Co., Ltd., London 620 8 3

NEWCASTLE.—For erection of large garage, for the Newcastle Electric Supply Co. Mr. L. J. Couves, architect, Newcastle :—

*J. & J. Lowry, Newcastle..... £10,000

NEW SEAHAM.—Repairing boundary wall, at school, for Durham E.C. :—

*C. Humble, Ryhope Village £219 1 4

PORTSMOUTH.—For alterations at "The Red House." Mr. F. T. Cawthorn, architect, Brighton :—

F. Privett	£727 0
John Lay & Co.	583 0
Jno. Croad.....	540 0
*J. Tilbury	538 10

ST. NEOTS.—For widening of St. Neot's Bridge, for the Bedfordshire C.C. :—

*Wrycroft & Sons, St. Neots £878

SHIPLEY.—Reinforced concrete work at sewage works, for U.D.C. :—

‡H. Sugden & Sons £212 16 6

STILLINGTON.—Alterations to roofs of Council school, for Durham E.C. :—

*I. Wilkinson, Sedgefield £479 18 6

SUNNISIDE.—Remodelling old and building new latrines and drainage at school, for Durham E.C. :—

*Walton Bros., Crook £898

WASHINGTON.—Additional accommodation, at secondary school, for Durham E.C. :—

*John Stokes, New Washington.. £674 9 7

WELLINGBOROUGH.—For newmassage room at cottage hospital :—

*Henson & Son, Wellingborough.... £497 10

WEST SOUTHWICK.—General repairs to school, for Durham E.C. :—

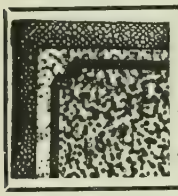
*W. B. Cooper & Sons, Ltd., Sunderland £1,173

WHITELEAS.—Builder's work in sub-st &c., Council school, for Durham E.C. :—

A. Ridley, Whiteleas..... £1,041 18

WILLESDEN.—For (*a*) Alterations to blo (*b*) for interior decorations at Hospital, for the

*(*a*) W. Stamper .....
*(*b*) Norfolk Decorators, Ltd. .....



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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VII.—No. 4253. AUGUST 8, 1924.

ON LOOKING AHEAD

EVERY age, we suppose, has its cut-and-dried opinions upon certain measures requiring legislation. If we happen to be dealing with a social problem, it matters not at all that we should have hazy ideas upon its relation to other social problems. Definite values of and wrong are assumed, and constructive criticism is ted as adverse criticism.

e created a housing shortage (we have ceased to speculate the wisdom of this action), and we must build. This is ide of the problem, but there is also another. Having ed a housing shortage, costs of materials and wages are , as we would expect. The remedy of the popular press threat of Government control similar to that during the -a threat which is almost ludicrous to those with memories previous control under which even a fool could prosper. natural and simple remedy of the layman is to refuse to until prices come down, but he is thereby increasing the ng shortage, and like Pooh-bah, he must compel himself ild—as an official. In this way he defeats his own object, on and on the vicious circle keeps increasing. We can he social and economic aspects in this way: we need s; we refuse (as individuals) to build at the price, yet we uild. We can think of no compact little quotation or rb, with an agreeable flavour of antiquity, to suit this ion; if we could, it is quite conceivable that it would be l with all the authority of a proverb and be accepted as asant way of clinching what threatens to be an endless ssion. The agreeable method to get over this absurd muddle be to forget about it, in the hope that things would right elves, whereas, on the contrary, our politicians are con- ating a running fight for many years ahead.

Unless some remedy is forthcoming, either through the ional methods of building or by a modification of our iose schemes, the nation inevitably must pay a heavy

On the simple issue of ways and means we believe that a mistaken policy to do more than legislate for a short l. There are scores of sentimental reasons for building houses, but against these there are scores of practical ns against the principle of Government housing schemes a long period. Unfortunately, the nation will not yet t what appears at first sight to be an anomaly: that one be an enthusiastic housing reformer, yet not be able to about either the method or the extent of our housing . It is useless for us to argue that the real significance problem of better houses only emerges when the artificial r of subsidies becomes no longer necessary.

ppose, however, we assume that the financial side pre- l no difficulties, we have still to examine some aspects of uge housing programme which we are planning for ity. In assuming this, we are aware we lay ourselves o the retort that there is a fairly general belief that under conditions there would either be no housing problem, or, st, it would have no interest for our politicians. Never- s, we would like for the moment to distinguish between using shortage and housing ideals; between how to houses and our ideas for posterity.

few weeks ago we expressed the opinion that we doubted er any party has explored the problem thoroughly. ding the design of houses, and estate development, we he Tudor Walters report (in our opinion one of the most and suggestive publications yet produced), but we have see what a committee of non-party professional and ss men of experience would submit upon the general ples underlying the idea of better housing. We have umber of intellectuals who think they know what the an either wants or ought to want, and he is the one man all who ought to be represented on a commission. We like to ask the following questions:—

Has any one visualised the result or effect of building ns of houses at, say, 12 to the acre?

We know that a twopenny tram fare, in certain districts, has put the new houses beyond the reach of the workman. But suppose we remodel our whole transport system, and reduce the cost of travel to next to nothing, and making all allowances for the acceleration in speed of travel, is it certain that the workman can afford the necessary time before and after his working hours?

(3) Is there convincing evidence to prove that many of the workers do not prefer to be housed in high-class tenement blocks in the city near to their work? We may not think they ought to be in the city, but we know that many wealthy people prefer to live in the city, and that everyone is not an amateur gardener despite the theories of the idealist. If there is a doubt on this matter, we may find in the end that we have still to build "workmen's dwellings."

(4) Is it realised that while we are ostensibly building houses for "workers," we are also building houses for the "lower middle classes"? Incidentally, this may explain the complaint that workmen's dwellings are a little too small for the occupiers.

(5) Assuming we have found the ideal housing scheme in all its details, have we taken any steps to see that the individual (regardless of his social position) can secure these benefits through legislation? In other words, have we not made a distinction between the individual who can afford to build a house, and one who cannot pay a rent?

(6) We are legislating for houses for many years ahead. Assuming that building costs and rentals reach an economic level: what then?

(7) Are we making any allowance in our housing programme for new inventions which might alter the whole conception of house construction? (This observation applies also to the financial aspect.)

(8) We look for a report to prove conclusively that better housing is either an ideal which requires subsidising permanently, or that it can be a practical and economic solution requiring no help from subsidies when building conditions have ceased to be artificial. The housing shortage and subsidies are intimately connected, we know, but the public does not understand the relationship between housing ideals and subsidies. If these matters were carefully examined, it is probable that housing legislation would be simplified, and the outlook altered.

In submitting these points, we ought to say that we consider the Government housing schemes to be a great advance both in the design of the small house and its amenities. They have met the needs of a number of people, and when we say that many of the architects who have designed these houses are now occupying them we have stated both the need for the privileges to be extended, and for an examination of the problem of "workmen's dwellings." We merely question whether we have found either the solution we are seeking, or the ultimate solution.

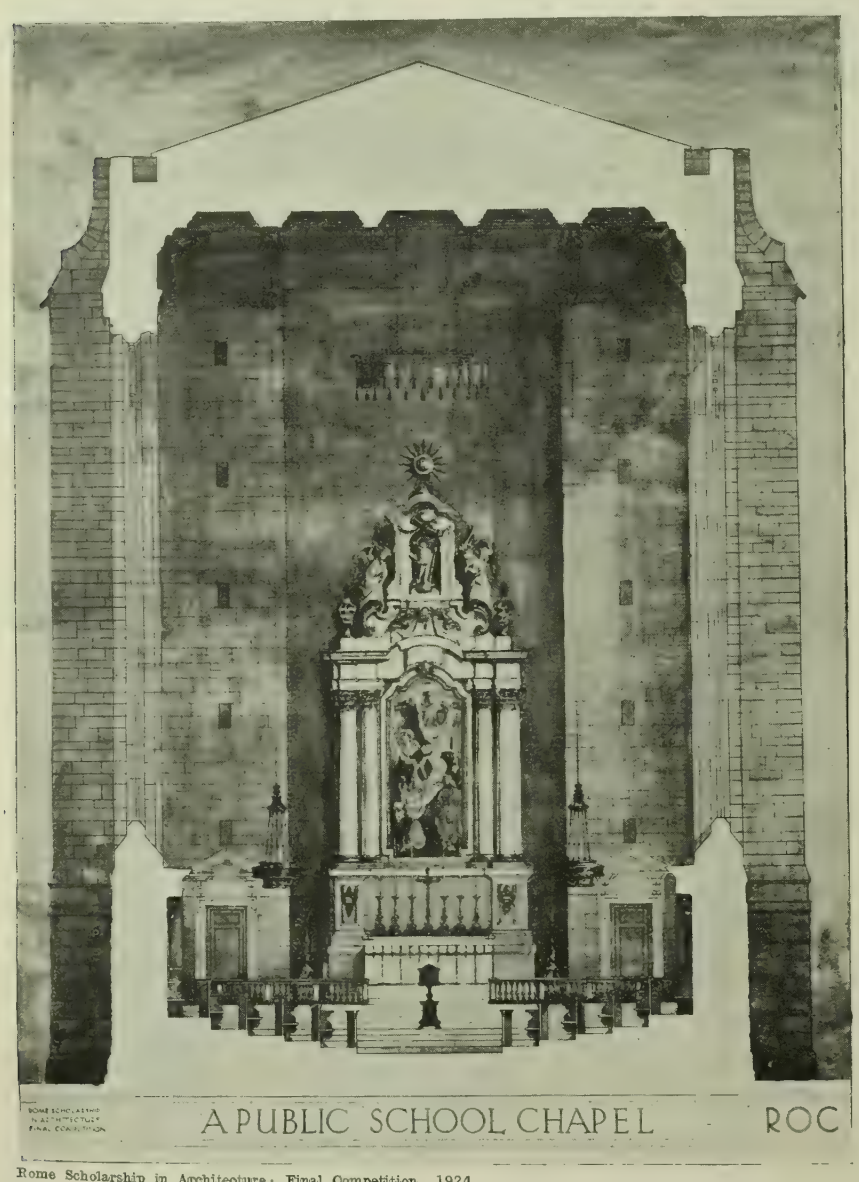
We cannot estimate what any particular Government will do; all that we can ask is that it should be guided by the report of a Commission so that it may secure the true ends which are essential to the ideals of housing. The actual number of houses which any Government may care to subsidise is another matter, and has no significance in our observations.

We do not think that future generations are likely to suffer from the housing schemes which our politicians are now so anxious to settle upon them; they are more likely to suffer from our conception of housing ideals—a totally different matter from the supplying of houses. It is hardly just to say that the housing shortage has become an obsession, but it is fairly certain that long before our housing schemes have run their course there will be many alterations—if our housing Acts are not obsolete. A housing shortage and housing ideals may appear to coincide, because they present the opportunity, but they demand separate legislation. Meantime (apart from our housing schemes) what have we done to secure for everyone the elementary factors which lie at the root of good housing conditions?

NOTES

The Architectural Education Conference. If the Conference on Architectural Education which was organised by the Royal Institute of British Architects has not provided any very striking or original ideas, it has been a highly important and successful meeting. Many subjects of considerable interest have been discussed, as will be realised from the lengthy reports we have published; but the importance of the Conference will not be fully realised until the proceedings are before us in full and we have a translation of the foreign speeches as well as papers, when we hope to discuss some of the questions considered by the Conference.

River Traffic. There is talk once more of attempting to ease the traffic congestion by utilising the river. It appears extraordinary to the Frenchman, who is accustomed to the Seine, that the Thames plays no part in coping with London's traffic. We are aware of the tidal difficulties and of the changed conditions that have existed since the removal of old London Bridge, but it surely cannot be beyond our power to restore the river to its former position as one of our main arteries. One would like to see a time-table worked out, with allowance for the tides, and we are convinced that many business and professional men who live in areas adjacent to the river would welcome an adequate service of steamers to take them to and from their daily work, so that they could escape being jammed into trains or scrambling for the omnibus. A little longer on the journey, entailing an earlier start, would be a slight inconvenience compared with the advantage obtained, especially in fine weather. Besides, what better route could there be for such short journeys as Cannon-street–Westminster, or Charing Cross–London Bridge?



Rome Scholarship in Architecture: Final Competition, 1924.

Jarvis Studentship: Accepted Design. By Mr. M. A. Sisson (London University School of Architecture.)

The Victorian Bedroom Even Mr. Lytton Strach must admit that the action is coming. T generation has made sp of its predecessor, but the next discover its grandmother. It will, course, begin with Early Victoria; alre the 1840–1850 house and London squ are justly recognised for their qualiti certain mahogany and walnut furnit has a lightness and strength that m it welcome in any room, and the bea screens and footstools of the period snatched at in the sale room. But Ea Victoria was separated by the best of a generation from Mid; what is collector to anticipate in Mid-Victor It takes courage to envisage the arra impossibilities, and it would take a l to stow away the portly sideboa dinner wagons, and mighty dining-r chairs. What of the imported E cabinets and the elaborate overmant We do not think that their hour is hand, but if we had the space to h it, we should begin to collect good l room furniture. The cabinet work f 1850 to 1880 is admittedly heavy, but fine graining and fine timber it has n been surpassed. The wardrobes, dres tables, and washstands (even if mar topped) have a quality that must c mand respect, though to those of us are wedded to earlier work affection still be lacking. Admittedly much we have mentioned is too cumbrous the small modern house, but it is t hoped that those occupying large, fashioned homes will wait for the re of what is essentially a Period in En cabinet work.

St. Bartholomew's Hospital. Our readers are prob aware that last April Paul Waterhouse was pointed Honorary Con ing Architect to St. Bartholon Hospital, and it seems necessary explain that this appointment does imply either that the Governors of Hospital are generally in favou endeavouring to obtain architec advice free, or that Mr. Waterh considers that hospital architecture sh go unpaid. As a matter of fact explanation is a simple one. Mr. W house was invited earlier in the ye advise as a paid consultant. He sidered, however, that the natur certain advice which he had previ given in the capacity of President c Royal Institute of British Archi together with certain consideratio relation to other architects, would r a paid appointment liable to misu standing and possibly to embarrass He, therefore, accepted the suggesti the Hospital Board that he should them as a Governor and under the of Honorary Consulting Architect part in the Board's consideration c work in which professional architec advisers may in due course be engag

rbohm ee and illiam urges.

A NEW story in "Studio and Stage" about Tree recalls a similar incident in which Burges was the chief character. According he Tree story, the famous actor- ger, having expressed himself speci- delighted with a piece of scenery ed for one of his notable successes His Majesty's," happened to hear casual suggestions thrown out by ng lady, proposing some inconse- ial changes which, however, would spoiled the scheme considerably. ainter, Joseph Harker, says he was y surprised to hear Tree immedi- agree, and the more so when, in ost engaging manner, he asked his to have these alterations made, hen, without waiting for any com- , hastily left the theatre. It was nt that discussion would not avail, e stage hand was ordered by Harker t the piece in question out of sight, in the dock, where it remained ched till the whole scene had to be n. Tree had, in the meantime, several inquiries about it, and was ed all was "well in hand." Any- the result caused Tree to exclaim on the completed stage effect, "Ex- t—heaps better than it was!" m Burges, it will be remembered, ned the famous stalls for Worcester ge Chapel, Oxford. This work in- s a series of excellent carvings of t animal forms conceived in the of the Middle Ages. A. Robinson, ell-known Gothic craftsman, carried he job. Burges called at his shop, Drury-lane, to see these stalls prior eir dispatch to Oxford. He found faults, worked himself into a bad r, and left Robinson much upset s fury. Nothing could be done to ve or change the condemned stalls, ey were put back waiting events. weeks later the architect called to a further inspection. Burges ex- d himself well pleased, and his had changed though the carvings ned unaltered. We are reminded Irving was all amiability when ssed, say, in the character of the r of Wakefield," but when engaged rôle of "Mephistopheles" was be "deuced unpleasant," putting in a stew. Tree and Burges also heir moods evidently.

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venir lace of ts.

THE illustrated souvenir of the Palace of Arts at the British Empire Exhibition, which we have received, is interesting record of the art of the e at large, and also of the art of the the retrospective Loan Collection paintings, including several very ntative examples. It was desired, are told in the Introduction, to the relation of United Kingdom gs to those in the Overseas es and so to present the widely-



THE ADMIRABLE DECORATIVE EFFECTS OF PANELS IN THE HEADSTONES OF OUR CHURCHYARDS IS SUGGESTED ABOVE.

divergent impulses which influence the art of the Dominions. The collection is certainly very wide and varied, which is, perhaps, as much a weakness as a source of strength, but it enables us to form a view of the impulses moving through the arts at the present day. The illustrations include various examples of handicraft, and there is a small collection illustrative of the art of the theatre. Of the example of sculpture illustrated, the fountain figure and Laughing Girl, by Phœbe Stabler, have all her characteristic charm and vitality, and are fine examples of an art which seldom reaches in this country the highest distinction. Ecclesiastical art also forms the subject of illustrations which are of varied merit, lacking on the whole the atmosphere which would establish the reality of its impulse to affect us very much. But perhaps out of its real ecclesiastical setting this must be the case, and it is a question whether the art is furthered much or at all by this sort of publicity. The Souvenir is well printed and is an agreeable record of a remarkable collection of the art of our own time.

Roadside Trees.

WE are glad to see that the Director of the Royal Botanical Gardens at Kew, Dr. Arthur Hill, has drawn attention to our lack of imagination in tree planting. Wherever we go we see the horse chestnut, the plane, elm and lime, when we might enjoy an immense variety of smaller growing and other flowering trees—the flowering ash, silver birch, Norway maple, red oak and the tree of Heaven. The tulip and the maiden-hair tree are further suggestions. Few people are aware that the fan palm (*Chamerops Fortunei*) is perfectly hardy in England, and large specimens can be seen in Kew Gardens. Why not compete with Continental towns and provide a few avenues of these in our streets?

Lamp Post Signs.

WE note that the Lambeth Borough Council has again refused to allow its lamp posts to be used for purposes of advertisement. The lamp posts should undoubtedly be reserved for official notices. We can imagine how much confusion would be added to the streets if we were faced with an array of lamp advertisements mixed with official directions as to 'bus stops, fire, and ambulance notices, and the like. We sincerely trust that the advertising convention recently held will have stirred the advertising authorities to take active steps towards curbing the excess of zeal that too often lowers what should be a great and noble business into an instrument of offence to the public.

The Building Trade Dispute.

IT is some satisfaction to be able to state not only that a round-table conference has been convened by the Minister of Labour to continue discussions with a view to reaching a settlement of the building trades dispute and that the conference took place on Wednesday, but that the Liverpool men, who have repudiated the authority of the unions to which they belong, have accepted the invitation of the Minister of Labour to send representatives to the conference. On behalf of the national employers, the statement has been made that "when the Liverpool problem has been disposed of, there will be no issue which is not capable of negotiation," and as this was the opinion of Lord Buckmaster at the Court of Inquiry recently held we may hope for a speedy settlement of the dispute. The Disputes Committees of both the Employers' and Operatives' organisations met before the meeting on Wednesday to decide the policy to be pursued, but at the time of going to press no settlement had been announced.

GENERAL NEWS

Professional Announcement.

Professor Derwent Wood, R.A., has resigned the chair of sculpture at the Royal College of Art, South Kensington.

Architects' Estates.

Mr. George Haywood Truefitt, of Hornsey-lane, Highgate, N., and of Warnford Court, Throgmorton-street, E.C., formerly of Fern Bank, Tufnell Park, N., architect (net personalty £12,764), £13,439.

Brevet-Colonel Cecil Locke Wilson (50), of Garnhill, St. Andrews, Dinas Powis, Glamorgan, architect (net personalty £7,567), £9,090.

Welsh Hospital Extension.

Lord Tredegar, at Newport, Mon., recently, opened the new wing of the Royal Gwent Hospital, erected at a cost of £60,000, and part of an extension scheme which will cost £240,000.

English Furniture.*

This is a valuable little volume containing no less than 56 beautifully printed half-tone illustrations, with comprehensive descriptions of the various pieces. In a portion of his preface Sir Cecil H. Smith says, "It is not the policy of the Museum to encourage the removal of treasures from churches or other public buildings, but to rescue and preserve such as have lost their proper homes, so far as our limited financial resources make it possible"; surely a very admirable policy, deserving every support. The illustrations cannot be passed without a few words taken at random. Plate No. 4, "Three posts from the altar screen, Chichester Cathedral, about 1530." The beauty of design, their proportion, the execution of the carving, are wonderful. Plate 19, "Upper part of a stall end, from a Norwich church, 15th century, and upper part of a stall end from Norwich Cathedral," is another spirited piece of carving. The numerous chests, forms, and other articles illustrated are worthy of study by the student, collector, and lover of beautiful craftsmanship. Other volumes are to follow the present one, Late Tudor and Early Stuart (A.D. 1550--1660), Late Stuart to Queen Anne (A.D. 1660-1714), Georgian (A.D. 1715-1830).

* *Catalogue of English Furniture and Woodwork.* Victoria and Albert Museum (Department of Woodwork). By H. CLIFFORD SMITH, M.A., F.S.A. Vol. I, Gothic and Early Tudor. Price 2s. 6d.; by post, 2s. 10½d.

Builders' Estates.

Mr. Joseph Isaac Hallam, of Kitchener-road, Leicester, builder (net personalty, £57,418) —£85,496.

Mr. William Mailer, Jordanhill, Glasgow, slater, plasterer and tile roof contractor, £12,525.

COMPETITION NEWS

Rome Scholarship in Architecture.

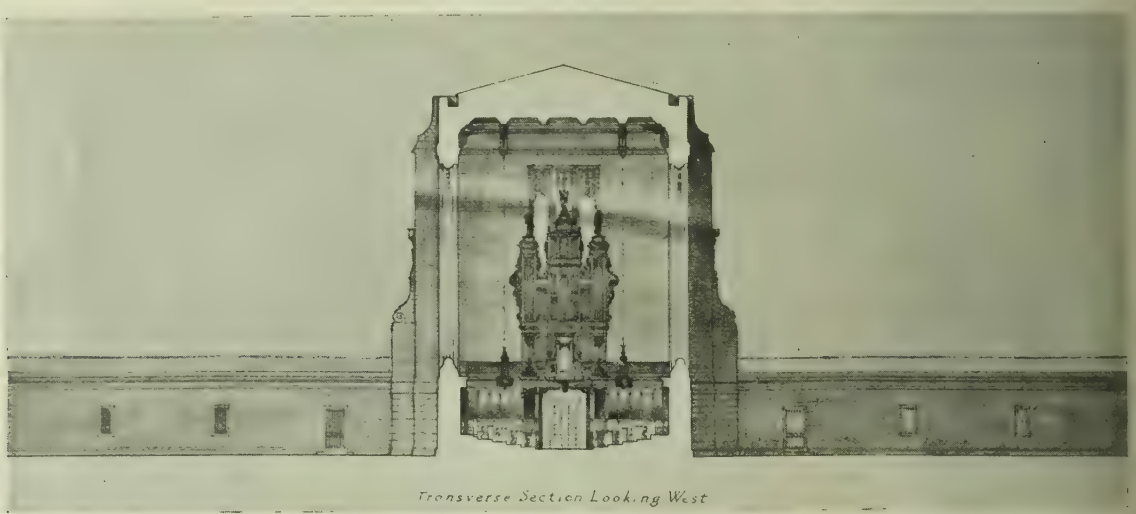
The scholarship in architecture offered by the British School at Rome was not awarded this year. The Jarvis Studentship (given by the R.I.B.A.), £250 per annum for two years was awarded to Mr. M. A. Sisson, B.A. University of London, and is given in this issue. The design of Miss Elsie Rogers was placed second.

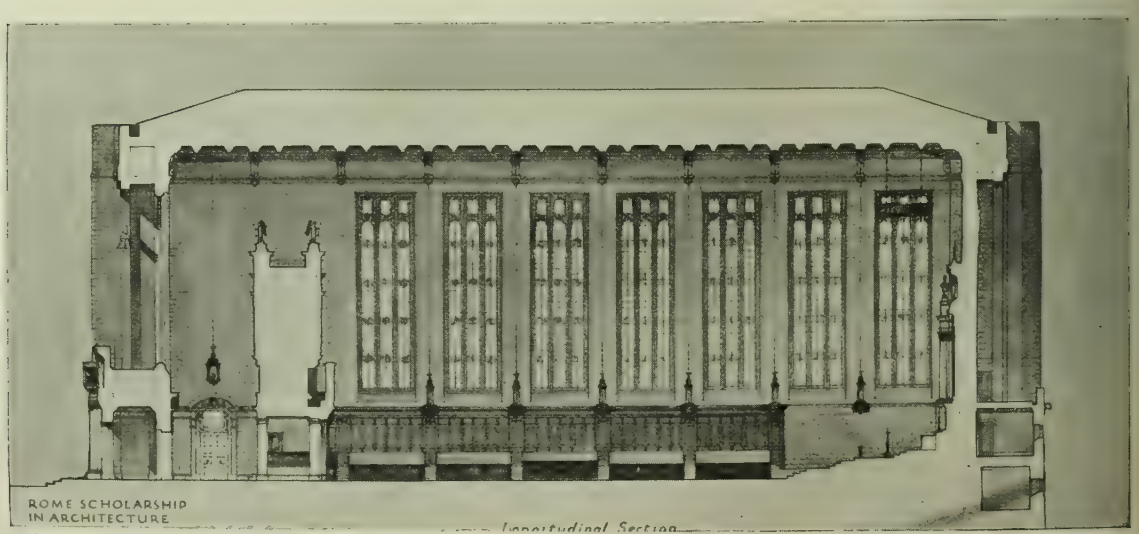
London Hotel.

Designs for a row of shops, with an hotel over. Premiums of £150 are offered for the selected designs. Particulars from Mr. H. Waldu Imperial Hotel, Russell-square, W.C. 1.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending in date, and second the issue of *The Builder* which full particulars were given):—Ross-Sm Memorial (Sept. 30; Feb. 21). Harrogate Infirmary (Sept. 30; May 30). Hamilton W Memorial (Sept. 1; May 30). Glasgow H School Memorial (Sept. 30; June 13). Maso Memorial (Aug. 22; June 13). Bexhill Ent tainment Hall—Banned by R.I.B.A. (Sept. May 30).





Rome Scholarship in Architecture: Final Competition, 1924.

Design for a School Chapel.

Jarvis Studentship: Selected Design. By MR. M. A. SISSON (University of London School of Architecture.

CONSTRUCTIONAL ASPECTS OF THE LIVERPOOL CATHEDRAL

By J. E. MARSHALL, B.Arch.

Senior Lecturer in Architectural Construction in the University of Liverpool.

The visitor to the new Cathedral will, as approaches, see at once that Sir G. G. ott has made effective use of compara-ely large plain wall surfaces and heavy sonry masses. Larger windows and less l area came as a natural corollary to in-ased facilities for the manufacture of ss during the fourteenth and fifteenth turies. This reduction of wall area and increase of thrust from the vaulting ant larger buttresses. Here in our new hedral Sir G. G. Scott makes use of ple buttresses and wall area as though paring the building to withstand the ele-nts for all time in its elevated and ex-ed position. The plan is, in the main, nmetrical, and its expression in the erstructure will result event ally in a uping reminiscent of the classic tradi-n.

To these simple facts probably more than ny other is due the feeling of repose and fulness which the building pre-eminently es—in contrast to the disturbing quality is so often to be found in authentic mples of Gothic architecture. The form he design is distinctive and modern: its erful masses and its detailed mouldings e a boldness and vitality of a new order. n this stupendous undertaking many in-sting structural problems have inevit-arisen. The present article is written nly to draw attention to some of the blems which were met with, some of ch have been solved by the men on the , under the direction of the clerk of rks, Mr. Pittaway, who is to be con-ulated upon the care, skill and resource nas shown in his great task. There is ost the same absence of finality in the blems involved in this class of work as e is in the style of architecture, which me mysterious way fits it for the archi-ural expression of religious ideas.

he main structural features are in them-es almost bewildering. The great but-es projecting some 30 ft., at the base, n the main walls are required to take hrust of the vaulting of the choir. But-es of such dimensions would appear to nnecessary if thrust from the vaulting alone to be considered, especially when nd that, in effect, they do not terminate he main wall. Anyone paying a visit he first time would not realise, until nters, that there are aisles about 13 ft. idth flanking the choir; and further-, that the vaulted ceiling delivers its st upon the inner piers. On further ination, however, it is seen that these are really part of an extension of the esses. That is to say, the buttresses continued, or arched at certain points s the aisle-space and terminate in the . This renders the buttresses still substantial, and it is probable that the projecting buttresses will receive only ght amount of lateral thrust from the ing. Such an arrangement has much mmend it, for here we have solidity firmness, convincing qualities which usually characterise the classic rather than the Gothic mode of building.

Owing to the nature of the subsoil and having regard to the immense concentrated loads from the superstructure, the foundations were taken down a considerable depth (varying up to 54 ft.), until the solid hard rock was reached. The excavations, when made, were filled up to the ground level with either Portland cement concrete or hard blue bricks. Countless stones now rise one upon the other, forming the massive piers which rise to a great height until they appear to lose themselves in a bluish haze.

Here is the vaulting, simple yet complex in its construction, where problems have arisen which must have taxed the most skilled. The vaulting over the choir has a span of about 47 ft., and is formed into a pair of quadripartite vaults to each bay. From a respond over the apex of each main arch spring the intermediate ribs. The main vault, on a magnificent scale, begins to spring above the lofty arcade, and in place of a clerestory is a blind gallery separately vaulted. A fine effect is given to the delicate breasting spanning the dark gallery by the light which enters the choir in each bay by a single large window in the main wall behind the arcade.

The main ribs of the vaulting are 3 ft. deep by 1 ft. 4 in. thick. The filling consists of courses of long stones, each course forming an arch from rib to rib in the French manner. Thus the vault is more or less domical in form, a feature which gives strength and stability to the whole fabric.

Some of the most difficult problems in masonry are those relating to vaulting, the perfect execution of which, from the knowledge required of projection and of the intersection of curved surfaces, has always been the severest test to which the skill of the mason can be exposed. Mouldings on diagonal ribs vary in profile on the same side of the rib, and the variation is not equal on both sides. The mouldings must follow, to some extent, the peculiar twisting surfaces of the vaulting. So much do these vary in each groin or rib, as well as in the individual ribs which ascend in the vault to meet at a central point, that in order to hide these discrepancies, or at least to make a fair junction possible at the crown, an ornamental boss becomes a real necessity.

A finely executed piece of work is to be seen in the vaulting between the last main arch of the choir and the arch of the east window, which is higher than the former by about 2 ft. This difference in the level of the two arches is a device adopted in order to correct an apparent drop in the height of the east window when viewed by the spectator from below. The surfaces of the stone filling are here twisted into very complex forms. This can best be seen from the blind gallery previously referred to.

We come now to the most ingenious and probably the most daring piece of construction, namely, the great vault over the first bay of the central space. It is impossible to comprehend its magnitude from below. One must view it from above the vault itself to be able to grasp its true dimensions, and the best position is directly over the large central boss. Looking at the plan it will be seen that the problem is to cover the crossing between the future tower and the choir from four points of support on one side, and two on the other; and at the same time the height has to be raised 3 ft. The space to be covered is approximately 50 ft. by 87 ft. The four main ribs meet at the large central boss, but the ribs on opposite sides are not in the same plane—because of the irregularity of the space covered—and yet two of them form, in effect, one complete arch some 80 ft. or more in span. These main ribs, though large in section (3 ft. 6 in. by 15 in.), appear to be quite small when compared with the large span. The security of the rib or ribs is in their contour, for though they may follow the lines of a pointed arch, they nevertheless approximate a parabolic outline which would give the best results, structurally, in such a case as this. Sir G. G. Scott himself must have had some doubt about the stability of this delicate-looking rib or arch before the smaller ribs and the filling were placed in position. It is doubtful if there exists any structure built in stone quite equal to this. The vaulting rises from its springing about 50 ft., a height much foreshortened when seen from below. The large central boss has an over-all measurement of roughly 6 ft. by 5 ft., and is made up of five stones, including a cylindrical one in the centre to form a key. Most of the smaller bosses are made in one piece, and contain some 40 to 50 cubic ft. of stone in each.

A striking example of the complexity of the vaulting is seen in the first bay of the central space, between the main arch of the choir and the first rib. Part of the face is hidden, so that the horizontal direction of the face is not visible. From the point of springing of the filling, the face begins to twist and continues to do so, horizontally, in its ascent, until about three-quarters of a circle has been traversed, and then returns part of the distance before the surface ends at the crown of the vault.

These examples of elaborate and difficult construction in stone are all the more remarkable because we may be said to have passed the age of masonry craftsmanship for such purposes. For more than half a century, architects have spanned their great spaces by steel and reinforced concrete. Stone has come to be used more and more as a screen or veneer for the protection of a metal or ferro-concrete skeleton. In the Liverpool Cathedral the stone-mason has come into his own again as a great constructive craftsman.

OBITUARY

The death took place recently of Mr. Frank A Brewerton, A.R.I.B.A., a well-known Manchester architect. Mr. Brewerton, who died at the early age of thirty-six, received his architectural education at the Manchester School of Architecture. He took a distinguished part in the war, obtaining the rank of Captain and receiving the Military Cross.

The death took place recently of Mr. Ernest G. Davies, M.S.A., at the age of 53. Mr. Davies was articled to Mr. John Parker, City Surveyor, Hereford, and studied at King's College, London. He commenced practice in 1893 at Hereford. Among his publications were several pamphlets on healthy dwellings. His works included Sellock Suspension Bridge, over Wye; Isolation Hospital, Burghill, Hereford; Leominster Cottage Hospital, and a good deal of restoration work.

THE BRITISH ARCHÆOLOGICAL ASSOCIATION

By the Rev. P. H. DITCHFIELD, M.A., F.S.A., Hon. A.R.I.B.A.

The eighty-first Congress of this venerable society was held this year at Hastings during the first week in July under favourable auspices. An extensive exploration of the county of Sussex and part of Kent was planned and accomplished, and no better centre could have been chosen than the town of Hastings, where excellent accommodation was found at the Albany Hotel. The Association met under distinguished patronage; amongst the patrons was Lord Curzon of Kedleston, who kindly promised to welcome the members at Bodiam Castle, which he had purchased and restored, and to describe it to them, but at the last moment he was prevented from attending owing to Parliamentary duties. Amongst the other patrons were the Marquess Camden, the Earl of Chichester, Lord Leconfield (Lord-Lieutenant of Sussex), Lord Eustace Percy (M.P. for Hastings), Lord Ritchie of Dundee, the Bishop of Chichester, and others in the county. The reception committee included the Mayor of Hastings, the Archdeacon of Hastings, the Dean of Battle, and others.

The Association was very fortunate to have again as its Congress President, Mr. Charles E. Keyser, F.S.A., who has acted in that capacity for seventeen years, and also two indefatigable organising secretaries, Mr. Philip M. Johnston, F.S.A., and Mr. John E. Ray, whose knowledge of the antiquities of Sussex is unrivalled. Mr. Bagster-Collins acted as secretary and his grandfather as treasurer. About sixty members were present at the Congress, including the Editor of the Journal of the Association, Mr. Harold Sands, F.S.A., Mr. Webb, Mr. and Miss Reginald Taylor, F.S.A., Mr. W. Dale, F.S.A., Mr. A. Radford, and many others.

The proceedings began after luncheon at the Albany Hotel with an exploration of the antiquities of Hastings under the guidance of the organising secretaries. By permission of the Earl of Chichester, Hastings Castle was first visited and described by Mr. Ray. And here I may refer to an earlier visit of the Association to Hastings nearly sixty years ago which called forth an excellent work by the late Mr. Thomas Holwell Cole on the "Antiquities of Hastings." He tells how cruelly the sea has dealt with the town, washing away the Old Burg. Archæologists have gained much knowledge since that writer's day. He claims a British, Roman, and Saxon origin for the town; but modern antiquarians are more cautious; and whereas Mr. Cole said on Castle Hill there once stood a Saxon fortress, Mr. Ray states that there is no evidence of this, at least, so far as masonry is concerned. He stated that the first castle erected on that site was built by William the Conqueror, who landed near Pevensey and then marched on Hastings, where he raised a typical Norman temporary castle of timber, erected on a mound with a stockade around it. Such a castle is faithfully depicted in the Bayeaux tapestry. This was brought over ready for raising from Normandy, and was put together in the west side of Castle Hill during the ten days which intervened between his landing at Pevensey and his march on Senlac, the battlefield so fatal to English hopes. The site of this castle has disappeared, the west side of the hill having been cut away for the building of houses, and the outer ditch of the castle has also vanished and also an advanced barbican.

The Conqueror bestowed the Rape of Hastings on his faithful follower Robert Count d'Eu, who founded within the precincts a collegiate church about the year 1070. He was faithful to William during the troubles of 1088, when Robert, his son, rebelled against him. The curtain wall was built about 1150, the keep between the year 1170-80, followed by the central tower and chancel of the church. The remains of the castle are slight. According to the plan we can trace the eastern entrance and the towers flanking it; the postern tower communicating with a passage in the thickness of the wall; the castle mound and keep; the north gateway and dungeon. Of the church there remain the nave with chancel arch (which we believe to be a reconstruction), chancel, sacristy, vestry, chapter house and deanery, sally port and ruined tower, Norman turret, drawbridge gateway and portcullis, and on the west wall traces of machicolation. The mound was trenched in 1824, but nothing was found.

Mr. Johnston said that Mr. Herbert was the author of the reconstruction of the chancel arch, which consisted of two orders, the inner order resting on a corbel which had stiff-leaved foliage of a very fine and elegant description. He placed the date of it 1170-80. It was of Caen stone, which was so frequently used in Sussex buildings, having been easily brought over from Normandy. The effect of materials on the work in Sussex was very noticeable. Caen stone was easily worked, and excellent results were obtained. He pointed out the remains of a staircase, the supercession of a short choir and the erection of a tower. Herring-bone was observable. The smallness of the building was owing to the cramped site.

The company then adjourned to St. Clement's Caves, which were viewed by invitation of the Mayor. They were known in the eighteenth century, and Mr. Butterfield said they were entirely of geological formation. The caves were purely fresh-water formations, as revealed by the fossil remains of plants and fishes, and were formed when Britain was joined to the Continent and the Weald of Sussex and Kent constituted a delta of a river that flowed here from what is now France. The caves had been cleaned and brushed up some time ago, so that not a vestige of the former contents were to be found. They were rediscovered in 1827, when a new entrance was constructed.

Hastings had two enemies, the sea and the French, who often made raids on the coast of Sussex. The St. Clement's Church belonged to the Abbey of Fécamp, and the earliest building was destroyed by the waves. A new site was granted to the Abbey in 1286 to replace the older edifice. The French attacked Hastings in 1378, and destroyed the church except part of the walls and the lower portion of the tower. A generous citizen, William de Lynda, at the end of the fourteenth cent came forward and built the present chu a good specimen of Perpendicular buildi though it has suffered much at the hands Puritans and "restorers." A restoration made in 1849, and a very drastic one Butterfield in 1874. There were chant founded in the fourteenth and fifteenth c turies, and St. Clement's, the patron saint sailors, was always regarded as a sailo church. The sailors' chantry was founded 1442 and endowed. The tower is curiou situated at the west end of the south ai In the time of Queen Elizabeth the Corpo tion of Hastings gained possession of church, and an order was made that chantries, bells, and other valuables sho be sold in order to provide a harbour. most interesting feature of the church is font, which is very interesting and splen It is of Perpendicular date and octago and sculptured with the implements of Passion: on the west, the Cross and Cr of Thorns; on the north the Scourging P and Scourges; on the east, the Lantern o Pole, Ladder, and St. Peter's Sword; on south, the Reed and Spear crossed; on small shields, Hammer, Pincers and Cr The vaulting of the tower is very charmi showing bosses of foliage. There are piscinæ in the south aisle showing the p tion of the chantries. There are three bras which have lost their effigies, and an inci cross-slab with fleur-de-lis. Beneath the sa tuary is a crypt used as a sacristy. The qu ruple sedilia are reproductions of anci work. The eighteenth-century sedilia are v fine. There are two stoups. Mr. Johns pointed out the niches in the piers next to east end where the rood beam was fixed.

Motor coaches conveyed the party to Ro lands, the house of Major and Mrs. J. Whittaker-Swinton, R.E., who, in their be tiful garden, whence noble views were obtai of the sea and hills and glens, entertai them to tea.

A Norman building once stood on the of All Saints' Church, but only a few tra remain, save the stones built up in the w which reveal Norman axe-tooling, and perh the piscina in the south wall, and the foiled arch cusps. The present building erected (according to Mr. Ray) in 1436. Mr. Johnson declared that there was notl else like it. He pointed out the curious sh of the arches of the nave arcade, which nearly but not quite Tudor. These arches four-centred, and are very rare, especially Perpendicular work. The windows are ne all modern owing to Butterfield's very dra restoration; he swept away many mural pa ings, showing figures of ships connected the representation of St. Christopher. T was an altar dedicated to St. Nicholas,



Lydd.

with St. Clement as the patron saint of
rs, as evinced by the sculptured font at
nton.
ring the drive homewards to headquar-
some stoppages were made in order to
some of the old timber houses which
in in modern Hastings. In All Saints'-
t there are several of the fifteenth and
enth centuries, with steep roofs. One
ese was the residence of the mother of
Cloudesley Shovel, Admiral. Besides this
is the Old Town Hall in High-street,
in 1823; Old Hastings House, built by
Collier (Town Clerk and Mayor early in
eighteenth century), and an early fif-
h-century house in Bourne-street, with
ecting upper story.
ter dinner a reception was held at the
n Hall by the invitation of the Mayor
ncillor Blackman), who extended a cor-
welcome to the Association. The Presi-
delivered an interesting presidential ad-
s.
n Tuesday, July 1, motor-coaches conveyed
company to Battle Abbey, to the founda-
of which, by William the Conqueror, the
owes its origin. It was the first post-
uest Benedictine house in England, and
ls on the site of the famous battle. The
tiful gatehouse was described by Mr.
ston as a most perfect monastic building.
as erected in 1338, incorporating some
nan fragments. The blind tracery he
ounced authentic. It was built of Sussex
, and Mr. Johnston pointed out the
ish tracery in the arcade of Late Deco-
l work. The string-course was continued
d the octagonal turrets. We noted the
es for images, the windows with wooden
ions, just as they were built, and the de-
ful panel work. On the inner side the
style was evident extending from the
dle Decorated period to the fuller perfec-
of that style. Our guide pointed out the
p cusping, the Kentish tracery which
found in North Oxfordshire and might be
buted to William of Wykeham, the oilet
s, the range of curious grotesques, includ-
figure half woman, half beast, demon,
key's head, lion's head, etc. The front
crowned with battlements with surface
ment, and there is a charming effect of
t and shade. Mr. Johnston told the story
s foundation, which need not be repeated
. The Abbey was consecrated in 1094
had great privileges. At its dissolution
539 it was one of the wealthiest. It has
red much by pillage. Of the church
ing remains save part of the south wall
he south aisle; and of the crypt. The
dormitory shows French characteristics.
e was much interchanging thought and
between France and England during the
nan and Plantagenet periods. The church
cruciform in plan, and had a short nave.
refectory was on the south side of the
er, the dormitory large. The walls of
Hall are covered with modern tapestry.
is a good chimney-piece and this hall
e only part of the Abbey which retains
d features. The roof was erected in the
part of the fifteenth century. The win-
have been modernised, but the corbels
riginal. It is of the hammer-beam type
there are few of these in Sussex. The
olution came in 1538. Part of the Abbey
pulled down, and the rest adapted for
ses of a layman's mansion. The Abbey
given to Sir Anthony Browne, who built
rge house out of the Abbey materials.
house fell into ruin, and the present
ion is modern in the style of the Gothic
the Fifties" of the last century. The
buildings suffered from neglect and
lation. The refectory is an imposing
ing with its range of lancet windows.
arrangement of the three crypts is unique,
outcome of levels of the ground. Our
compared it with Mont St. Michel.
dicated to the Blessed Virgin, Battle
ch was founded for the servants of the
stery by the monks in 1110, and illus-
s well the growth of a parish church. In
it consisted of a plain Norman nave and chancel with no tower. Forty years later the nave was enlarged and the tower added. In 1180 the arcades and aisles were constructed. French influence is seen in the capitals, which exhibit the palm-leaf decoration. The west end is purely Early English; the windows and clerestory have lancet windows, and the latter are placed over the spandrels rather than in the usual place over the apex of the arches. There were some most interesting mural paintings of the fourteenth century, an account of which was published in Vol. II of the *Journal* of the British Archæological Association, but these were swept away by Butterfield. Want of space prevents me from describing these vanished beauties. There is a Norman font of Purbeck marble showing an arcade of circular-headed arcades Butterfield was guilty of an absurdity in raising it to a considerable height and placing on a new base The east end is Early English, but the windows are Butterfield's work. There is a fine alabaster tomb of Sir Anthony Browne and his wife (1548). In the fifteenth century the north aisle was widened, and old glass remains in the top lights of the windows. There is a curious squint window in the north aisle which seems to indicate the presence of an anchorite's cell.

Mountfield Church, dedicated to All Saints, is a typical village church. The nave is Norman, having two Norman lights deeply splayed of the eleventh century. The chancel arch is small, with a plain abacus of the late eleventh or early twelfth century date. There are two pierced squints of the fifteenth century. The rear arch of the doorway is Norman, the tower low and squat, a common type in Sussex, with a wooden staircase, the treads and risers being solid pieces of timber of triangular shape. The chancel is Early English, the east window Decorated, but the tracery is modern. We noted the piscina, the seventeenth-century altar rails, the priest's doorway, and the unusual roof, which seemed to have anticipated the hammer-beam roof of the fourteenth century. It is very early. The rafters are hidden by plaster as in the thirteenth-century roof of the chancel. The font, which is large enough for total immersion, is Norman, but was ornamented later with Tudor flowers and shells.

There are very slight remains of Robertsbridge Abbey, founded by Alured de St. Marion in 1176. It was one of the three great Sussex monasteries dissolved in 1538. The existing remains are the thirteenth-century crypt, under the Abbot's Hall (now incorporated in a farmhouse), the ruins of the refectory and vaulting under the dormitory, the altar stone, and part of the precinct wall. The site calls for excavation, and it is good news that the active Sussex Archæological Society is about to perform the work.

Salehurst church is in many ways remarkable. It is a large church founded by the Cistercian monks of Robertsbridge for their tenants. It is large aisled, with six arches on each side. The mouldings are different. The arches on the south side date from 1200 to 1210, on the north from 1230 to 1255. The aisles were rebuilt in the Perpendicular period. There is some ancient glass depicting birds—a duck, falcon, etc. The chancel arch has been rebuilt, and the chancel is Decorated. The altar slab has been brought here from Robertsbridge Abbey, and serves as a pedestal for the credence table. The south porch is of oak with wooden tiles. The font is Norman and has three salamanders round the base and a wooden cover.

At Bodiam Castle Mr. Harold Sands, F.S.A., read a paper and led the company around the fortress.

The chancel of Northiam Church was modernised in 1835. The striking feature is the tall west tower with stone spire; iron stone was used in its construction, flanked with heavy buttresses. Part of the lower portion is believed to be Saxon.

By invitation of Major Frewen, the beautiful gabled half-timbered house called Blackwall was visited. In the evening a learned paper was read by Miss Rose Graham, who had the honour of being the first lady F.S.A. elected by that Society, on "Battle Abbey."

The first visit on July 2 was to Guestling Church, which has a modern appearance, having been greatly restored in 1884 and the interior rebuilt after a disastrous fire in 1890 caused by a defective heating apparatus. Some of the details are interesting, and the remains of old work, but the church is so modernised that it is not necessary to dwell on them.

Incklesham Church is full of interest. It was originally Norman, but has been altered and enlarged at different periods. The nave, aisles, tower and three small windows in the south aisle are Norman. The arcades date from 1130-40, and the circular piers have curious capitals of various patterns, including the ornate scollop of 1175 date. The tower dates from 1130, and is in three stages. There are double lights in the top story. The chancel is wide (1200 c.), and the stones are axe-tooled, not worked with a chisel. The corbels are interesting, composed of volutes, and seem of Eastern origin brought over by the Crusaders. The walls are lofty, and seem to indicate a Saxon date. The chancel is very large, and there are many other details.

At Winchelsea we first visited the Court Hall, the first building erected on the new site of the town with stones brought from old Winchelsea, which now lies beneath the waves. So much has been written upon the town that a detailed description is unnecessary, though Mr. Johnston most ably described the church, which is magnificent and contains so much of absorbing interest. A visit was paid to the ruins of the Greyfriars' House.

At Rye we were met by Mr. Adams and others who conducted us to the Land Gate, the Old "Flushing" Inn, the Town Hall, where we received a municipal welcome, and where the town maces and historical documents were exhibited, and then to the Church, Ypres Tower, and the timber houses of Watchbell- and Mermaid-streets.

Playden church has a transitional Norman nave (1180-1190) with aisles and central tower. The arcades are very similar to Rye church, with circular and octagonal piers. The west arch is pointed, but they all belong to the same period. The same masons who built Rye were evidently employed here. The font is Perpendicular, but it has probably been recut. A special feature is the carved screen, probably the earliest in Sussex. There is a grave slab to the memory of a Flemish brewer.

The chancel arch of Peasmarsh Church has the appearance of Saxon work, but Mr. Johnston pronounced it to be Norman. It is horse-shoe in shape, and has imposts with mouldings of the star pattern, and little mouldings beneath, a rather unusual arrangement. Two beasts are carved on the chancel arch, representing lions guarding the sanctuary. The piers of the nave are square with shafts at the corners. The chancel is Early English, but it has been rebuilt. We noticed the squint, piscina, blocked-up low-side window, and interesting sedilia. The priest's door has a segmental head, and there is a plain pointed recess in the wall which is rather a puzzle, probably a reliquary.

Udimore Church Mr. Ray described as a prebendal church of St. Mary in the Castle, Hastings. The plan suggests Saxon work, but it is purely Early English (*c.* 1300). There are nine lancets in the chancel, also an aumbry, piscina, low-side window, and a reliquary under the central lancet of the east window. The chancel arch springs from corbels. The south side of the nave was pierced for the formation of an aisle, but this plan was abandoned. The Norman piers have ornamented capitals of foliage similar to Guestling. There is an early twelfth-century north door.

Brede Place is an interesting house, which we were permitted to visit by Mrs. Morton

Frewen. Originally there was an open central hall with sixteenth-century alterations and additions.

Brede Church is of mixed dates, somewhat difficult to read. Mr. Johnston said that the oldest work was the Early English of A.D. 1200. In the north aisle there is a lancet, but all the other windows are Perpendicular, and there is no Decorated work.

The Oxenbridge window is exactly like the French flamboyant work. The south aisle of the chancel is the Oxenbridge chantry, and contains the fine monument of Sir Goddard Oxenbridge (1537) with his figure as a knight in armour and head resting on his helmet and his feet on a lion. His arms appear on the tomb, which is made of Caen stone probably worked by Frenchmen.

After dinner, Mr. John E. Ray delivered a very interesting lecture on " Old Hastings."

On July 3 we first drove to Bexhill, which most people imagine has no antiquities. There was, however, a church here in Saxon times. In 1878 a most interesting stone was found under the west arcade below the floor. Mr. J. Romilly Allen saw and described it. It measures 2 ft. 9 in. by 1 ft. 3 in., and is truncated. It shows wonderful interlacing work and dragons, and belongs to the Anglo-Saxon school of sculpture. It is very peculiar and the most important in Southern England. It was probably made in the North and brought down South by St. Wilfrid. Mr. Ray produced evidence from various charters to prove that there was a Saxon church here. A Norman church was built early in the twelfth century. The walls of the nave were pierced, and some herring-bone work disclosed, probably part of the Saxon church. The Early English chancel was ruthlessly destroyed in 1878. There were several chantries, one in an unusual place nigh the chancel arch, and one in the north aisle, which subsequently was used as a school in Elizabeth's time kept by Dr. Rye. Mr. Johnston stated that the church had suffered from horrible mangling. There is some ancient glass in a window in the north aisle which has had strange wanderings. Horace Walpole got hold of it for his " Gothic " mansion of Strawberry Hill. At his death it was sold and was taken to Hardwick House. Now happily it has been restored to the church.

A visit was paid to the Manor House of Bexhill, which formerly belonged to the Bishops of Chichester. There are several records of the visits of Bishops, and their steward lived there. It was erected in 1450.

At Pevensey Castle Mr. Harold Sands described that strong Norman keep within the Roman castrum. He had conducted the excavation of the fortress and had found it a very difficult undertaking. The church was described by the Rev. A. Evans, who said that there was a wooden Saxon church here. The present building was begun in 1170 and the work completed about 1270. There is a deep chancel with early English windows and wide aisles. The chancel is unusually long. The chancel arch is early English, and has capitals adorned with stiff-leaved foliage, the mouldings of which Mr. Johnston pronounced to be unique. The nave is remarkable for its mediæval beauty. After the Mise of Lewes, Pevensey Castle was besieged by Simon de Montfort, who did much damage to the church, which was restored in 1264 in the Early Decorated style. Green sandstone was the material used. The arch on the north was the entrance to a chantry destroyed at the Reformation and rebuilt.

Westham Church was visited and described by Mr. Ray. It is cruciform in plan, and on the east of the transepts were two horse-shoe-shaped apsidal chapels, now removed; but traces can be seen. The chancel, too, had a curved end. The windows are all Norman, but an elaborate Norman doorway has vanished. A scratch dial was pointed out. The church consists of early Norman and late Perpendicular. The transepts are small, and there is a fine west Perpendicular tower. The coarseness of the trefoils in some of the windows denote the lateness and degeneracy of the style. Mr. Johnston stated that the roof was unlike any other in Sussex. There were queen posts and curved braces, and seating plates resting on corbels, very simple and thorough. The east window has some original glass representing the Apostles. There is a charming ancient Perpendicular screen. The rood-loft has been reconstructed and carried too far forward. We noticed in the chapel a fine old altar-slab with the five crowns which for some time had been used as a tombstone, three piscinæ, some masons' marks, and outside a stoup, and a dedication cross under the east window.

We then journeyed to Eastbourne under the guidance of the Rev. Walter Budgeon, and visited first the house called "the Parsonage House," which was the manor house of the Rector of Eastbourne. It was built by Hugh Rolf (1519-49). Records of the house go back to the reign of King John.

Eastbourne church has undergone several restorations, and is a fine large building with chancel, nave, clerestory, and aisles, and is a good example of transitional Norman work (1170). The chancel arch is adorned with zig-zag. The capitals of the chancel have stiff-leaved foliage. In the fourteenth century were erected the sedilia, piscina and Easter Sepulchre, and the fine screens.

A visit was paid to the Lamb Inn, which has an early thirteenth-century crypt.

Jevington Church was described by Mr. Budgeon. It has a Saxon tower wider than the church, and resembles Barton tower, Lincolnshire, and shows herring-bone and long and short work. The nave is twelfth-century, and the chancel arch was formerly semi-circular. In the thirteenth century the north aisle was added. In 1872, £2,000 was spent, and a drastic restoration took place. In the north aisle there is a curious cross arch. The roof is very fine, of mediæval date, altered in the fifteenth century. It is a wagon roof of king-post and hammer-beam alternately. There is a curious piece of Saxon sculpture showing Our Lord bruising the serpent's head, the cross being driven into the mouth of the serpent.

The church of Hailsham was described by Mr. Johnston. It is mainly Perpendicular, but there are traces of an earlier church. It is mentioned in Domesday. There is some flint herring-bone work in the south wall of the nave, and the head of a very small window which may be pre-Conquest. It has been very heavily restored, and weird patterns carved on the piers. The arcade piers chancel arch are poor. The chancel is b with its piscinæ and sedilia excellently ca The twin capitals resemble those in the clo of St. Saviour's, Southwark, or in F and Spain. They are exotic and prob taken from some priory. The tower ar of reddish sandstone

After luncheon at Hurstmonceux, visited the castle by the permission of Co the Hon. Claude Lowther, M.P., which built in brick by Sir Roger Fynes in It illustrates the development of the f fortress into the manor house. The n bouring church is transition Norman Perpendicular windows. The capitals o piers resemble those at Battle, and probably carved by the same masons. south arcade is poor, but the capitals beautiful, and in the south aisle there fourteenth-century window, square-he The chancel has a modern look. The window is Perpendicular. There is a nificent tomb, with elaborate heraldry Thomas, eighth Lord Dacre, and his Gregory (1534); a fine brass (1402) to William Fienes with a Norman-French scription. The font, like that at Hailsh is peculiar to Sussex, early Decorated. side, the chancel and chapel are faced brickwork, and inside the tower. This pale yellow colour, and was brought over the Netherlands in the thirteenth centur

After dinner, Mr. P. M. Johnston gav interesting lecture on " Sussex Churches

On July 4 a very interesting day was s in the charming district of Romney Ma under the guidance of Mr. F. C. Elli Erwood. Brookland Church has a str timber detached belfry and a very impor twelfth-century font, which was describe Mr. J. C. Druce, F.S.A. Then Old Ron Church and then Lydd, called the " Cathe of the Marshes," an important little t the charters and documents of which we permitted to inspect, and New Romney H Ivychurch, Appledore, followed. In the e ing Mr. E. Reginald Taylor, F.S.A., rea excellent paper on the Cinque Ports.

On the last day of the Congress it arranged to utilise the morning by drivin Tunbridge Wells. We were thus enable see Echingham Church, a complete exa of a fourteenth-century village church; wash, with its Norman tower; Ticeh and Bayham Abbey of the Premonstrate Order, and with that visit the Congress to an end.



Design for a London Plaquette.
Submitted by MR. C. F. A. VOYSEY in the recent competition.

RITISH ARCHITECTURAL STUDENTS' WORK

By ARTHUR J. DAVIS, F.R.I.B.A.

HE exhibition of work of the schools of itecture in Great Britain and the British inions on view at Devonshire House connection with last week's International gress of Architectural Education, was of ptional interest, as it not only gave a fairly prehensive survey of the results obtained tter years by these schools, but naturally ed comparison with the foreign exhibits h were being shown at Grosvenor House. regrettable that it was not found possible how the entire exhibition under one roof, owing to the number and size of the drawings to the limitations of wall space this was not ble. As it is, only a restricted number of ings sent by the different schools were ayed,. but these were well selected by Hanging Committees and were sufficient to a general idea of the work completed during ast few years.

e exhibition as a whole was impressive by quality of the work shown, and proved lusively that the student of to-day is being ed in a vastly more efficient and compre- ve manner than was the case with the last ration. Our principal schools are rapidly ing architects who, when they have obtained practical experience inseparable from a prehensive knowledge of our art, will tually give us buildings worthy of our best tions. It is safe to say that already we challenge similar foreign institutions of older standing and reputation.

e main object of a theoretical training is o much to manufacture architects of genius raise the general standard of the profession, hat this object is being achieved cannot be ted by any impartial visitor to the exhi- n.

one who has followed with interest the opment of architectural instruction in this ry in recent times, it is gratifying to be o register an increasing progress towards a er and more scientific outlook, which is ent in the results of each successive n. The course of study has been extended e years, and the students are obliged to ement their theoretical training by spend- certain time in the offices of practising ects, where some knowledge of the e of architectural practice is attained. adverse criticism has been levelled at our s, but a visit to the exhibition cannot but ss by the variety of the subjects dealt nd the skill with which many complicated ms have been handled. A regrettable on is the absence of programmes of the es exhibited, as the subjects of many of signs have to be guessed, and this makes ent criticism difficult.

ough it may be advisable in exhibitions hitecture which appeal mainly to the l public to favour perspectives, photo- , and elevational drawings in preference lies in planning, I think this should not pplied where the principal object was to British and foreign architects the aims hievements of our schools. Nowadays is heard about the necessity for treating blems in a modern manner and discard- shackles of past tradition; yet we often ool plans which take no account of the on of modern practice and the use of nstructional materials which have altered ire character of recent buildings.

ome of the Dominion and provincial the students show a certain weakness handling of large planning compositions, cial attention should be given to this of architecture. In the design of and the treatment of interior decoration elp may be obtained from existing es, books, and other sources, but in the nception of a building and in the har- s disposal of its internal parts the archi- faced with problems which he alone is solve, and the real success or otherwise fforts will depend largely on his knowledge of planning in a logical and effective manner. I also note with regret that the study of domestic architecture has been somewhat neglected of late; this is to be deplored, as our superiority in this branch of architecture was acknowledged all over the world, and we should endeavour by every means in our power to retain our reputation in this field.

It is evident that the senior students of the Architectural Association and Liverpool Schools have acquired a knowledge of design sufficient to enable them to express their ideas without being hampered by a lack of skill in technical ability.

The works of the prize winners of the R.I.B.A. series of studentships were displayed in the entrance hall of Devonshire House. Most of these are already well known, and it will be unnecessary to comment on them in detail. They formed a very inspiring collection, and in most cases are remarkable for the excellency of their draughtsmanship and rendering.

THE ARCHITECTURAL ASSOCIATION.—On the landing and staircase and in Room No. 1 some of the recent works of the Architectural Association were to be seen. The professors of this school have evidently been able to inspire a strong feeling of enthusiasm in their students, and a large number of the designs showed a technical skill somewhat lacking in the work of the smaller provincial schools. I have picked out at random a few of the designs which I thought particularly interesting, but the limitations of space preclude my mentioning many other excellent examples.

Amongst the fourth- and fifth-year students the Italian Embassy by Mr. J. C. Shepheard, which won the Tite prize in 1923, is a skilfully handled scheme for a difficult sloping site.

A stadium, by Mr. H. John Harrison, the winning design for the Victory Scholarship, is a fine solution of this difficult problem. The plan is straightforward and economical, and the elevations are characteristic of the type of building required. Unfortunately the draughtsmanship and rendering are inadequate.

A town-planning scheme for an exhibition in Hyde Park, by Miss Chambers, shows that she can handle with considerable skill the difficult and complicated problem of town planning. Her treatment of the main roads and pathways is very effective. Unfortunately the position of the concert hall would block the view of the composition from the entrance avenue; this feature would have looked more convincing if it had been placed at the head of the main axis. A similar error has been committed at the Wembley Exhibition, where the Lloyds Bank pavilion entirely blocks the vista and spoils what might have been a magnificent approach to the Stadium from the entrance to the grounds. Amongst other good examples of her skill Miss Chambers showed a design for a town house, and an excellent study of a recreation centre, in which the façade is unworthy of the plan.

Mr. Thompson exhibited an elevation of a building for fine arts treated in a simple modern manner, with a well-balanced division of its masses. He is evidently somewhat influenced by the modern Dutch school.

Mr. Hislop's plan for a recreation centre, which was the programme for the Rome Scholarship in 1923, is direct and broadly handled, but his modern treatment of the elevation is not entirely successful. The large dining hall is insufficiently lit and would be improved by the omission of the small vaulted corridor in the front.

Attractive coloured treatments of a council chamber were shown by the Hon. H. A. Pakington and Mr. R. E. Enthoven. Mr. Enthoven is a host in himself, and his work occupied the whole side of one room and part of the staircase landing; he is evidently a very versatile and competent student. One of his plans, that of a headland hotel, is well adapted to the irregular site, but I would like to have seen how he has arranged his bedroom floors. The elevation is modern in character and well grouped, and the difference of levels has been considered with good effect. He also exhibited a charabanc station, and a charming little bungalow scheme. His Hyde Park exhibition plan is perhaps the least successful of his works, which included some good archæological studies.

Captain Lyle exhibited some charming rough sketches of a house on an irregular site treated in a most original and attractive manner.

Miss Sleigh's plan for a headland hotel has many good qualities, but the elevation is too massive and severe for the character required.

Mr. D. H. Beaty Pownall and M. F. Napolitano, both third-year students, showed spirited and imaginative designs for a doorway in a natural history museum.

Amongst the first-year students, Mr. E. Wamsby Lewis and Mr. E. J. Carter have produced some well-drawn archæological drawings of the Temple of Vesta and the order of Erectheon. A number of drawings of constructional details show that this branch is not neglected at the Architectural Association. As well as those I have mentioned there were many other designs of considerable merit exhibited by this School, which deserves congratulations for the excellent results it has obtained during the last few years.

THE LIVERPOOL SCHOOL.—In Rooms Nos. 8 and 9 were to be found many interesting examples of the work produced at Liverpool University, and if these appear to favour more academic lines than those of the Architectural Association the collection exhibited is amply sufficient to show the thoroughness of the architect's training in all branches of theoretical knowledge. To mention a few of the best examples:—

Mr. A. L. Gabb exhibited some well-executed drawings for a proposed repertory theatre in Cairo, showing a carefully elaborated scheme but devoid of special local characteristics, the building being of a type which might be designed anywhere.

"M.C.L." sent a rather ambitious plan for a recreation centre; dancing is not suggested by a mosaic floor in the main hall, and it would be unsuitable for a concert auditorium, as a view of the orchestra could not be obtained from the extremities of the room. The elevation is complicated and badly proportioned, and the arrangement of the terraces is faulty.

Mr. H. S. Silcock's design for a dining room on a "White Star" liner contains too many *motifs* and the scale is too small. The depressed arches are unsuitable for a ship, and the entire design would be improved by considerable simplification.

Mr. S. L. Bridgwater's plan of a fine art exhibition in South America is straightforward, but marred by the introduction of numerous unnecessary columns. His elevation is not of the same quality as his plan.

Mr. W. Dougill exhibited a well-arranged plan for a Royal Academy in the Beaux-Arts manner, also a carefully-drawn scheme for a city bank on American lines, somewhat unsuitable to this country, where more working space is required for the staff, the strong rooms being placed in the basement.

Mr. Stephen Welsh's drawings of a library over an open loggia in an Italian garden is an admirable study in the Italian Renaissance manner.

Mr. Richard Mique showed a beautifully-drawn and rendered elevation and section of the Belvedere-Petit Trianon, and Mr. C. C. Shaw's Carnavalet Museum is equally well done.

Some charming holiday pencil sketches of well-known streets and buildings were exhibited by Mr. Max Fry.

The details, both exterior and interior, of a ball room somewhat in the late eighteenth-century manner, designed by Mr. H. C. Bradshaw, are beautifully proportioned and full of charm, and these drawings were among the most interesting exhibits of the Liverpool School.

A fine specimen of draughtsmanship, in the Archæological Section, was to be seen in Mr. R. G. Heal's drawing of the Temple of Mars Ultor from the restoration by Mr. Chaussemiche.

The School of Architecture, designed by

Professor C. H. Reilly, is a noble building represented by a fine perspective drawing by Mr. H. C. Bradshaw.

LONDON UNIVERSITY.—Generally speaking, the work produced by the London University students is of a very high standard, and under the able guidance of Professor Richardson and Mr. Corfiato we may be led to expect even more excellent results in the future. Already many of the schemes sent in by this University show remarkable ability—for instance, the design for a school of architecture by Mr. F. S. Bardell is a fine plan, well grouped, if somewhat lacking in modern expression. Each department is in its place, and the entire composition is compact and easy to read.

Mr. Forster's plan for the same programme was also interesting. He has taken the *parti* of planning his studios around a closed court-yard on one side of the main composition. The handling of the motives is rather weak, and the planning shows a lack of knowledge of modern construction.

Mr. J. R. Alabaster and Mr. C. H. Short both showed some clever little studies of a dairy farm.

The design for swimming baths, by Miss Elsie Rogers, is based on a semi-circular plan with a simple and interesting elevation.

MANCHESTER SCHOOL.—Among the exhibits of this progressive school I noticed some carefully-drawn archæological details and two excellent studies of monumental doorways in the Italian manner. A design for a railway station by Miss Elsie Rogers deserves scrutiny. The plan is simple and straightforward, but the difficult problem of harmonising the stone elevation with the great metal vault of the concourse behind has not been solved in a convincing manner.

GLASGOW SCHOOL.—The Glasgow School has shown some good classical studies, together with designs in architectural composition, which are somewhat weak in expression. The plan for a Parliament building has merit, but is marred by its unpleasant colouring.

ROYAL ACADEMY SCHOOL.—In the room devoted to the work of the Royal Academy School of Architecture were some delightful water colour sketches and a municipal theatre design by Mr. Cyril A. Farey, together with a study for a Propylæum in Greek Doric, well proportioned and of good draughtsmanship.

Owing to the lack of space at my disposal, I cannot deal with the work of the smaller schools of the provinces and Dominions, but in the rooms allocated to their work there were many drawings worthy of examination, and I am sure that an hour spent at Devonshire House amply repaid the visitor and surely proved that the education of the young provincial architect is in very competent hands.

BOOK REVIEW

Architecture Series of Measured Details. Drawn by WALTER MCQUADE. (London: B. T. Batsford, Ltd., and Charles Scribner & Sons, New York.)

This is a portfolio of twenty-four large plates of details of modern American architecture, drawn to scales ranging from ½ in. to 3 in. to the foot, and having on each plate photographs of the work as seen as a whole. They represent work of renaissance character, and include examples from the New York City Hall, the Municipal Building at Hartford, a public library at Montclair, and from houses at Albany, Louisville and Long Island. The details are chosen from external colonnades, doors, door-ways, windows, mantelpieces, &c., and together form an excellent collection of modern American work, though we could wish to have seen included among them some examples of the productions of Thomas Hastings, Charles F. McKim, or Richard Morris Hunt.

Books Received.

ERICH MENDELSOHN. Translated from the German by Herman George Scheffauer. (London: Ernest Benn, Ltd.) Price 21s. net.

A BOOK OF DESIGN. By Senior Students of the Architectural Association School. (London: Ernest Benn, Ltd.) Price 21s. net.

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ILLUSTRATIONS

Church of St. Helen.

The Church of St. Helen, of which Mr. W. D. Caröe, M.A., F.R.I.B.A., is the architect, is from this year's exhibit at the Royal Academy.

Rest Houses, Halstead.

These rest houses, twenty in number, have been erected on the site of the old workhouse and infirmary in North-street, Halstead. They are arranged in five blocks with four houses in each block. In the middle of the centre block is a fine oak-panelled room, to be used as a common room or room for trustees meetings. The view is taken looking along the terrace in front of the centre block and shows the bay window of the common room. The different blocks are connected by timbered porches or garden houses, and there is also a timbered garden house at the end of the blocks nearest the road.

The contractor was Mr. C. Deaves, of Bures, Suffolk; the facing bricks are 2 in. Tudor bricks, supplied by Messrs. Ames & Finnis, of 37 & 38, Strand, W.C. 2, who also supplied the roofing tiles and carried out the tiling.

The architect is Mr. E. W. Coldwell, Lic. R.I.B.A., of the firm of Messrs. Coldwell, Coldwell & Courtauld, 83, Pall-mall, S.W. 1.

St. Andrew's Church, Sudbury.

The original intention was to carry the main roof upon wooden posts, after the manner of St. Mary's Hall, Chichester, or the Town Hall, York, but light stone and brick arcades have been substituted as being more ecclesiastical in effect, and perhaps more permanent. The original design is not abandoned without regret. The accommodation is by no means cramped, and there is plenty of space about the entries, yet it is believed the cost will be well within £20 per sitting inclusive, not including an organ. During last year a vicarage was built at an inclusive cost of under £2,000, and as the parish hall already exists the erection of the church will complete the equipment of the parish.

The architect is Mr. Chas. Waymouth, F.R.I.B.A., of 104, High Holborn, W.C. 1.

Royal East Sussex Hospital, Hastings.

The general contractors are Messrs. Peerless, Dennis & Co., Grove-road, Eastbourne; sanitary fittings, Messrs. Pontifex & Co., Shoe-lane; electric fittings, Mr. F. J. Wordley, St. Leonards; heating and hot water, Mr. Mathew Holt, Wigmore-street, London; lift, Messrs. Pickerings, Ltd., Stockton-on-Tees; windows, Messrs. Crittalls; operating theatre, Messrs. T. Sclaters Sterilisers. The cost was about £80,00 The architect is Mr. John Saxon Snell, F.R.I.B.A.

Jarvis Studentship.

We illustrate this week the selected desig by Mr. M. A. Sisson (London University Sch of Architecture), for the Jarvis Studentshi The designs submitted are on view at t R.I.B.A. Galleries until August 15. T Scholarship in Architecture has not Ro been awarded this year.

A WREN MEMORIAL

LAST Friday the Earl of Crawford unvei in St. Paul's Cathedral a tablet to Sir Christop Wren, presented by American architec The plaque which the Dean and Chapter h received is of bronze, the border represent a wreath of golden rod and oak leaves entwin The gift of the Architectural League of N York, it bears this inscription, "In recognit of the inspiration and enduring influence u American architecture of the work of Christopher Wren, this tablet is inscribed the Architectural League of New York."

The service of dedication was conducted Dean Inge, assisted by Canon Alexander Canon Newbolt.

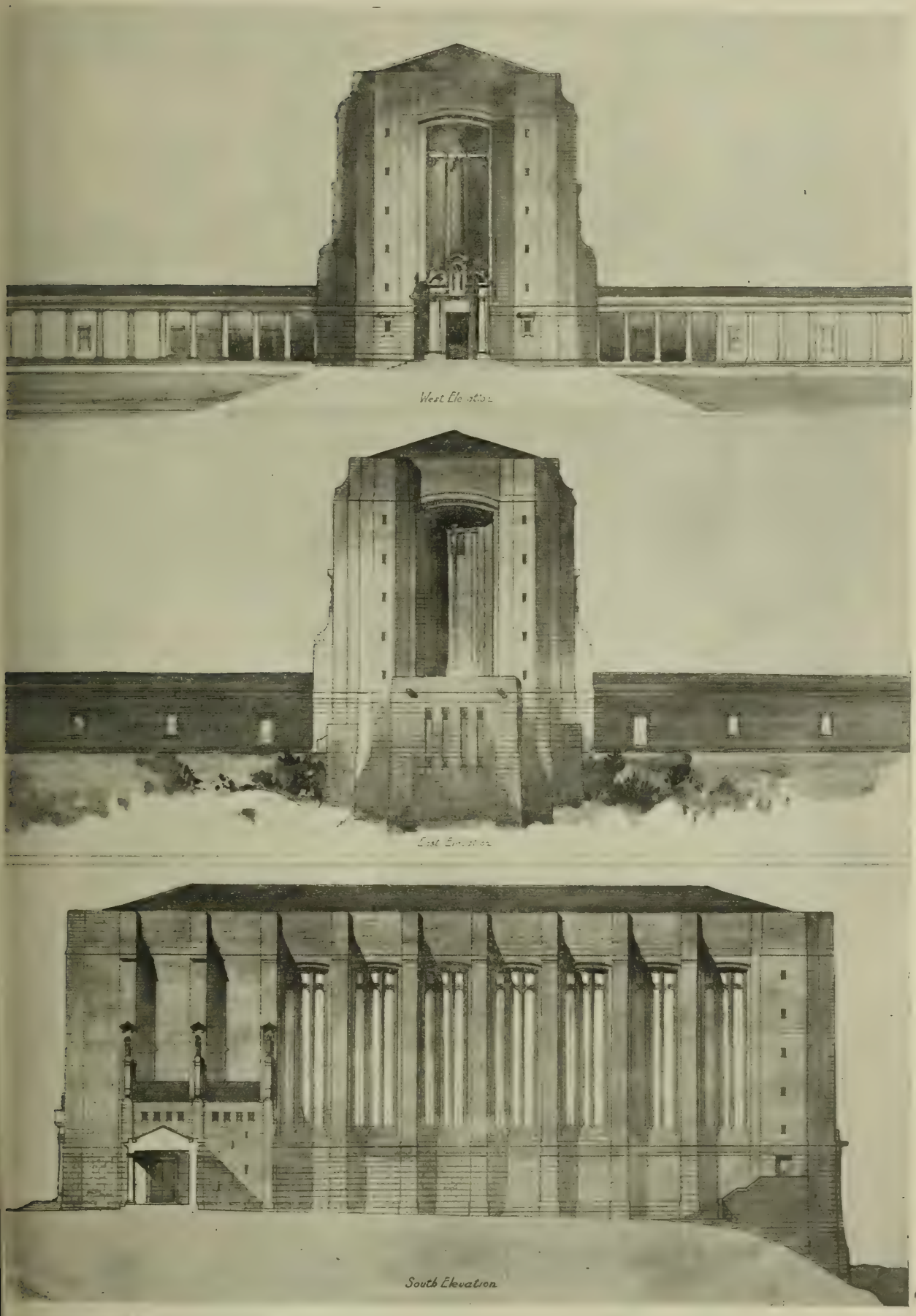
The Earl of Crawford, in unveiling the me rial and committing it to the charge of the D and Chapter, said it was a testimony to strength and vitality of Sir Christopher Wr influence, and though they recalled the fam admonition against a memorial of his achi ment, and the plea that his work, rather t his personality, should carry his recollec onwards to future generations, they m direct their minds to his memory on this where "Thro' the long-drawn aisles and fre vaults, the pealing anthems raise the not praise."

To-day they stood beside the very he pulse of the throbbing life of this great continued Lord Crawford. In imagination them carry back their minds to this same in the days when the genius of Wren walke streets. He knew the city decimated by pla shattered by death, devastated by fire, and the ashes of its despair he raised this monument to the hope of immortality. M generations had passed through the life o Cathedral, each adding its tribute of praise their words were but rippling waves pa over the unfathomable depth of his great Indeed, so great a master was he that might almost say of him as was said o Greatest of all and His followers, "He before, and they were amazed, and as followed they were afraid." In that dark of their history the genius of Wren took hovering like some great spirit over the sce desolation, surveying its ruins, and conce its massive reconstruction. Creation foll creation, each excelling its neighbour in str and grandeur, in grace and fidelity. So city of death became the envy of the wo architecture.

Among those present at the ceremony Mr. Alfred C. Bossom (Chairman of the Fc Activities Committee of the Architec League of New York), Mr. J. A. Gotch dent, Royal Institute of British Architects Brumwell Thomas, Sir George Frampto Mark Short, Mr. Mervyn McCartney, the Walter Scott, Sir William Berry, Visco Maitland, Lady Frederick Lewis, and Clara Butt.

Plymouth Housing.

Negotiations were completed recently f purchase of the Randwick Park estate acres. It is to be developed for buildin poses, and the intention is to erect upon it of the semi-detached villa type, with gardens.



Rome Scholarship in Architecture: Final Competition, 1924.

Design for a Public School Chapel.

Jarvis Studentship: Accepted Design. By Mr. M. A. Sisson.

Rome Scholarship in Architecture: Final Competition, 1924.

Jarvis Studentship: Accepted Design. By Mr. M. A. Sisson (London University School of Architecture).


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FOR S·A·COVRTAVLD·ESQ·
E.W. COLDWELL (R.I.B.A.)
83 PALL MALL
LONDON W.
R.A. EXHIBITION, 1924.

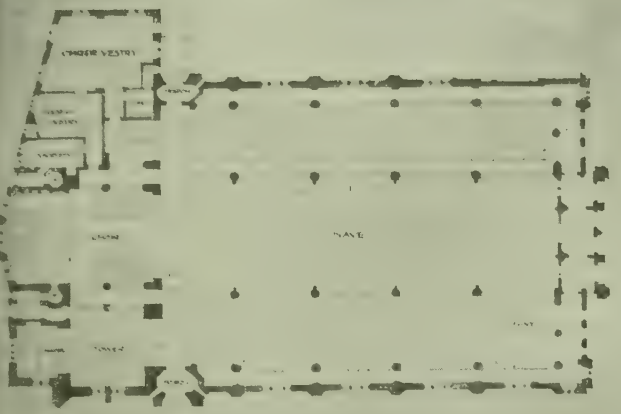


Hastings Hospital: The Chapel. Mr. C. G. Hare (Messrs. Bodley & Hare), Architect.



Hastings Hospital. Messrs. J. S. Snell and S. N. Spoor, FF.R.I.B.A., Architects.

NEW CHURCH OF S. HELEN. ST. HELENS. LANCASHIRE







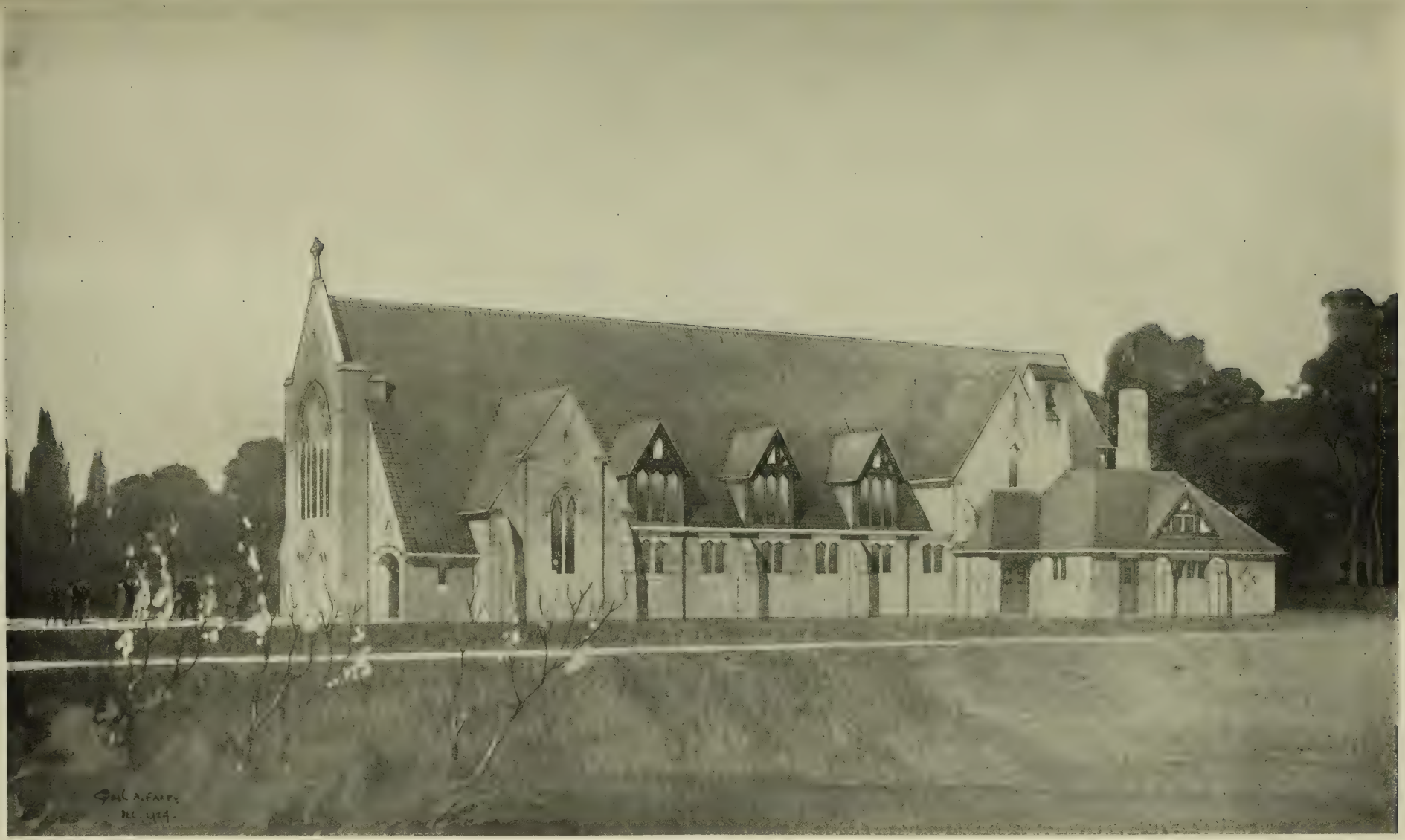
R.A. Exhibition, 1924.

Mr. W. D. Caröe, M.A., F.R.I.B.A., Architect.





Hastings Hospital. Messrs. J. S. Snell and S. N. Spoor, FF.R.I.B.A., Architects.



R.A. Exhibition, 1924.

St. Andrew's Church, Sudbury, Middlesex. Mr. W. Charles Waymouth, F.R.I.B.A., Architect.



Marble Pavement at Liverpool Cathedral. Sir G. Gilbert Scott, R.A., Architect.

Marble pavements at Liverpool Cathedral are carried over the public space, north transept, south transept, choir, choir aisles, and chapter house. Hopton Wood stone and Belgian bird's-eye fossil marble are used. Sienna marble is used in banding-up the panels, and was specially picked so that the maximum of warmth and colour was obtained with the minimum of black pencil figure. Rosso antico is used in the pavement to the Chapter House. Marble inlay is used in the form of two inlaid devices in the altar platform of the Memorial Chapel, and one in the pavement of the Choir. The marbles used in the inlays include sciavezza statuary, rosso antico and sienna, caroline and lunel rubane, blood-red skyros, Hopton Wood and bird's-eye from England.

These floors were executed by Messrs. John Stubbs & Sons, of Liverpool.

WESTMINSTER ABBEY RE-EXAMINED—VI.

By W. R. LETHABY.

THE CONFESSOR'S CHURCH.

EXISTING REMAINS.—The Monastery at Westminster was founded by King Edgar. It is possible that there had been some small church on the site before, but the evidence for this is very doubtful. Dean Robinson writes in "The Times of St. Dunstan" (1913), "After Edway's death in 957, the kingdoms were reunited under Edgar, and Dunstan became Archbishop of Canterbury. The monastic movement now went forward rapidly." At Westminster were many precious relics which were said to be the gift of King Athelstan. "Now it was not until Athelstan had been in his grave for twenty years that Dunstan took Westminster in hand, and brought monks, probably from Glastonbury, to dwell there. Till then there was but a small church there of no significance. Dunstan himself is not among the donors of relics . . . but it is possible that he had part of King Athelstan's treasury of relics at his disposal, and may have given some of the items mentioned in his old master's name."

In the first half of the thirteenth century, Abbot Barking gave some hangings for the Choir on which the life of Christ was figured, and also the story of St. Edward. The last subject of the latter represented the founders of the Abbey. In a copy of the inscriptions (seventeenth century), the writer says, "The ffounders names of Westminster were theis: King Edgare, King Edward, and ye Archbishope Dunstane." This information he doubtless found on the tapestry itself, and it gives the early thirteenth-century tradition.

Edward the Confessor rebuilt the church in emulation of the great monastic buildings of Normandy. In *Gleanings*, Sir G. Scott discussed a description of the church—given in a "Life" of the Confessor, written not later than 1070—and its relation with the existing "Norman" buildings. He came to the conclusion that the scale of the plan was much the same as that of the existing church, but that the Confessor only built the eastern part including the crossing and transepts. In 1866, Scott found the bases of some piers of early Norman form, under the mosaic floor of the Presbytery, which, as he saw, could only be actual remnants of the Confessor's Church. In 1894, Micklethwaite planned these piers in their relation to the existing "Norman" buildings, and set out a tentative reconstruction of the whole church.

In 1906 I suggested that, if we seek for a direct prototype, it is probable that we should look to Jumièges, a famous church, founded by Robert, who became Archbishop of Canterbury. Like Jumièges, its prototype, Westminster probably had an effective triforium story. In a letter written to the Pope to obtain Edward's canonisation, in 1165, it is described as a noble building, which the King had *beatissima consummavit*. A spurious charter of later days mentions Godwin Great-syd as having been the master-mason (*cementarius*). I accepted the view that the Confessor had not completed the church.

In November, 1909, I published a short study of the Confessor's Church (*Journal*, R.I.B.A.), following an account of excavations at Jumièges in *Bulletin Monumental*, July, 1909. This is now given in a condensed form.

"The stumps of the piers of the Confessor's Church have convinced me that they were probably parts of wall-piers once attached to a closed-in presbytery. They consisted of pilaster-strips with bold half-rounds in front; although in themselves they might have belonged to isolated piers, it is almost impossible to imagine the chance which should have led to just these members surviving while the rest of such isolated piers were entirely grubbed up. Of the two piers on the north side, being the first and second from the crossing, the second is different in having to the *west* an additional member, so that it projects forward or south about a foot in front of the other pier. These facts can best be explained by supposing that the second pier represents the respond of an apse terminating a closed presbytery. (Fig. 1.) The force of the evidence will be appreciated by comparing it with the plan of Cerisy, and the prototype of Cerisy was Jumièges. According to this reading

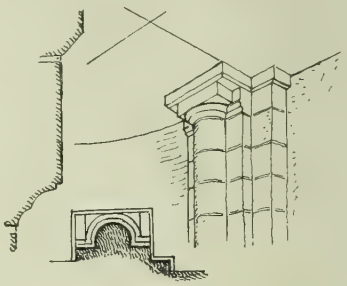


FIG. 1.

the bays of the Confessor's Church would have been about 17½ ft. wide, and the site of the altar would not have been moved by Henry III. The old presbytery would then have been of the normal two-bayed type found in early Norman churches. Thus, too, the site of the old altar conditioned the short presbytery of the present church, an extraordinary feature which has never been explained. The plan so obtained coincides perfectly with that of Jumièges. The word *ambitus* in the description of the church referred to the aisles [and not as had been supposed, to an ambulatory round the apse. See below]. In the Jumièges type they were continued even across the ends of the transepts. The ambulatory plan did not reach Normandy till about 1070 and England about 1080. The form of the piers and the profile of the bases bear out the evidence of the plan; the base made only of two hollows, is found at Caen, and it is *the* base at Jumièges. The facts gathered up show that Westminster was a copy of Jumièges."

In February, 1910, Dr. Armitage Robinson, then Dean of Westminster, read a paper before the Antiquaries, in which he gave the results of a visit to Jumièges. From measurements taken there he prepared a restored plan of the Confessor's Church. "It appeared certain that at Jumièges the original presbytery consisted of

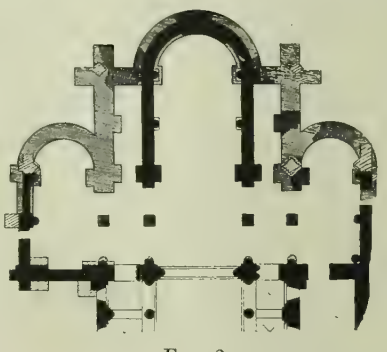


FIG. 2.

two bays and an apse." A little before this time M. Roger Martin du Gard published a monograph on the Norman Abbey, giving the result of recent excavations. From this my Fig. 2 is taken. Dr. Robinson, in his paper, analysed all known written sources regarding the Confessor's Church and came to the conclusion that it had been completed before King Edward's death, although in the eleventh-century description the older Saxon church is said to have been left standing to the west.

After Dean Robinson had read his paper I suggested that a search might be made for the foundations of the Confessor's apse und disturbed piece of pavement just behind present altar screen. I had observed that the two stumps of piers on the north side, more eastward one had an additional brea its western face and projected further, so the space between the eastern piers on opp sides must have been 2 ft. 6 in. less than space between the piers further west. It s obvious that the pier to the east must have one of the responds to the arch opening t apse, and a comparison with a series of Norman plans fully confirmed this vi (Fig. 1.)

In searching for the apse we found that u the mosaic floor the ground had been mad for several feet by a filling of stone chips a mason's yard; at a depth of 5½ ft. reached the flat surface of a hard mass follo a concave curve. We now dug deeper alon curved front of this hard mass and found it was a foundation-wall of concreted r largely of flints. The upper surface of

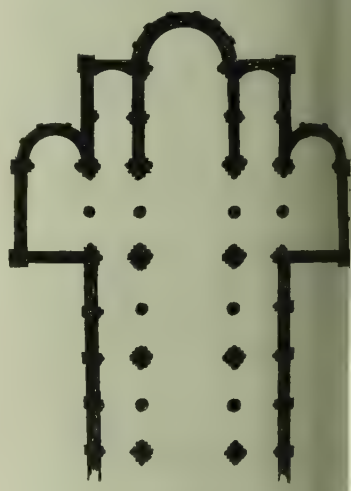


FIG. 3.

remained was in part covered with b Roman tiles. A total depth of 7 ft. 8 in reached and here we seemed to come to turbed sandy loam. The foundation must projected about 1 ft. 6 in. from the surface apse wall. In digging the hole several pieces of Roman tiles (bricks) were found one fragment of a Roman roof tile with fi sides, and some lumps of a floor of *signinum*—that is, of mortar and broke about 3 in. thick. It is evident that must once have been an important R building on the site" ("Archæologia," Vo

Since this plan of Westminster (Fig. established other churches of similar form been explored. Mr. Bilson described the p the early Norman church built at Linc "Archæologia," XLII. The presbytery its aisles was of the same form, but a bay l and the apse was narrower, as at Westmi the aisles ran on past the transepts, Jumièges and Bayeux (see an original pl Blouet in the Print Room at South Kens Museum), and probably at Westminster. recently the foundations of an eleventh-c Norman church of the type have been exc at Wenlock (Fig. 4, based on "Archæolog



FIG. 4.

CRIPTION.—The eleventh-century descrip-
f the church contained in the *Life* of the
sor was first printed by Camden "from
cient manuscript." Wren put it into
h thus :—

e principal area or nave of the church,
aised high, and vaulted with square and
n ribs, is turned circular to the east; this
h side is strongly fortified with a double
g of the aisles in two stories, with their
and arches; the cross building contrived
tain the choir in the middle, and the
to support the lofty tower, rose with a
and lower vaulting, which tower, then
ng with artificial winding stairs, was
ied with plain walls to its timber roof,
was well covered with lead."

Iowel's "Londonopolis," 1657, I have
version earlier than Wren's, given from
ld manuscript book," doubtless through
n: "The principal plot or ground-
f the building was supported with most
rches, cast round with four-square work,
nblable joints. But the compass of the
with a double arch of stone on both sides,
osed with jointed work, firmly knit and
together, every way. Moreover, the cross
church, which was to compass the mid
f those that cnaunted unto the Lord,
th a two-fold supportance, that it had
er side to uphold and bear the lofty top
ower in the midst, simply riseth at first
ow and strong arch; then mounts with
r, with many winding stairs, artificially
ng with a number of steps. But afterwards
single wall, it reacheth up to the roof of
well and surely covered with lead."

the "Life" of the Confessor was
n the Rolls' series, it was found that the
ion of the church in the MS. used
a little from that given by Camden.
's began, "*Princ palis domus area*";
er had "*arae*." The new text also had
tional passage.

passage in the "Life" has often been
and analysed—most fully in Dean
n's paper in *Archæologia*. I am quite
tent to deal with it as a whole, so I only
re the first part as a necessary key to
ollows: (1) Principalis arae domus
us erecta fornicibus quadrato opere
commissura circumvolvitur; (2) am-
item ipsius ædis duplici lapidum arcu
ue latere hinc et inde fortiter solidata
compage clauditur; (3) porro crux
. . .

has been interpreted in several quite
ways, but there is general agreement
ne latter part not given here.

ew text was printed in *Gleanings* (1863),
editor (J. H. Parker) observed of it:
s *arae*, literally the house of the Altar,
y means the choir, whereas Wren had
for the area or nave. From other
it is clear that the Choir was the only
ished at the time of the dedication."
xt mentions the cross and the central
ver the *Choir*, and hence Parker must
ed this word to include the transepts
ssing.)

04 Mr. Micklethwaite adopted this inter-
n in a version which otherwise closely
Wren's. I give his opening sentences
nding to the part of the text printed
"The main building is rounded and
th very high and uniform arches of
ork, and the aisle enclosing that part
ly vaulted with a double arch of stone
from either side, right and left. Then
s of the church . . . ."

09 the late Mr. Francis Bond objected
was a mistake to imagine that *arcus*
"a vault," and *fornix* "an arch."
eaning of the words, *principalis arae*
lissimus erecta fornicibus circumvolvitur
he sanctuary (home of the high altar)
vith vaults very high and is surrounded
." These vaults, he goes on to say,
have been those of the ambulatory,
were no high vaults in 1050.

thwaite supposed that the arches or
question must be those of the main
(Parker's *Choir*), and that, therefore,
they could be no other than the four great arches under the Lantern tower, which, as all agree, surmounted the crossing of the church.

Dean Robinson, in 1910, followed Mr. Bond in making the description begin with the presbytery, but he claimed that "the very high vaults" must be those of the presbytery and the apse. It had now been discovered that, at Westminster, there had been no ambulatory around the apse, such as Mr. Bond assumed. I copy here this latest translation in full :—

"The sanctuary of the high altar rises up with very high vaults; it is made with squared stones and even jointing, and is brought round in a curve.

"But the main church is compassed about with a double stone arching on both sides, and is closed in, this way and that, by solid work of strong construction.

"Then the crossing, which is to contain in the middle the choir of those who sing God's praises, and with its two-fold abutment on either side to steady the lofty summit of the tower in the middle, rises simply at first with a low and sturdy vault, swells with many a winding stair of elaborate artifice, but then, with a simple wall, reaches the wooden roof, which is carefully covered with lead. Above and below projecting chapels are arranged, to be consecrated by their altars to the commemoration of apostles, martyrs, confessors, and virgins.

"Now the whole of this vast and elaborate work was started so far east of the ancient church that the brethren of the place might not have to cease in the meantime from the service of Christ, and also that some part of the porch which was to be set in between might have room to follow on."

What does the opening phrase of the description refer to—the highest and most characteristic part of the whole structure, as Parker and Micklethwaite supposed, or to the eastern limb of the building?

I am incompetent to deal with the question and should not pretend to do so were it not for fresh evidence. This I find in what Enlart tells us of early churches in France: "At times a lantern tower giving light to the church surmounted the crossing; it may have been a Gaulish version of a central dome. It was called *turris*, *domus altaris*, or *domus arae*, the altar being placed below; the tower had a pointed roof, *turritus apex*." ("Manuel," vol. 1, p. 118). See also "*Cabrol* under *Domus*."

The lantern-tower of a Romanesque cruciform church, like a Byzantine Dome, rose over the centre of the structure, having windows through which much of the light was derived. Wilfrid's Church at Hexham is described as a round *tower* with four projections surrounding it. The late Saxon church at Durham had two towers, one of which contained the choir. The Saxon church at Ramsey also had two towers—one being central. The characteristic feature of the Saxon cathedral at Winchester was "a lofty *temple* full of light—a sparkling tower reflecting the rising sun." The picture in the "Benedictional of St. Ethelwold" shows clearly that the church had a tall central tower as well as a second one, which was doubtless at the west end.

The lantern, with its windows, is here identified with the temple or main structure, just as in the Westminster description it represents the *domus*. The same general idea seems to be followed in a description of the Saxon cathedral at York, about 970, also given by Willis.

"A wondrous basilica was completed. This house of appropriate altitude is supported by solid columns set under curved arches . . . within its beauty shines environed with many aisles (or apsidal chapels). It has a great number of apartments, which contain thirty altars."

This leads off naturally as, I suppose, the Westminster account does, with the height of the "house," and, in fact, it might be the model for the Westminster description. Of Lanfranc's Church at Canterbury, we are told, although it had a long nave, "the tower, raised upon great pillars, is placed in the midst of the church like the centre of a circle. . . . A gilded corona hangs in the midst of the church."

The relation of Domus, Dome, and Lantern-tower is well brought out in Walcott's "Sacred Archæology." "*Dome*: A cupola, probably so called as being the distinguishing ornament of the cathedral; the Italian *Duomo*, the German *Dom*, and Latin *Domus dei*, God's house, the *Dominicum* of St. Jerome. . . . It became the lantern of English Gothic art, but is closely approached in the superb lantern at Ely." "*Lantern*: An open central tower, as at Ely, Coutances, Lisieux, Evereux, Lincoln and York, for showering down light on the choir and rood. On festivals an immense lamp was suspended from the vault of the tower at Beauvais and was visible at great distances at night—a beacon that could not be hid."

It is curious that Howel, who was quoted above, uses the word "dome" for Old St. Paul's and also for Westminster Abbey.

John Carter, a century ago, noted of lantern towers: "There is a part of our antiquities which seems to have escaped general observation—the interiors of central towers. Hiding them by ceilings seems to have been first resorted to, temp. Henry VI and Henry VII, and many fine groined ceilings were then set up, as at Canterbury, Gloucester and Wells. The central tower at Durham, still open, is the diadem of masonic power." The name Lantern-tower occurs in the Rites of Durham, and in the Will of Henry VII it is used for Westminster.

We are now better prepared to understand what the writer of the *Life* must have meant by the opening words of his description. We should note first of all that there were no other introductory phrases dealing with the main building. The account begins by saying that the King rebuilt the monastery not far from the walls of London and then at once proceeded as above quoted. I venture now by comparing the several versions, and with the help of a dictionary, to put down what I suppose the writer must have meant.

The House of the High Altar (sacred structure, or, as below, "temple") is raised extremely high with vaults (or broad arches) of squared work closely jointed (round about the four sides of the central space). The edifice is also enclosed on both sides by double arches of wrought stone, solid and strong. Moreover, the cross (or transept) of the temple, which contains in its midst the choir of those who sing to God, with twin supports from each side, upholds the lofty middle tower: first (on either side) it has a low and strong vault, then rises with many winding stairs artfully ascending and continues with a simple wall up to the wooden roof, which is well covered with lead. Below and above chapels are thrown out to be consecrated by their altars to the memories of apostles, martyrs, confessors and virgins. All this vast and complex work was planned far to the east of the old temple that the brethren need not cease from the service of Christ, and so that a sufficiently spacious vestibule might be placed between them.

The great arches of the crossing under the lantern would have been six or eight feet broad on the soffit, and an untechnical writer even now might be confused in describing them as to the precise use of the words "arches" and "vaults." As the word *fornicibus* is plural, Dean Robinson explained it as applying to high vaults over the whole of the presbytery and its apse. If I could believe the presbytery had high vaults, then I could also think that the little transepts were also vaulted, and thus again we should be free to suppose that the description started with the main building. Apart from other considerations, the existence of high vaults at this time seems to me more unlikely than the use of the word *fornicibus* for the arches—great and high and altogether remarkable—which were about the square crossing.

Further, it is these arches or vaults which appear to be described as constructed of carefully wrought stone. Now arches would have been so built while main vaults would not. Dean Robinson alone makes this wrought masonry apply to the walls.

Again, Dr. Robinson understood the second sentence, *Ambitus autem ipsius aedis . . .*, which he rendered, "But the main church is compassed about . . ." to apply to the nave,

while the third sentence came back to the choir. Yet in a monk's church the nave hardly counted, while the choir was essential.

Besides describing the Confessor's work at Westminster, I want to bring out the thoughts which conditioned the design of our ancient churches. The dominating position in every way of the central tower and its parallelism with the eastern dome has hardly been realised. It was much more than a handsome feature in "a design." In some of our smaller Saxon churches the body of the work is a tower with a projection for the altar at one end and a porch at the other, and these have been well named "Tower churches." It is part of the same tradition that in churches like Westminster the choir of singers is in the western limb of the building.

While speaking of Saxon cruciform churches, I may add that the foundations at Peterborough may be explained by supposing that the transepts were not wider than the nave, but had sacristies or chapels which made up the greater width found. Were not the foundations at York, which Micklethwaite supposed to be Saxon, part of Bishop Roger's work?

THE NAVE AND TOWER.—The *Life* description of the Church is usually said to have been written about 1070, but Dean Robinson pointed out that there is no reference to the Conquest and that it is quite possible it was written before the end of 1066. In any case "the writer's description does not come at the end of Edward's life, but while the work is still in progress. . . . But we may not assume from this that when he wrote the things described were only in contemplation. He is describing the process of building." Dean Robinson also pointed out that Sulcard, who wrote about 1080, said "the work that had been begun was pushed forward by the King's command, and after a few years, supported on divers columns and vaulted with manifold arches (*multiplicibus volutum hinc et inde arcubus*), being finished to the very porch (*vestibulum*), it was shown forth to the bishops for consecration." I wonder whether *vestibulum* here and in the earlier description necessarily means a western porch? I find it hard to think that the older Saxon church was still further to the west than the *completed* nave of the Confessor's church. Dean Robinson speaks of "room for the Saxon church between the Norman west front and the Long Ditch, a distance which may be reckoned as from 300 to 350 feet." If we could suppose that *vestibulum* might here stand for nave, which otherwise does not seem to be mentioned, then we might understand that a part of it was first interposed between the old church and the new, and then the former was pulled down for its completion. Sulcard, indeed, says that the old monastery "which we have all seen, was purposely destroyed that the nobler one might rise, which now we see." In Parker's "Concise Glossary," it is said that vestibule sometimes meant nave, but this meaning is not given by Ducange.

A slight confirmation of this view may be found in the fact that in the Confessor's *completed* church there was an altar dedicated to the Trinity. Now a legend told that it was at the altar of the Trinity that the Confessor saw one of his visions. This would mean in the old Saxon church, for the Confessor never entered his new church after its consecration. It seems probable, therefore, that the site of the older Trinity altar (possibly in a lateral eastern apse) was considered to be represented by a nave altar in the church built by the Confessor. The event is represented by one of the sculptures on the back of the existing altar-screen, and it there looks like a nave-altar. The Trinity altar is mentioned in 1246 as being the place where the Confessor saw as in a vision the King of the Danes drowned. (B.M. Cal. "Charter Rolls.")

Again, remains of Roman building have been found half-way down the nave, and the Saxon church is likely to have been on a Roman site, which seems to have been the highest point of very low ground.

This reading of the evidence, however, requires that the Vestibule spoken of between the Confessor's work and the old Saxon church should be understood to mean a part of the incompleted nave to the west of the Choir gates. Possibly only the actual altar and not the chapel of the Trinity was preserved.

That the Confessor built at least a considerable part of the western limb of the church is confirmed by the Bayeux embroidery on which the church is carefully represented. In a study of this work in the *Archaeological Journal*, about ten years ago, I convinced myself that it was an English work wrought to the instructions of Odo, Bishop of Bayeux, soon after the conquest for his cathedral. (Its subject was Harold's oath on the relics, and what followed, rather than the Conquest of England seen politically).*

Of several buildings indicated on the embroidery the only one which is represented with any appearance of accuracy is the Confessor's church. It is properly shown close to the palace, which lay just to the east, and it is familiarly named "the Church of St. Peter."

Five bays of the western limb of the church are shown. These, it is true, might stand for a greater number, but no completion by western towers is indicated. The view correctly represents the facts that the church was cruciform and had a tall central tower standing over high arches. The upper storeys of the tower were reached by turret stairs projecting at the angles, and above it was finished by a steep leaded roof. The western limb had arcades and upper windows, but the eastern limb, which was short, had no arcades.

All this agrees with the evidence otherwise gathered. The tower had two stages of lights, and it can not be doubted that it was a "lantern." It may be compared with the noble early lantern tower of St. Albans, and also with that of Jumièges, the parent of both.

The importance of the lantern tower at Westminster, as brought out both in this view and the old description, is confirmed by the fact that Matthew Paris, telling in the "Major

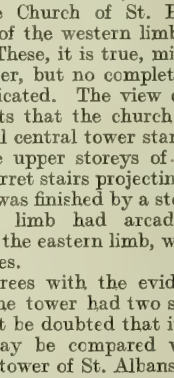


FIG. 5.

Chronicle" of the beginning of the new work of 1245, says that the eastern part of this old church was pulled down, and adds in the margin, "*cum turris.*"

Another little detail which may be gathered from the embroidery is that the church had a weathercock (Fig. 5).

It has been held hitherto that the scale of the Confessor's plan was nearly the same as that of the present church, but this may, I think, be proved to be a mistake. One piece of evidence I gave last October in showing that the south wall of Henry's III's church against the Cloister must have been built outside the older church. This is substantiated by two further facts. About ten years ago we found by an excavation in the north walk of the Cloister that the outer wall of the west walk of the Norman cloister ran for some feet under the present north walk of the cloister, and it was not traced to the angle. Again, the t of early Abbots seem to have been shifted Henry III to the south walk of the cloist suppose they originally lay by the w the church, but were displaced when i widened.

The dimensions of the Confessor's wo Westminster, which may be stated with accuracy, are these: Internal width o presbytery, 31 ft. 2 in.; its external about 40 ft. Internal length of presb comprising two bays and the apse, about Width of bays in presbytery at 17½ ft. external width of the existing Dormitory which ran away from the south transept was probably of the same dimension) is 3 that is about the same as the presbyte might be expected. Now these agree c with the dimensions of the similar par Jumièges, and we may not doubt that th churches were closely alike in size. So we transfer other dimensions from the Ne church to Westminster with high proba of their being correct. At Jumièges the was about 66½ ft. internally, and about externally. Dean Robinson, however, g width of 72 ft. to the Confessor's nave at minster, nearly as much as the present which is 73½ ft. The width of 66½ ft. see be the greatest known for contemporary Ne churches (see J. Bilson's "Lincoln," in *A logia* 62), and it may be doubted wh Westminster was so great.

Other probabilities which may be ga by the comparison with Jumièges are tha aisles ran on past the transepts, and tha remaining parts of the north and south were vaulted at the same height as the The nave had large piers and columns nately following from the treatment a transepts. There was an important trif stage. The great lantern tower had two s above the roof. The existing pier bas Westminster are like bases at Jumièges some very early Norman capitals fron Dormitory windows (*c.* 1075) are also Jumièges type. In M. Roger Martin du book on Jumièges, the presbytery and tra are dated 1040–52, and the Nave 10 There is a late statement that the Con began his church in 1049, but this is dou I noted above that the master mason wa to be one Godwin Gretsyd. The late Dr. wrote to me in 1913 that "the Dean of has just found him and his wife Wende in the list of people to be prayed for in Abbey at Winchester." Only the othe Mr. Westlake told me he had found a ref to "Teinfrith mine Churchwright."

These both look like Saxon names, bu records are not contemporary documents I cannot think that any other than a N master could have built this great church fashion new to England. The material existing bases seems to be Caen stone.

ST. MARGARET'S.—Until recently it has generally accepted that this church clo the Abbey was founded by the Confesso has been urged, however, that such a dedi in the name of the Martyr of Antioch hardly be earlier than the second half twelfth century. But the claim for the found by the Confessor goes back to an early In Bentley's "Cartulary," among fourt century documents, I find the heading " foundation of the parish church of St. Mar Westminster, by S. Edward Confessor."

The similar dedication of a churc Rochester may be cited as evidence that i in use at an earlier time than is alleged. earliest mention of the church in the Roc records is found in a charter of Bishop Gu which may be assigned to the period 1107- The Bishop grants to the monks the altar of St. Nicholas [in the nave of the dral] the church of St. Margaret whi appendant thereto" (Mr. G. M. Live Parish Magazine). Then, further, we hav fact that an English princess, granddaugh Edmund Ironside, and a relation of Confessor, was named Margaret (afterwa become St. Margaret of Scotland).

*Mr. R. S. Loomis, in the latest examination of the evidence, concludes that the embroidery was English work prepared in time for the dedication of Bayeux Cathedral in 1077. "When it reached its destination it was found to be too long. The end shows no border corresponding to the beginning. The designer presents Edward enthroned in the first scene, Harold in the middle, and evidently intended to present William enthroned at the end. An embroidery which belonged to the Conqueror's daughter, Adele, must have been planned by the designer of the Bayeux hanging. Every scene is found also at Bayeux, except the last two. It follows that these two were in the Bayeux hanging before it was cut down." (American *Art B lletir*, Vol. VI, No. 1.)

RCHITECTURAL EDUCATION CONFERENCE

ARCHITECTURAL EDUCATION OF THE FUTURE

the third and last day of the Congress Mr. Gilbert (United States) presided. In his ng statement he said they were going to hat day with the architectural education e future, and called upon Mr. F. H. Bos- (America) to read the first paper.

AMERICA.

ling with the probable future trend of ectural education in America, Dean orth said, knowing the parentage it l not be impossible to foretell some of haracteristics of future architectural edu- . Changes in system would surely come. country and perhaps each part of each y would have some detail peculiar to In each, local conditions or local diffi- would require, as they required to-day, modifications, some adjustments, to fit ectural education into its place as a part general educational system.

its parents, the apprentice system was der, at the worst a penurious and can- ous old man, subject to no influences economic ones, which in the end caused ath of the whole guild system of which ntage was a part. Too often the pupil sciously set as his goal a faithful copy- the master. He learned his style and erisms, his exaggerations and idiosyn- , but did not grasp the essential spirit ch these idiosyncrasies were the expres- He grasped the form, not the sub- ; learned how to speak, but had no- to say. At its best it was the most is system of education evolved by man t it was the personal inspiration of the t by the master who taught untram- by any system, unhampered and free firing of growing imaginations by the f great example. When practice of this was teacher it was a greater influence ncentive towards high accomplishment heory ever could be, but being indivi- ic it had no continuity. What was good t of necessity perpetuate itself.

future's inheritance from the formalised g of the schools was perhaps less spec- , less obviously important. Theory t its worst sought for basic causes, was ted in the past and the principles which nt deduce from that past. That the de- ns were mistaken it was true, but the f research and analysis was recognised true foundation upon which to build. too, it had continuity, a life of its own ndent of the individuals who were s. Having continuity it was subject nences from without. It might change owly, but change it did in response to b and flow of students who sought for ace where education was most vital, and d that where the dry rot of academic held sway unchecked. Analysis and sis, creative faculty and critical faculty, eory and practice of architecture; the ust check the other. As in logic, is and synthesis were not, if properly tood, separate methods, only two neces- arts of the same method. Each was ative and corrective of the other.

e were the traits which they would hould be education's inheritance. From e the knowledge that no school could by system alone; that teaching in fact nly possible when it was learning, an t of the teacher but of the pupil; that and curricula were of use only so long served as the crucibles in which teach- as transmuted into the precious gold of g by the fire of imagination and enthu- kindled by contact with great per- y. The awakening of the imagination n act of the spirit rather than of the from theory, thoroughness, a respect entific research, and a scientific attitude towards the problems which the future architect must face. Their premises must be based upon knowledge, not sentiment, for sentimental conclusions had no more place in artistic work than in scientific; an inheritance from both, the best from each.

That it would be so was easy to believe. They had not changed so fundamentally since the days when men travelled to Thebes or Babylon, Athens or Alexandria, from one side of the world to the other, to find that man or that place where analysis and synthesis were but two parts of one process. That the schools had come to stay was sure, for they had a continuity and a responsiveness to the educational balance of trade which would act as an ever-present corrective—a corrective which could only exist where continuity existed. The shrinking world would make that international index even more delicate, even more quick to point a way from the western continent or the eastern, the southern hemisphere or the northern, as the one or the other lost touch with life, or enmeshed in the net of practical construction again mistook the means for the end. That corrective gauge would be not only an incentive to greater effort in the schools and country towards which it pointed, but by its very avoidance of another would spur that school and country to a higher standard. The schools of his own country owed much to France. They owed also much to the fact that once their own students deserted them. The compass needle pointed south as well as north.

They could not all be on an equality; but the day would surely come when practice aided by theory would cast off the bonds of form precedent and suck from the dry bones of the past the living principles which created those forms, and theory guided by practice would take on new life and vigour in its mission of analysis of present-day needs and methods. The present no less than the past had its fetishes, its useless inhibitions.

Diminishing distances would tend to make them more alike, each country to its neighbour, each school to its rival, not in its exact system of education nor in its details, but in understanding of the basic aims of architecture, in its appreciation of architecture as a great interpretive art, an intangible language speaking in terms of the culture of the south or the east, the north or the west, but understood by all men or all times as was the story told by the Acropolis of the glory that was Athens.

ENGLAND.

On the future of architectural education in England, Mr. H. V. Lanchester said in looking towards the future they should in architectural education take up the same attitude as they did in the political sciences, namely, that of developing from present systems towards something that would be superior to them. Evolution was orderly and natural. Revolution, though on rare occasions the only possible road, was always expensive and uneconomical of energy.

It was impossible to formulate a scheme that would be generally applicable when they took into account the marked variation in individual capacity of those desiring to enter their ranks. Education might proceed on either of two lines. It might direct itself towards the enhancement and expansion of individual characteristics, or towards concentration on the less developed ones in order to bring those up to a definite minimum standard. It was easy to see that the first was more in harmony with nature and the world spirit, the latter being merely a regrettable necessity imposed by the social organisation of the day. In many of the arts they were free to adopt the former, and it might be possible to conceive conditions in which architecture could come into line with them, but they were not the conditions obtaining at the present time. Therefore education must effect a compromise with its highest ideals, and the task was to devise the mode of doing it with the least possible damage to the more valuable side of their work.

He was convinced that an inflexible curriculum was a mistake, and that whatever the general lines adopted might be, they should be capable of very considerable modification to meet temperamental variations in the students in order to develop the best. They had seen the inadequacy of examinations as a test of artistic capacity, and the same reasoning applied to a fixed curriculum. Theoretically, all education in the arts was at any one period a matter between one master and one student, and they had to keep that door open to the maximum extent practicable. Then, again, they had the difficulty that many sought to become architects who were incapable of achieving their aims and secure a solid position in the profession through qualifications that were valuable in connection with building, but were unrelated to architecture. He would by no means deprive them of that position, but thought it devolved on the educational system to differentiate between such qualifications and the faculty for design.

To his mind the defects of the system at present in vogue were mainly due to the steam-roller labelled "curriculum," which aimed at turning out every student with a certain uniform acquirement; of course, it could not succeeed, but in its effort to roll everyone out to an ideal pattern, a good deal of harm was done. To begin with, it disguised inherent disqualifications and thus failed to eliminate the unfit at an early stage; furthermore, it militated against the development of individuality in type, assuming that four or five valuable years might be spent by every student in similar pursuits with equal profit. The whole tendency of the age was towards specialisation, and even a single profession such as their own had become too wide in its scope for most of them to master all its ramifications, but while he regarded the form of specialisation that confined them to certain types of building as vicious, he hailed as beneficial that which made the design and conduct of building operations a co-operative effort. Possibly the school could not be expected to anticipate such a practice, but he felt that at the end of the course a differentiation in qualification should be admissible, such as "honours" in some branches and "pass" in others, giving some indication of the graduate's special faculties.

It must be clear that in the case of anyone destined for an artistic occupation some indication of aptitude would be evident at quite an early age, say, between eight and twelve, and though it was usually undesirable that studies should take a technical direction before adolescence, faculties of all kinds, especially those of observation and deduction, now too generally permitted to lapse, should be judiciously developed from the time they first appeared. Public schools had been just as wide of the mark in failing to effect this as their own professional ones, with less excuse. Educationalists are beginning to recognise it, and he hoped to see one day young people on leaving school presented with a certificate reciting what types of occupation they were likely to be capable of. It seemed quite absurd that a youth should go to the age of sixteen or eighteen without having his thoughts turned in any particular direction and should then be pitchforked into this occupation or that on grounds that were often quite inadequate.

Taking architecture as the case in point, the school tests would be ability in drawing, including imaginative aptitude, together with the capacity for grasping the science of geometry, which was bound to connote a sufficient measure

of mathematical facility. Those qualifications, or their absence, were conclusive, and were, or should be, within the curriculum of every school. A student with those credentials was not running a great risk in taking up a course in architecture, but it had yet to be discovered whether his imagination was vigorous enough to survive the discipline demanded in the technique of the subject, which was a most searching test. Original work in ornament and decoration might be carried on side by side in order to provide comparative results; they would not militate against architectural proficiency if the latter could be attained, but might offer an alternative route to imaginative design should the trammels of construction prove too stringent for the expressive faculty.

On the other hand, should the logical and scientific attitude of mind take charge it should then be possible for the school to open a route in that direction and secure a high degree of efficiency without having to tack on to it a guarantee indicating a high grade in architecture. Possibly those would be the exceptions, and the majority, if accepted only on a certificate and with the proper adaptations in the course of study, would be able to justify the adoption of architecture as their work in life, though the more searching test would come later. Much could be learnt, but those whose work would live for all time were but few.

He would like to add a few words on the place of what was termed a "liberal education" in the making of an architect. The outlook on life that such an education gave made existence mean so much more that was well worth possessing, but in view of his claim that the education of the artist must begin with his earliest years, they would naturally scent a conflict between the continuity of this and the demands of the broader studies. This continuity must not be broken, and if the artist could not secure the broader outlook through the windows of his art, he could only afford to seek it during his life with the balance of energy allowed him by his proper occupation. After all, an art was itself in great measure a liberal education, and such an education was a lifelong affair more accessible by means of an open mind towards what had been and now was than by a term of years devoted to specific studies. True education was the development of faculty to the utmost, whatever that faculty be, and only by keeping that clearly before them could they attain to the greatest results.

FRANCE.

M. Leon Jaussely (Government Architect, Professor of the "Ecole Nationale Superieure des Beaux Arts," Paris) said whatever opinion they might hold of the present evolution of architecture, it was undeniable that the evolution did exist, and that they were witnessing at present conscious or unconscious attempts to renew architectural forms and æsthetics. This renewal was more particularly noticeable in large constructions: large stores, bridges, churches, banks, cinemas, railway stations, airship sheds, &c., which they could consider as the expression of the monumental architecture of their times, and which logically should be compared with that of other epochs in order to understand the meaning of this architectural transformation.

Iron and cement and their compound—reinforced concrete—had rendered possible, owing to their elasticity and greater strength, a constantly increasing development of what must be considered the most important characteristic of modern architecture; considerable increase in horizontal spans in contrast with the reduction of thickness of the vertical supporting pillars or piers, spiritualisation of forms by the maximum utilisation of the strength of the materials. The proportions were the reverse of the former proportions.

In modern architecture, architects in general had not regarded those chief materials as noble materials, and had exercised their ingenuity to hide them when it was a question of a really architectural work. The reinforced concrete was covered with mosaics (rational) or with stone or marble facings (irrational), so that in the latter case the facing thus produced frequently gave the building the appearance of precariousness which it had not got in reality, and of bad utilisation of the apparent building materials.

The new æsthetics derived from these materials were, therefore, indicated first of all by the reversal of proportions and stressed by pronounced contrast between vertical and horizontal lines without any softening of line and form, of transition or passage from one to another. The arch had been almost completely abandoned. It might be said that these æsthetics were rather crude, arbitrary, and intentionally unpleasing. Their influence had been felt also in the architectural æsthetics of the materials formerly used, such as stone, brick, wood; horizontal lines predominated, curves were more and more avoided; opposition between vertical and horizontal was universal.

These new æsthetics were further characterised by the simplification of the membering and its reduction to a small number of elements, the search for the enveloping form and general colour, in place of detailed moulding; the decorative points were elaborate, and even precious, but very sparsely distributed and stood out from a bare background; the appreciation of volumes and masses was exact, the outlines were severe—the sobriety of these æsthetics excluded all mannerism. A new direction seemed to have been struck which could only become still more pronounced. It was a pity that constructive frankness of form is reserved chiefly to the interior parts, and that external decoration of the façades mostly did not correspond to it.

Did that new orientation demand a new teaching of architecture? It seemed that it must be so. The problems which the architect was more and more called upon to face were constructive problems of always increasing audacity, difficulty and complexity. This must lead the architect to become more and more a constructor, not in the narrow professional sense, but in the highest sense, bearing in mind that the architect must be in a position to solve architecturally any exceptional and most important constructive problems that may occur.

He could no longer be simply an artist who, as was the case still to-day, conceived merely the decoration, the clothing of the forms supplied to him by the calculations of the engineers; he must himself imagine the forms in their complete logic and rationality, construction and decoration being the product of one and the same brain. It seemed that was the capital point of the future teaching of architecture.

The beginners should be taught besides, at the very commencement of the study of architecture, to consider all the forms of the history of architecture of the great periods, Classical or Gothic, as chiefly constructive forms—which they were—and shown that the decoration merely brought them out, and that instead of covering everything the decoration was sparsely and very judiciously distributed to suit the constructive form. That was the great lesson taught by the fine periods of architecture. The evolution and the progress of architecture were in the fusion of the two spirits at present sharply distinct; the constructive spirit and the decorative spirit. Seen from that higher point of view, the teaching of the construction, that of the history of architecture and of the theory of architecture became capital points. From the first, all teaching must be directed by a study of the rationality of the forms of the past and a logical conception of modern forms.

Another important point of view in teaching was that of the conception of the building or of the construction considered as being situated in a generally harmonising environment. In teaching, attention had been chiefly given to the æsthetics of the work itself, but the pupils should be shown the value of the general harmony—natural or human—in which the buildings were to be erected, and the necessity of adapting the work to be built so as to ensure that harmony. In that sense, and wit insisting on the importance of the teachir "urbanism" from its purely technical practical points of view, the teaching o history of architectural urbanism was of highest importance and should not be negle but should form part of the general tea of architecture.

ITALY.

Mr. Gustavo Giovannoni also read a pap "Architectural Education in Italy in Future."

Italy, he said, was proceeding to carry a conception similar to that followed by F when it founded about twenty years ag Regional Schools by the side of the old Centrale d'Architecture in Paris. Whilst serving organic unity of the type of instru in such schools, it seemed advisable to in them a certain variety in the direction o both as regarded the study of the sul (different in a centre of industry and in a of monuments), and the study and inspir of the regional forms.

In Italy, in effect, in spite of a single ment having endured through different s in spite of the prevalence later of that which, from the sixteenth century to our t had become, with progressive transform a universal style in the monumental archite and partly also in the modest private arc ture, there had always remained in al regions a special character which, by degrees, passed from one centre to an It was just in this variety which logicall ponded to the various conditions of enviro and was expressed in so many noble monun that was to be found one of its most inter architectural characteristics. Also in therefore, the new architecture should accordance with the Italian formula of " vation in the tradition," and the local sent should be a substratum for new manifesta

In that way would be avoided illogical position of types and forms from one pl another, which transpositions represente negation of the sound conception of "en ment," that was to say, of the accord be the sentiments and the proportions of th architecturally perpetuated and the p In every centre with traditions of art the could begin with the survey and exact standing of the local monuments—not o the noblest, but specially of the humble in which the ethnical character lived to a g extent and the permanent elements found a and direct expression. When this idea be supported by positive knowledge, the g on the old trunk of new plans and new responding to the new conditions woul place automatically and naturally by r solutions, but harmonising with the e ment, which, in Italy, was an extrinsic e dominating the intrinsic element.

The following are further abstracts fr Gustave Giovannoni's paper on "Archit Education in the Present in Italy," sor of which was given in our last issue.

As regarded the artistic direction a method by which were incorporated int conditions of modern problems and pla those of the tradition, the principle f was as follows. In the beginning the was based on the one hand on classical for their laws, so as to mould the mind of the man into an architectural humanism sin that which the study of Latin produce general culture; on the other hand, on plans or schemes without that exagg either of the synthetic volumetric stud excessive care for the style. In that research very useful methods were to b in the manifestations of the spontane picturesque architecture of country hou the more highly developed and elaborat festations of the so-called minor arch which lived in the modest city houses gratings, small churches—which beauti streets by small local touches and solv natural manner so many problems troubled modern architecture.

sition in various styles of the past was carried out as a direct exercise of the architectural styles and of history of ure side by side with the sketching in book and making plans of monuments lying their restoration. These com- in style dealt, however, with genuine such as those of an old edifice with its nation and in its proper environment (a ouse in Ostia, a Gothic church in Siena, enth century palace in Naples, &c.), side the application of styles to modern

intended in that way to prevent from false ideas of style not based on any reason from getting hold of the mind of the young, which must be formed by essive exercises, with a relative freedom as controlled merely by the initial education and discreetly guided by the f the teacher. In the same way as difices had developed or were developing hitectural environment with a free and rmony, the single individualities must is instructional environment means of without being oppressed, having in merely the general ideas, the sentiment, age of architectural inheritance. And od began, in fact, to bear good fruit.

High School of Architecture in Rome s a special course for the study of nts which now began to function as a f the school itself. The object of this ourse was to develop analytical study y, technique, and art of monuments, of restoring them, and archæological pertaining to architecture; it was to become a centre of culture where would meet archæologists and s of art, to constitute, so to say, a for research in assistance to the roblem of restoration of ancient monu- d excavations, and to prepare in that lified technical and artistic staff to e State could entrust the task of pre- ne nation's capital. Its foundation had the transfer to architects of the study of the monuments, which was now y in the hands of other people who he necessary technical and artistic ion.

mber of students in the school of Rome d this year to about 150, and in the tural Section of the Polytechnic of about 60. These figures were still very mpared with the thousands of civil various schools of engineering and in nics in Italy who were sufficiently if not repared in the studies of architecture entitled by their leaving certificate to it. But it should not be forgotten that period of new foundation and of intro- of new ideas. The principle having n firmly established that the art and the n of a modern architect must be distinct ose of an engineer (contrary to the of studies which was more deeply n Italy than elsewhere), architectural taken in itself was found to progress and to reach the goal of preparing not xceptional architects made to raise and grandiose buildings, but a large of professional architects capable of with every concrete problem of When that reform came to maturity be possible to introduce a sharper sub- in the professional practice between s and civil engineers, who now worked me field.

necessary to make a brief mention of utions which completed the culture of after they obtained their leaving es, and gave artistic direction and finish ung. The national artistic foundation ecture, an institution somewhat similar f the Prix de Rome in France, was of nportance than competitions open to g; it was offered by the State every and lasted for two years. Numerous d private foundations enabled young who distinguished themselves to emselves to study before starting pro- work.

The competitions for young members instituted by the "Associazione Artistica fra i cultori d'Architettura" in Rome, a corporation which had for its object artistic and general culture, had lately acquired great importance as an adjunct to the official course of training. The subjects of these competitions were very modest and practical, such as projects of groups of small dwelling houses, of small country churches, of special building arrangements, &c., in which the young purified their strong sentiment for art, keeping far from the empty academy, the place of which in the modern nervous life became of secondary importance. By the side of those competitions a series of lectures, debates, visits to monuments or to works in course of construction, completed the education of young architects, brought them in contact with their maturer colleagues, and allowed that fusion between tradition and innovation which in Italy was necessary since it had to harmonise with the permanent and continuous character of its architectural manifestations.

The results were very satisfactory and promising. All the energies of the new generation converged now in the effort in a single direction. The dead centre had been passed, and the young saved Italian architecture and restored it to its nobility. The fifty years of aberration in the teaching of architecture, now surmounted, had not in fact left unaffected the average architectural works, though, of course, that does not imply depreciation of some monuments of high importance such as the Monument to Victor Emanuel, the Palace of Justice in Rome, &c., that had been produced in that period. Unsuitable and irrational imitations of styles vulgarised by speculation had too frequently alternated with the application of exotic fashions without the architects remembering that national style in architecture was a positive reason rather than sentiment, and that ephemeral caprice was inadmissable in permanent manifestations such as architecture which was settled by extrinsic rather than by intrinsic conditions.

Discussion.

Professor C. H. Reilly said looking at their English towns, what did the nineteenth century schools give them? They gave egotism and rank individualism. In place of the urbanity and continuity of the eighteenth century they had the riot of free architecture which produced towns like Wigan and Bolton in the North and thoroughfares like Oxford-street and Fleet-street in London. It was because the individualists of the nineteenth century broke through all the rules and restraints that had grown up through centuries that to-day they had nearly all their buildings overloaded with unnecessary features and ornaments. Modern French and American buildings were clean and restful structures in comparison. The great achievement of American building was that the general level of the worst buildings had been raised. Only the co-operative spirit, the sense of responsibility to the community, could successfully combat individualism and restore again something like order and decency to their towns. This was the chief problem of the future and the solution of it was the chief contribution the schools of architecture could make. If they solved it, it would be because they had learnt from France the right method of approach to a problem and the value of a logical solution.

By accepting French logic they learnt to build with restraint and dignity, but they had a long way to go before they reached American standards. In American schools they had 5,000 students; in England they should have, not 686 students, but 2,000. If English offices could reproduce the spirit of comradeship the schools possessed, students would not be so depressed on entering them. Mr. Waterhouse had mentioned the spirit of the offices in the eighteenth century; if only it were as general to-day they might hear less of the divine inspiration of the great architect, but they would have a prouder and better spirit of work. Enthusiasm was too valuable to be lost in offices run like factories. It was important that programmes should be set that called for simple, monumental solutions. If they did big things simply and directly they would do little things with distinction. It was not possible to enlarge a cottage into a palace. There were two schools of architecture in England at present: one derived from the association of the domestic hearth, and the other from the Roman Forum. He, Professor Reilly, would choose the latter.

Mr. Howard Robertson said he entirely agreed with Professor Reilly with regard to his defence of the schools in respect of generally raising the standard of architecture. They did not want young men not fitted for architecture, and self-respecting schools rejected them. The trouble seemed to be to decide what constituted an architect; there were many differences of opinion as to his function. The opinion had been expressed that his function was knowing everything about the feel of materials. Then there was the business man in architecture who got jobs and hired them out; they were better without him. Then there was the type mentioned by M. Jaussely; a big man who was not worried by details of construction, but was concerned with the big problem of handling form with the materials and construction available. Lastly he would include the ordinary small man in practice who had a feeling for craftsmanship. All those people came into the schools to be trained. The only conclusion they could come to was that they had different types and could not make the curriculum too inflexible. It was questionable whether five years was such a long period that a man could not go through it without having individualism crushed.

The following letter from Professor Lethaby was then read:—

Architecture: Design, Education.

"The problem, what is the right kind of education in design for architecture is difficult to discuss, for the words are so variously understood in different minds that they stand for three unknown—or at least, ill defined—quantities: architecture, design, and education. Two or three years ago I tried to draw up a short statement of what I thought might best be meant, and when it was shown to an able man he seems to have been quite interested, for he remarked, 'It expresses exactly what I don't mean.' The subject is generally discussed as if it involved deep metaphysical questions to be argued over like a theology, and the amendment of educational processes is likely to be as difficult as to reform the Book of Common Prayer.

"What I think should be meant by the words must be plainly said at once. By 'architecture' we should understand the whole building work of a time or country; by 'design,' arranging how this work should be done; and by 'education,' training in the same.

"On the very first point, that 'architecture' must mean the whole of building work (I must not say art here, for that word is another nest of ambiguities), it will be said that most of this work is obviously unworthy. Just so! it is unworthy architecture! It is impossible to draw any line giving architecture a superior status to building that does not result in defining it in such a way as may leave some of the best and most beautiful buildings in the non-architectural class, while retaining some of the most dreadful ones within the fold. Secondly, it is thus we use the word in regard to the building arts of past times. Thirdly, it is only by bettering the whole body of building that we shall be able to raise the summit. Fourthly, to seek to improve the whole custom of building in a country seems to be the only motive big enough to worry about.

"By design I mean the reasonable for seeing how sound work shall be done. Design in the modern sense of contriving striking 'effect' was unknown in ancient art. Custom was then the designer, requirement was the definer. Design as *design* is a modern disease. We have to get rid of 'design' in the discovery of the inevitable. It appears to students that to be a competent architectural designer is to be a master joker in whim-works. I must say that it is as silly to design modern buildings in the styles of school competitions as it would be to

design ships and engines in anxiety about massing, composition, lines, proportion, and all that. The truth is that engines and ships, having reality and being organic structures, have form and style, too; whereas the compositions in 'looking so' have only the style of a style.

"By education we must mean the best possible training in a sound knowledge of fine procedure in building. It is not necessarily attendance for many years at a school. Schools may doubtless teach many things, like planning, geometry, mathematics and drawing, but school education must be supplemented by direct contact with hard material and real problems. Even in what is done in the schools, it should be reconsidered whether they are done in the best way. Drawing itself, if I may venture to say so, is in danger of being thought of as a way of preparing fascinating winners in competitions, not as the best way of representation. Fine and sincere drawing is undoubtedly a personal discipline, little as it has to do with the hard realities of building. To the young student, I should like to say—so far as you are permitted—put structure in the place of style; put craftsmanship in the place of draughtsmanship; and put science in the place of archæology.

"Old building art was essentially different from ours. It was folk custom freely interpreted by little masters who were of the same class as the executants, and it was done for local understanding in local ways. It was often small and shy, yet always showed the human soul. Its essence was craftsmanship. Modern building in cities has to be planned by experts trained in universal science who order from a distance executants with whom they have little direct contact. Its type is engineering.

"One was intuitional and immediate, the other is intellectual and international. All attempts to make modern highly organised building resemble the old free craftsmanship are foredoomed to failure; we are fighting against the essence of the thing instead of seizing that of making the best of it. Although it may be anxiously provided that there shall be none but handwork, the result is all the more subject to the machinery of plans, specifications and contracts, and you reach less freedom rather than more.

"In country building it might to some extent still be different if we approached this work from the end of craftsmanship, local custom and materials. There might well be a difference between city and country buildings, and the kind of people who undertake them. Always, too, all decorative matters should be the contribution of independent artists. Decoration is of the nature of poetry, and machine-made poetry is really an unnecessary mistake.

"Although a great gulf is fixed between the past of architecture and ourselves, all frantic efforts to form any new and original style are misguided and the results seem to me worse than the dead style stuff to which we are accustomed. You cannot make originality, you must find it. True style is not a whim, it is the expression of that which is within.

"As I see the problem there are two great ambitions open before us: To be better builders and better structural engineers. There are two main approaches: (1) From the side of workmanship, the knowledge of materials and methods; (2) from the side of science, mathematics and books. These two paths, however, must be drawn together; the scientific man should go through as much shop drill as possible, and the practical craftsman must have book knowledge, too. Art and science have to be re-intergraded. I should like co-education with builders and engineers.

"The 'styles' should not so much as be mentioned among you. There is something shameful about talk of such vain superstitions which, in fact, stand in the way of our working towards true style. We have too long tried to impose 'styles' from outside, whereas true style and vital forms are always the results of growth from within. In the place of style dreaming we must put the idea of structure life, energy, activity.

"By structure, I mean something quite different from what is ordinarily meant by construction, the safe putting together of a style-design. What should be understood is an organic principle directed towards the perfecting of building types, including skilful planning, suitable selection of materials, adequate lighting, warming, roofing, efficiency, endurance, economy, I mean a sort of building crystallisation, the entering on a line of development like those which have produced the ocean liner, the engine, and the aeroplane.

"It is a big matter which requires a great effort, and I wish I could suggest a motive strong enough to be a counter-attraction to the distinctions and prizes that are to be won by designing draughtsmanship 'architecture' in the air. All I can point to is the reason of the thing and the public service the architect who can improve ordinary buildings—for example, the small dwelling house—will be a benefactor to his country. Moreover, the nation which develops a school of structural architecture will necessarily lead the others. We shall have to copy wisdom if we cannot discover it for ourselves. If we won't look forward we shall have to 'look out.'"

Mr. W. W. Scott-Moncrieff said in the matter of architecture all nations should have their own individuality, and, for this reason, he made an appeal to his own country to strike out a line in architectural education and stick to it. The system that might be right for France or America might not necessarily be right for England.

Mr. C. R. Ashbee said with regard to architectural education of the future, they must include social as well as technical education. There were five points which were not sufficiently considered. First, the architect and the profession generally must get to know the workman—what he stood for and what he did not; and what was the cause of the chronic discord between masters and men? Second, in architectural education of the future the question must be studied as to what was right or wrong, logical or illogical, with regard to machinery. They had so far regarded it empirically. Third, the architectural schools had come to stay, but it was necessary to remind themselves that schools must always remain imperfect instruments of architectural education, and that they still continued to be divorced from life. The craft and technical vocations could only be learnt in the workshops of those who were practising for a livelihood. Therefore, they should distrust schools, particularly technical schools. Much of the finest building, old and modern, had been done by men who could not, in the accepted sense of the word, draw properly. Fourth, the architectural education of the future must give heed to the humanities. Lastly, when attempting to solve some of those problems, they must not forget how much damage had been done by the war. The architectural education of the future would have to take the thread up from where it was dropped in 1914.

MM. Carl Brummer, Jean Hébrard, A. Defrasse took part in the discussion.

Professor Beresford Pite said he would like to draw attention to two matters. First, the important move which had recently taken place in the recognition by Cambridge University of the importance of architectural study, and the admission of architectural studies into the curriculum of the University. The great need of architectural education in the future was not students, but teachers inspired with wide ideals which far exceeded the requirements of a curriculum. Teachers who could create schools, and whose personal influence would replace the loss that architecture was sustaining through the lack of individual masters. The other point he wished to emphasise was the very interesting letter from Professor Lethaby and the important speech of Mr. Ashbee. For some time now, about two years, a group of architects had been meeting in London to consider the possibilities of an ideal for architectural education.

After M. Horta, M. Victor, Mr. Foster King, and M. Vladimir Jezek had taken part in the debate, the Chairman closed the discussion.

THE BANQUET.

A banquet in connection with the C was held at the Hotel Victoria, Charing on Thursday evening. The President Royal Institute (Mr. J. A. Gotch) occup chair, and amongst those present wer Crawford and Balcarres, Sir Reginald Bl Sir John Burnet, Sir G. Gilbert Scott, S Simpson, Sir Cecil Harcourt Smith, Si Sulman, Sir A. Brumwell Thomas, Sir Walston, Sir Lawrence Weaver, and Me D. Adshead, A. Annoni, T. P. Benn Bèrard, C. Boni, W. A. Boring, Carl Br L. B. Budden, H. P. Cart de Lafontaine Cordonnier, H. O. Confiato, H. C. Corle E. V. Crompton, P. D'Achiardi, A. J. E. Guy Dawber, A. Defrasse, Rudolf Franz Drobny, W. Emerson, H. M. F Cass Gilbert, Charles Girault, H. S. G Rendel, W. Curtis Green, Stanley Ham Hebrard, M. L. Jaussely, Gilbert Arthur Keen, Erik Lallerstedt, H. V. Lan A. Louvet, Ian MacAlister, Mervyn Ma A. R. Mercato, M. O. Monasterio, Monson, W. G. Newton, R. Ostberg, E. ridge, A. Beresford Pite, W. S. Purcho Reilly, Howard Robertson, D. F. Slot M. J. H. Somakeo, Arthur Stratton Sullivan, R. Unwin, C. F. A. Voysey Warren, Paul Waterhouse, Maurice C. J. H. Worthington.

Proposing the toast of "The Pro Architectural Education," MR. GOTCH thought they would all agree that archi education was now so firmly established to the progress which had been made recent years, that its continued progres future might be taken for granted, a might drink the toast with a light he success depended in a large measure teachers, and to them and to the P Architectural Education they owed a d of gratitude. He was happy to believe teachers took a wide view of their resp ties, for education was not merely the ir or acquiring of knowledge but the pr sharpening the faculties and of de innate powers to put to good use the kn which was acquired. He had little do architectural students avoided the d becoming too learned, of being too th armed against the forces of ignorance an petence, and thereby rendering themselv to share the fate of the unlucky kni was smothered in his own armour. same time, in architecture as in anyth a little learning was a dangerous thin students had their own interests at he would quaff deep the draughts which out to them by the architectural school architectural students in other counti working to some purpose was manifest splendid exhibition of their work at G House, which had been one of the features of the Conference, and that t supported by their distinguished co was evident from the welcome prese many eminent architects from overseas attended the Conference in most circumstances, which promoted the all nations could be as closely united in they were in art. He coupled with the names of three of those eminent r Girault, whose singular genius had alre recognised by the Institute by the awa Royal Gold Medal; Mr. Cass Gilbert, most distinguished architects of Ame was showing a lead in modern archit such brilliant examples as the W Building; and Mr. Ostberg, of Swed splendid design for the new Town Hall holm had been exhibited at the Inst had filled them with deep and genu ration.

Messrs. Charles Girault, Cass Gi Ragner Ostberg responded.

MONSIEUR GIRAULT expressed, on the architects of France, their great p having had an opportunity of atte Congress. He would assure them had taken a very great interest in the e views on education which had been in the discussions, of which they wou

ge. If the different groups of people reason of their different countries, their customs, their social state, adopted methods of practising the art of archi- t did not matter so long as the great s of the art could be made to serve as of study for the architecture of the in which the architect practised. An miration should be reserved for me- rchitecture and for the beautiful archi- f ancient times. In considering the to be used in building, they should account the climate, the ways of the nd the temperament of the people, logically the problems which had ut the ages confronted mankind. to transport the methods of one into another without knowing the s and customs of the country in which od of building originated was illogical, not the way in which would be pro- uilding which would be the admiration who beheld it. When, in order to recordance of civilisation; it was, in fact, the recordance of life itself. It was always of its own time. It might sometimes try to imitate, but it could not do so successfully because the conditions were always different with each age. Architecture reflected the conditions and civilisation of the age in which it existed. Whatever was taught in the present, the architects of the future would, consciously or unconsciously, record indelibly the civilisation of the age in which they lived. It was said of Solomon that he was the wisest of men because he was the most learned; therefore, teach wisdom, teach understanding of the spirit of things, of the spirit of the age. It was the spirit they should teach—let imagination run, for the trained mind would cover an active imagination and make it more useful for the present and more valuable for the future. It was up to the architects of the present to keep burning the torch of yesterday, and pass it on to the eager age of to-morrow. He and the other delegates all felt grateful for the opportunity of attending



The Cover of the Congress Banquet Menu.
Designed by Mr. GERALD MOIRA.

their young architects, they placed eir eyes the best examples of the past, t to incite them servilely to copy those , but that they might apply themselves ining of a knowledge of how the great of the art of building had gone about rk. Past generations had left im- e monuments which were witnesses ability in the art of architecture and so were records of the customs and nd religion of their times. Architects resent should not confine themselves ng monuments to meet the popular but should in every case satisfy them- at the laws of hygiene were followed the buildings would be healthy and habitations. More than ever the study ecture should concentrate on the study houses. Perhaps it was hardly neces- mphasise this to their English *confreres* given them a lead in the design of class dwellings, for it was with un- dmiration that the foreign delegates the housing schemes in this country.

ASS GILBERT said architecture was the Conference, and would carry the memory of it as another event in the history of the Royal Institute of British Architects.

MR. OSTBERG said Swedish architects had the habit of cultivating in their northern country the architecture of the Greeks 2,000 years ago, and that could be seen reflected in their modern buildings.

MR. PAUL WATERHOUSE, proposing "Our Guests, Foreign Countries, and the Dominions of the British Empire," said when it was remembered that the Congress represented no less than seventeen Dominions and foreign countries, they would realise what a big task he had been set in proposing their health. At the conclusion of a witty speech, in which he addressed the foreign delegates in French and introduced some couplets suitable to the occasion, he said it was in no artificial parlance of the dining-room, but with a very feeling heart, in which all his English friends joined, that he asked the Englishmen present to drink the toast.

MR. H. K. STABELL, in responding, said on behalf of the nations invited to the Congress, he expressed their most hearty thanks for the hospitality they had received and the ideas they had gained on architectural education. The Congress had been very successful, both on account of the very interesting lectures they had heard and the opportunity it had afforded of discussing the subject. The representatives of the different nations would go home and discuss the different ideas they had learned, which he felt sure would be reflected in methods of architectural education in the near future.

SIR GEORGE SULMAN said as an Anglo-Australian, he need hardly assure them of the loyalty of the Dominions—that was proved in the late war—but he would assure them of the loyalty of architects in Australia to the Royal Institute, whose footsteps they endeavoured to follow. They might have some slight differences in method, and perhaps they occasionally made a forward step on their own account as, for instance, the obtaining of registration a year or two ago by the Institute of Architects of New South Wales. He felt sure members of the R.I.B.A. could rejoice in the activities of their Australian brethren. The Conference had been most valuable, and he would take back to Australia many ideas, and hoped to have opportunities of spreading the knowledge of what was being done in this country. In Australia architectural education had not developed as it had in this country; there were only one or two schools, but they would grow. He had been struck in listening to the discussions by the fact that although they differed in matters of detail they were all anxious for the well-being of their profession, for its greater influence in the world, and especially for the benefit of the generation which would take their place in the world. In conclusion, he expressed the opinion that before long, with the development of wireless telephony, it might be possible for the Royal Institute to have for its President a representative from one of the Dominions.

PROFESSOR WELLESLEY MCCONNELL also responded, and expressed his appreciation of the hospitality the delegates had received.

VISIT TO GREENWICH.

The visit to Greenwich on Friday by launch was a great success. Weather conditions again appeared somewhat unsettled, but the delightful greys and opalescent tints of the immobile clouds stirred our foreign visitors to enthusiasm and one heard on all sides such comments as "*C'est épatant ces tous gris!*" "*C'est ravissante cette brume!*" At our departure, the tide was at its highest point and the wavelets and eddies caught in infinite variety the tones of blue and grey, the mellow shafts of golden light which now and again illuminated the passing panorama of the bridges, warehouses, wharves, and other buildings on either bank; while the graceful silhouette of the spires of the City churches and the dome of St. Paul's completed a picture of enchantment.

Chief among those whose duty and pleasure it was to describe this panorama of architectural achievement and historic interest was Mr. John Burns, who must have created a record with a continuous flow of descriptive and informed comment from Lambeth to Greenwich. This, however, by no means exhausted our Honorary Fellow's fund of information, as he repeated the performance on the return journey.

On arrival at Greenwich, our launch made a wide circuit of the river and thus enabled us to get an excellent view of the famous Hospital and the Queen's house beyond, with the fantastic outline of the Observatory on the skyline behind. After a welcome tea at "The Ship" Hotel, the delegates were shown over the Hospital by Mr. T. C. Agutter, architect to the Royal Naval College, who explained the manner in which the buildings had been constructed and how the necessity of providing access from the Queen's House—then a Royal residence—had resulted in the open plan with two blocks of buildings on each side of the central avenue. Of these, the block on the west side is the earlier and is supposed to have been carried out

by Webb. Sir Christopher Wren subsequently made additions to this block and planned the block to the east of the main avenue, together with the two colonnades which form a distinctive feature in the whole scheme, with the Chapel on the east and the famous Painted Hall on the west. This latter particularly interested our foreign colleagues, both on account of its admirable proportions and for the magnificence of the scheme of decoration. A brief visit was paid to the Queen's House, designed by Inigo Jones, forming the central feature at the end of the central avenue with two wings of later date on each side. The central hall was admired and its excellent proportions commented on, as were also the fine ceiling and curious mosaic floor.

The return journey proved even more agreeable than the outward trip, as the sun had, to a great extent, dispersed the clouds, which were massed in towering beauty behind the towers and spires of Westminster.

VISIT TO CAMBRIDGE.

The all-day excursion to Cambridge arranged for the penultimate day of the Congress proved to be a great success; in fact, several delegates from distant lands expressed the opinion that it would have been worth coming to England for this excursion alone, as few of them had any idea of the distinctive charm which is so marked a feature of each of the two great Universities.

The arrangements for the visit (as indeed for all the excursions and visits which took place during the Congress week) were well thought out and worked smoothly, thanks in great measure to that indefatigable secretary, Mr. Everard Haynes, who was ably assisted by the small band of stewards and interpreters. Their success received the best of all tributes—the lack of any comment. The party assembled at the Great Gate of Trinity—surely one of the finest gateways in England—and after a concise summary of the distinctive functions of the University and the Colleges by Mr. H. M. Fletcher, proceeded to the Chapel and Hall, admired the great Quad., and passed on through Trinity to the famous "Backs," with their picturesque charm and wonderful lawns. The latter, as always, were a source of astonishment to our foreign friends. A rapid visit was paid to St. John's, where the "Combination Room," a delightful example of the domestic architecture of the period, with its old panelling and fine modelled plaster ceiling. From St. John's we made our way to Caius and Gonville, where the party was entertained to lunch in the Hall. At the conclusion of our repast Mr. Dawber proposed a vote of thanks to the University authorities in a few graceful and well-chosen words. The Vice-Chancellor, in his reply, referred to the importance of architectural surroundings as an adjunct to the culture which it was the mission of their university to impart and expressed the pleasure which they had in receiving the delegates to this important conference.

After lunch a visit was paid to Magdalen College and the Pepysian Library was inspected before we proceeded by private motor bus to the new buildings of Clare, designed by Sir Gilbert Scott, R.A. Here we were met by the architect, who briefly explained the building. This is rather a departure from the usual type of college building, of singularly happy proportions, treated in grey brick with stone dressings and a red tile roof. In the centre is a memorial gateway of characteristic design. The old buildings of Clare were next visited, and we then proceeded to King's, and inspected King's College Chapel under the guidance of Dr. Cranage. From here rapid visits were made to St. Catherine's, Queen's, Pembroke, and Emmanuel before returning to town. As before, part of the party returned by car and the remainder proceeded to London by train. The car section further divided *en route* as some of the party made a halt at Hertford for dinner, and at the conclusion of this repast Professor Boring made a charming impromptu speech, in which he expressed the thanks of the foreign delegates for the kind way in which they had been received.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

**** ***We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.***

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

[Reply to "PERPLEXED."]

SIR,—I am not quite clear as to the nature of the contract between your correspondent and the person he refers to as the "purchaser." It almost appears as if the latter was only an intending purchaser, in which case there is considerable difficulty, as the subsidy is payable to the person erecting the necessary type of house and application is not accepted in respect of houses that have been already erected, which precludes a fresh application on another's behalf.

If, however, the terms of the contract permit of the "purchaser" establishing this title to the house, and his withdrawal can be made to take the form of a re-sale to the contractor or to another purchaser, then the original applicant for subsidy is entitled to claim the same although the property has passed out of his hands, that is, of course, provided the local conditions as to occupancy within a certain period from completion have been complied with. He thus becomes the person who has erected the house. It would, therefore, be well to consult a solicitor with the object of putting the transactions into correct form, and I do not think there should be much difficulty in so doing.

In future transactions of a like character, where your correspondent erects houses with a view to sale on completion, it would be well if he applied for subsidy in his own name, and he could then claim the grant when the house became occupied. "X.X.X."

Corrugated Iron.

SIR,—Considerable trouble is experienced on the underside of roof and inside walls of a large works covered with corrugated iron. This was painted about two years ago with oxide of red paint, which is now coming off in flakes and powder. The difficulty we are contending with is that *rust* comes off the corrugated iron sheets in the form of dust and settles on our stock, which causes stains. There is water used in our works and it causes a lot of damp vapour. Would some reader give remedy?

"Z."

[Reply to Mr. THOMAS TILE.]

Drainage.

SIR,—The open manhole cover as a fresh-air inlet is always objectionable in the vicinity of a dwelling-house, and would be rightly condemned by a surveyor, though he will doubtless require it to be replaced by a proper mica-flap F.A.I.

The present position of the interceptor will not prevent back flooding and the required position will make no difference in this respect, though it rightly throws a long length of drain into the ventilated section.

Water-tight cess-pools will always overflow in time if no provision is made for the disposal of the contents. Most rural authorities undertake the periodical emptying of cess-pools, but where this is not so, the objectionable operation may be avoided by the adoption of a septic tank system, the effluent from which is almost pure and can be allowed to soak away through a filter bed of destructor clinkers. The requirements are that the septic tank must be absolutely air- and light-proof, and the inlet and outlet pipes must dip well below the liquid surface, to allow the scum to form and develop undisturbed.

"SANITARY."

Cement and Other Foundations.

SIR,—I have recently had to put in fou tions to carry a stone for a memorial weig about four tons. The work is under the s vision of a well-known archæologist, who w to me as follows:—"Cement is quite an unk quantity as regards its durability over a period and should therefore not be used. only thing to do is to carry to the spot flin small stones, a certain amount of fragmen brick and sand, also unslaked lime. The should be well mixed up and then (and before) water should be poured on and being thoroughly mixed should be used wi delay. This is the only way and will set so that it will be just as good in a thousand as it will be in a few months' time." I sh be glad to know if the above statement justified by facts.

"CLERK OF WORK

Floor Treatment.

SIR,—What is the best treatment for sound oak floors in a club? We do not wi stain the boards or varnish them, but to something which will bring out the grain put "life" into the boards.

"J.

Leaking Walls.

SIR,—A house built about five years ago 14-in. walls in cement and rendered outsi cement left from the float, persistently le water through. No settlement cracks noticeable, but pronounced crazing has place in some of the outside rendering an damp patches inside are most noticeable this occurs. The walls are cream distem outside.

Can anyone suggest a cure for this troub

"ARCHITEC

Provisional or Copy Amounts.

[Reply to "ARCHITECTUS."]

SIR,—Provided the architect takes ca word his orders for goods from sub-contr appointed by him so that they clearly re orders for the general contractor to ord goods from the firm concerned, his fin responsibility therefrom begins and ends he has duly certified for payment, an sub-contractor has no financial claim upo except in cases where a certificate has withheld without justification. The pr should be made clear to the sub-contr when they are advised of the issue of an to the general contractor. There is a deal of laxity in these matters, and architects order in their own names and accounts to certify when rendered dir them. This is a very irregular and unbus like practice, and architects have been responsible for payment in some such where the general contractors have fail

"X.

London Housing.

Up to the end of March the L.C.C.'s capital expenditure in respect of housin £15,499,566. Their pre-war housing oper as a whole (apart from the cost of cle schemes, &c.) have resulted in a surp £106,984.

For the current financial year the total sums to be voted on capital account is £1,9 in addition to which £1,580,000 is in under the heading of provisional sums to expenditure on purposes not yet spec approved by the Council. Of the amo £1,909,900 now to be voted, £1,169,040 to such development of the Becontre Downham estates as has been approved Council. A sum of £50,000 is provided fo sum grants under the Act of 1923 in of houses erected by private enterprise. the Armistice the number of hous tenements completed is 8,570, and of th houses and tenements under construc large number are nearing completion.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Building Materials Bill.

Prime Minister informed Sir K. Wood e Building Materials (Charges and Supply) ould be one of the first measures that the ment would invite the House to con- n its reassembly in the autumn.

Bricklayers' Labourers.

K. Wood asked the Minister of Health r he could state the arrangements he ade concerning the facilities to be given y bricklayers' labourers might rapidly e fully-fledged craftsmen ?

Wheatley said the National House g Committee on which both employers eratives were represented, proposed in eport to give special consideration in the pment of their apprenticeship scheme to nts such as building trade labourers d had previous experience of the building

Returned Emigrant Bricklayers.

K. Wood asked the Minister of Health r he could now make a statement as arrangements he had made with the ional authorities for the training of tice bricklayers; whether the period of ticeship would be thereby curtailed; and r he could give any estimate of the r of returned emigrants that might be d to return to the building industry the next twelve months ?

Wheatley said he was not yet in a position e a statement as to arrangements with onal authorities. It was obviously im- e to frame any estimate of the number grants likely to return within the next months.

A Guaranteed Week.

Wheatley informed Lord H. Cavendish- ck that the question of the adoption of anteed week was one for settlement by lustry itself. He understood, however, efore the present dispute arrangements en made within the industry to refer the n of payment for wet time for negotiation ttlement.

Monthly Return of Apprentices.

Wheatley informed Sir K. Wood that he eady undertaken to consider, in con- n with the Industrial Committees he d to set up, the possibility of obtaining hly return of apprentices. He could not ake, however, to furnish this information iculars of the men employed on housing s during the Recess. The present from local authorities did not provide information, and it was impracticable ain particulars of the number of men ed by private enterprise on housing

Rents of State Houses.

Meller asked the Minister of Health r he was now prepared to state what ements he had made to meet the dis- that would arise if houses built under housing schemes were let at a lower han houses of a similar type built under s Housing Acts ?

Wheatley said he did not anticipate that ficulty which the hon. member had in would arise and he did not propose to ny arrangements at the present time.

A London Scheme.

unt Curzon asked the Minister whether, giving his approval to the erection by the County Council of five-story dwellings ing about 537 tenements, with accom- on for over 3,200 persons on a site of ight acres at East Hill, Wandsworth, a involving the erection of approximately es to the acre, his attention was drawn Wandsworth Ratepayers' Association to nistry of Health Circular 388 A, of 15, 1924, expressing the opinion that the of approximately twelve houses to the acre represented a desirable standard, and that, as a general rule, a local authority should not approve the building of more than 20 houses on any one acre; and on what grounds he gave his approval to this scheme which involved the construction of roads of a less width than 40 ft. and of a steeper gradient than 1 in 20 which were the minima prescribed by the London Building Act, 1894 ?

Mr. Wheatley said the scheme was approved before he assumed office. He understood it was the intention of the London County Council to use this site as a rehousing site in connection with schemes for the clearance of insanitary areas. In view of the scarcity of suitable sites for rehousing in the County of London, and of the altitude and open situation of the site in question between the river and a large common, it was considered that some departure from normal standards could be justified. This decision was reached after full examination of the objections raised.

Hadrian's Wall.

Major Church asked the First Commissioner of Works whether his attention had been called to the suggestion to restore certain parts of Hadrian's Wall; and whether he would give his earnest consideration to the project, seeing that it would provide work for a certain number of unemployed under skilled supervision and at the same time present to the nation a memorial of great historical and educational interest ?

Mr. Jowett said he could assure the honourable member that a project of this kind would be viewed with the greatest sympathy by his Department. There was, however, no part of the Wall in the charge of the Department, and under the existing legislation dealing with ancient monuments the Department was not empowered to spend money on repairs or excavations on monuments not in its charge.

Emigration of Skilled Workers.

Mr. R. Morrison asked the Parliamentary Secretary to the Overseas Trade Department whether his attention had been drawn to advertisements now appearing in the press, inserted by the Empire Settlement Bureau, offering assisted passages to one of the Dominions to skilled carpenters, bricklayers, plasterers, masons, and plumbers; and, in view of the great importance for house-building purposes of retaining as many of these skilled workmen as possible, whether he would see that these men were not encouraged to emigrate.

Mr. Lunn said that the answer to the first part of the question was in the affirmative. As regarded the second part it was understood that the advertisement had been authorised by the Government of Australia; that the number of skilled workers required was strictly limited, and that the opportunities offered were likely to be advantageous to the individual. In those circumstances, it had not been considered desirable to interfere.

Non-Parlour Houses.

Mr. Wheatley informed Sir K. Wood that the following were the average prices of non-parlour houses (excluding cost of land and development), included in contracts let by local authorities during each of the months from January to June, 1924, the latest date for which figures were available:—January, £384; February, £389; March, £418; April, £416; May, £408; June, £421.

Houses Built in London.

In reply to Colonel Vaughan-Morgan, who asked the number of dwelling houses erected and in course of erection, in the County of London, and in the area of Greater London within the last three years, Mr. Wheatley said that in the County of London the number of completed houses was 12,594. There were 1,512 in course of erection, making a total altogether of 14,106. The number completed by private enterprise without State assistance, the figures for which were only available for the eighteen months prior to March 31 last, was 2,563, while 1,379 were in course of erection, bringing the total up to 3,942. There were 25,768 dwelling houses completed in the Greater London area (including the county), and 3,801 in course of erection, a total of 29,569. Those completed by private enterprise without State assistance for the eighteen months prior to March 31 last numbered 16,663, there being in course of erection 8,739—a total of 25,402.

Brickfields Development.

Mr. Richards, replying on behalf of the Minister of Health to Mr. W. Thorne, said that the report of the National House Building Committee showed that all the brickfields of the country were not yet working at full capacity. The Government had taken the most practical steps for securing an increase in production, by the adoption in the new Housing Bill of a long programme of house building which would enable manufacturers with confidence to develop their resources and increase their output.

The Building Dispute.

Mr. Shaw, the Minister of Labour, in answer to Sir K. Wood, said that the situation in regard to the building dispute was more complex and difficult than any he had ever known. He found that neither the employers nor the men believed in the good faith of the other. That being so, the difficulties were very great indeed. There would, however, be a further meeting of both sides on August 6. As to what the extra cost on housing would be if certain eventualities were to arise, that was a hypothetical question which might be left to the future. It would be perfectly easy to make an attack either on the employers or on the men—there was plenty of ground for it—but it would be wiser to allow the industry to come to its own conclusions.

THE HOUSING BILL.

The House of Lords considered the Housing Bill in Committee on Monday, August 4.

Before going into Committee, the Earl of Midleton moved "That this House resolves that, having regard (1) to the great charge on public and municipal funds involved in the Bill; (2) to the deficiency of skilled labour and increasing cost of materials; (3) to the consequent delay and enhanced cost in erecting the necessary houses—an immediate inquiry should be set on foot by His Majesty's Government as to the possibility of building houses of other materials than brick, which could be erected more rapidly and at less cost." The noble Earl referred to the speech of Lord Weir on standardisation (reported in *The Builder* last week), and said the Government had two alternatives to consider in view of the high cost of brick houses and the shortage of bricklayers. The first was Lord Weir's house, which could be produced for less than £300, and the second was the undoubted facilities that existed in Canada for building wooden houses on a system that would not require the labour of carpenters in this country. These houses could be sent over here by the hundred thousand as quickly as we could put them up, and could be provided in the opinion of those who knew, at from 20 to 30 per cent. less than a brick house. Wooden houses could also be obtained from Scandinavia. Further, there were houses made of wood and concrete which could also be produced at 30 to 40 per cent. under the cost of a brick house. If either of these alternatives were accepted the emergency could be met for three or four years, but there was no possibility that that could be done under the Government's scheme with brick houses.

The Lord Chancellor, on behalf of the Government, accepted the motion, saying that it did not really go far enough. The Minister of Health intended to hold an inquiry, the scope of which would be wider, with regard to points connected with production and economic distribution. It was a great mistake to suppose that there would be any hard and fast way of building the new houses. All such propositions such as those put forward by Lord Weir would be considered. Even the wooden houses from Canada and Scandinavia might be considered. In fact, any proposal which would produce

houses quickly and cheaply would be looked at gladly.

The motion was agreed to.

The House then considered the Bill in detail. Few alterations of substance were made. On clause 3, which deals with the conditions to be attached to the letting or sub-letting of houses, the Lord Chancellor moved an amendment to provide that consent should not be given to the assignment or sub-letting unless it was shown that no payment other than rent had been, or was to be, received by the tenant in consideration of such act. The amendment was agreed to.

An amendment, moved by Lord Strachie, to provide that the rents charged should not be higher than would be payable if the houses were let at the appropriate normal rents charged in respect of pre-war working-class houses of similar size, type and amenity, was carried against the Government by 42 votes to 9. The Lord Chancellor feared that the amendment would lead to the standardisation of houses.

One of the chief alterations was made on clause 4, where an amendment, moved by Lord Strachie, was carried against the Government, providing that the housing position shall be reviewed in 1926 instead of 1927, and after every second year instead of after every third year.

On clause 10, which deals with materials and methods of construction, Lord Sumner moved an amendment providing that if a local authority refused, without reasonable cause to adopt a new material or method of construction which the Minister deemed suitable, and further refused, on reconsideration, without reasonable cause, to adopt such new methods, the Minister might make such deductions from the Government contributions as he deemed reasonable.

The amendment was agreed to, and the Bill, as amended, was reported to the House.

On the report stage, on Tuesday, Lord Banbury moved amendments to provide that where houses that are provided under the Bill by the Common Council of the City of London and the London County Council make supplementary contributions, the amount of the latter should be treated as part of the expenses borne by the local rate in the City. The Government accepted these amendments, which were agreed to.

An amendment moved by Lord Strachie, to specify that the tenants to whom houses built by the local authority under the Bill are to be let shall be "members of the working classes," was accepted by the Lord Chancellor and agreed to.

The report stage was then concluded and the Bill read the third time.

Kensington High-street.

The Kensington Borough Council recently approved of a scheme for the widening of High-street on the south side.

This would be done by the setting back of Messrs. John Barker's main frontage, and that of Messrs. Derry & Toms from the Metropolitan District Railway Station Arcade on the west to Young-street on the east. The new line of frontage would, if the scheme is carried out, effect a widening of upwards of 20 ft. at one part. The proposals include the building over of Ball-street at the back of Barker's main buildings, and certain mewsways, and the widening of King-street, leading to one side of Kensington-square. A considerable widening would be effected in what is now the narrowest part of Kensington High-street, in front of the Town Hall.

Obituary.

The death has occurred of Mr. Ben. Jones, builder and contractor, Henfren House, St. Clears, Carmarthen, a former member of the Carmarthen R.D.C. and Board of Guardians.

Messrs. Morner & Co.

In Messrs. Morner & Co.'s announcement in our last issue the price of their P.P.P. Flooring was given as 9s. This should have read 10s. 6d. per sq. yd. The address of this firm is 54A, Parliament-street, S.W.1.

ROYAL SANITARY INSTITUTE ANNUAL CONGRESS—II.

The annual congress of the Royal Sanitary Institute was held at Liverpool last month. Some account of the proceedings, and a report of the first day's meeting of the section of architecture and engineering were given in our issue of July 25, and is continued below:

SUBSIDY HOUSES.

MR. SEARLES-WOOD moved the following resolution :—

> That the Council of the Royal Sanitary Institute be recommended to urge upon the Minister of Heath the undesirability of perpetuating the 1923 standard of types and sizes for the building of two-and-a-half million houses during the next fifteen years.

In his opinion it was stupid to tie local authorities down to those dimensions for such a long period.

In seconding the resolution, SIR HENRY TANNER said flats were wanted as well as houses; small dwellings were in greater demand than houses. In urban areas it was impossible to build twelve houses to the acre, and people who lived and worked in towns did not always want to be moved four or five miles into the country. In one scheme recently carried out there were over sixty dwellings to the acre in three-story buildings, and, with plenty of open space around, they were quite as healthy as separate houses and considerably cheaper.

MR. BROWNRIDGE, speaking against the resolution, said, in his opinion, the minimum and maximum sizes laid down allowed plenty of scope, and having regard to the fact that houses were so badly needed it would be better not to harass the Government further by raising this point now; in Birkenhead they had built a variety of very good houses under those restrictions.

THE MAYOR OF WEST HAM raised the question of boroughs such as his, where there was no room to spread the population, as the area of the local authority was hemmed in by surrounding authorities. It had been suggested that they should go outside their own area and build houses miles away. But in his borough, 50 per cent. of the male population were casual labourers at the docks, who had to apply for work three or four times a day, and it was impossible to ask those men to remove to new houses miles away from their work. He objected to the hands of the local authorities being tied to the types of houses laid down by the Government. With full use of modern scientific methods of building, and a proper conception of its responsibilities, it would be possible for the local authority to provide adequate accommodation in its own area, and, moreover, if they had more freedom they would be able to build good houses at lower cost and thus let them at lower rents. In West Ham, for instance, the problem could best be met by the erection of flats in three-story buildings, with an open space in a central courtyard in which the children could play. By that means they could house everybody in the borough, without the necessity for going outside, under as good conditions as under the Government scheme.

A delegate from Sunderland said the Corporation of that town was building sixteen houses as an experiment, to see exactly what profit private enterprise was making, but it was found that the cost of building by direct labour was as much as by private enterprise.

MR. HILL (Liverpool Property Owners' Association), said property owners were quite in favour of improving housing conditions. In the case of unhealthy areas, however, property-owners were not invited to co-operate with the Health Committee, but were faced with a very penal legislation. He suggested that, in the case of unhealthy areas, property owners should be invited to try to discover a method of improving the conditions at li cost, and that a subsidy should be allo them to improve their property. By means he thought slum property could be m healthy at less cost to the rates than by present method.

After some further discussion, the resolu was withdrawn.

HEALTH EXHIBITION.

A well-known and appreciated featur connection with the Congresses of the R Sanitary Institute, the Health Exhibitio always of interest to those concerned with well-being of the public. This year's show opened by the Lord Mayor of Liverpool, expressed the opinion that it should do fo general health of the country what the Br Empire Exhibition was doing for the t of the Empire.

The majority of the exhibits were conce with foods and personal hygiene, but a nu of products of interest to architects and bui were to be seen. One of the largest stands that of the Public Health Departmen Liverpool, which included models sho the unhealthy areas already dealt with the types of new houses erected under housing schemes. A new glazed wall l was exhibited by Messrs. Marvle Proo Ltd., of Wellington-road, Battersea, which is claimed to be much cheaper any other type of permanent glazed wall li The basis of the material is concrete, the su being cold-glazed in any desired colou mixture of colours. The material ca drilled in order to fix it to existing walls, we are informed that the surface does crack or craze. Other exhibits included sa apparatus by Messrs. Jones & Attwood, (Stourbridge); wood-working machiner the Dominion Machinery Co., Ltd. (Hali gas and coal heating apparatus by M Sidney Flavel & Co., Ltd. (Leamington); disinfectants by the Lewbart Manufact Co., Ltd. (Norfolk-street, W.C. 2).

The following are among the awards c judges :—

Silver Medals.—Dominion Machinery Ltd.; Sidney Flavel & Co., Ltd.; Jo Attwood, Ltd.

Bronze Medals.—Dominion Machinery Ltd.; Easiwork, Ltd.; Lewbart Manufac Co., Ltd.; Loft Ladders, Ltd.

LAND FOR A NEW RO

MR. J. D. WALLIS, Official Arbitrato issued his award in a claim by Mr. Daniel Coates against the King's Lynn Corpor touching the Corporation's compulsor quisition of 1,556 sq. yds. of land in conn with the formation of a new road. The aw as follows :—

(1) The Acquiring Authority to pay t owner the sum of £395 as purchase mone compensation; (2) the Acquiring Author pay interest at the rate of 5 per cent. per a from the date of entry until payment of th pensation; (3) the Acquiring Authori pay the fees on this award; and (4) the to pay the sum of £21 towards the costs Acquiring Authority.

At the hearing of the claim, Mr. H. Wilkin, F.A.I., giving evidence for the cla valued the land at 12s. 6d. per sq. y £972 10s. 6d. There was also a claim b Coates for valuer's and architect's fees, professional charges, &c.

On behalf of the Corporation, Mr. Widdicombe, F.S.I., District Valuer, sub a valuation of £302.

THE BUILDING TRADE

UCATION IN THE BUILDING INDUSTRY

he annual Conference of the Institute of rs with the Teachers of Building in Great , Major R. J. Holliday (Vice-President nstitute of Builders) read a paper entitled Absorption of Well-educated Youth in the ry for Training for Managerial Positions." tever might be the ultimate development echnical education policy of the Institute lders, he said, the facts that that body ised the need for technical education and finitely committed to assist in its encou- nt imposed upon it the responsibility of ring the nature and scope of the technical ion required, how that technical education e usefully employed, and what arrange- could be made to that end.

cation without opportunity for its full s wasteful, and in the long run destructive t, and no body of men representative of ortant industry and desirous of securing imum efficiency could afford to neglect the technical education for its service, or l employment and development of that al education in its service. It therefore important for the Institute of Builders, was taking an interest in technical educa- consider the capacity of its industry to the youth who had received a higher ion for it, the qualifications it demanded uch youth, and suitable methods of con- and developing the education it had d.

nvenient starting-point was a considera- the industry's organisation in relation to neral tendency of the commercial world. f the marked characteristics of current ial conditions were the tendency towards isation and the tendency towards larger sations. Both tendencies resulted in the oment of the departmental system of and the creation of managerial positions. tain industries it would appear possible both tendencies had been carried to es, that the limit of human ability to from some central point had been reached hat a policy of decentralised control ding a type of manager with general than specialist qualifications had had to opted.

ibly for reasons of technical requirements, liarities of the industry's organisation, or son of its freedom from external com- n, the building industry did not seem to hared to the same extent as other indus- the tendency towards larger organisa- True there were businesses which oper- ll over the world, and businesses which ed all over the country, and although it be argued that all large building concerns ed under a system of decentralised control contract being a separate unit under the iate control of a man on the spot and the te control of the central office) there were ely few building businesses under the ty of establishing district control points n their central office and works and their g contracts.

ertheless the amalgamation of large con- nd the tendency of building contractors ate over a wider field led him to his first sion, that the building industry was , and would continue to share, in the l trend of the age, resulting in a growing cy to create managerial positions, an e in the number of departmental managers d, and a demand for bigger men in this f the industry.

he present time, in addition to such people tract managers and general foremen, and y one or two others on the administrative f the business, the organisation of all ant building contractors was sufficiently ped to necessitate such departmental ers as works managers, yard managers, managers, buyers, estimators, measuring surveyors, cost accountants, and company secretaries. And while it would be unreasonable to forecast a very much larger demand for the managerial type, it would be less reasonable to assume that the capacity of the industry to absorb this type had reached its limit, or that there was not room for a considerable development in the administrative and earning capacity of the type.

The better the organisation and the bigger its scale the greater would be the demand for the managerial type. It would be foolish to imagine that in a highly industrialised country such as this they could look forward to an unlimited demand for new buildings. It might even be remarked that the shortage of labour, which was probably due in part to an actual shrinkage in the supply, indicated that the industry had reached the limit of its expansion under its present organisation. But the effect of improved method and the artificial and other controls which existed in every industry made such rapid conclusions dangerous; and he was of opinion that there was evidence that the day was far distant when the demand for rebuilding and new buildings in this country would become stabilised. The progressive movement of trade in which the industry played such an important part in its provision of adequate buildings was likely to involve a fairly steady and, it seemed reasonable to assume, an increasing demand upon the industry. That demand would, to some extent, exist in spite of or because of the supply, according to the inadequate or adequate character of the industry's organisation. It was well to keep in mind that not the least important part was played in this question of volume of demand by the response in efficient craftsmanship and organising ability which the industry made to it; for just as organising ability lowered cost and stimulated the demand so did organising inability raise cost and diminish the demand.

The capacity of the industry to absorb the managerial type would for a long time be limited rather by the technical qualifications of its departmental heads and their ability to develop than by such considerations as the demand for building; and the capacity of the industry to absorb youth with a view to their training for managerial positions would depend very largely upon the natural qualities and the educational qualifications of youth received from technical institutions and other sources.

In that connection he would emphasise the paramount importance to the industry in its higher ranks of a technical education which would develop an appreciation of the industry as a whole, even at the expense to some extent of a specialised knowledge, and of an educational authority which would assist businesses by a preliminary estimate of students' qualities and by their scientific development.

The difficulty of selecting the future manager in the early stages of his career was enormous. Rarely was the undoubted leader or the managerial type discovered without careful observation. There were technical schools to-day which decided at an early age the special craft a student should follow from experience of his work, and in this grade of employee the work of the technical education authorities in this direction was extraordinarily valuable. On the other hand, it would appear desirable for the day and evening technical education of higher types to be upon as broad a basis as possible, with a view to securing the students' appreciation of the broad requirements of the industry and of ensuring the discovery of the future managerial type rather than to limit the study of this class of student to a narrow field and to trust to luck or accident that their qualities would become apparent before it was too late to develop and to make full use of them.

The industry was full of specialists who had specialised from a relatively early age and who had never been given the opportunity of acquiring the broad knowledge necessary to management; and it was probable that they were carrying to-day in one or another minor capacity men who with wider opportunities of discovering their abilities would have developed into the managerial type, to the general advantage of the industry and the particular advantage of the business in which they were engaged.

The keystone of the successful absorption of youth in any industry was a close co-operation between a technical authority alive to current conditions and requirements of the industry, and the business heads of the industry equally alive to the current conditions and requirements of technical education. These conditions were necessary in order to secure a perfect link between school and business in a logical development of the educational foundation that had been laid, and a full employment of the principles that had been learnt. There was plenty of room in the industry for men in important managerial positions, and there was a heavy responsibility upon the educational authorities of this country to see that the right type came into the industry adequately equipped to ensure their maximum ability output.

The youth which came into the building industry might be broadly divided into two classes. For the most part he came in to fill a vacancy, more especially when he came in on the administrative side, so that, although he believed there were businesses who had definite schemes of training to ensure a broader development than was generally possible in the single department or trade, it was doubtful whether there was generally any clear-cut plan for the development of likely youth beyond their advancement in the department in which they began and where they often ended. There was a good deal to be said for this early specialisation in the present organisation of the industry, but it was wasteful to the extent that it restricted the vision of youth and hindered the discovery of that managerial type which the further development of industrial organisation stood in need of.

For the rest he came in to be taught the business "to the best ability of the employer." He would start at the beginning and go right through the business. In these busy and arduous times, this usually resolves itself into giving the youth an opportunity under a varying supervision to see and to do something of what is going on within the limits of a general plan of a period in the shops, a period on a contract, and a period in the various departments of the office.

Where the latter system obtained, all the seniors were held responsible for the instruction of the juniors, as except in special circumstances no promotion was granted unless the candidate for it had an understudy ready to step into his shoes. Thus a fairly complete ladder of promotion was provided which had the advantage of keeping everyone up to his work and reaching out for the post higher up, if he would avoid the risk of supersession. Of course it would not be possible for building contractors to carry a large number of students in the hope that they would be ultimately absorbed, but there was a normal demand created by wastage and development which it might be well to meet to some extent by the wider introduction of the student class into businesses before the actual need for the finished product was felt. In any case, it should be the aim of all modern employers to keep in view the qualities of their employees, to secure for them opportunities to prove their worth in higher capacities, and therefore to consider plans to that end. Or it might be possible by a revival of the apprenticeship system embodying a well-thought-out scheme of training (designed to continue and to develop in the business the education that has been received in the technical schools) to ensure

a better controlled flow of suitably trained youth into the industry who would there receive that fair field and open opportunity which it was in the best interests of every industry to afford it.

The main difficulty in the organisation of a system of advanced training in the building industry seemed to lie in the financial difficulty in the way of many businesses usefully to carry a qualified man of the instructor class, in view of the limited number of students he would be called upon to supervise. The idea had occurred to him that if the suggestions he had put forward were to be adopted it might be possible for groups of builders to employ area supervisors with teaching and practical experience whose duty it would be to supervise the business training of students in their area, to test their progress, and to act as liaison officers between school and employer. Such a system would place this important matter in the hands of a specialist and make for a valuable interchange of teaching method and current practice. But although the principles of business were fairly constant, there were local variations in practice which would probably render such a system very difficult in operation.

At the present juncture the best solution would seem to lie in the development in each business of a course of instruction which he had outlined, under the supervision of the various people indicated, and subject to the ultimate control of the various directors interested who would take such opportunities as they could to test progress. It was a system which he believed had worked well in another industry, and one which seemed likely to succeed in obtaining the desired product from the right material.

Assuming that every student would have studied the outlines of commercial history and economic geography which in practice were of considerable importance as a background, he would suggest that the general training of the picked student should be divided into four periods before he proceeded to specialise in any particular department, and that his movements and outline instruction should be as follows :—

PERIOD A.

In the Secretary's Office.—The organisation of the industry; Function of its members; Finance; Company law; The organisation of the business; Functions of its departments; Insurances; Contract and common law; Local government regulations.

In Estimating and Surveying Office—Preparation of an estimate; labour rates and conditions.

On Building in Course of Construction (under the general foreman).—Ordering plant and preliminary materials.

In Yard or Depots (under the Yard Manager). —Plant, materials, and transport.

On Building in Course of Construction (under the general foreman).—Labour control and supervision; ordering materials; co-ordination of sub-contract work; measuring up.

In Office and on Building (under the Measuring Surveyor).—Preparation of final account.

PERIOD B.

In Estimating and Surveying Office.—Preparation of estimate.

On building in Course of Construction.—Its location, character and problems.

In the Joinery Mills (under the works manager).—Preparation of joinery work.

In Prime Cost and Accountancy Department. —Analysis of costs.

In Office and on Building (under the measuring surveyor).—Preparation of the final account.

PERIOD C.

In Estimating and Surveying Office.—Preparation of estimate.

On Building in Course of Construction.—As for Period B.

In the Office (under the buyer).—Buying materials; Placing orders and sub-contracts; Transport facilities; Visits to manufacturing works to learn something of manufacturing processes and costs, and material supply possibilities of areas.

In the Office and on the Building.—Preparation of final account.

PERIOD D.

In the Secretary's Office—Revision; Correspondence; Disputes; Arbitrations; Accountancy.

In the Office (under the outside manager or director).—Managerial control; co-ordination of works in progress.

In the Office.—Personal supervision.

Under that scheme the student's starting-point was an appreciation of the organisation at the back of the business and the conditions within which it operated. In each of the periods he would have an opportunity of making a critical and well-informed survey of an important section of a contract, in addition to learning something of the machinery of a contract from its inception to its completion. How far such a scheme would be generally practicable it was difficult to say, but some such scheme seemed necessary to encourage the entry into the industry of the right type of youth and to secure for him that opportunity for development on broad lines which was so desirable before the stage of departmental specialisation was reached.

A JOINT COUNCIL FOR THE BUILDING TRADE

By S. STRANKS (*Organiser, Amalgamated Union of Building Trade Workers*).

THERE are certain forces in human affairs which, in spite of prejudice, vested interest, indifference, and ignorance, are always operating to bring about change, economic factors, the spread of education, and other forces contribute to this end. This state of evolution recognises no limit to human progress. There is always room for differences as to the wisest course to direct these desired changes, but the main difficulty is due to our being wedded more or less to our personal interests and prejudices. Just as the individual reflects this particular phase, so employers' and operatives' organisations are prone to become victims to the same factors, but in all cases these eventually have to give way to the common good. But there is this difference between the individual and associated effort, that the latter force quickens the rate of progress. Certain phases of associated effort have indulged, and as reflected in present building trade dispute do indulge, in the a species of warfare which any intelligent person would much prefer to avoid. In face of facts pertaining to present conflicting economic and social life, many resign themselves in a philosophical manner to such warfare as being a mere phase in evolution; if our mental outlook does not respond to a higher plane in settling our differences, then we must go through the bitter experience till we embrace a more reasonable and rational policy.

Can the different interests in the building industry mark their experiences, coupled with a frank recognition of differences engendered, and centre on the idea of a revival of a Joint Industrial Council as a medium of threshing out questions pertaining to the industry and arriving at decisions aiming at the common good? Before answering this question it is essential to appreciate certain fundamental facts which are a forerunner of the present difficulty.

The fundamental difference is due to the employers and operatives being divided into two classes. It is no use ignoring this fact; society has created this condition, and as a result the employer is looked upon as the captain of industry and all it implies; but past history suggests that this view will have to give way. There are fundamental differences of opinion which time will work out, but pending this operation there are reforms in our industry which call for practical adjustment; hence the need for a mutual ground whereby these matters can be decided.

If we turn to the operative of the present day we find he is evolving an outlook which is making a claim for a higher status of life; he is out for higher wages and other matters of material benefits, but above all, he is gradually taking up an attitude of resentment against the idea of being a mere accommodation to a power which is the outcome of the mental outlook of past generations.

Due appreciation having been gi fundamental differences referred to, ground exist upon which we can bas that through a Joint Industrial Co can accrue? Can such a channel parties to bring about a solution of ideas and principles by the power rather than force? Certainly the la does not impress those who took deliberations; it became charged judices which gave small chance for and tolerant minds to prevail. The t in the building industry will not en similar venture without having some that time and money spent on it w ductive of good. Further, if such a succeed it must be inspired with a pr There must be many in both camps with the need of such a body. Ma all who are obsessed with the idea t body would merely resolve itself int compromising machine, that this w that logically no representative assem survive? The House of Commons Councils, and other administrative b precisely the same difficulty, but demand they get on with the busines the building industry say the same? to find some way out of the prese conditions. Which is it to be—force

There are practical questions on Joint Council could be of great s Mr. Stoker, K.C., is to be comm ventilating this matter in your col refers to the question of apprenti beyond the bounds of possibility t scheme that will place this questi conflicting interests? If there a revival of that real interest in app that is desired, the question has to be from a different angle altogether fro and a much broader outlook must to bear on this question.

In face of the failure of agreement lish a rational system of mess-room some action must be taken to work ou by which a uniform standard of acco whereby the health and comfort of are secured. There is no tangible negligence in providing this impor If efficiency is to be attained, the consideration should be the creati ditions which conduce to such. Industrial Council ought to project standard for guidance in this matt

Again, take preventive measur protection of life and limb, and dise all these matters ought to be cons measures adopted to obviate sufferin of money.

Surely the time has arrived wher question of overtime should be rer the misunderstanding which obt economic grounds, and in the inte community, the continual jarrin question does little credit to any believe it is possible to define a would remove our differences and new departure which would redo credit of all. Again, on this, the field for a Joint Council.

Cannot something be done in th of projecting uniform rules for Works Committees? I know evide jobs indicated a lack of sense of p things on the part of some opera Works Committee existed, but indi found their level. Here is a field f consideration of all interests involv to agree to the recognition of W mittees with properly-defined functi

Are we to display to the commu jointly have no ideas by way o education, technical and otherwise expert knowledge in the industry t be a sphere of action which would on these highly-important subjects. touches the value of a Joint Co matters of a legislative, or adv character, in the domain of imperi government.

A Joint Industrial Council shou oughly representative of all enga

—architects, builders, surveyors, neral foremen, sub-contractors, s, and would provide a council ul selection of the representatives immense value.

I do the stagnant pool of negation the councils of employers' and ociations, I feel there is a deal of ne before we reach agreement. t recede, suspicion must subside. in an age when organisation is ecessary in social and economic problem confronting us is the ress the physical to the detri- nental factor. Let us examine d see whether without impairing ce of either it is not possible to on the lines suggested.

UILDING TRADE DISPUTE.

ceived the following letters on pute in the building industry.]

. H. Stoker, K.C., in your issue ws attention to the "Misunder- een the parties," drawn from the ourt of Inquiry Report, and t a year ago he contributed to he expression of a hope "that ight be found for resuscitating ades Parliament." I have many ce to the same hope and cannot ining Mr. Stoker in his present in power on both sides to return irit of 1919–20. Architects have p forward on the road to unity n; is it too much to hope that in y may have a place in a new Parliament in which the com- be represented on the lines I ur columns so long ago as 1914? to the representatives of the oyers and operatives—I sug- community should be represented pointed by such bodies as the eyors' Institution, Institution of s, the Mechanical Engineers, the ountants, the Institute of Auc- nore or less interested in the ther with such bodies as the ational Association, the Working National Education Association, Wholesale Society, Settlements d Women's Industrial Organisa- ested for the better conditions ves.

o discuss in detail the findings of quiry; their conclusions make it t the bottom of the trouble is ding," and a curious want of he documents which made the dily understand the failure to tion."

ssible in reading the report for ticise either of the parties without biased by preconceived views; and ld fix blame on both parties, no would be served; but one may be suggest that had the Building nent been in existence such mis- would have been impossible. The ed" of all our great industries, ade, is in the best position to show t reconstruction which has been ed, and which surely must come is to maintain its position as a

of all needs in the building trade and the only way to get it is by kers. Wages and conditions can with if we can achieve the maxi- output; and, in my opinion, the ucceed is to revive the Building ent and re-create the atmosphere 9.

are too conservative and let the ; the operatives are too rash and rs guide them. The only way out

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
E. Glam. (Mon. Vall)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0¾
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0¾
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0¾
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0¾
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0¾
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0¾
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾

(For rates of wages in the Building Trade in Scotland, see page 229.

is frank, fearless discussion and willingness to accept a new order, a new system, to meet the needs of a changed world—reconstruction, worked out with goodwill all round for the benefit of all concerned. JOHN E. YERBURY.

SIR,—We should like to direct attention to the proceedings being taken in connection with the agreement required to be signed as a condition of operatives being allowed to return to work in the London area.

On July 10 last we wrote to the National Federation of Building Trade Operatives (London Regional Council), asking for copies of the agreement. Two were forwarded to us on the 11th, with a letter stating: "I am enclosing two copies of the Provisional Agreement required for carrying on work during the present dispute. Will you kindly return same with your signature attached, and I will then return one copy for your own use."

The printed form of agreement refers in paragraphs *a* and *b* to wages, and provides for 1d. per hour increase; paragraph *c* sets out the hours of labour (44 hours per week).

The next paragraph is as follows: "Time lost in consequence of circumstances over which the workers have no control shall be subject to immediate local arrangement between the employer and the London Regional Council of the N.F.B.T.O., such negotiations shall be completed forthwith."

The Bromley builders have agreed to paragraphs *a*, *b* and *c*, but not the paragraph referring to payment for lost time. On Tuesday, last week, a conference was held between the Bromley master builders and the local strike committee, which was also attended by a representative of the London Regional Council. Being asked what would be the procedure after signing the agreement to put into effect the negotiations suggested in paragraph *re* lost time, the delegate stated that what was required was 50 per cent. payment for lost time. That was the demand and unless it was conceded men would not be allowed to work.

It is quite obvious from this statement that there is to be no question of "arrangement" or "negotiation," and it would appear that the signatures to the agreement are being obtained under false pretences. Under these circumstances the builders of this area refuse to sign.

Bromley. PEARCE BROS., *Builders.*

After the break-up of the Conference, as announced in our columns last week, a statement was issued by the National Allied Building Trades Employers denying the statement that the delay in the proposed meeting with the Liverpool representatives was due to obstacles placed by the employers in the way of an earlier meeting. The statement that the employers were trying to "break the operatives' federation" was stated to be equally untrue. An employers' official stated to a Press representative last Saturday that "While deploring the necessity to continue the struggle, we are satisfied that the situation develops steadily in our favour. Our object in posting lock-out notices has been justified, for it brought the issue to a head, and is hastening a settlement. The latest news from our regions is that, even in districts where the posting of lock-out notices was attended with difficulty and hardship for some of our members, it has since been decided to post them nevertheless.

Mr. R. Coppock, general secretary of the National Federation of Building Trades Operatives, was the principal speaker at a meeting of members of that organisation held at Hoxton. He said the representatives of the men were trying, consistent with their general policy, to bring an end to the dispute at the earliest possible moment. They believed that the first call on industry should be for those who were working in it. The reply to the question as to why they had changed their policy from national to regional settlements was that they had had to design a policy which would meet the tactics of their opponents.

On Wednesday a conference was held at which the National Federations and employers and operatives from Liverpool had been invited to attend.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with are advertised in this number. Certain conditions beyond those given in the following are imposed in some cases, such as that advertisers do not bind themselves to accept the low tender; that a fair wages clause shall be observed; that no allowance will be made for ten that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or of those willing to submit tenders, may be sent in; the name and address at the end is the person or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

AUGUST 9.—**Coychurch (near Bridgend).**—RENOVATIONS.—For renovating the interior of Coychurch parish church. Rectory, Coychurch.

AUGUST 9.—**Doncaster.**—MORTUARY.—For the erection of mortuary buildings in the Guild Hall Yard, for the T.C. Mr. R. E. Ford, 3, Priory-place, Doncaster.

AUGUST 9.—**Farnborough.**—COTTAGES.—For erection of six cottages, for the U.D.C. Mr. J. E. Hargreaves, Surveyor, Town Hall, Farnborough. Deposit £1 1s.

AUGUST 9.—**Navan.**—SHED.—Erection of storage shed, for the Meath C.C. County Surveyor, Navan.

AUGUST 9.—**Rathmines.**—ANNEXE.—For the erection of an annexe to the Technical Institute, for the U.D.C. Mr. F. G. Hicks, architect, 86, Merrion-square South, Dublin. Deposit £1 1s.

AUGUST 9.—**Teddington.**—PAINTING.—For the painting of the external wood and iron work to the houses on the May's and the Udney Park Estates, for the U.D.C. Mr. Marshall Hainsworth, surveyor, Elmfield House, Teddington. Deposit £1 1s.

AUGUST 9.—**Wallingford.**—HOUSES.—For the erection of sixteen working-class dwellings, in Station-road, for the T.C. Borough Surveyor, 12, St. Martin's-street, Wallingford. Deposit £1 1s.

AUGUST 11.—**Barnsley.**—PAINTING.—For painting railings to the Churchfield frontage to Sackville-street, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—**Bretby Hall.**—ALTERATIONS.—For alterations and improvements at Bretby Hall, near Burton-on-Trent, for the Derby C.C. Mr. W. H. Ward (Martin, Martin & W. H. Ward), architect, 106, Colmore-row, Birmingham. Deposit £5.

AUGUST 11.—**Carlisle.**—DEMOLITION.—For the pulling down of a chimney stack at Junction-street, belonging to the Carlisle South-End Co-operative Society, Ltd. Mr. S. W. B. Jack, architect, Lloyds Bank Chambers, Carlisle.

AUGUST 11.—**Cwmamman.**—HALL.—For the erection of workmen's hall, Garnant, Carmarthenshire, seating accommodation about 950. Messrs. H. Herbert & Co., Architects, College-street, Ammanford. Deposit £2 2s.

AUGUST 11.—**Dublin.**—PAINTING, &C.—For painting work and minor structural repairs at Crooksling Sanatorium, Brittas, Co. Dublin, for the T.C. City Treasurer, Exchange Buildings, Lord Edward-street, Dublin. Deposit £1 1s.

AUGUST 11.—**Eldwick.**—PAINTING.—For painting, &c., at Eldwick Sanatorium, near Bingley. West Riding Architect, County Hall, Wakefield.

AUGUST 11.—**Evesham.**—BUILDING.—For erection of brick building at Bergeworth Cemetery, for the T.C. Mr. J. Abbott, borough surveyor, Evesham.

AUGUST 11.—**Hull.**—BUILDINGS.—For providing accommodation for fish merchants, &c., at St. Andrew's Dock, Hull, for the L. & N.E. Railway Co. Mr. Stephen Wilkinson, architect, N.E. Area, L.N.E. Railway Co., York.

★AUGUST 11.—**London, S.W.6.**—CLEANING AND PAINTING, &C.—Cleaning, painting, and repair works at the Medical Superintendent's House, Western Fever Hospital, Seagrave-road, Fulham, S.W.6, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 11.—**Port Glasgow.**—FENCING.—For timber fences and gates in connection with the erection of 27 blocks of houses, for the T.C. Mr. Andrew Paton, Town Clerk, Port Glasgow.

AUGUST 11.—**Rathmines and Rathgar.**—HOUSES.—Erection of 16 houses at Church-place, and works incidental thereto, for the U.D.C. Mr. Edwin Bradbury, F.R.I.A.I., 13, South Frederick-street, Dublin. Deposit £2 2s.

AUGUST 11.—**Watford.**—BRIDGE.—For the reconstruction of the bridge over the River Gade in Cassiobury Park, for the T.C. Mr. D. Waterhouse, Borough Engineer, Watford. Deposit £2 2s.

★AUGUST 12.—**Islington, N.1.**—PAINTING, POINTING, &C.—Painting, pointing, and repairing Thornhill Bridge, Caledonian-road, also for painting and repairing the Clock Tower, Highbury, for the Metropolitan Borough Council of Islington. Borough Engineer, Municipal Offices, Tyndale-place, Upper-street, N.1.

AUGUST 12.—**Kensington, W.**—PAINTING.—Internal painting at the Post Office Savings Bank, Blythe-road, Kensington, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (payable to the Secretary).

AUGUST 12.—**London, S.E.16.**—CONVERSION OF INSTITUTION.—Conversion of Parish-street Institution into flats for the Borough Council of Bermondsey. Mr. Fredk. Ryall, Town Clerk, Town Hall, Spa-road, S.E.16. Deposit £2 2s.

AUGUST 12.—**Manchester.**—LANTERN.—For the construction of a new lantern in roof of second-class swimming bath at New Islington Baths, for the T.C. City Architect, Town Hall, Manchester. Deposit £1 1s.

AUGUST 12.—**Plymouth.**—ALTERATIONS.—For alterations and additions to sanitary accommodation at Union-street Schools, for the T.C. Mr. J. Wibberley, Borough Engineer, Municipal Offices, Plymouth. Deposit £2 2s.

AUGUST 12.—**Saffron Walden.**—PAINTING.—For painting houses at various places, for the R.D.C. Mr. A. E. Pitstow, Saffron Walden.

AUGUST 12.—**Southall-Norwood.**—
Erection of three cottages (concrete block c
at Adelaide Dock, Endsleigh-road, S
Southall-Norwood Urban District Council.
Thomson, Assoc.M.Inst.C.E., Chartered Civ
Engineer and Surveyor, Town Hall, South

AUGUST 12.—**Workington.**—HOUSES,
works required in the erection and drai
houses, as a first instalment of a propos
five hundred, in connection with the Salter
Scheme (Contract No. 2), for the Corporat
ington. Mr. H. B. Williams, Borough
Surveyor, Town Hall, Workington. Dep

AUGUST 13.—**Goole.**—GARAGE.—For th
garage, workshops, &c., for the U.D.C.
Castle, Surveyor, Council Offices, Goole.

AUGUST 13.—**London.**—EXTENSION
Extension of the General Post Office (So
Commissioners of His Majesty's Office
Contracts Branch, H.M.O.W., King C
London, S.W.1. Deposit £1 1s. (cheques p
Secretary).

AUGUST 13.—**London, N.1.**—FLATS.—
132 flats on a site between Laycock-street a
Station-road, Upper-street, Islington,
Council of the Metropolitan Borough of Isl
E. C. P. Monson, F.R.I.B.A., Finsbur
House, 120, Moorgate, London, E.C.2.

AUGUST 13.—**London, S.W.10.**—DECO
REPAIRS.—Painting, decoration and re
Infirm Women's Wards, &c., in the Wo
Fulham-road, S.W.10, for the Guardians
Westminster Union. Mr. W. J. Lickley,
Guardians, Guardians' Offices, Princes-r
ham Palace-road, S.W.1.

AUGUST 13.—**Pontefract.**—PAINTING.—
painting at the Assembly Rooms, for t
J. E. Pickard, Borough Surveyor, Ponte

AUGUST 13.—**Tredegar (Mon).**—BUIL
RIALS.—Supply of building materials,
for the erection of new piggeries at the
Tredegar, for the Guardians of the Beds
Mr. William Hall, Clerk to the Guar
Offices, Tredegar, Mon.

AUGUST 13.—**Wellington (Salop).**—
erection of 24 pairs of houses, for the U.D.
Connor, Surveyor, Council Offices, Wellin

AUGUST 14.—**Dublin.**—REPAIRS, &C.—
and decoration, &c., to Kilmainham Co
the C.C. By order, Seamus Ua Le
Runaidhe. Deposit £1.

AUGUST 15.—**Annan.**—HOUSES.—Erec
four-apartment houses and four thr
houses at Addison-place, for the T.C.
Gladstone, architect, 4, Bruce-street, An

AUGUST 15.—**Dewsbury.**—WALL.—Fo
lition of property at Hill Head Farm,
building of a length of boundary wall. Mr
Borough Engineer, Town Hall, Dewsbur

AUGUST 15.—**Tipton, Staffs.**—AL
Alterations to the Employment Exchan
street, Tipton, Staffs, for the Commissi
Majesty's Office of Works. Contra
H.M.O.W., King Charles-street, Lon
Deposit £1 1s. (Cheques payable to the

AUGUST 16.—**Chopwell.**—ALTERATIONS
tions and additions at Chopwell ex-Servic
Club, Ltd. Mr. J. Johnson, Secretary, a

AUGUST 16.—**Edlington.**—POINTING.—
brickwork and general repairs at Edlin
School, Mr. L. J. Blackburn, Divi
Education Offices, 20, Christ Church-roa

★AUGUST 16.—**Ilfracombe.**—ADDITION
to 44, High-street, Ilfracombe, for Mr.
Allen T. Hassell, F.R.I.B.A., Architect a
8, Market-square, Ilfracombe.

AUGUST 16.—**Tadcaster.**—HOUSE.—Fo
of a caretaker's house at sewage works, f
Mr. H. M. Driver, surveyor, Garforth, nea

AUGUST 18.—**Cheadle and Gatley.**—S
For the erection of a sub-station at Grov
U.D.C. Mr. C. H. Wordingham, 33, Bra
Manchester. Deposit £2 2s.

AUGUST 18.—**Uppingham.**—MEMORIAL.
down and rebuilding the memorial
Uppingham. Mr. G. Dolphin, North-st
ham. Deposit £1 1s.

AUGUST 18.—**Winchester.**—PAINTING.—
painting at Royal Hants County Hospita
Mr. Herbert Maslen, Secretary, Winche

AUGUST 19.—**Birkenhead.**—MOTOR
—Erection of a motor bus garage and
in the Tramway Depot yard at Laird-s
head, for the County Borough of Birk
Chas. Brownridge, M.Inst.C.E., Borough
Surveyor, Town Hall, Birkenhead. Dep

AUGUST 19.—**Cannock.**—HOUSES.—Fo
of 17 pairs of non-parlour type hou
(Dark-lane) site, for the R.D.C. Mr. H.
Director of Housing, Penkridge, Stafford.

AUGUST 19.—**Wellingborough.**—LAV
the erection of women's lavatories at the
house, for the B.G. Messrs. Sharman, Mc
architects, Sheep-street, Wellingborough

AUGUST 19.—**Wigan.**—ALTERATIONS
TIONS.—Alterations and additions to t
and Sorting Office, Wigan, for the Con
His Majesty's Office of Works. Cont

King Charles-street, London, S.W.1.
s. (Cheques payable to the Secretary).
r 20.—**Crewe.**—HOUSES.—For the erection
on the Alton-street site, for the Borough of
icipal Housing Committee. Mr. E. G.
I.Struct.E., &c., Architect to the Housing
Municipal Buildings, Crewe. Deposit

1.—**Birr.**—PLASTERING.—For the external
f cottages in the Birr No. 1 Rural District.
ailors and Soldiers' Department, Colonial
Branch), 30, Lower Fitzwilliam-street,
eposit £1 1s.

1.—**Durham.**—HOUSES.—For the erection
s at Lowes Barn, for the Durham County
ages, Ltd. Mr. S. Wilkinson, architect,
e, Westgate-road, Newcastle.

22.— **Clydebank.**— PAINTING, &C. — For
cing, and hedging work in connection with
ouses, for the T.C. Town Clerk, Municipal
lydebank. Deposit £1 1s.

5.—**Aylesbury.**—COTTAGES.—For erection
es in four contracts, for the T.C. Mr. Wm.
orough Engineer, Town Hall, Aylesbury.

5.—**Hemsworth.**—EXTENSION.—For exten-
ondary school, for the West Riding E.C.
ept., County Hall, Wakefield.

5.—**Hertfordshire.** — COUNTY SCHOOL.—
d completion of a new County Council
accommodate 120 scholars, at Hunsdon,
ead Abbots, for the Hertfordshire C.C.
eyor's Office, Hatfield, between the hours
nd 4 p.m., except on Saturdays. Deposit

5.—**Morley.**—HOUSES.—For the erection
and for the several other works in con-
rewith on the Middleton-road Housing
e T.C. Mr. F. Turner, Borough Engineer,
Morley. Deposit £1 1s.

6.—**Bathgate.**—FLOORING.—Laying hall
flooring for the Bathgate Co-operative
td. Managing Secretary, Co-operative
ey-street, Bathgate.

—**Bradford.**—PAINTING.—For (1) internal
painting, Rawson-place Market and James-
t; (2) vacuum cleaning work, Rawson-
and James-street Market; (3) external
shops and warehouses, Nos. 71 to 83,
eet. City Architect, Town Hall, Bradford.

26.—**Cardiff.**—POST OFFICE.—For the
head Post Office for the Commissioners
ty's Office of Works. Contracts Branch,
King Charles-street, London, S.W.1.
s.

26.—**Wallasey.**—HOUSES.—For the erec-
ises on the Poulton-road and Surrey-street
for the C.B. Mr. L. St. G. Wilkinson,
.C.E., Borough Engineer and Surveyor,
Wallasey. Deposit £1 1s.

27.—**Chester.**—BUILDING WORKS.—Erec-
pletion of new dairy and hostel buildings
heath School of Agriculture, near Nant-
e County of Chester. Mr. H. Beswick,
County Architect, Newgate-street, Chester.
s.

27.—For cleaning, painting and repairs
rth Infirmary, Grays, Essex, Queen Mary's
shalton, Surrey, Princess Mary's Hospital,
vesden Mental Hospital, King's Langley,
tain Mental Hospital, Tooting, S.W.17,
n Ambulance Station, New Cross-road,
dington Casual Ward, Woodfield-road,
W., St. Luke's Hospital, Lowestoft, for
Asylums Board. Office of the Board,
bankment, E.C.4. Deposit £1 for each

27.—**London and Margate.**—VARIOUS
r erection of new offices at South Western
Station, Landor-road, Stockwell, S.W.9;
crete paving at North-western Ambulance
n-road, Hampstead, N.W. Erection of
sun platforms at Princess Mary's Hos-
te; erection of new concrete boundary
Works, Carnwath-road, Fulham, S.W.6;
airs at Hackney Casual Ward, Gains-
, Hackney Wick, N.E.; and minor
laundry at Brook Hospital, Shooter's
for Metropolitan Asylums Board. Office
. Victoria Embankment, E.C.4. Deposit
s.

27.—**Tooting, S.W.17.**—SLATING WORKS.
works at Tooting Bec Mental Hospital
urch-lane, for the Metropolitan Asylums
e of the Board, Victoria Embankment,

ER 2.—**Birmingham.**—REPAIRS, &C.—For
rdinary works and repairs at The Beacon
Hotels, for the Commissioners of His
rks, &c. Contracts Branch, H.M.O.W.,
street, London, S.W.1. Deposit 10s. 6d.

ER 2.—**Orpington.**—REPAIRS, &C.—For
of ordinary works and repairs at build-
rpington district, for the Commissioners
sty's Works, &c. Contracts Branch,
King Charles-street, London, S.W.1.
d.

6.— **Congleton.**— SCHOOL.—For the
elementary school for 600 scholars at
r the T.C. Mr. J. H. Walters, architect,
Congleton. Deposit £2.

— **Consett.**— OUTHOUSES, &C.— For (1)
existing and building of new outoffices,
ttages; (2) sewage and streetmaking.
sett Iron Co., Consett.

.—**Sanderstead.**—Erection of a small
erstead, near Purley. Mr. R. A. Hinds,
chitect, 8, Duke-street, Adelphi, W.C.

Torquay.—HALL.—For the erection of
morial hall at St. Marychurch, Torquay.
on & Bruce, architects, Scala Chambers,
posit £4 4s.

FURNITURE, MATERIALS, etc.

AUGUST 11.—**Litherland.**—KERB.—For the supply of 520 lin. yds. of Haslingden kerb to the U.D.C. Mr. Geo. Ponsford, Surveyor, Council Offices, Sefton-road, Litherland.

AUGUST 16.—**Bootle.**—FLAGS.—For 3,500 square yards of concrete flags, for the T.C. Borough Engineer, Town Hall, Bootle.

AUGUST 28.—**Lambeth.**—MATERIALS.—For highway materials for six months, for the B.C. Mr. T. Cattlin, Borough Engineer, Town Hall, Brixton Hill, S.W.

ENGINEERING, IRON AND STEEL.

AUGUST 9.—**Wokingham.**—BRIDGE.—For construction of reinforced concrete bridge at Embrook, for the R.D.C. Mr. A. H. Prince, Surveyor, Council Offices, Wokingham. Deposit £2 2s.

AUGUST 11.—**Near Builth Wells.**—BRIDGE RECONSTRUCTION.—For the reconstruction of Abergwessin Bridge, for the R.D.C. Mr. R. Willings Thomas, architect, Llandrindod Wells.

AUGUST 12.—**Manchester.**—TRACK WORK.—For the supply of permanent way special track work. Mr. Henry Mattinson, General Manager, Corporation Tramways, 55, Piccadilly, Manchester. Deposit £1 1s.

AUGUST 12.—**Portsmouth.**—QUAY WALL.—For the construction and maintenance in repair for twelve months of a new quay wall, for the T.C. Mr. Arthur W. Ward, Borough Engineer, Town Hall, Portsmouth. Deposit £3.

AUGUST 16.—**Kidwelly.**—TIDAL GATES.—For the renewal of the tidal gates of Commissioners' Bridge and Culvert, near Kidwelly, by new gates of thoroughly seasoned oak timber, together with the construction of a new culvert, for the Carmarthen C.C. Mr. R. W. Jones, County Surveyor, Carmarthen.

AUGUST 18.—**Clones.**—BRIDGE.—For the reconstruction of a steel underline bridge, between Newbliss and Clones, for the Great Northern Railway (Ireland) Co. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

AUGUST 19.—**Birmingham.**—BRIDGES.—(a) Reconstruction of the canal bridge, Tipton-road, Tipton; (b) the construction of a new bridge over the Birmingham canal navigations, Dudley Canal, for the T.C. Mr. Herbert H. Humphries, Engineer, Council House, Birmingham. Deposit £2.

AUGUST 21.—**Tarbert.**—WHARF WORKS.—For works on the passenger wharf and goods quay at Tarbert, Lochfyne. Mr. J. S. Henderson, Clerk to Harbour Trust, The Hollies, Lochgilphead.

AUGUST 25.—**Stalybridge.**—STEELWORK.—Supply and erection of structural steelwork for power station, for the Stalybridge, Hyde, Mossley, and Dukinfield Tramways and Electricity Board. Messrs. W. H. George & Son, architects, Ashton-under-Lyne. Deposit £1 1s.

✱AUGUST 27.—**Tooting, S.W.17.**—GUTTER, &C.—For supply and delivering cast-iron rainwater gutter and down pipes at Tooting Bec Mental Hospital Extension, Church-lane, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.]

ROAD, SANITARY, AND WATER WORKS.

AUGUST 9.—**Littleport.**—SEWERAGE.—For the construction of a new pumping station and laying pump delivery pipes, &c., in the parish of Little Downham, for the Littleport and Downham Drainage Commissioners. Mr. E. J. Silcock, 25, Victoria-street, S.W. Deposit £5.

AUGUST 9.—**Spenborough.**—CULVERT.—For the reconstruction of a culvert partly under the Wakefield and Halifax main road at Spenborough, for the West Riding C.C. The West Riding Surveyor, County Hall, Wakefield. Deposit £1.

AUGUST 9.—**Torquay.**—GAS MAIN.—For laying an 8 in. high-pressure steel gas main between the Hollacombe and Paignton Works of the Torquay and Paignton Gas Co. Mr. C. G. Dawson, engineer, Gas Works, Paignton. Deposit £1 1s.

AUGUST 10.—**Skegness.**—ROADS.—For street works in Sunningdale and Muirfield drives, Brancaster-drive, and Sea View-road, for the U.D.C. Mr. R. H. Jenkins, Council Offices, Skegness. Deposit £1 1s.

AUGUST 11.—**Barnsley.**—ROADS.—For making up Cawley-place, Smithies, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—**Barnsley.**— SANITARY. — Plumber's work, conversion of privies into water-closets, in the Monk Bretton and Ardsley Districts, for the T.C. Borough Engineer, Fairfield House Offices, Barnsley.

AUGUST 11.—**Grimethorpe, near Barnsley.**—ROADS, &C.—For carrying out Miners' Welfare Scheme, which includes laying-out site, planting trees, erection of fencing, band stand, shelters, &c. Mr. W. T. Lynam, F.S.I., Surveyor, Hemsworth, near Pontefract.

AUGUST 11.—**Glasgow.**—ROADS.—Widening the eastern section of Paisley-road extending from the boundary of the City of Glasgow at half-way to Lennox-road, for the Renfrew C.C. Messrs. Kyle & Frew, C.E., 227, West George-street, Glasgow. Deposit £2 2s.

AUGUST 11.—**Northwich.**—WATER MAINS.—For laying of eight miles of 5 in., 6 in., 7 in., 9 in., and 12 in. cast-iron water mains &c., for the R.D.C. Mr. John Birtwistle, Winnington-street, Northwich. Deposit £1 1s.

AUGUST 11.—**Paisley.**—ROADS.—Widening the western section of Paisley-road extending from Lennox-road to the boundary of the Burgh of Paisley, for the Renfrew C.C. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £2 2s.

AUGUST 11.—**Panteg.**—ROADS, &C.—(a) Construction of roads and sewers on the housing estate at Kemy, Fawr, Griffithstown; (b) intercepting sewer, for the U.D.C. Mr. H. R. Davies, Surveyor, Council Offices, Pontymoel.

AUGUST 11.—**Whitchurch.**—SEWER.—For the construction of a cast-iron sewage outfall drain and other works for the R.D.C. Mr. W. C. Easdale, 1, Victoria-street, S.W. Deposit £2 2s.

AUGUST 11.—**Wigton.**—SEWERAGE.—For the construction of sewers and sewage purification works at Fletchertown, for the R.D.C. Messrs. Taylor & Wallin, Commercial Union Buildings, Newcastle-on-Tyne. Deposit £5.

AUGUST 11.—**Worsborough.**—ROADS.—For widening and improvement of the road at Balk-lane corner, on the Wakefield and Sheffield main road, for the U.D.C. Mr. T. Shield, Surveyor, Saville House, Worsborough Bridge. Deposit £1 1s.

AUGUST 12.—**Daventry.**—SEWERS.—For the laying of 2,300 yards of 6 in., 7 in., and 9 in. sewers, &c., for the R.D.C. Mr. J. B. Williams, Surveyor, Moot Hall, Daventry.

AUGUST 12.—**Polmont.**—ROADS.—For forming new roadway, &c., at Brightons Housing Site, near Polmont Station, for the Stirling C.C. Mr. T. M. Copland, 76, High-street, Falkirk.

AUGUST 13.—**Cleckheaton.**—ROADS.—For the paving with granite setts on reinforced concrete of the Leeds and Elland main road at Westgate, Cleckheaton, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1

AUGUST 13.—**Leeds.**—ROADS.—For (a) paving and concreting, &c., of portions of highways in Meadow-road, Water-lane, The Calls, Armley-road, Swinegate; (b) paving and concreting, &c., of portions of tramway track in Meadow-road; (c) granited rock asphalte surfacing at Swinegate, for the T.C. Mr. J. B. Hamilton, Commercial Manager, 1, Swinegate, Leeds. Deposit £1 1s. each contract.

AUGUST 15.—**Dunmow.**—WATERWORKS, &C.—For sinking borehole, supplying cast-iron pipes, and laying 4,000 yds. of stoneware pipe sewers at Thaxted, for the R.D.C. Messrs. Sands & Walker, Milton Chambers, Nottingham. Deposit £2 2s. each of four contracts.

AUGUST 15.—**Manchester.**—WATER MAINS.—For the laying and jointing of half a mile of 44 in. C.I. pipes connected with the Fourth Pipeline from Thirlmere to Manchester, about one mile north of Lostock Junction, for the T.C. Secretary, Waterworks Offices, Town Hall, Manchester. Deposit £3 3s.

AUGUST 15.—**St. Mellons.**—ROADS.—For the improvement of the district road, about half-mile in length, between Pye Corner and the Royal Oak public house, Rogerstone, for the R.D.C. Messrs. Thomas & Morgan, & Partners, 23, Gelliwastad-road, Pontypridd. Deposit £5 5s.

AUGUST 18.—**Barnet.**—ROADS.—For the making-up of Wentworth-road, No. 3 portion, for the U.D.C. Surveyor, Council Offices, Wood-street, Barnet.

AUGUST 18.—**East Riding of Yorks.**—ROADS.—For construction of new roads at Brandesburton, Lissett, Ottringham and Hollym, for the C.C. County Surveyor, County Hall, Beverley. Deposit £2 2s.

AUGUST 18.—**Merton and Morden.**—SEWERS.—For the construction of 3,180 yards run reinforced concrete culverts from 9 ft. to 4 ft. in width; 300 yards run brick culverts, 9 ft., to 8 ft. 6 in. in width; 2,950 yards run concrete and stoneware pipe sewers, &c., for the U.D.C. Mr. G. Jerram, Engineer, Council Offices, Kingston-road, Merton., S.W. Deposit £5.

AUGUST 19.—**Dunfermline.**—SEWERS.—Providing and laying 5,450 lineal yards of 9 in. and 6 in. diameter fireclay pipe sewers, with other works, for the Fife C.C. Mr. H. F. Hodge, District Engineer, County Buildings, Dunfermline. Deposit £2 2s.

AUGUST 20.—**Scunthorpe.**—ROADS.—For the making-up of several streets and 10 ft. roads in the Buckingham-street and Parkinson-avenue areas, for the U.D.C. Mr. W. Farrar, Surveyor, Council Offices, Scunthorpe. Deposit £2.

✱AUGUST 21.—**Edgware.**—SEWER WORK.—For construction of 566 yds. of 12 in. stoneware pipe sewer, together with manholes, &c., at Edgwarebury-lane, for Hendon R.D.C. Mr. H. W. Rackham, Engineer and Surveyor, Council Offices, Stanmore. Deposit £3 3s.

AUGUST 22.—**East Barnet Valley.**—ROADS. &C.—For the construction of roads and sewers on Long-street housing estate, for the U.D.C. Mr. H. York, Surveyor, Council Offices, New Barnet.

AUGUST 25.—**Dunfermline.**—ROADS.—For the widening and reconstruction of Halbeath-road to a width of 60 ft. for a length of 800 yards, for the T.C. Burgh Engineer, City Chambers, Dunfermline. Deposit £2 2s.

AUGUST 27.—**Lambeth.**—ROADS.—For (*a*) laying creosoted deal paving in Dulwich-road, Water-lane, and Westminster Bridge-road; (*b*) laying granited natural mastic asphalte paving in Stockwell-avenue, for the B.C. Borough Engineer, Town Hall, Lambeth, S.E.

✱AUGUST 27.—**London and Sutton.**—ROAD REPAIRS.—For repairs to tar paving at Fountain Mental Hospital, and repairs to roads at The Downs Hospital for Children, Sutton, Surrey, for Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4 Deposit £1 in respect of each work.

AUGUST 27.—**Southborough.**—WATER MAIN.—For the laying of 1,500 yards of 6 in. cast-iron water main, &c., for the U.D.C. Messrs. G. & F. W. Hodson, Bank Chambers, Loughborough. Deposit £5 5s.

AUGUST 27.—**Watford.**—ROADS.—For the reconstruction of Station-road and Woodford-road and part of Queen's-road and Cassio-road, for the T.C. Mr. D. Waterhouse, Borough Engineer, Municipal Offices, Watford. Deposit £2 2s.

AUGUST 30.—**Featherstone.**—ROADS, &C.—For the making of roads and laying of sewers in connection with the erection of 50 houses at Streethouse, near Pontefract, for the U.D.C. Mr. Samuel Chesney, A.R.I.B.A., Council Offices, Featherstone. Deposit £2 2s.

Competitions.

(*See Competition News, page* 200.)

Auction Sales, Tenders, etc.

AUGUST 9.—**Great Bookham, Surrey.**—Mr. C. E. Clark will sell, without reserve, at Eastwick Buildings, Lower-road, Great Bookham, Surrey, timbers, new and bright, and builders' effects. Auctioneers, Beddington House, near Croydon.

✱AUGUST 12, 13 AND 14.—**Cleethorpes.**—Messrs. Riggall & Riggall have received instructions of Messrs. Hewson, Chapman & Co., Ltd., Grimsby, the timber contractors, to the Lincolnshire Agricultural Society, to sell, upon the Agricultural Show Ground, Cleethorpes, a quantity of selected redwood timber, floorings, deals, battens, scantlings, and boards, &c. Auctioneers, Old Market-place, Grimsby.

AUGUST 12.—**Hayes, Middlesex.**—Mr. F. H. Clark will sell, absolutely without reserve, at the National Filling Factory, Hayes, Middlesex, new and second-hand timber and building material, machines and lorries. Auctioneers, Railway Wharf, York-road, Wandsworth.

✱AUGUST 12.—**London, S.W.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, timber and building materials (from demolition of aircraft buildings), at 255, Clapham-road, at 1.30 p.m. Auctioneers, 365, Norwood-road, S.E.27.

✱AUGUST 13.—**Upper Norwood.**—Messrs. Veryard & Yates will sell by auction, without reserve, building material (from demolition of the Mansion), at "Hazlewood," Church-road, at 1.30 p.m. Auctioneers, 365, Norwood-road, S.E.27.

✱AUGUST 14.—**Colliers Wood, Merton.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, building materials to clear sites for C. & S.L. Railway, High-street, on Mr. A. T. Harris's ground, at 1.30 p.m. Auctioneers, 365, Norwood-road, S.E.27.

AUGUST 20.—**Peckham, S.E.15.**—Mr. C. E. Clark will sell, without reserve, at Rollin's Wharf, Canterbury Bridge, Peckham, S.E.15, large quantities of prime new timbers (landed and piled away to length). Auctioneers, Beddington House, near Croydon.

✱AUGUST 28.—**London, E.**—Messrs. Weatherall & Green will sell, at 68, Cambridge-road, Mile End, E. (owners retiring from business), builders' material, plant, machinery, and office furniture. Auctioneers, 22, Chancery-lane, W.C.2.

PRELIMINARY ANNOUNCEMENT. — **London, W.**—Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

NO DATE.—**London, W.1.**—Messrs. Knight, Frank & Rutley will sell corner site in the West End, having a frontage of 73 ft. to Charing Cross, and a return frontage of 218 ft. to the north and east sides of Craig's-court, site area, 19,000 sq. ft., known as Cox's Bank, Charing Cross. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

AUGUST 8.— **Beverley.** — JUNIOR ARCHITECTURAL ASSISTANT.—Junior architectural assistant required by the East Riding of Yorkshire C.C. County Architect, County Hall, Beverley.

AUGUST 9.—**Bedford.** — Architectural Assistant required in the Borough Engineer and Surveyor's Department by the Bedford Borough Council. Mr. N. Greenshields, Borough Engineer and Surveyor, Town Hall, Bedford.

AUGUST 9.—**Leicester.**—Chief Architectural Assistant in the Housing Department required by the City of Leicester. Mr. J. S. Fyfe, A.R.I.B.A., Housing Architect, Wyggeston House, 18, Highcross-street, Leicester, endorsed "Chief Architectural Assistant."

AUGUST 9.—**Leicester.**—CLERK OF WORKS.—Clerk of works required by the Housing and Town-Planning Committee of the Leicester City Council. Mr. J. S. Fyfe, Housing Architect, Wyggeston House, 18, Highcross-street, Leicester.

AUGUST 9.—**Stafford.**—Town-Planning Assistant required by the Borough of Stafford. Mr. W. Plant, A.M.I.C.E., F.S.I., Borough Engineer and Surveyor, Borough Hall, Stafford.

AUGUST 11.—**Birmingham.**—Town-Planning Assistant Surveyor in connection with the work of Regional Planning in their area required by the Midland Joint Town-Planning Advisory Council. Mr. Herbert H. Humphries, M.Inst.C.E., Surveyor to the Council, Council House, Birmingham.

✱AUGUST 12.—**Oldham.**—Designer and Superintendent of Works required on the Staff of the Electricity Committee of the County Borough. Mr. F. L. Ogden, Borough Electrical Engineer, Greenhill Electricity Offices, Oldham.

AUGUST 16.—**Leeds.** — INSTRUCTOR.—Instructor in studio design required by the Director of Education, at the Leeds School of Art, Department of Architecture. James Graham, Director of Education, Education Department, Calverley-street, Leeds.

✱AUGUST 22.—**Swansea.**—Lecturer and Instructor in Building Subjects required by Swansea Education Committee. Mr. T. J. Rees, Director of Education, Education Offices, Dynevor-place, Swansea.

✱AUGUST 28.—**Liverpool.**—Chief Architectural Assistant required by the Finance Committee of the City of Liverpool. The Land Steward and Surveyor, Municipal Buildings, Liverpool.

✱SEPTEMBER 1.—**Greenwich.**—Architectural Assistant, Commercial Clerk, and Grade "A" Clerk required by the Metropolitan Borough of Greenwich. Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich-road, S.E.10.

SEPTEMBER 9.—**London, S.E. 1.**—TECHNICAL ASSISTANT.—Technical (engineering) assistant on the permanent staff in the Architect's Department required by the L.C.C. Clerk of the Council, The County Hall, Westminster Bridge, S.E. 1., with stamped addressed foolscap envelope.

✱NO DATE.—Architectural Draughtsmen required for temporary employment in Government Departments. Joint Substitution Board (Treasury and Ministry of Labour), Montagu House, Whitehall, S.W.1.

✱NO DATE.—Quantity Surveyors and Surveyors' Clerks wanted for temporary duty under the Royal Engineers at Home Stations and on the Rhine. Under-Secretary of State, War Office (F.W.4), London, S.W.1.

PROPOSED NEW BUILDINGS & OTHER WOR

IN these lists care is taken to ensure the accuracy of the information given, but it m sionally happen that, owing to building owners taking the responsibility of commenci before plans are finally approved by the local authorities, "proposed" works at the publication have been actually commenced. Abbreviations: T.C. for Town Council for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Co B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ACCRINGTON.—Additional sanitary accommodation is to be provided at the Grammar School, at a cost of £500.

ARLEY.—Plans have been prepared by the Warwick County Architect for a school for 400 on a site at Gun Hill.

ATHERSTONE.—Representations are being made to the C.C. for the reconstruction of the Coleshill-road canal bridge. Dry rot has been discovered in the judge's room at the Assize Court, and remedial measures have been authorised.

BARKING TOWN.—Suggested relief schemes under consideration by U.D.C. include the formation of the banks of streams and improvement of the land adjoining the Mayesbrook Meadow, the widening of Longridge-road, and a new road from Ripple-road to the Faircross Estate. The Council is urging the completion of the Barking-East Ham bye-pass in order that the Thames-side housing and development may be facilitated. Plans passed: Celluloid factory at West Bank for River Roden Co.; shop and premises, Ripple-road, for Messrs. Mann. Crossman & Paulin. The Council propose to sell four acres at Upney Farm for a hospital to be erected by the Barking Cottage Hospital Committee.

BASLOW.—The U.D.C. proposes to build 16 additional houses.

BELFORD.—Plans passed by R.D.C.: Semi-detached houses at Seahouses, for E. Fordy & Son.

BINGLEY.—Plans passed by U.D.C.: Bungalow-Sheriff-lane, Eldwick, for Mr. T. H. Stephenson; conversion of Hollings Farm, Low Springs, into two houses; warehouse, Station-road, Wilsden, for Messrs. H. Drake & Son; pair of semi-detached villas, Beck-lane, for Messrs. W. & S. Bradley; bungalow, Beech-street, for Mr. Albert Bolton; residence, Park-road, for Mr. J. Yellowlees; bungalow, Primrose Hill, for Messrs. H. & A. G. Nutter; 10 houses at Crossflats, for the Bingley U.D.C.; house, Beech-street, Bingley, for Mr. A. Bolton.

BIRKENHEAD.—The T.C. has asked a committee to report on a proposal to construct a model yacht and paddling lake on the Boothby Estate, at an estimated cost of £4,220. The B.S. is to prepare a report in regard to the proposed art gallery on the island site. Plans passed:—Pair of semi-detached houses on the north side of Bedford-drive near Bebington-road; house between Nos. 53 and 57, Cavendish-drive; Lascar Mission Hall and house, Cleveland-street; six pairs of semi-detached houses on the northerly side of Bebington-road.

BIRMINGHAM.—The T.C. proposes the construction of three two-story pavilions, nurses' home, and two isolation wards at Little Bromwich Hospital, at an estimated expenditure of £108,460.

BRADFORD.—The Sites, Works and Finance sub-Committee of the E.C. has given instructions to the City Architect to prepare sketch plans on new lines, with estimate for a Secondary school on a site at Bolling Hill. The City Council propose to cover the Idle Hill, Gilstead and Thornton Moor Reservoirs with reinforced concrete, at a cost of £10,000.

BRIDLINGTON.—Plans passed by T.C.: Mr. C. L. Waite, new road on the Priory Estate, for Mr. C. L. Waite; Mr. C. F. Johnson, garages, Hilderthorpe-road, for Mr. H. Fitch; Mr. C. F. Johnson, house, Kingsgate, for Mr. T. Flowers; Mr. C. L. Waite, house on the Priory Estate, for Mr. W. Witting; Mr. J. R. Earnshaw, house, Brookland-road, for Mr. H. F. Hird; Mr. C. F. Johnson, house, Fortyfoot-road, for Mr. J. Burrell.—The East Riding E.C. are going to be asked to consider a scheme for the extension of the Grammar School and the High School for Girls, and also to consider the question of the provision in the near future of an intermediate school or schools.

BRIGHTON.—Plans passed: Four houses, Hollingbury-road, for C. T. James; six houses, Roedale-road, C. Newman & Sons; 14 houses, Hollingdean-terrace, A. G. Lower; depot, corner of Dawson-terrace and Freshfield-road, Anglo-American Oil Co.; 19 houses, Dudley-road, J. T. Segrue; house and outhouse, Reigate-road, F. Duncan; The Preston Park police station is to be remodelled at a cost of £1,000. The Housing Committee recommends the erection of 48 flats at Loder-street, at a cost of £25,440. The purchase is recommended of the remainder of the Moulsecoomb Estate, at a cost of £27,500, with a view to utilisation for present and future municipal purposes.

BRISTOL.—Six houses in Berkeley-street, derelict under closing orders, are to be improved by the T.C., at a cost of about £1,000. The reconstruction is suggested of the washhouses at the Weir-street Baths. The T.C. has now acquired the whole of the College Green site, which is required for municipal offices. Street improvements are proposed at a total cost of £19,000. Property is to be acquired to carry out the Eugene-street area reconstruction scheme.

CHADDERTON.—Lancashire C.C. proposes the appointment of a sub-committee to confer with Oldham T.C. as to the provision of a secondary school for Chadderton and the neighbouring area.

CHELTENHAM.—Plans passed by T.C.: J. B. Hiron, house, Whaddon-lane; R. C. Swabey, store buildings, New-street; Cheltenham Education Committee, school buildings, St. Peter's; Cheltenham Original Brewery Co., steel and concrete garages, Dunalley-street; Mrs. Cornock, house, London-road; Cheltenham Education Committee, school building, St. Peter's; Mrs. Griffin, house, Old Bath-road.

See also our List of Contracts, Competitions, etc.

CLIFFORD.—The Warwickshire C.C. pr widening and improvement of Clifford bridge, at a cost of about £10,000.

COCKERMOUTH.—A secondary school is be mended to the Cumberland C.C. by the Committee.

COLESHILL.—A proposal for a public institute has now been agreed to, and t R.D.C. have arranged for office accommod provided for it at the public hall.

COVENTRY.—With the support of the Warwickshire County Surveyor has prepare for a road to enable the through traffic mingham–Coventry–London main road to narrow congested streets of the town. nection it is reported that considerable development is taking place in the Earls the south-west of Coventry, and to regula ment the Warwick R.D.C. is preparing a to scheme. The road will cost £130,000.

CROYDON.—The T.C. has agreed with t Railway for the widening and improve James'-road bridge, at a cost of £7,700, to £2,575 for road works. The Gover Whitgift Foundation propose the erectio school for 500 boys, with an extension accommodation for another 100 later. P House, Pollard's Hill, for Mr. A. Monk; Wingwall-road, for Messrs. Young & 24 houses, The Close, Norbury, for Messr Mackintosh; 15 shops and living rooms, for Mr. W. G. Ingram; four houses and sho road, for Mr. W. P. Meller; two house road, for Messrs. A. W. & H. J. Linfoot; bury-avenue, for Messrs. R. Kendall, Ltd. and flats, Brighton-road, for Messrs. Ch Reading; two houses, Blake-road, for Sadler; additions to parish hall, Bingha Mr. H. N. Dering; seven houses, Buller-roa Scratchley Bros.; house, Addiscombe-ro P. Richardson; hall, Shirley-road, for Mr. son; two houses, Preston-road, for Mr. three houses, Collier's Water-lane, for Mr. son; two houses, Alton-road, for Mr. H six houses, Mersham-road, for Mr. G. A. V Woodbury Close, for Mr. H. P. Hawl Norbury-avenue, for Messrs. E. Batley & S Manor-way, for Mr. J. S. Thompson; Lodge-road, for Mr. H. St. John; se Gonville-road, for Mr. L. White; 66 house road, Upwood-road and Lloyd-avenue, f Laver.

DONCASTER.—It has been decided to the building of the new Infirmary on the site.

DUBLIN.—Plans passed by T.C.: W houses, St. Barnabas Public Utility Societ road, Clontarf, bungalow, Mr. P. O'Kel street, 25, Leinster Market, store, Messrs 91-92, Benburb-street, shops and flats, Mr. 19, Shaw-street, stores, Mr. E. Richards lane, conversion of stables into factory, Mes & Woods; "Silverdale," Inchicore, two J. Thompson; Rutledge-terrace, 48 street, shop, Mr. John O'Connor; 18, P road, rebuilding, Mr. Maguire; 16-17, Ch store, Mr. T. J. Murphy.—At a specia Dublin County Council, the draft co scheme, under the Housing and Build Act, was presented as follows: Balro new houses, £1,920; for reconstructing £200. Celbridge, for 18 new houses, reconstructing three houses, £90. Nort 33 new houses, £1,320; for reconstructi £180. South Dublin, for 42 new houses reconstructing eight houses, £240. Rath new houses, £1,360; for reconstructing £220.

DURHAM.—A statement as to prop provision of more school accommodation of Durham has been submitted at th the C.C.. The proposals comprise: A West Cornforth, at an estimated cos school at Whiteleas (£3,912), Fishburn (£ side (£9,494), Silksworth (£5,353), for portion of the hospital at Elisabethville a school (£1,600). It is proposed shor proposals for a new school at Delve estimated cost of £6,119, Easington-lan

EASTBOURNE.—Plans passed by T avenue, house, and garage, J. Sharples; H house and garage, W. W. Smith; Pashle A. R. M. Sykes; Brodrick-road, three h & Co.; 32, Hyde-gardens, conversion o and basement into two separate flats, 21, Upperton-gardens, conversion into fla Prideaux-road, house and garage, G. A.

ELLESMERE PORT AND WHITLEY.—T preparing perliminaries for a town-plan Plans passed:—House, Copenhurst-lan Price; house, Princes-road, for Mr. Ge brickworks in Copenhurst-lane, for Mr. V

GANTHORPE.—The M.T. has sanctio C.h. proposal for a bridge across the Riv estimated cost of £90,000.

GUILDFORD.—The office of the Borou to be enlarged at a cost of £350. Pl House, Woodbridge-road, submitted Hodgson, Lunn & Co., for the Surrey Committee; house, Warren-road, by Mr. house, Ennismore-avenue, by Messrs.

Miss Brooks; house, Tangier-road, by Mr. T. architect, Guildford, for Mr. J. A. Fogwill; ndon-road, by Mr. H. Harlock; new road and Royal Chase," Onslow Village, by Messrs. Hastie, for Messrs. Onslow Village, Ltd.; octon-road, by Mr. J. Lake, for Mr. T. A. ouse, Avonmore-avenue, by Messrs. Frampfor Mr. Barris; house, new road off Pewley essrs. Hodgson Lunn & Co., Architects, &c., for Mr. Brand.

ILL.—Warwick county architect has pres for class rooms at the Council school to ate another 100 scholars.

H.—Oakley-road is to be widened at a cost Plans passed: House, on Marine-parade, t, for Mr. C. E. Hills.

S.—Plans passed by T.C.: Bungalow, ad, for Mr. C. Butler, per Mr. J. Hunt, bungalow, Filsham-road, for Mrs. Furber; es are to be erected on the Eversley-road te.

—At the Warwick County Mental Hospital al work in connection with the erection of s, construction of a cinema, and other and additions are being done for the Committee.

—Middlesex C.C. and the G.W.R. are regarding the reconstruction of the canal Botwell.

—A site at the Hyde has been purchased ddlesex C.C. for playing fields for Hendon schools.

—Plans passed by B.C.: Eight houses ley-crescent, Mr. E. N. Cansick; nine at en-avenue, Mr. O. H. Hughes; house at -road, Miss R. A. Harrington; house, avenue, Smerdon Bros.; house, Cranley-Mr. C. Winkley; two houses at Sheldon r. W. Quennell; bungalow, Avenue-road, weeney.—The Middlesex E.C. has been to accept a tender for extensions at the High School for Boys.

EY.—A site has been purchased for the a school.

—Proposals for extensions and additions to chool to meet the growing demands for education are estimated to cost £20,500. include new chemical and physics laboraarooms, staffrooms and cloakrooms to cost nd additions and alterations to existing costing £3,500. A sub-committee of the d C.C. has conferred with the Governors of regarding the proposals.

RY.—The Middlesex E.C. has been em- place the contract for the adaption as a school of the premises recently acquired ircraft Manufacturing Co.

M.—Tenants on the Bellingham estate are provision of a public library. The acquisie Charlton Park Estate of 110 acres is s an open space. Plans passed: 10 houses, oad, for Messrs. W. Reynolds & Co.; shops , Rushey Green, for Mr. A. E. Thomas; es, Fairfield-road, for Messrs. C. Cutler & houses, Downham Estate, for the L.C.C.; Bellingham-road, for Mr. H. R. Watt; eight ring-road, Lee, for Mr. W. A. Ross.

Y.—The site of the Spring Gardens is to be the erection of a swimming bath. Plans T.C.: House, King George-avenue, for Mr. ement; additions, General Hospital, for the ospital Committee.

(KENSINGTON).—The B.C. is negotiating for improvement scheme which would provide for the widening of Kensington High-street ng back of Messrs. Barker's premises on the of that street. In this connection the s received an assurance that if arrangements whereby Clarence-mews, Burden-mews and are closed to the public and the site thereof d with the adjoining buildings of Messrs. claim will be made by the Company for the nd proposed to be surrendered in connection idening scheme, the matter of compensation ined to rebuilding and disturbance. The acquiesces in this proposal. The B.C. ne erection of 40 more tenements on the St. tate.—Large derelict houses taken over by re to be converted into flats, and Mr. J. B. chitect, is to prepare specifications and obtain the conversion of 34 and 36, Bosworth-road and Mr. L. R. Guthrie, architect, is to act regard to four houses in Sirdar-road.

(SHOREDITCH).—The B.C. is preparing parall derelict property in the borough with the ealing with it under the provisions of the ng Bill.

—The L.N.E.R. have promised to go into ions made by the T.C. for improving the tions of the town. The B.S. has prepared e conversion of the Plait Hall into a covered l been instructed to obtain prices for the nd tenders for the constructional work. to prepare plans and estimates for the recond improvement of the sewage pumping lans passed: Two houses, Biscot-road, and C. W. Walker; four houses, Stratfordter; four houses, Arundel-road, C. T. Webb; s Carlton-crescent and Alexandra-avenue, wo houses, Carlton-crescent, W. M. Router; Kingston-road, Geo. Day; four houses, J. T. Garrett; two houses, Biscot-road,

—The Liggard brook lineage on the Prestons Annes main road is to be reconstructed £4,000.

TER.—Public conveniences are to be conBelle Vue-street and Gorton-lane. A stores for the Electricity Department is to be rlton, at a cost of £40,000. The City Archin authorised to prepare plans for car-shed t the tram depot. St. Mary's Municipal School is to be converted into a central school, at a cost of £1,600. Plans passed:—Six houses, St. Austell's-road, Chorlton-cum-Hardy; three houses, Ellesmere-road South and Egerton-road South, Chorlton-cum-Hardy; two houses, St. Brannock's-road, Chorlton-cum-Hardy; two houses, Milton-grove, Whalley Range; two houses, Manor-drive, West Didsbury; 40 houses, Goulden-road, Hague-road, and Rutland-avenue, Withington; 40 houses on portion of Burnage Housing Estate, Crossley-road, &c., Burnage; six houses, Brook-road, Wilmslow-road, and Mitford-street, Withington; six houses, Ash-grove, Longford-place, Rusholme; 128 houses on the Didsbury Park Estate, Didsbury; new street, Wembley-grove, Wellington-road, Rusholme; continuation of Rutland-avenue, West Didsbury; house, Darley-avenue, West Didsbury; steelwork to showrooms, New Wakefield-street; two houses, Burton-road and Leighton-road, Withington; Co-operative stores and hall, Withington-road, Moss Side; shop and house, Lloyd-street South, Withington; shops, showrooms, market hall, and motor auction, Wilmslow-road and Grange-street, Rusholme; electricity sub-station, Princess-street, Newton Heath; shop, café, and offices, Bridge-street and Dolefield; house, Sherdley-road, Crumpsall; shop, workroom, &c., Little Lever-street and Stevenson-place; steelwork, &c., to warehouse, No. 23, High-street and Marsden-square; power station to works, Gorton-lane and Preston-street, Gorton; store to works, Chatham-street, Clayton; new street, Moss Grange-avenue, Upper Chorlton-road, Moss Side; addition to brewery, Bland-street and Bold-street, Moss Side; office, store, and garage, Longford-road, Chorlton-cum-Hardy; steelwork, &c., to warehouse, Calder-street, Great Bridgwater-street; house, Polruan-road, Chorlton-cum-Hardy; house, Derwent-avenue and Darley-avenue, West Didsbury; additions to synagogue, Lansdowne-road, West Didsbury; house, Polefield-road, Blackley; additions to machine shop to Hendon Vale Works, Hendham Vale; house, Polefiel-road, Blackley.

MANSFIELD WOODHOUSE.—The Church of England School is to be enlarged by 50 places and generally improved.

MEREDEN.—Arrangements have been made by the Warwick C.C. for the police house to be completed by Mr. G. Bryant, of Wellesbourne, at a cost of £240.

MERTHYR TYDFIL.—The Borough Architect is to prepare a scheme for dealing with the Upper Colliers-row area. Plans have been prepared in connection with the Fiddler's-row Viaduct for the erection of a bridge near St. Cynons' Church, at a cost of £18,000. The Forest-road housing site is to be developed, the Borough Architect having been asked to prepare his proposals therewith. In connection with the Pant housing scheme the Borough Architect has been asked to submit a comparative estimate of the cost of manufacturing and purchasing partitions. Sketch plans have been asked for in regard to the Tavern Field site. It has now been decided to have a modified scheme for the central library, Mr. Richards being asked to prepare a scheme not to cost more than £18,000. The principle of the establishment of a central depot for the Corporation business has been decided on. Plans have been passed for five houses, East-street, Dowlais, for Mr. D. Dalacey.

NEWCASTLE-ON-TYNE.—A suitable memorial is to be erected to the late vicar of Witton Park, and it is supposed it should take the form of Sunday School premises, which had been contemplated by Mr. Geeson.

NEWPORT (ISLE OF WIGHT).—After negotiation with the Board of Trade, the Corporation has arranged for Messrs. Orr, Wall & Co., Ltd., to proceed with the construction of the new swing bridge at the quay. —Plans passed: Converson of old "White Horse," Upper St. James-street, to stores, for Thomas, Gates, Bradfield & Co..

NEWARK.—Plans are being considered by the Governors of the Girls' High School for the provision of a central hall and other improvements, at a cost of about £3,000.

NORTHAM.—The U.D.C. General Purposes Committee presented a scheme for dealing with coast erosion at Westward Ho! at an estimated cost of £6,000, and recommended application to the Unemployment Grants Committee with a view to asking the sanction of the M.H. to borrow £6,000. This was approved.

OLDHAM.—Plans have been prepared by Messrs. Taylor & Simister for alterations at the Town Hall to provide for a retiring room for the Councillors. The erection of a children's hospital is recommended. Plans passed:—Conversion of portion of the White Bear Inn, Market-place, into business premises for Mr. J. R. Plowright.

PETERBOROUGH.—Plans passed by T.C.: Bungalow and garage at Park-road, for Mr. J. R. Johnson; two houses, Russell-street, for Mr. J. G. Maddison; house, Gladstone-street, for Mr. J. G. Maddison; house at Park-crescent, for Mr. P. J. Fairweather; house at Broadway, for Mr. Andrews; house at Grange-road, for Mr. Elmer; house at Harris-street, for Mr. A. F. Stevens. Before deciding as to the widening of Narrow-street, the Corporation has arranged to ascertain the probable cost.

PLYMOUTH.—Plans passed by T.C.: G. A. Daymond, five houses, Bridwell-road; W. R. Littleton, six houses, Lyndhurst-road; M. M. Hart, bungalow, Mutley-road; A. Spurrell, house, Compton Park Villas-road; W. H. Joce, two houses, Compton Park-road; F. Packer, two houses, West Down-road; J. Roberts, addition, 91, Mutley Plain; Committee of South Devon and East Cornwall Hospital, addition to pathological block, South Devon and East Cornwall Hospital; Kimbers, 20 lock-up garages, Devonport Station, G.W.R.; G. H. Webber, five houses, Rowden-street; W. R. Swiss and T. F. Savage, two bungalows, Wolseley-road, Saltash-passage; F. Westcott, bungalow, Bladderley-road.

PRESTON.—Plans passed by T.C.: R. Cooper & Sons, for J. A. Butler, house and shop, Holmrook-road; F. N. Pinder for E. Atkinson, two houses, Frenchwood-avenue; J. Nightingale for J. Wilding, house, Brackenbury-road; J. Nightingale, four houses, Addison-road; A. J. Duckworth, for Mrs. W. Ralphs, bungalow, Heather-grove; V. B. Norton, bungalow, Lytham-road; J. W. Grange, three bungalows, Lytham-road; T. Bradley, bungalow, Ribbleton-avenue; J. Sargent for Sargent & Fish, four houses, Primrose-road; E. J. Andrew for G. Carter, bungalow and garage, Watery-lane.

RADCLIFFE.—It is proposed to construct a new road from Radcliffe to Manchester, through Darcey Lever.

ROCHDALE.—Plans for two bungalows were approved by the Housing Committee. The Housing Committee recommended the Council to invite offers for the purchase of freehold plots of land on the Turf Hill Estate for the erection of permanent shops.

RUGBY.—The M.H. has approved a sewage scheme. The B.E. has passed plans for the proposed new secondary school.

ST. ANNES.—The Corporation has in hand another building scheme, which follows the acquisition of suitable areas of land at Squires Gate. On these it is intended to erect, as soon as possible, 20 houses.

SEDGEFIELD.—Plans passed by R.D.C.: Bakery at the Broom, Ferryhill, Mr. E. Callend; house and garage, Chilton Buildings, Mr. J. P. Coulson; conversion of two cottages into shop, Trimdon Grange, Mr. Farmer.

SELBY.—The West Riding C.C. are going to build a new bridge over the canal in place of the old stone bridge, at a cost of £15,000.

SELSTON.—The B.E. has passed plans for the erection of an iron building for 60 scholars at the Portland-row Council School.

SHENLEY.—Middlesex C.C. have appointed the County Architect to act in connection with the erection of the buildings at the Porter's Park Estate, recently acquired for the provision of further accommodation for mental defectives.

STOCKTON.—Plans passed by R.D.C.: Bungalow, Thorpe Thewles, Mr. W. Howe; house, Wynyard-road, Wolviston, Mr. Loughran, Port Clarence; house, Wolviston Green, Mr. Dearlove; house, Preston, Mr. F. Hay; house, Elton Back-lane, Mr. W. Beswick, Stockton; bungalow, Preston, Mr. J. Wheatley.

STOKE NEWINGTON.—The Public Library Committee has been empowered by the B.C. to accept the most favourable tender for the extension of the public library. A committee has been asked to report as to the provision of a swimming bath for the borough.

STRATFORD-ON-AVON.—The R.D.C. have prepared plans for additions to the old Toolgate Cottage at Wootten Wawen, but the Warwickshire C.C. suggests an entirely new building further back so that the road can be improved there.

STRETFORD.—A new secondary school for boys is proposed by the Lancashire C.C.

SUNBURY.—The Middlesex C.C. has decided to include an assembly hall at the new council school, which Messrs. C. J. Newby Bros. are erecting. The estimated cost is £2,000.

SWINTON.—Lancashire C.C. proposes a secondary school for Swinton, Pendlebury and Worsley.

THORESBY (NOTTS).—In connection with the new railway to the New Colliery the L.N.E.R. are to construct a bridge on the Ollerton–Mansfield main road.

TOTTENHAM.—The Middlesex C.C. propose alterations at and additions to the Tottenham Courthouse and Polytechnic. The scheme has been prepared by the county architect. The county architect estimates the cost of the work at £2,500.

TYNEMOUTH.—Plans passed by T.C.: Shops and flats corner of Hawkey's-lane and Newcastle Turnpike, for Mr. Percy Scorer, by Messrs. F. R. N. Haswell & Son; War memorial, West Allotment, for West Allotment and District War Memorial Committee, by Mr. W. Wright; four houses, Kirton Park-terrace, for Mr. Beautyman, by Messrs. P. L. Brown & Son; two houses, Kenners Dene, Tynemouth, for Messrs. J. F. Newbold & Co., by Mr. A. K. Tasker; 16 houses on the Hunt Hill Estate, for Messrs. Ball Bros., by Mr. W. Stockdale; conversion of dwellings into shops and offices, West Percy-street and Bedford-street, for Mr. J. Vert, by Mr. J. R. Wallace; four houses, Stanwick-street, Tynemouth, for Messrs. B. Peel, Ltd., by Mr. W. Stockdale; semi-detached houses, Cleveland-road for Mr. W. Bower, by Mr. W. Stockdale.

WALTON.—To strengthen the county bridge the Middlesex C.C. is to construct a concrete raft on the southern approach and tye the spandril walls at a cost of £800.

WARRINGTON.—The T.C. is preparing plans for 54 houses on the Reynolds-street site. Three houses for firemen are to be erected in Cambria-place. Alterations are to be made at the Technical School, at a cost of £3,000. Plans have been prepared by the B.S. for a bridge across the river near Manor Lock, in order to facilitate town development. Plans passed: Wesleyan church and schools, Ellesmere-street, for Trustees, Ellesmere-street Wesleyan Church; house, Alexandra-street, for Mr. A. Harter; sub-station, Kerfoot-street (behind), for Warrington Corporation (Electricity Committee); single-story building on Nora-street, for The Firth Co., Ltd.; butcher's shop and loading yard, &c., Cairo-street, for Warrington E.I. Co-operative Society; pavilion on Recreation Ground, Gorsey-lane, for Messrs. Rylands Workmen's Recreation Club.

WEST BRIDGFORD.—10 Allotments in Loughborough-road, Chantry-road and Carlisle-road are now to be developed for building purposes.

WHICKHAM.—Messrs. Adams have submitted to the U.D.C. plans for two shops on land on the Gateshead-Hexham main road at Swalwell, and negotiations are taking place regarding the building line.

YORK.—Plans passed by T.C.: E. Relton, two houses, Carrington-avenue; G. Forster, house, Moorgate; J. Terry & Sons, Ltd., bottle store, &c., Vine-street; C. Martin, Ltd., two houses, Beech-avenue, R. Johnston & Sons, six houses, Beech-avenue; T. Harrison, two houses, Hull-road; York Equitable Industrial Society, Ltd., alterations, Holgate-road.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£	s.	d.
Best Stocks	4	3	6
Second Hard Stocks	3	18	6

Per 1,000. Delivered at London Goods Stations.

	£	s.	d.
Flettons, at King's Cross	2	13	3
Do. grooved for plaster	2	15	3
Do. Bullnose	3	8	3
Best Stourbridge Fire brick:—			
2½ in.	8	11	0
3 in.	10	3	0

GLAZED BRICKS—

	£	s.	d.
Best White Ivory, and Salt Glazed Stretchers	23	0	0
Headers	22	10	0
Quoins. Bullnose and 4½ in. Flats	29	10	0
D'ble Str'tch'rs	31	10	0
D'ble Headers	28	10	0
One Side and two Ends	32	10	0
Two Sides and one End	33	10	0
Splays and Squints	31	0	0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s.	d.		s.	d.
2 in. per yd. super	2	1	3 in. per yd. super	2	11
2½ in. „	2	6	4 in. „	3	6

	s.	d.		
Thames Ballast	10	6	per yard.	delivered 2 miles radius Paddington.
Pit Sand	14	9	„ „	
Thames Sand	15	6	„ „	
Best Washed Sand	15	6	„ „	
¾ in. Shingle for Ferro-Concrete	14	0	„ „	
¼ in. „	15	0	„ „	
½ in. Broken Brick „	10	6	„ „	
Pan Breeze	7	6	„ „	

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0	10	0
Super Cement	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
„ „ Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
„ „ White	3	12	6
„ Fine	5	12	0
Sirapite, Coarse	3	9	0
„ Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	11	9
Best Ground Blue Lias Lime	2	4	6
Hair	17	0	0
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.

STONE.

	s.	d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2	9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2	11½
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4	4
Do. do. delivered on road wagons at above stations, per ft. cube	4	5

White basebed, 3d. per ft. cube extra.
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ¼d. beyond 30 ft.

HOPTON-WOOD STONE.
Delivered at any Goods Station, London.

		s.	d.
Small random blocks, up to 10 ft. cube. Per ft. cube		7	/-
Random blocks from 10 ft. and over	„	17	/-
Sawn two sides	„	27	/-
Sawn three or four sides	„	32	/-

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station London.

		s.	d.
6 in. sawn two sides landings to sizes (under 30 ft. super.)	Per Ft. Super	5	6
6 in. rubbed two sides, ditto	„	6	0
3 in. sawn two sides slabs (random sizes)	„	2	3½
2 in. to 2½ in. sawn one side slabs (random sizes)	„	1	6½
1½ in. to 2 in. ditto, ditto	„	1	4

HARD YORK—
Delivered at any Goods Station London.

		s.	d.
Scappled random blocks	Per Ft. Cube	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.)	Per Ft. Super	5	1½
		6	1½
6 in. rubbed two sides ditto	„	2	10
4 in. sawn two sides slabs (random sizes)	„	2	1½
3 in. ditto. ditto	„	9	0
2 in. self-faced random flags	Per Yard Super		

ARTIFICIAL STONE.

Delivered in London Area in full van loads.	s.	d.
Plain — per ft. cube	6	6
Moulded — „ „	7	9
Cills — „ „	8	3

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
6 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10	1 × 9 £36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅜	21/-	1¼	33/6
½	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
⅜	17/6
½	21/-
1	26/-

BATTENS

Inches	s.	d.
¾ × 2	2	6 per 100 ft.

SAWN LATHS.

Per bundle					0	2	8
Dry Wainscot Oak, per ft. super, as inch	0	2	0	to	0	2	6
¾ in. do.	0	1	6	to	0	2	0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9	to	0	2	6
Cuba Mahogany	0	3	0	to	0	3	6
Teak (Rangoon, Moulmein or Java), per load	45	0	0	to	50	0	0
American Whitewood planks, per ft. cube	0	14	0	to	0	16	0
Best Scotch Glue, per cwt.	4	10	0	to	—		
Liquid Glue, per cwt.	4	7	0	to	5	10	0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station.
Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	6	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

	Per 1,000 f.o.r. London. £	s.	d.
Best machine-made tiles from Broseley or Staffordshire district	5	12	6
Ditto hand made ditto	5	17	6
Ornamental ditto	6	2	6
Hip and valley tiles (per dozen) Hand made	0	9	6
Machine made	0	9	0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£	s.	d.
R. S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
Stanchions	17	10	0
In Roof Work „	20	10	0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
¼ in.	16	10	0	⅜ in. to ½ in.	13	10	0
⅜ in.	14	10	0	⅝ in. to 2¾ in.	13	0	0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28½ %	35 %	45 %
Steam	22½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2¾	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2¾	3½d.
3½ in.	1/6½	1/2¾	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. „	1/9½	1/4	2/0½
3 in. „	2/1½	1/8	2/5½
3½ in. „	2/6½	1/11½	2/10½
4 in. „	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. „ „	3 6½	2 5½	3 3½
3 in. „ „	4 2½	2 8	4 0½
3½ in. „ „	4 7	3 3½	4 8½
4 in. „ „	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. „ „	6 3	6 8	11 4
5 in. „ „	7 6	11 6	18 2
6 in. „ „	8 10	14 4	23 5

Per ton in London.

IRON—	£	s.	d.		£	s.	d.
Common Bars	13	10	0	to	14	10	0
Staffordshire Crown Bars—good merchant quality	14	10	0	—	15	10	0
Staffordshire "Marked Bars"	17	0	0	..	18	0	0
Mild Steel Bars	12	10	0	..	13	10	0

METALS (*Continued*).

	£	s.	d.		£
Steel Bars, Ferro-Concrete quality, basis price	13	0	0	..	14
Hoop iron, basis price	16	10	0	..	17
Galvanised	31	0	0	..	32
Soft Steel Sheets, Black— Ordinary sizes to 20 g.	15	0	0	..	16
„ „ „ 24 g.	16	0	0	..	17
„ „ „ 26 g.	18	0	0	..	19
Sheets Flat Best Soft Steel, C.R. & C.A. quality Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21	10	0	..	22
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22	10	0	..	23
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24	10	0	..	26
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21	0	0	..	22
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21	10	0	..	22
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23	10	0	..	24
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23	10	0	..	24
Best Soft Steel Sheets, 22 g. and 24 g.	24	10	0	..	25
Best Soft Steel Sheets, 26 g.	26	0	0	..	27
Cut Nails, 3in. to 6 in.	20	10	0	..	21

(under 3in. usual trade extras.)
METAL WINDOWS—Standard sizes suitable fo plete houses, including all fittings, painti coats, and delivery to job, average price ab to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£	s.	d.
LEAD—Sheet. English, 4 lb. and up			
Pipe in coils			
Soil Pipe			
Compo pipe			

NOTE—Country delivery, 30s. per ton extra; lo 3 cwt., 2s. per cwt. extra and over 3cwt. and cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cw

Old lead, ex London area, at Mills — per ton	31	0	0 ..
Do., ex country, carriage forward — per ton	32	0	0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB CO IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in
29/	45/-	76/-	153/-	246/-	510/-

NEW RIVER PATTERN SCREW DOWN STOP C UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/-

NEW RIVER PATTERN SCREW DOWN MAIN F

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- pe

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- pe

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per

NEW RIVER PATTERN CROYDON BALL VALVE

½ in.	¾ in.	1 in.	1¼ in.	1½ in
35/-	56/-	98/-	162/-	228/-

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

	1¼ in.	1½ in.	2 in.	3
8 lbs. P. traps	33/-	41/-	56/-	101/
8 lbs. S. traps	35/-	45/-	66/-	126/-

COPPER—	£	s.	d.	
Strong Sheet per lb.	0	2	3	..
Thin „ „	0	2	4	..
Copper nails „	0	2	3	..
Copper wire „	0	2	4	..
TIN—English Ingots „	0	2	4	..
SOLDER—Plumbers' „	0	1	2	..
Tinmen's „	0	1	4	..
Blowpipe „	0	1	5	..

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	
„ „ „ in barrels	„	
„ „ „ in drums	„	
Boiled „ „ in barrels	„	
„ „ „ in drums	„	
Turpentine in barrels	„	
„ in drums (10 gall.)	„	
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots	per ton delivered	
Red Lead, Dry (packages extra)	per ton	
Best Linseed Oil Putty	per cwt.	
Filocol	per cwt.	
Size. XD Quality		fkn

(Concluded on next page.)

* The information given on this page has b compiled for THE BUILDER and is copyright. this list is to give, as far as possible, the ac of materials, not necessarily the highest or lo and quantity obviously affect prices—a fact be remembered by those who make use of this

URRENT OF MATERIALS (*contd.*)

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.		Per Ft.
3½d.	32 oz. fourths	8½d.
4½d.	32 „ thirds	10½d.
5d.	Obscured Sheet, 15 oz.	4d.
6½d.	„ 21 „	5½d.
6d.	Fluted 15oz. 6½d., 21oz.	9½d.
7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

ccording to size and substance for squares tocks.

OLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
ate	4½d.
lled	5½d.
lled	5½d.
olled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large white	6½d.
, tinted	9d.
eet	6d.
lled Cathedral	5½d.
do.	7½d.

late is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
	Outside	0 14 0
	ditto	0 16 0
	ditto	0 18 0
	ditto	1 0 0
arriage	ditto	1 4 0
	ditto	1 12 0
	Inside	0 18 0
per	ditto	0 18 0
abinet	ditto	1 2 6
latting	ditto	1 0 6
Oak	ditto	0 18 0
rying Oak	ditto	0 19 0
arnish	ditto	1 0 0
	ditto	1 2 0
	ditto	1 12 0
old Size		0 10 0
apan		0 10 6
gany Stain (water)		0 12 0
ack		0 7 6
		0 14 6
ent)		1 5 0
Brush Polish		0 17 0
in Terebine		0 9 0
Enamel		0 7 0

emorial Church, Castleton.

dation stone of a memorial church n was laid recently by Viscount essrs. Temple, Mooore & Moore, of the architects, and Messrs. Lidell borsham, the contractors.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Aberdeen.—Houses.—Plans for four houses with other building work have been passed by the Corporation Plans Committee.

Alloa.—Classrooms.—The Dean of Guild Court has passed plans for new classrooms at the Ludgate Centre.

Ayr.—Buildings.—The Buildings Committee of the Ayr D.C. has passed the following plans: School at Pennievenie, Dumellington; cottage at Alloway, for J. Limond, Woodfield. Ayr; alterations at Fairfield Lodge, for Col. Campbell, Fairfield; 77 houses at Burnfoot, New Cumnock; house at New Cumnock; two cottages at Shields Farm, Monkton; cottage at Sorn-road, Auchinleck; alterations at the "Coylton Arms" Inn; house in Longbank-road.

Edinburgh.—Buildings.—The Corporation Public Parks Committee resolved to recommend the erection of a building at the tennis courts, Inverleith.—The Dean of Guild Courts has granted warrants for the erection of a house at Granton-road; bungalow at Hillview-terrace, Blackhall; two semi-detached houses at Saughtonhall-avenue; bungalow at Dovecot-road, Corstorphine; four houses at Saughtonhall avenue; also for offices at Mains Hospital.

Portobello.—School.—The Edinburgh Dean of Guild Court has passed plans for a R.C. School at Hamilton-terrace. The cost will be about £25,000.

Paisley.—Houses.—The Scottish Board of Health has approved the sketch type plans for the two and three-apartment houses under the slum clearance scheme; and also approved the local authority's proposal to erect 42 houses at Baterholm and 60 at Springbank-road.

CONTRACTS OPEN.

No Date.—**Inverness.**—Reconstructing Road.—For the carrying out of the following works, for the Town Council: Reconstruction of Mayfield-road; repairing and resurfacing of Longham-drive, Inverness; laying a sewer on Mayfield-road; and formation of a footway on the top of the embankment. Specifications may be had from Mr. A. F. Mackenzie, burgh surveyor and tenders may be lodged with Mr. G. S. Laing, Town Clerk.

August 12.—**Polmont. (Stirling)**—New Roadway.—For forming new roadway at Brighton's housing site, near Polmont Station, for the Stirling County Council. Schedule may be had on application from Mr. T. M. Copland, C.E., 76, High-street, Falkirk.

August 21.—**Tarbert Harbour.**—Works.—Tenders are invited for works shortly to be commenced on the passenger wharf and goods quay at Tarbert, Lochfyne. Plans, specifications and schedules of the works may be obtained from J. S. Henderson, "The Hollies," Lochgilphead.

DING TRADE WAGES IN SCOTLAND.*

wing are the present rates of wages in the building trade in the principal towns of Every endeavour is made to ensure accuracy, but we cannot be responsible for errors ccur :—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-Masons'	Plas-layers' terers' Labourers.
	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½	
	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½	
	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2	
	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½	
	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Eastern									
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

rmation given in this table is copyright. The rates of wages in the various towns in England and on page 223.

THE BUILDING DISPUTE

The employers' and operatives' representatives had meetings at their respective offices in Glasgow recently, but the questions under discussion were mainly of a private character. The operatives heard reports from the various districts, and they considered that satisfactory progress was being made.

An official of the Glasgow Operatives' Disputes Committee stated that the attention of the committee had been drawn to the fact that unskilled men were being employed on contracts from which building trade labourers had withdrawn their labour on account of the strike. The Committee had decided, he said, that all such jobs would be regarded, even after the strike, as "blackleg," and that no craftsmen would be allowed to work there.

The Scottish employers in a statement to the Press mention that the manifesto issued by the operatives' secretary in Scotland still maintains a claim that 60 per cent. of their operatives who are members of the union are working. It must, they state, be noted that such a claim, having in view the almost complete stoppage of building trade work in Scotland south of Dundee, simply exposes the known fact that the operatives' union does not contain in its membership more than 40 per cent. of the workmen. The further claim that 600 employers have signed the agreement has already been disposed of from the national headquarters in London, whereupon Mr. Coppock claimed that 350 employers had agreed to the men's demands. This will obviously cover all the employers not only in the south of Dundee but north of Dundee, where the operatives' union are content to observe the old conditions. The building trade employers are satisfied, they state that instead of an increase in the number of men employed, the lock-out notice and the withdrawal of signed agreements has replaced hundreds of men on the strike roll.

OBITUARY

The death took place recently of Mr. John Henderson, Director of Glasgow School of Art. His father was the late Mr. Joseph Henderson, the Scottish marine and landscape painter, whose three sons also became artists. Mr. John Henderson, the second son, was born in Glasgow in 1860, and was educated at a private school and at Glasgow University. He graduated Master of Arts in 1881, with first-class honours in philosophy. On the death of his older brother, he decided to follow the profession of the fine arts, and he studied painting under his father and also at the Glasgow School of Art, of which he afterwards became the head. Early in his career, Mr. Henderson took an active interest in matters connected with the teaching of art in Glasgow. Some twenty years ago he became a member of the Board of Governors of the School of Art, representing on that body the Haldane Trust. He became vice-chairman of the board ten years ago, and when Mr. F. H. Newbery retired from the directorship of the school, about seven years ago, he was succeeded in that position by Mr. Henderson. He was also chairman of the Haldane Trust and a governor of the joint board of the Glasgow School of Architecture.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6 ..	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2: 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers .. "		50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"	1¼"
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/8	1/9
Deal shelves and bearers	"	1/5	1/7
Add if cross tongued	"	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8

Housings for steps and risers		each
Deal balusters, 1 in. × 1¼ in.		per ft. run.
Mahogany handrail; average 3 in. × 3 in.		" "
Add if ramped		" "
Add if wreathed		"

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges a letting in to floor a	
Casement stays	1/2	making good	
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt
Plain compound girders	"
Do. stanchions	"
In roof work	"

RAIN-WATER GOODS.

		3"	4"	5"
Half-round plain rebated joints ..	ft. run	1/11	2/4½	3/7
Ogee Do. Do. ..	"	2/4½	3/1	3/1
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/7
Do. nozzles for inlets	"	2/2	2/7	3/1

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt
Do. Do. in flats	"
Extra labour and solder in coated cesspools	each
Welt joint	per ft run
Soldered seam	" "
Copper nailing	" "

	½"	¾"	1"	1½"	2"
Drawn lead waste per ft. run	1/1	1/9	1/11	3/5	4/2
Do. service "	1/8	2/2	2/7	3/10	
Do. soil "					3/3
Bends in lead pipe each					
Soldered stop ends "	1/2	1/8	2/1	2/10	3/6
Red lead joints .... "	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints "	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws .... "				14/7	19/6
Bib cocks and joints .. "	6/4	9/7	15/4	41/-	
Stop cocks and joints "	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard su	
Do. Do. Sirapite	"	"
Do. Do. Keen's	"	"
Add sawn lathing	"	"
Add metal lathing	"	"
Portland cement screed	"	"
Do. plain face	"	"
Mouldings in plaster	per l girth	
One-and-a-half granolithic pavings	per yard su	

GLAZIER.

21 oz. sheet plain	per foot su
26 oz. Do.	" "
Obscured sheet	" "
⅛ in. rolled plate	" "
¼ in. rough rolled or cast plate	" "
¼ in. wired cast plate	" "

PAINTER.

Preparing, and distempering, 2 coats	per yard s
Knotting and priming	" "
Plain painting 1 coat	" "
Do. 2 coats	" "
Do. 3 coats	" "
Do. 4 coats	" "
Graining	" "
Varnishing twice	" "
Sizing	" "
Flatting	" "
Enamel	" "
Wax polishing	per foot su
French polishing	"
Preparing for and hanging paper	per piece

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment of percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The wi

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TENDERS

nications for insertion under this heading should ssed to "The Editor," and must reach him not n Tuesday evening.
es accepted. † Denotes provisionally accepted.
es recommended for acceptance.
tes accepted subject to modifications.

YSTWYTH.—For erecting (*a*) five workmen's s in Mill-street and (*b*) five workmen's dwellings Drill Hall :—
iams, Porth (Glam.)—(*a*) £2,450 ; (*b*) £2,465

ON-UNDER-LYNE.—For reconstruction of for the B.G. Mr. G. J. Gibbs, Engineer, -street, Preston :—
ain, Preston £3,138 18 10
Armstrong & Co., Ltd., London, E.C. 4 ..... 2,999 6 0
cton, Oldham 2,912 13 9
es Ritchie, Glasgow 2,878 4 3
Marshall & Sons, Ltd., Ashton-under-Lyne 2,859 5 9
radford & Co., Salford 2,838 8 3
J. Tullis, Ltd., Clydebank 1,826 12 9

HORY TERNAN.—For mason, carpenter, rk, &c., for additions to the Central Higher hool, for the Kincardineshire E.C. Messrs. Walker, FF.R.I.B.A., architects, 375, Union-berdeen, and quantities also by them :—
on—P. R. Leslie, Torphins.
er—R. Robertson, Torphins.
er—G. L. Grant, Banchory.
nber—J. C. Johnstone, Banchory.
ierer—McRae Bros., Banchory.
ter—Jas. Chrystall, Banchory.
ing—R. Tindall, Aberdeen.
Total cost, about £2,000.

ING TOWN.—Fencing for Greatfields Re-Ground, for the U.D.C. :—
ers & Forster, Ltd. £885 0 0
& Smith, Ltd. 808 5 7
iss, Jones & Bayliss, Ltd... 714 7 9
. Smith & Co. 669 0 0
on Bros. 634 15 2
ithers & Pratt 623 12 6

ORD.—For alterations and additions to the gh School, for the Governors of the Harpur Ir. G. P. Allen, F.R.I.B.A., architect and sur-Bedford :—
ll £1,088 0 0
aughtor 896 5 8
rby & Son 884 0 0
owler 860 0 0
gus 851 0 0
Foster, Ltd. 826 0 0
(All of Bedford.)

NHEAD.—For the erection of 193 non-ouses on the Derby Park Estate, for the
od, Lloyd & Co. £86,512 5 0

VER.—For the erection of 30 houses in Moor-for the U.D.C. :—
. Goss £13,950

VER.—For laying water main in Moorfield-the U.D.C. :—
wper £161 7

FF.—For erection of 20 sets of firemen's nd other works at the Central Fire Station, poration. Mr. T. Peirson Frank, City Archi-Hall :—
Evans, Cardiff £36,305 0 0
Evans, Cardiff 34,655 0 0
Evans, Cardiff 34,498 0 0
Thomas, Cardiff 34,277 17 0
Jones, Cardiff 32,635 2 11

SFORD.—Painting water-tower, for the
Beaumont & Son, London £211 0 0
& Sons, Chelmsford 155 0 0
Cowell, Chelmsford 170 0 0
orfolk Decorators, Ltd., ion 137 5 6

ONE.—Erection of school for 728, for the :—
twood & Sons, Warsop.... £16,750

M.—For erection of 50 houses on Shield ng Estate, for Stanley U.D.C. Mr. A. Council Offices, Stanley, co. Durham :—
"*A2*" *Type.*
idley, Stanley (8 houses) £3,087
Raper, Stanley (22 houses) 8,580
"*A3*" *Type.*
endle, Stanley (20 houses) £8,546

IDING OF YORKSHIRE.—For con-reinforced concrete bridges at Fraisthorpe for the C.C. :—
on, Bridlington.. £1,180 and £2,120
ectively.

RGH.—For construction of Portobello a wall, for the T.C. :—
Brown £54,480

or laying 685 yds. of 9 in. diameter fire-&c., for the County. Mr. H. F. Hodge, unty Building, Dunfermline :—
axter & Sons, Dunferm-..... £566 19 2

.—Shettleston and Tollcross Library, for T.C. :—
Marshall—£1,946 14s., for the completion work.

GLASGOW.—Construction of workhouse at Dobbies-Loan, for T.C. :—
Digger, brick, mason, reinforced concrete, and asphalte works—
*A. Bremner & Co. £10,196 0 0
Carpenter, joiner, and glazier works—
*W. J. Crawford 1,698 1 9
Plumber work—
*G. Munro 2,050 9 10

GLASGOW.—Construction of new buildings at Trongate, for T.C. :—
Excavator, mason, and brick work—
‡Jackson, Brown & Co..... £15,651 7 4
Carpenter and joiner work—
*John M'Donald (Contractors), Ltd. 7,436 6 5
Plumber work—
*John Paterson & Co. (Plumbers), Ltd..... 1,633 12 5

GUILDFORD.—For erection of 10 pairs of non-parlour houses at Clive-road, for the T.C. :—
Gibson & Harris, Shalford £10,614 10
Grove & Son, Guildford 10,580 0
‡Perry Bros., Ealing 9,400 0

GUILDFORD.—For the improvement of Woking-road, for the T.C. :—
Swinford, Powell & Morrison, Ltd., Woking £5,350 0 0
Henry Osman & Co., Southampton 4,939 12 3
A. Streeter & Co., Godalming.. 4,859 11 2
W. Manders & Co., London 3,942 10 6
*D. Weston & Co., Croydon 3,785 16 7
J. Douglas, Southampton..... 3,709 0 0

GUILDFORD.—For surface-water sewer in Grange-road, for the T.C. :—
John Douglas £242 9 0
Perryman & Last..... 284 8 3
Swinford, Powell & Co..... 271 16 0
A. Streeter & Co..... 255 19 0
*Franks Harris Bros., Guildford.. 237 0 0

HULL.—Electricity extension works for T.C. :—
*The Ovenden Sheet Metal Co., Halifax £367 10

HULL.—Erection of Ferens Art Gallery, for the T.C. Messrs. Cooke & Dawes, architects :—
*George H. Panton & Sons, Ltd..... £53,980

LAKE VYRNWY.—For painting several houses, cottages, offices and workshops, for the Liverpool Water Committee. Mr. W. Moon, Town Clerk, Town Hall, Liverpool :—
C. R. Jones, Oswestry £570 15

LANCASHIRE.—Erection of seven pairs of cottages on small holdings at Howick. Hutton and Longton, for County Agricultural Committee :—
*E. Tomlinson & Co., Leyland..... £7,315

LANCASHIRE.—Erection of Dutch barn and loose-boxes at Pear Tree Farm, for County Agricultural Committee :—
*P. Barron, Tarleton £220 10 5

LANCASHIRE.—Resurfacing part of the Burnley-Todmarden main road, for C.C. :—
*Penmaenmawr and Trinidad Lake Asphalt Co., Ltd..... £4,142

LANCASHIRE.—Building a river wall, &c., in connection with the Hodder Higher Bridge, for C.C. :—
*Byroms, Ltd., Bury..... £898 15

LANCASHIRE. — Reconstruction of Ellerbeck bridge, for C.C. :—
*R. Birch & Sons, Lindal-in-Cartmel £1,429 19 10

LANCASHIRE.—New bridge across L.M.S. railway on the new road between Poulton and Singleton, for C.C. :—
Steel work—
*Skipworth, Jones & Lomax, Trafford Park £3,132
Masonry work—
*J. Dickenson & Co. (Bolton), Ltd.. 12,591

LANCASHIRE.—For construction of new road from Freckleton village to the Preston main road, for C.C. :—
*T. Croft & Sons, Ltd., Preston.. £37,568 12

LANCASHIRE.—Reconstruction of further lengths of Liverpool and Manchester main road, at estimated cost of £14,497, for the C.C. :—
*W. Turner (Ardwick), Ltd.

LEEDS.—For structural alterations at 40, Park-lane, for office accommodation, for the T.C. :—
*J. T. Wright £10,186 3 7

LIVERPOOL.—For erection of 1,000 houses, for the T.C. :—
*Unite Construction Co... £515 for each "B 950" type, and £465 for each "A 814" type, each type to be in blocks of two or four.

LIVERPOOL.—For building of tenement houses in Larkhill, Clubmoor and Springwood, for the T.C. :—
*John Lewis, 24 tenement houses £17,603
*Turner & Moss, 25 do. 17,123
*Haugh & Pilling, 24 do. 14,483
*J. Jones & Sons, 24 do. 18,340
*Duthie & Sons, 24 do. 18,139

LIVERPOOL.—For painting, &c., cottages, offices and workshops at Lake Vyrnwy, for the T.C. :—
*C. R. Jones £570 15

LIVERPOOL.—For the erection of a shelter at Warbreck Moor Recreation Ground, for the T.C. :—
*Brigg & Collins £166

LIVERPOOL.—For the erection of shelter at Greenbank Estate, for the T.C. :—
*J. Rimmer £200

LONDON.—For cleaning and decorating works at Town Hall, for St. Marylebone B.C. :—
*J. Simpson & Son..... £415

LONDON.—For street works in Grove End-road, for the St. Marylebone B.C. :—
*Limmer & Trinidad Lake Asphalt Co., 12s. 4d. per sq. yd.

LONDON.—For supply of furniture and fittings at Children's Department of Central Library, for the Deptford B.C. :—
North of England School Furnishing Co. £425 17 6
G. M. Hammer & Co..... 348 0 0
*Libraco, Ltd. 292 0 0

LONDON.—For the erection of the maisonettes in Fletching-road, for the Hackney B.C. :—
Geo. Parker & Sons, Ltd. £44,652 0 0
J. & W. Stewart 43,258 11 3
Wm. Shurmur & Sons, Ltd. .. 41,549 0 0
G. B. Farrar & Co., ... 38,828 0 0
*F. & G. Foster 35,559 0 0

LONDON (CHISWICK).—Construction of secondary school in Burlington-lane, for the Middlesex C.C. :—
‡G. Godson & Sons, Ltd., Kilburn-lane £33,870

MANCHESTER.—Extension and alterations Baguley Sanatorium, for T.C. :—
*F. Heys, Manchester.

MANCHESTER.—Additions and alterations Southall-street School, for E.C. :—
*Atkinson & James, Manchester.

MANCHESTER.—Additions and alterations, Lily-lane School, for E.C. :—
*Atkinson & James, Manchester.

MANCHESTER.—Supply of 6 in. and 3 in .cast iron pipes, for T.C. :—
*Sheepbridge Coal & Iron Co., Ltd., Chesterfield.

MANCHESTER.—Repairs to Clarendon-road police station, for T.C. :—
*S. Ashton, Manchester.

MAYFIELD (SUSSEX).—For erection of a house, for Mr. Hugh J. Brock. Mr. Frank Nash, architect, 6, New-square, Lincoln's Inn, W.C. 2 :—
E. J. Hodges, Mayfield £1,599
H. & E. Waters, Forest Row 1,589
A. Chilton, Uckfield 1,489
Durrant Bros., Uckfield 1,439
S. Lea, Mayfield 1,275

MONMOUTHSHIRE.—For converting Hafod-y-ddol house into a secondary school, for the County E.C. :—
*Gay & Head, Blaina £3,700

NEWCASTLE.—For the re-painting externally of 198 houses on the Walker housing estate. The Housing Architect's Dept., 18, Cloth Market :—
Jas. Burdon, Ltd., 75, West-street, Gateshead £720 0
E. S. Smith, 98, Cardigan-terrace, Heaton, Newcastle 690 0
J. Cato, 165, Heaton-road, Newcastle 682 15
Sydney Hull, 77, Clayton-street, Newcastle 597 0
Alexander & Sons, 7 and 9, Leazes Park-road, Newcastle..... 586 11
H. J. Sinclair, 158, Heaton Park-road, Newcastle 557 10
W. B. Cato, 251, Chillingham-road, Newcastle 553 8
Stephenson Bros., 116, New Bridge-street, Newcastle..... 498 0
T. & R. Stephenson, Cherryburn-gardens, Fenham, Newcastle.... 434 0
W. S. Hetherington & Sons, 48, Ashleigh-grove, West Jesmond, Newcastle 424 11
A. E. Preece, 6, Ulverstone-terrace, Walker 400 0
A. Robertson & Son, Newcastle.... 398 0
*Alex. Anderson, Newcastle..... 297 0

NEWPORT (I.O.W.).—Construction of houses, for T.C. :—
‡Mr. H. Dalton—Two pairs at £820 per pair.
‡Mr. T. E. W. Phillips—Four pairs at £764 per pair.

NUNEATON.—Fencing land on the Birmingham Nuneaton main road by Bacon's End and Coleshill Hall bridges, for Warwickshire C.C. :—
*W. Blackwell £236 5

PLYMOUTH.—For repairs at 2, High-street, 30, George-street, Stonehouse, and 2 and 3, Eton-terrace, for the T.C. :—
*F. G. Nicholls—2, High-street..... £129 10
*C. Lobb—30, George-street..... 139 10
*C. Lobb—2 and 3, Eton-terrace.... 100 0

PLYMOUTH.—For the erection of 134 houses at North Prospect, for the T.C. :—
*James Cockerell £79,871

PLYMOUTH.—For sewage disposal works at Udal Torre, for the T.C. :—
*Maben & Waldron £345 10 4

PLYMOUTH.—For construction of subway at Ford, for the T.C. :—
*R. T. Hortop & Co. £3,217 10

PRESTON.—For the re-erection of the Isolation Hospital Lodge, for the T.C. :—
*J. Turner £620

PRESTON.—For the supply and erection of wrought iron fencing at Isolation Hospital, for the T.C. :—
*T. Blackburn & Sons £566 3 8

ST. GERMANS.—For erection of a house at Downderry. Messrs. Parkes, Lees & Rosedeare, architects, Launceston :—
Sandy & Carthew, St. Germans £1,641 10
§J. H. Runnalls & Son, Liskeard 1,390 0

SELSTON.—Erection of classroom at Bagthorpe School, for Notts. E.C. :—
*E. Allcock & Sons, Eastwood £2,008

SOUTHPORT.—Road works, for T.C. :—
*Webster & Winstanley, of Wigan—£1,807, Belvedere-road ; £2,290, Osborne-road ; and £927, Belgrave-place.

SOUTHPORT.—Erection of boys' secondary school, for T.C. :—
*W. Moss & Sons, Ltd. £58,895

SOUTH SHIELDS.—Extension of tramcar sheds, for T.C. :—
*H. T. Newbigin, Ltd., Newcastle.... £7,350

STOKE-ON-TRENT.—Alterations and extension at the Market, for T.C. :—
*Ball & Robinson £2,697

STOKE-ON-TRENT.—Erection of 41 houses, Scotia-road, Burslem, for T.C. :—
*Finney & Broadhurst £20,198

SUTTON COLDFIELD.—Erection of pair of police houses, for Warwick C.C. :—
*G. T. Stephens..... £1,628

WALLINGFORD.—For erection of a fire station in Station-road. The Borough Surveyor, 12, St. Martin's-street :—
Francis Bros., Tilehurst, Reading £2,180 0 0
J. Smallbone & Sons, Streatley 2,150 0 0
Boshers, Ltd., Cholsey 2,083 10 0
*Brasher & Sons, Wallingford .. 2,022 4 4
Borough Surveyor's Estimate, £2,100.

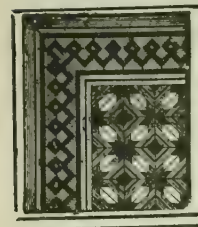
WOLVEY.—Erection of police house, for Warwick C.C. :—
*S. Thompson £750

WOOD GREEN.—Repairs to cottages, Walton's-road, for Middlesex C.C. :—
B. T. Burnell £637 8 0
E. & A. Jenkins 373 19 3
H. H. Wilson 353 0 0
‡C. Yardley 337 18 6

WOOLSTON.—Erection of police house, for Warwick C.C. :—
*Corfield & Burton £730

WORKSOP.—Erection of last section of school for 384, at Hoggonfields, for Notts. E.C. :—
*Richmond & Sons, Retford £7,546

WYKEN GRANGE.—Erection of school for 580 children, for Warwick C.C. :—
*J. G. Gray—Building £14,488



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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

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EDUCATIONAL VALUES

nan builds to himself alone. Let the proprietor do as he likes inside his building, for we need not call upon him. Bad ed not be seen, books need not be read, but nothing but blindness or the numbing of our faculty of observation can protect buildings in the street.—PROFESSOR LETHABY.

E have read somewhere that the simple enjoyment of beautiful things seems to be the privilege of youth. We would dismiss this philosophy as foolish if it meant that delight should fade with the coming of ge; it would mean that our knowledge had been bought. If, however, we accept the essential truth philosophy we are bound to find fault with a system tion which fails to supply the beautiful things for the ment of the youthful mind.

find ourselves thinking of architecture as one of the l things, and we have in mind the future towns and hen we are discussing the teaching of architecture ols. It is true that though most of our elementary uildings are hygienic, many of them are distinctly t is a curious trait in some of our educational reformers, hey do not fail to grasp the significance of architectural in its influence upon the mind, they violently destroy tradition by substituting their own immature works. anging one educational theory for another, they find sary to design their buildings themselves. This is assing phase perhaps, and it is only fair to say that f our public schools realise their architectural respon-. Too much importance is attached to environment e who maintain that the attitude of students towards architecture of our universities is one of indifference. take is to assume that every student should (or could) oducer—an architect. We are reminded of Whistler's t upon Ruskin's lifelong study of pictures. "A life mongst pictures makes not a painter, else the policeman National Gallery might assert himself."

would like to believe that good taste, the appreciation nd lovely things, in themselves, in literature, in archi- in society, can be planted as a seed in the heart of a Education theories are plentiful in this age, but ately there are many doubts amongst educational ies about relative values in education. We are told ucation is not primarily the acquisition of knowledge red, by the way, an easy thing to acquire), but rather more difficult task of approaching gradually a right sitive appreciation of the fundamental problems of life There is a difficulty to be faced in all theories of educa- d it is most important in architecture); we have to our minds whether we are educating for appreciation uction.

ssume that the public is responsible for the low level ecture, and that the general lack of taste is the result ance in architectural matters. It is not our point to hese assumptions at the moment; the grounds are to indicate that a certain amount of architectural n at school could produce nothing but good. The have to determine is what we mean to aim at in our n. What architects mean (we presume) when they n educated public, is that their clients, being conscious eauties of architecture and their responsibilities to the ity, will commission an architect to design their . When this simple statement is analysed we begin at it is the beginning of any improvement in our archi- amenities. We cannot look to the average man for up and a sound knowledge of architecture, and it is that a certain amount of guide-book knowledge of ural dates and periods can do little more than give an uch of interest to the annual holiday. It may even add to the exclusiveness of architecture, as an art, to house designed by a speculative builder, and to deny nsibility for the appearance of the building. It is in that we have succeeded in covering the country with monotonous and vulgar houses, and in bringing up our on this tradition.

We take it for granted that school buildings should play their part as examples of architectural beauty, and we can appreciate the fact that it is difficult to find a place for architecture in the curriculum of public schools. It is generally argued that there is not time to teach very much about architecture at school, and that the most that can be done is to lay a good foundation for a subsequent knowledge of the subject. Experiments are being tried here and there, we believe, with success, proving that architects can do much useful work in our schools by explaining in simple language the elements of architecture. It is vastly more important that children should understand in a general way the real meaning of architecture than that they should inherit from their parents the trifling knowledge which distinguishes between a Norman and a Gothic arch. The observation of the children can be stimulated and their interest maintained by brief lectures upon the climatic, geographical and social conditions, of which it may be said that architecture is the result or effect. The architecture of the future seems to us likely to be almost wholly influenced by social developments, and if so, much must depend upon the outlook of the nation.

There is a negative side to architecture which cannot be overlooked. It embraces by far the greater portion of the buildings which comprise the dull towns and suburbs which surround the children, and form the background for the rest of their lives. Ugliness should be analysed and exposed, so that future generations will learn to think of architecture as an art for which they are directly responsible. It is fashionable to put forward the philosophy that we make an end of ugliness if we teach a love for beauty, but there is a simpler philosophy which attacks ugliness in every shape or form because it is morally wrong to produce it. We may not always get the beauty we are seeking, even if we can prevent ugliness, but it is a move in the right direction.

There is a form of architectural education which results in the knowledge of the pedant, whereas if a sense of responsibility were inculcated at school we might reasonably hope that the attitude towards architecture and civic decencies would be elevated to the status it deserves. Our public schools are the main sources which maintain the tradition of our social codes and conventions, yet it must be admitted that the arguments against certain improprieties would appear trivial compared with the greater offence of creating vulgarity in architecture. There is an absence of true culture in a nation which is unconscious of guilt when it commits an architectural solecism. Children are quick to see the difference between bad taste which is personal, and bad taste which is a permanent offence against society. It cannot be repeated too often that it is not sufficient that our architects should be educated; there must be a desire on the part of the people for better architecture. Some months ago Lord Curzon, in the course of an address, asked this question: "Could anyone explain why it was that whereas cottages built four hundred years ago costing next to nothing were among the most beautiful things in creation, they were being replaced by modern buildings which were an abomination of desolation?"

Much credit is due to Professor Lethaby for the efforts he has made to stimulate the interest of children in the arts of everyday life. At one moment he is writing upon the homely and beautiful arts and crafts of an earlier generation, at another he is writing upon the dreadful things we have contrived to make of our villages and towns. In teaching the children to recapture the pleasures of beautiful things, he also teaches them what he terms the minor items connected with town administration: decency, cleanliness, order, and fitness. The subject is one which should interest the Royal Institute of British Architects. We would like to see architects giving their services in their spare time, and we would like to see our schools equipped with a few illustrations of our finest buildings.

NOTES

Housing Costs.

A STRONG light is thrown upon the subject of housing by a letter in *The Times* by Mr. J. E. Drower. Whilst we do not quite agree with all he says, we must see that he has hit on some vital points. The speculative builder might not have succeeded so well as the writer suggests in face of increased cost of materials and labour, but his criticism of the long array of extra costs we are forced into by political action is shown below. He says: "The provision of houses for the working classes is now almost entirely in the hands of the local authorities, whose procedure differs completely from that of the speculating builder. Architects are now employed to design the houses, careful specifications are written, and surveyors prepare bills of quantities. The builder is allowed no discretion in his choice of material or method of building; he must provide the material and employ the methods specified and none other; he must do the whole building by day-work, and must not even sublet except by permission. Clerks of works are appointed to see that he carries out the strict letter of his contract, and his office expenses are increased by the Ministry of Health's requirements as to accounts and audits. The result of it all is that houses are now so expensive that the Government has to step in with a subsidy, and the rates are burdened to allow of the houses being let at rentals which the tenants can afford."

Problems of Architecture.

IT would be unfair not to recognise an improvement in the new cottages being built, and also in the planning of some of the larger housing schemes, in which economy is often found not a hindrance but an inspiration towards style, since it compels a new approach and a concentration on the essentials away from foolish ornamentation and the appeal of display. We are in a more difficult situation, however, when the more pretentious demands of commerce direct so much the forms of our larger city buildings. It is perhaps too easily assumed that the requirements of commerce will always secure for us good architecture, and there are some who will point to the new Regent-street as an example of the improvements created by the present more ambitious aims of commerce. If there were nothing in commercial aims which contradicted the aims of architecture, and the architect were free to do his work without hindrance to the claims of his vocation, this, no doubt, would be the case. We are perhaps too ready to accept the spirit of an age in which the claims of architecture do not always prevail, and it would be better to admit the problem of the present situation, which is to secure the right place of architecture in the direction of new buildings. There must be a communal sense in building, a sense of the obligation to what already exists, consideration of the relation of new buildings to older ones, also the claims of the street or place on which they are erected. It cannot be only what our private interest makes us think desirable. To build out of scale and character with the surroundings should appear to us as an offence, and the city claims from us consideration as well as the success of our business.

A Book of Designs.

PROBABLY the best-connected tribute to the work of the Architectural Association School is the Book of Design just issued by Ernest Benn, Ltd. (price one guinea). It is mainly a book of designs, but is prefaced by interesting articles by Messrs. Howard Robertson, Robert Atkinson, Oscar Faber, Walter M. Keesey, V. O. Rees, and L. H. Bucknell. All these contributions have a value of their own and should help to clear the view of students and others as to the aim we all have for the further the art of architecture. The desi on the whole, of definitely quality and will be quite as wel many in that most of them do no closely any special tradition. It haps well that there is little trace picturesqueness or of the lighter g architectural treatment. We n that the student is happier in his tion of a bungalow than of a chur council chamber rather than of a or an office building, but, take whole, we may certainly feel t designs indicate some progress the finer qualities of architectural The book is hardly one from whic any serviceable "crib," but we grateful for this volume of s designs.

Difficulties in Design.

IT is probably e write as follows to-d it would have been ten years ago. "O both in practice and in the writt of our moderns, architecture b construction is discarded as a basis. It is well for the studer reminded of the difficulties in the right constructional expression. materials are of such great stren adaptability that we can almos that any form will hold up s cannot see too clearly the depen form on construction. Our buildi not often have a purpose worth particular expression, but we remember that the architect m been called in so as to give th possible expression of a swaggerin tisement. If he can turn this in of forcible dignity he may have expression he can condone and e

A Coat of Paint.

THE rather charmi open iron railing borders the pave the street on the n of Westminster Abbey, with its Portland stone posts, a very



Medallion Windows. BY MR. REGINALD HALLWARD. (*See p.* 237.)



Photo: Mr. Gilbert H. Jenkins, F.R.I.B.A.

Cupola at Coleshill.

f alternating black and white, is need of a coat of black paint. iron fence forms an agreeable to the mechanical iron railings of nd more ostentatious character se in the Abbey at the west. We ays regarded this comparatively e railing—inviting, rather than ng us, to the charm of the smooth ch lies behind it—as an agreeable a time when simplicity counted han it does now. So much more than would be anything more us and expensive, we trust it ng preserved to greet the passer- this preservation will be better y a coat of black paint at the me.

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r- VERY encouraging indeed m is it to see such results from whole-hearted and well- directed voluntary effort for rovement as that which has he progress of the Birmingham iety. The report just issued ne, 1923, to June, 1924. Promi- gst the subjects dealt with are and we have already (March 21) the admirable work in connec- Aston Park, the alterations to still in progress and bid fair to very unique and valuable city Besides this, during the past lerable progress has been made mes for the improvement of ill, Muntz, Selly Oak, King's d Handsworth Parks. Designs have also been prepared for parks at Aston Yardley, Ladywood, Aston Reservoir, The Henburys, Pipe Hayes, Moseley New Pool, Trittiford Mill, Upper Witton Reservoir, King's Heath, and Sparkhill. The preparation of these designs and the careful inspection of their carrying out certainly constitute a valuable contribution to the objects for which the Civic Society was formed. Telephone kiosks, publications, lectures, public appointments, and last, but not least, very sustained effort towards the continual establishment of the Repertory Theatre, complete a list of activities which should earn the gratitude of Birmingham's citizens.

A valuable asset to the Society is, of course, the sympathy and help which has come to it from official quarters, and at present the Lord Mayor of Birmingham is the President of the Society. We congratulate the hon. secretary, Mr. Wm. Haywood, on the results he has been able to show in this report. The very success of the Society raises in one's thoughts the wonder whether our towns and cities can possibly thrive and get all the benefits they ought without a liberal and enlightened citizenship which can willingly undertake so heavy a burden as the pages of this report suggest.

War Office Devastation.

THE objections which have been raised to the acquirement for military purposes of Lulworth Cove, and the absorption of some of the most beautiful rural districts throughout the country from Northumberland to Cornwall as military centres, raises issues of national importance. These sites may be required as a means of so-called security, but in regarding the value of such security we should bear in mind what security we propose to reach, whether we ought not to consider the matter on wider grounds. It is strange that at a time when the desire for peace is so paramount, and the ruin, waste and failure of war as a reasonable solution is so strongly held, that it should even now be accompanied by war preparations more destructive to the beauty of England than ever before. If the desire for security operates in such a destructive manner, it is only less destructive than war itself, and further evidence of its failure. If the wholesale detacement of the country should prove an influence antagonistic to war it may be thought worth while to suffer the growing loss to rural surroundings, but if only the re-assertion of that hoary fallacy, *si vis pacem pare bellum*, the attitude of the War Office can only be regarded as a reaction towards the disastrous outlook which plunged the world into war ten years ago.



Photo: Mr. Gilbert H. Jenkins, F.R.I.B.A.

Houses at Burford.

GENERAL NEWS

Professional Announcements.

Mr. W. T. Davenport, F.S.I., quantity surveyor, Queen's Chambers, Warrington, has opened an office at 32, Victoria-street, Westminster, S.W.1.

Mr. D. H. Roberts, M.S.A., Wombwell, has been appointed lecturer in building construction and building science at the King's-road Technical Centre, Wombwell.

Change of Address.

Messrs. J. Walter Hanson & Son, architects, are removing from 78, King-street, South Shields, to 18, Eldon-square, Newcastle-on-Tyne.

Sheffield Public Hall.

The City Council of Sheffield propose to erect a public hall at an estimated cost of £350,000. It is expected building will commence next spring.

Wallace Collection.

The Lords Commissioners of His Majesty's Treasury have appointed Mr. Emery Walker, F.S.A., to be a trustee of the Wallace Collection in the place of Sir Martin Conway, M.P., who has resigned.

£400,000 Kent Road Scheme.

The Kent County Council recently approved in principle a £400,000 scheme for improving the Folkestone road between Maidstone and Folkestone, with by-passes at Lenham, Charing, and Ashford. The Ministry of Transport will contribute 75 per cent. of the total cost of the scheme.

Glastonbury Abbey.

The Dean of Wells, on behalf of the Trustees, has invited Mr. F. Bligh Bond, F.R.I.B.A., to take charge of the collection of architectural fragments that have from time to time been discovered by him during a period of excavation in Glastonbury Abbey grounds.

Ancient Monuments.

The Office of Works has notified the Cardigan County Council that Cardigan and Newcastle Emlyn Bridges have been scheduled as ancient monuments.

New Town Hall, Barnsley.

The Barnsley Town Council has appointed a sub-committee to deal with the question of building a new town hall. The Carnegie United Kingdom Trust has offered a sum of £9,000, on certain conditions, for the provision of a library in Barnsley, and the Town Council has informed the trustees that it will prepare a scheme in the near future.

Builders' Estates.

Mr. George Edward Powell, of Hunter House-road, Sheffield, builder and contractor, of Messrs. B. Powell & Son, Ltd., who died on April 30, aged 71, left estate of the gross value of £13,157, of which £12,496 is net personalty.

Mr. F. J. Trotter, of Leicester, builder (net personalty, £8,899), £11,058.

Obituary.

The death took place recently, at his residence, South Kensington, of Sir Claude Phillips, the well-known art critic, and Keeper of the Wallace Collection from 1897 to 1911.

The death occurred recently, at 72, Chapel-street, Hoyland Common, Sheffield, of Mr. Samuel Hawke, retired builder and contractor, aged 85 years.

The death recently took place at Montrose, in his 78th year, of Mr. James Black, builder.

The death of Mr. James John Angliss, a retired builder, at Kentish Town, N.W.5, took place recently.

The death took place recently at Middlesbrough of Mr. Arthur Marshall, aged sixty-three. Mr. Marshall was one of the best-known builders and contractors on Tees-side.

Correspondence.

A letter on a "Joint Council for the Building Trade," by Mr. J. E. Drower, is given on p. 258.

COMPETITION NE

Selby War Memorial.

The committee, out of five sets of plans mitted by architects for the proposed new Memorial Hospital, has accepted the submitted by Mr. Leslie T. Moore, F.R.I London.

Manchester Art Gallery.

The Corporation invite designs for a Gallery and Museum of Art. Applica accompanied by 5s., not returnable, t Town Clerk, Manchester. (See advertis this week.)

Club Premises.

The committee of the Rhyl Conservativ invite schemes for adding a second story Club premises. Particulars from the Secr Market-street, Rhyl.

London Hotel.

Designs for a row of shops, with an hotel Premiums of £150 are offered for the se designs. Particulars from Mr. H. Wa Imperial Hotel, Russell-square, W.C. 1.

The conditions of this competition are accordance with the regulations of the R.

National Eisteddfod.

At the National Eisteddfod the adjud did not consider any design worthy of prize in the architectural competition design for an art gallery and museum.

Other Competitions.

Other competitions still open includ following (the dates given are, first the se in date, and second the issue of *The Bui* which full particulars were given):—Ross Memorial (Sept. 30; Feb. 21). Harroga firmary (Sept. 30; May 30). Hamilto Memorial (Sept. 1; May 30). Glasgow School Memorial (Sept. 30; June 13). M Memorial (Aug. 22; June 13). Bexhill tainment Hall—Banned by R.I.B.A. (Se May 30) Public Baths, Newton-in-Mak (Sept. 30; July 11.)



Medallion Windows. By Mr. Reginald Hallward. (*See p.* 237.)



Medallion Windows. By Mr. Reginald Hallward.

DALLIONS FOR DOMESTIC GLAZING

By REGINALD HALLWARD.

but lately been occupied, in the in- my larger work, on medallions for decoration, of which a few examples this article, recently done for country nd the demand for such being on se as a means of adding charm to the particulars of the method and uch medallion work, as I have found y be of general interest. Like so gs, it is but a return to the custom ier time, which was encouraged by permanent character of the home. er the sale of an old house in ne years ago, the windows of which orated with ships painted on the e owner having been a sea-captain, tures of ships, probably those ther sailed himself or had interest other ways, he had had executed ch artist, and most delightful they the old man could treasure not alone y the associations connected with life, and sail his ships o'er again ked his cutty in the parlour.

d throughout the country from the of the sixteenth century medallion be seen, heraldic or other, set into g of windows in churches and uildings. The method and charac- production differ from earlier work, t that the colour is not always in but introduced on to it with enamel The scope of this enamel is quite d wholly unsuited for large sur- in its own particular field much work has been done. I have found ve only my own experience to guide namel colours tend to lose in trans- hen other than the primary colours uced, and that this clouding which en in the old work is due to these not having been observed. The and tertiary colours, the mixtures than the primary colours, I have tisfactory, and have therefore ruled limiting myself to the use of red, d blue colours which, superimposed ther, yield all the rest. I prefer er) stain to enamel yellow; and with n to these of a good enamel black s and light and shade, there is ll that is necessary, and such con- palette.

mel can be worked much as a s his colours, firing and refiring as ay be required to bring the colour strength and quality required. In y stained glass window it is dan- become over pictorial. The artist een trained as a painter and exe- knows this, and is careful lest he beautiful decorative colour and ty belonging to the material. But writing of this larger field of the ss window here, but of other ap- plications of glass methods; of a field, though small, in which the more pictorial can be delighted in, and presented in a charming way. In the case of the medallions illustrated, the subjects are painted on one piece of glass—a glass picture—the particular glass chosen for its adaptability to enamel and stain. The low toned Dutch window glass is very suitable, but being rather thin its fragility offers objection to its use, otherwise it is a delightful glass. The first firing in enamel work—the key block as it were—is painted in black enamel colour, a black-and-white, or mezzo-tinted drawing, which is then fired, subsequent firings being given as the colour is added, so many as are required. As the danger of breakage is generally in the first firing, the subsequent firings are at no great risk to the glass, and it can be put in again and again to deepen a tone or add to the colour. In leading up the glass afterwards to the ornamental surround, it is important to lead it loosely rather than tight, otherwise the sun's rays, expanding the glass when placed in the windows, may cause it to fly.

But enamel can also add a quality to ordinary stained glass. In my own work I find its aid very effective and useful. The use of enamels for details of ornament, the pattern on a dress, the enriching of the colour of inscriptions, in all these ways it provides another dimension for glass, and develops its resources further. The results have their own attractive characteristics, quite different from those obtained by aciding out the glass, and are an addition to it. Some glasses will not take the enamel well any more than they will take stain, but for those which will do so, for the border to a dress or cloak, to enrich lettering and so on, it is a helpful addition. Critics have sometimes puzzled themselves over my glass, wondering how these particular rather elusive and intimate effects are obtained. It is really a simple matter, but one not likely to be made use of unless one is very close to the work, seeing it through all its stages oneself. It is one of the advantages of this more intimate direction that we can give attention to the little more—and how much it is—to the difference, often one of hair-breadths, yet how important, which distinguish one artistic approach from another.

The purist may tell us that the decease of stained glass is to be dated from the time of the introduction of enamel painting, but these wholesale condemnations are a little theoretic. and I should be sorry to identify any material with the power of causing such a catastrophe. The fact is the use of glass was diverted into new directions, towards the different requirements of more domestic use, and the medallion work of the later centuries must be judged on its own merits, and not in comparison with glass of an earlier time. In any case it is not reasonable to condemn its use, if there are any who would still do so. Its endurance is not quite that of pot metals, but there are plenty of examples of the late sixteenth- and seventeenth-centuries' enamel work still able to give a good account of themselves, and this is a longevity quite respectable enough fully to justify its use on technical grounds.

In my own case the merits of enamel for small medallion work are determined by results which have proved attractive to others, and which encourage me in its further development. But it is not only in its use for small panels but as an amplification of the ordinary methods of stained glass that I have found it very helpful. Such enamel treatment is, however, one of detail only, and as an addition to the traditional methods associated with the material it offers the means of taking results a step farther, adding a new dimension and combining the qualities of enamels with that of the pot metals. There is danger, I know, in theorising at all about such matters, but where one is in close touch with workshop practice and experiment and forms one's judgment on practical experience one may venture the view that the mingling of the two opens out new possibilities that have not yet nearly reached their full developments. It is a saying, the general truth of which cannot be denied, that we must accept the limitations of a material, and that in so doing we shall best discover its beauties. But do we always appreciate what these limits are? If we accept such a statement literally we may too easily become contented with the use and wont of custom in the matter. An open mind is still desirable, and the adventure of art should always interest us, and the adventure of glass is still at the beginning.

The glass used in the old medallions is often so thin that this has been a cause of injury to much of the work of former centuries, but as the result of experiments with thicker glass I have found some to take the enamels quite well, with no loss of transparency, and with the advantage to the permanence of the work lying in its greater strength.

I have no theories about materials. The justification of their use lies in results, in their reasonable permanence, in their charm and adaptability. And in this light the glass picture has its own particular place. For there are many others who, like the old sea-captain, wish to remind themselves of the associations in which their lives have been bound up—those most agreeably associated either with their labour or leisure. These, remembered in tranquillity as the scenes presented are viewed by them, whether the gallant ships of the old sea-captain or the sequestered hills and valleys which some of us have loved, are of the nature of poetry. keeping open that world of romance and beauty in which the best of life is for ever enclosed.

THE COMPLEAT ARCHITECT

By DUDLEY HARBRON.

XV.—PROPORTION.

Proportion is a distinguishing characteristic of all the arts. It is easy to recognise, though difficult to define. It appears to consist in an inevitable relationship to the human form, its needs, and the aspirations; in building, not solely to be looked at, but to live in, not only as individuals, but as groups. The relation between the various parts may be harmonious, yet owing to a disproportionate scale the whole may be too big or too small for human needs. When the points have been reached in either direction we feel no further gain in impressiveness nor concentration of effect. Models and monstrosities are equally ineffective. The first appear as toys, the others as stupid waste.

Modern sculptors have violated the canon of scale in minor respects in an attempt, by a disregard of the human form, to symbolise those qualities of mind and muscle which they feel unable to express except by distortion. They present a reaction against insipid exactitude. Though much may ultimately spring from this rebellion, its higher manifestations will be found to consist of that blend of internal and external experience which distinguishes the greatest artistic achievement. The thing from which they revolt is very much less art than their own revolution. Happily, architecture in England has avoided this wilful disproportion, though Europe generally is not so blameless. Whatever mistaken ineptitudes her votaries have practised they have not so far betaken to the jungle.

In simple words, proportion consists in being right and looking right. Looking right and being wrong is not beauty. Being right and looking wrong is no more complete than the proposition that practical men are artists. Fortunately, being right is a recognisable quality which in every one of its implications sums up a work of art, for looking right is one of the resultant attributes.

If feelings other than the artist intended to engender in the spectator crowd into the mind they will be usually traceable to some fault in proportion, due to over-insistence or neglect. It is common ground that mouldings have their quite justifiable uses, and that there is nothing more difficult than their proper selection; so much is the difficulty felt that more and more is their employment tending to the most obvious utilitarian simplicity, perhaps quite naturally as a reaction against their improper employment. Let us assume that we have an assemblage of such, simple or complex, quite impeccably correct: what justifies the artist in disturbing their placid faces by dints and delves called carving? Is it not when he feels that the subtle line of their section will be lost otherwise upon the spectator, maybe, in the street below? In order to aid the man in the street to appreciate the niceties of his perception, the artist helps him to recognise that which might otherwise have escaped his notice. If his carving assists the observer to grasp the artist's intention, is not the artist justified? If he does not, or idly wastes our time by distracting our attention, is he not equally condemned? Proportion comes into the problem solely out of consideration for impression upon the mind through the eye from normal viewpoint. Distance diminishes; adventitious aids are not necessary at the eye level.

How far the artist is in order in correcting the natural loss of significance by superfluous means is a delicate ethical problem. By "superfluous means" I mean an intentional employment of material more than structurally necessary. Nature does not provide the tree with bigger leaves on the topmost twigs, and nobody finds fault with trees on that account. Does not Gothic art reveal that this correction is not so essential as Classic art would have us suppose? The parapeted, coped conclusion to a wall is quite satisfactory. Quite so, you may protest, but Gothic art errs in that spires are no more necessary than cornices, yet they serve the end of emphasising verticality quite as adequately as a cornice does horizontality. In doing so they do not intentionally mislead. Cornices may project farther than necessary, supposedly to correct the diminution due to distance. Is not this an artificially imposed exaggeration, from which we are escaping by force of the necessity of extremes? If a skyscrap designed as a single order the proper c would overhang the street to a darkening dangerous extent. The cornice has h be clipped; indeed, the whole order wh is employed has to be superimposed in manageable proportions, upon a plain cliff-like series of lower stories, and scrapers have gained æsthetically in quence.

I hope it will not be inferred from thi I have any anti-Classic bias. I am onl ing to find a common denominator for p tion. There is as much proportion i poetry of Mallarmé as in that of Ro and both are art—the art of Mallarm the art of Ronsard. A work of art is finite, sizeable, bounded unit. It is n finity. It must have recognisable ext where the eye can pause, and say, "H finishes, here it begins." To be comp satisfying it should possess repose, a f inherent attribute of proportion. Goth is deficient in this quality; it is restless. portion should resolve the dynamic force a palpable static state.

There are more conterminous qualitie ing this conclusion—balance and a focal (that is, some point which satisfies the that it is the point upon which the orig intended the beholder to concentrate his tion, and from which he was to formula opinion of its rightness). If this is t follows that the object looked at canno perly consist of two equal parts, b between two likes the mind is ever f and hesitating confusedly, unable to d It must find unity, a unity doubtless in cases resolved from plurality, in orde the mind may be enabled to decide. relative importance of the wings and the the head, the body, and the feet are as part of architecture as they are of the n formation of birds, butterflies, or men.

Proportion seems to amount to a ciliation of the external needs with the feelings of humanity. If man had satisfied with Nature he would have rer in noisome caverns; he introduced bu when he heaped the stones about the into the form of a wall; proportion wl formed a reasonable dimensioned en therein.



Fairford Church.



Worcester College, Oxford.

[The photographs on this page are by Mr. Gilbert H. Jenkins, F.R.I.B.A.]



Burford Church.

IE ROYAL ARCHÆOLOGICAL INSTITUTE ANNUAL MEETING

By H. J. D. ASTLEY, M.A., Litt.D., F.R.Hist.Soc.

annual meeting of the Royal Archæolo- Institute was held at Winchester, from 6 to 23, under the presidency of Sir William Dawkins, F.R.S. Mr. A. E. Bolton was on. Sec. of the meeting and Mr. J. D. Le ur assisted as local Hon. Sec. The last on on which the Institute visited Win- r was in 1845, thought it has been in the ourhood several times since, notably at ampton a few years ago.

Winchester Cathedral.

Wednesday morning, the members, ering about 120, assembled in front of thedral, where they were met by the Dean V. H. Hutton), who had undertaken to n address on "The Place of Winchester dral in English History." Really, to deal the subject adequately, said the Dean, be to re-write English mediæval history, or 100 years Winchester ranked with n as practically the capital of England, aster festival being usually kept here by g. The history commences with Cynegils, st Christian King of Wessex, about 635, se reign the "Old Minster" was com- d and consecrated after his death by St. s. The bones of early Christian kings saints, including Egbert (837), Cnut, Emma, and many others, are contained day in the six Renaissance coffers standing parclose screens in the choir.

Dean then gave way to Dr. Hamilton son, who gave an architectural descrip- the Cathedral fabric. When speaking of am's association with the Cathedral, hompson remarked that Wykeham was kely to have been the actual architect; he not have had time to study architecture. rms of his last will showed that the master- to whom the work was entrusted was m Wynford, one of the most prominent -architects of the day. With regard to posed tomb of William Rufus in the choir, hompson had an open mind, though he t it more probably to be that of Henry of If Rufus was buried there, the actual would not be the original, because the fell subsequent to the burial.

he afternoon, the party re-assembled for amination of the Cathedral glass, and Couteur mentioned that the glass in the window, now much disarranged, was ly the work of "Glazier" of Oxford

Longstock.

Thursday, the members had an excursion west side of Winchester, proceeding first gstock, probably a Danish dock.

Danebury Camp.

camp on Danebury Hill, described by illiams Freeman, is the finest of Hamp- twelve contour camps, and stands bare chalk, 470 ft. above sea level, in manding position, half-a-dozen hill-top eing within sight.

Mottisfont Priory.

Mottisfont a Priory of Austin canons is said e been founded in the beginning of King reign. The foundation was intended for canons, which had decreased to three in hen the King, Henry VII, procured a bull ress the house, intending first to change a secular college, second to annex it to a l he proposed to build at Windsor. in 1500, the convent of Westminster had o take it over; but in spite of all these ns it continued to the suppression, when a Prior and ten canons with a clear of £124 3s. 5½d. At Mottisfont the were met by Mr. Harold Brakspear, who, after detailing the history as given conducted the visitors over the present and the remains of the Priory.

Romsey Abbey Church.

After luncheon at Romsey the party proceeded to the Abbey church, which was described by Dr. Hamilton Thompson. The great abbey of Romsey was founded in 907 for Benedictine nuns by Edward the Elder, and received a second foundation in 980 from Edgar the Peaceful and St. Ethelwold. The original Saxon church terminated with an apse at the east end, and there were two apsidal chapels on the east of the north and south transepts which survive. The presbytery and choir were lengthened and made rectangular somewhere between 1120 and 1140. The present presbytery, the crossing under the tower, the transepts, and the four eastern bays of the nave remain as in the Norman period; the three western bays are Early English of about 1240. The triforium is noticeable in that the tympanum of the arches is divided by a pier in the centre. The work of the eastern portion of the church is remarkably fine and uniform; the twelfth-century work of the nave shows some variety of design. There is a stone rood, built into the west wall of the south transept, which is generally accepted as a pre-Conquest work of art and remained over from the Saxon church. A curious carving of the Crucifixion, also probably Saxon, forms the centre of a reredos, in the south-east chapel. A mediæval picture painted on wood is in the north choir aisle and may have been part of the reredos of the high altar. This painting consists of several panels representing saints and bishops and was described by Mr. Rushforth.

In the evening the Mayor and Mayoress gave a reception at St. John's Rooms, at which the city regalia and Corporation plate were exhibited. None of the silver is older than 1720, but there are some very interesting pieces including a magnificent loving-cup presented by the late Lord Northbrook. During the evening a lecture on Roman Winchester was given by Mr. C. F. Fox, who described Venta Belgarum—the "market town of the Belgæ"—as one of the most important towns of Britain during the Roman occupation. He described the original fort on St. Catherine's Hill as the British oppidum, which, on being taken by the Romans, was made into a strongly-entrenched camp. Later on the Roman city was built in the valley where Winchester now stands, and became a centre of commerce for the whole district in peaceful times. It is now buried many feet below the present city and there are no traces of any Roman walls, though many remains of villas and public buildings have been found from time to time. The Rev. Dr. Astley said he was very glad to find that "venta" was now accepted as meaning a "market town," for not so many years ago it had been a subject of controversy, many of the older antiquaries asserting that it was quite impossible to assign any meaning to the word "venta." Canon Chanter put in a plea for the preservation of all existing ancient remains in the city, and hoped the West Gate would never be removed on account of modern traffic, as had unfortunately been the case with Temple Bar in London.

Winchester.

Friday was devoted to perambulations of Winchester. The first visit was paid to St. Catherine's Hill (328 ft.), a conspicuous rounded chalk hill dominating the Itchen valley and the city. The summit is crowned by a single circular entrenchment consisting of rampart and ditch, with a slight bank on the counterscarp. The only entrance which is clearly original lies on the north-east, giving access to the adjoining plateau; on the west the hill falls steeply to the river, and on the east and south there is a gentler slope. Dr. Williams-Freeman described the bank and ditch which enclosed the original British oppidum; the Romans would appear to have established a fortified camp here before building the city in the valley. The thirteenth-century chapel of St. Catherine is on this hill, and was a resort of pilgrims attracted by the relics of St. Birinus and St. Swithin, but its exact position is no longer known.

The Hospital of St. Cross was next visited, its history being given by the Master; the building was described by Dr. Hamilton Thompson.

The afternoon was devoted to visits to Winchester College and Wolvesey Castle. At Winchester College the party was received by Mr. Herbert Chitty, M.A., F.S.A., the Bursar, who described the college buildings; and the glass in the chapel and Chantry Chapel was described by Mr. Le Couteur. The College of St. Mary, founded by William of Wykeham in 1382 for "seventy poor and needy scholars and clerks, living college-wise in the same, studying and becoming proficient in grammaticals or the art and science of grammar," lies immediately to the south of the Cathedral. Possession of the buildings was taken in 1394 and the chapel was consecrated in 1395. The college is entered from the north through the great gate-house, over which stands a fine statue of the Madonna and Child, and is arranged round two quadrangles. The outer court contained the land steward's room, mill, bakehouse, brew-house, stores, slaughter-house and stables. All the members of the Society, which consisted of a warden and 70 poor scholars, were housed in the inner quadrangle, which also contained the muniment tower, the chapel, the schoolroom with dining hall over it, the kitchen, cellar and sacristy. The disposition of the muniment tower and chapel to the east, the school and hall in the middle, and on the west, the cellar, buttery, library, and other offices arranged together on several floors, and carried to the same height as the chapel, are specially noteworthy. This contrivance, peculiar to Wykeham's work, and repeated with appropriate modifications at Windsor and at New College, Oxford, lends a dignity and symmetry to the buildings which is unusual in work of that age. The visitors were allowed to inspect all parts of the College and were particularly struck by the size of the cellar and kitchen and the darkness of the students' rooms, each of which was assigned to four or five scholars, who had, and have, a special corner to themselves. Our forefathers did not pay much regard to light or sanitation, and our elementary school children of the present day are certainly housed much better than the scholars in Winchester, though no doubt old Wykehamists would consider it a heresy to say so. The chapel contains some remarkable glass; it was originally filled with rich coloured glass, at the cost of the founder, about 1393; the firm employed was that of Thomas of Oxford, whose portrait may still be seen at the bottom of the east window. This glass escaped all early troubles, but having fallen into a dilapidated condition, was, unhappily, entrusted by the warden and fellows (the east window in 1821–1822 and the side windows between 1825 and 1828) to Messrs. Betton & Evans, of Shrewsbury, who undertook to "retouch and restore the glass to its original brilliancy." This they did by making a careful and painstaking copy of amazing excellence, as regards the design, but, owing to their inability to obtain the proper type of glass, only very feebly reproducing the gorgeous colouring of the original. The east window contains a Jesse tree, the day of judgment in its tracery lights; at the bottom of the main lights are a number of portrait-figures, including Edward III, Richard II, and two representations of the founder himself, together with smaller figures of the carpenter, the mason (William Wynford), the clerk of the works (Simon Membury), and the glass painter (Thomas). The original bill for bringing glass from Oxford, 9 days, 12 horses and six men, amounted to 19s. 3d.

Wolvesey Castle was next visited and described by Dr. Hamilton Thompson. It lies within its own enclosure south-east of the Cathedral, and was built by Bishop Henry of Blois, as the Bishop's fortress; to his time most of the existing ruins, though not all of the same period, belong. A considerable portion of the keep and the great

hall are still standing. The masonry of the keep is remarkable for the use of small stone shafts as bonding. If Giraldus Cambrensis is correct in stating that Henry of Blois used the remains of the Old Royal Palace for the castle which he began in 1138, these may have come from thence, but they may have been taken from the old buildings of the new Minster when that foundation was transferred to the suburb of Hyde in 1112. The chapel of the castle, a fifteenth-century building, was kept in use after the other buildings fell into ruin, and was used in the building of the Palace erected by George Morley, Bishop 1662–1684. This beautiful house is an excellent example of the architectural style of its date and is now used as the church house. The remaining portion of the city wall encloses the east and south sides of Wolvesey Castle, and the line of the walls can easily be traced along the present streets of the city; two of the gates, the West gate and King's gate, remain.

At the evening meeting at St. John's rooms Mr. O. G. S. Crawford, F.S.A., read a paper on "Air Photography and Archæology," with lantern illustrations. These showed the lines of Celtic and Saxon cultivation underlying the modern fields and downs taken from a height of 8,000 to 10,000 ft. and form a striking adjunct to the science of archæology.

Before the lecture the annual meeting of the Institute was held, when the report for last year was adopted and the choice of Carlisle, Chester or Shrewsbury for next year's meeting was left to the Council.

Merdon Castle.

Saturday was devoted to a run through the New Forest, visiting Merdon Castle and Beaulieu. The first stop was at Merdon Castle, which was described by Dr. Williams Freeman. These earthworks lie on a gentle ridge at some distance from the summit of the hill, the position being of no great strength. They consist of an irregular British ring, inside which has been thrown up a Norman mount and Bailey castle. Where it remains, the British rampart is in good condition. As in other examples in Hampshire, the usual Norman mount takes the form of a circular work, with a saucer-shaped depression inside. The protective rampart of this mount is of great size, rising 29 ft. above the level of the ground outside, and protected by a ditch 20 ft. deep; compare this vertical distance of 49 ft. at Merdon with the corresponding figures of 69 ft. at Old Sarum, and 64 ft. at Castle Rising. Some fragments of a flint and stone tower, a deep well, and some remains of a retaining wall remain to tell us of the castle built by Bishop Henry de Blois in 1129; this is one of the so-called adulterine castles with which the country was covered during Stephen's reign, and was destroyed by Henry II about 1156.

Beaulieu.

The route was continued through the New Forest via Romsey, Cadnam, Lyndhurst, and Brockenhurst to Beaulieu. At Lyndhurst a short halt was made to enable the party to see Lord Leighton's altar piece of "the wise and foolish virgins," so justly celebrated. After luncheon, the visitors were received at Beaulieu Abbey by Lord Montagu. At Beaulieu the present house has been built around the great fifteenth century gate-house; very considerable remains of the monastery, which belonged to the Cistercian Order, still exist. The manor of Faringdon, in Berkshire, was given by King John, in 1203, to the Abbot of Citeaux to found an abbey of the Order there. In 1204 he changed his mind and founded instead the Abbey of Beaulieu, and the church was built sufficiently to allow the monks to enter it in 1227, but it was not finished and hallowed until 1246. The area of the church was greater than that of any other Cistercian church in England; it had an eastern apse with ambulatory, aisle and nine radiating chapels, and the north transept was double-aisled with a large Galilee porch across its north end. Nothing of this church but the lower part of the south wall of the nave remains above ground. The west end of the vestry, which was a book-cupboard, and the arches at the west end of the chapter-house, are standing. The frater is complete; it has a fine contemporary pulpit in the west wall, and has been used as the parish church since the suppression. Most of the cellarer's building is complete. The outer and inner gate-houses also remain, the latter is of the fourteenth century, and has the gate-house chapel on the first floor. Part of the precinct wall stands, and there are remains of a building, called the "wine-press," to the north of the church. The precinct and surrounding lands were sanctuary until the suppression, and those therein at that time were allowed to continue there for the term of their lives.

The abbey was described by Mr. Harold Brakspear, who pointed out the beauties of the remaining early English work of the thirteenth century, and compared it with the many remaining Cistercian monasteries in Yorkshire.

Porchester.

Monday was devoted to visits to Porchester, Titchfield, and Bishop's Waltham. At Porchester, the Roman station, castle, and priory church were described by Mr. Brakspear.

Titchfield.

Titchfield was visited in the afternoon and described by Mr. Brakspear. Titchfield, like Beaulieu, was given at the suppression to Sir Thomas Wriothesley, who changed it into a magnificent manor-house for himself; the letters respecting this work are printed in the *Journal* of the Institute, Vol. 63, pp. 231–243. Except the entrance gate to the house, planted across the middle of the nave of the church, nothing of Wriothesley's work survives, but a considerable amount of monastic work still stands. The cloister was on the north. The walls of the nave, which was aisleless, the west side of the north transept, the west end of the chapter-house, and the south wall of the frater remain, and are all of the date of the foundation. The abbey is now in the hands of the Board of Works.

Bishop's Waltham.

The concluding visit was paid to Bishop's Waltham, where the palace and church were described by Dr. Hamilton Thompson. The manor of Bishop's Waltham was an early possession of the See of Winchester, but the first house of the Bishops, of which remains exist here, was built in the time of Henry of Blois, before 1171. From this, at the north-west end of the site, the later palace grew into a large building; of this a considerable portion of the hall range, rebuilt in the fifteenth century, is left. The great chamber was in the tower at the west end of the hall, which incorporates the remaining part of the twelfth-century house. The remains of the apsidal chapel, south of the hall are also of the earlier date. The whole site was surrounded by a moat, and a brick wall encloses it on two sides. The palace was one of the chief residences of the Bishops, and here Wykeham and Waynflete died. It was surrendered to the Parliamentary forces in 1644, when it was dismantled and fell into ruin. The church at Bishop's Waltham has been so much rebuilt and restored at various periods that its mediæval features are a good deal obscured, but some few remains of the ancient church may still be seen.

Old Basing.

On Tuesday visits were paid to Old Basing, Monk Sherborne and Sherborne St. John, all in the neighbourhood of Basingstoke. At Old Basing the party were met by Mr. Brakspear, who described the church, the barn, and the castle. At Basing there was a Norman cruciform church of which traces can still be seen in the lower part of the central tower and the north and south arches. The aisles were added in the fifteenth century. There are some interesting monuments, including several of the Paulets. Sir William Paulet became first Marquis of Winchester in 1572. There is a good fifteenth-century font and a figure of the Virgin and Child remains unmutilated in a niche over t west doorway. The barn, which was no do a part of the original lay-out of Basing Hou lies between the present road and the ri Loddon. It is a fine sixteenth-century buildi with a good deal of later patching, and may compared with the great barn at Paston, Norfolk. Old Basing Castle stands on grou of no great natural strength, sloping gen to the valley of the Loddon from the nor west; on this side protective marshy grou reaches to within a hundred yards of t citadel.

The earthwork now consists of the circu rampart of the citadel, 80 yds. in diameter fr crest to crest; surrounded by a ditch 35 below it. This was thrown up shortly af the Conquest, and here, as at Old Saru Merdon, and other Norman castles, the us mount takes the form of a circular work, w a saucer-shaped depression inside it. Licer was given in 1261 to Robert de St. John strengthen his house with stockades. Bas Old House was built inside the citadel; it v of vast extent and was for the most part erec by Sir William Paulet, first Marquis of W chester, after 1530, at which date he procu licence to build walls and towers to fortify manor. The rampart was lined and surmoun with a red brick wall, and the interior nea filled with his work, consisting of a hall, he gonal kitchen, and other buildings, and a la gatehouse to the north; these were known the Old House, and the foundations are n undergoing excavation. The same Marq later on built a new outer gatehouse on west side of the bailey, and on the eastern p another great house, with a third gatehou known as the New House, was erected. Qu Elizabeth was here in 1560, and again in 16 when she stayed thirteen days, and apparer so nearly ruined the owner that he forthw started to pull down part of the house, evider that the same honour might not be confer upon him again.

Basing Castle is celebrated for the two ye siege it underwent in the Civil War, 1643 which was ended by Cromwell in the la year, after a two hours' fight.

After lunch at Basingstoke the Priory Chu at Monk Sherborne was visited and descri by the Rev. G. Sampson, the Rector. T Priory was founded by Henry I as a cell of Benedictine Abbey of Saint-Vigor, Cerisy, Normandy. At the suppression of the A priories, Monk Sherborne was granted to Que College, Oxford, by whom the Priory and endowments are still held. The central tc and choir of the church are the only p now remaining, and are used as a parish chur the aisleless nave has disappeared with exception of the south wall, which now fo a garden boundary. There is a curious woo cross-legged effigy of John du Port of 1 several early coffin slabs, and a pre-Reforma bier. The great mansion, known as " Vyne," at Sherborne St. John, was r inspected and described by Mr. C. L. Ch M.A., as the closing visit of the day. The h was begun early in the sixteenth century William, Lord Sandys, and was much alt and enlarged by Inigo Jones.

Hyde Abbey and Great Hall.

Wednesday was occupied in visits to H Abbey gatehouse, the great hall of Winche Castle, and the Museum. In the aftern members visited St. John's and St. Pet Cheesehill, churches. The gatehouse at H Abbey, described by Mr. F. Warren, is all remains of this foundation. The abbey originally built by Bishop William Giff in 1109, in Hyde Mead, to replace the Minster which had proved to be inconvenie near the old minster of St. Swithin. At dissolution, the whole abbey was pulled d and on the site a gaol was built in 1788.

The great hall of Winchester Castle, whi all that remains of that great fortress buil the Conqueror, was described by Sir Wil W. Portal, Bart., F.S.A. The whole castle been swept away and buildings erected on

with the exception of the great hall, the of a tower, and traces of the ditch, and an esting underground passage leading to a -port. The castle was the principal resi- e of all the early kings, and on its site les II built a great palace with the intention iving there.

he great hall (111 ft. long, 55 ft. wide, and . high), originally Norman, was altered 235, and again in 1380; the roof is sup- ed by two rows of Purbeck marble columns. he west end of the hall, over the remains e Norman dais, hangs the celebrated Round le of King Arthur and his knights, 18 ft. ameter. The table, however, actually dates the thirteenth century, and was repainted he time of Henry VIII. The Parliament sat in this hall for nearly 400 years. Until 1874, when new courts were built, it had long been divided into civil and criminal courts.

This concluded a most successful week. Great credit is due to Mr. A. E. Bolton for the excellence of all the arrangements, and the fact that the proceedings passed off without a single hitch is largely due to his untiring efforts and unfailing courtesy. Thanks must also be accorded to all the organisers of the meetings and to the various lecturers whose descriptions and papers gave so much valuable information. A most attractive book of the programme, with maps and plans of the principal earthworks and buildings, and full of information, had also been prepared by Mr. Harding-Tyler and the members the meeting committee.

Bank of England Reconstruction.

The following notice was recently posted outside the Bank of England, headed "The London Building Act, 1894: Height of Building": "Notice is hereby given that the London County Council did, on the 28th day of July, 1924, consent to the erection of a building at the Bank of England, Threadneedle-street, Prince's-street, Lothbury, and Bartholomew-lane, of a greater height than that prescribed by the above Act."

It is understood, however, there is no intention of demolishing Sir John Soane's building, but the notice is posted merely in requirement with the regulations in connection with the intention to increase the height.



Medallion Windows. By Mr. Reginald Hallward. (*See p.* 237.)

PLINY'S VILLA AND WHITEHALL PALACE*

By W. R. LETHABY.

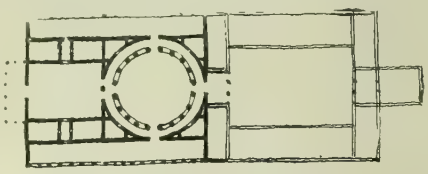
THIS volume is the work of the assistant Professor of Classics, Hunter College, New York. Her interest in Pliny's Villas "began with a desire to make the whole subject of the habitations of the Romans clearer." She not only collected what had been written, but studied existing buildings. "I learnt from my travels that a visit to the Villas throughout Italy, even to those built at a later date, helps us to understand the ancient establishments as descriptions alone never could. I determined to collect and compare the various reconstructions. The more I gathered, the more I enjoyed my search, and I came to the conclusion that it would be a pity not to make this material easy of access."

The gathering of material must be very fully done, and I should like to echo what is said in an introducing foreword: "Encouragement should be given to those who are willing to give discerning effort to bring together information which is not original but which is useful as a tool in the process of study. We are therefore indebted to the author for placing in one volume opinions of various scholars on the Villas of Pliny."

The solutions are so varied that they bring out the fact that no very exact reconstruction may be made. Pliny's text is short and chatty, and what can be gained from it is rather a list of names and uses than the disposition in a plan. The description, however, begins with the chief parts along an axial line, beginning with an atrium and ending with the triclinium, which projected so that views of the sea were obtained in three directions. The axial vista was so perfect that on turning around at the further end one might look back through the atrium to the woods and distant hills. One of the other most interesting features was a tower three stories in height, of which the top story was occupied by a dining-room. Tower-like erections appear on many paintings and mosaics which give views of Roman houses, and it is probable that some of the greater Roman villas in Britain had such towers.

It ought, perhaps, to be said that the use of such terms as "ante-room" for *cavaedium*, and "bay-window" for an apse with windows, does not inspire confidence in the rendering of technical terms in Pliny's text, but translation is not my business. The method of making a complete study of some one monument is to be strongly commended to our students, and it occurs to me that it might be stimulating if some educational body drew up a long list of possible subjects by way of suggestion. I would begin by the antiquities of every town and village in the country; every student might be "the greatest living authority" on some monument.

I have been specially interested in this book by finding reproduced among the plates—the first, in fact—a restoration made by Scamozzi and published in his *L'Idea dell' Architettura Universale* (Venice, 1615). After mentioning the atrium, Pliny proceeds *deinde porticus in D litterae similitudinum circumactae*, by which the earlier restorers understood a circular or elliptical wall enclosing a round or oval court. Scamozzi shows a large circular colonnaded passage set in a square, the angles between the circle and the square being occupied by staircases: the colonnade is not open to the central area except by doorways in the four cardinal directions, the other bays have windows in the enclosing wall, above are an entablature and a balustrade with tall statues standing on its dividing piers. Some six years ago I saw this engraving and recognised at once that it was the source for Inigo Jones's scheme for the palace of Whitehall. I have referred to this before, but the present republication of the plan gives me an opportunity for speaking of it more at length. I say Inigo's scheme, but this is disputed, and it is claimed that the full design for Whitehall Palace was the work of Webb, who had been Inigo's assistant. Now, although it does not amount to proof, it will, I think, be generally agreed that the taking over of this design is



Pliny's Villa, Scamozzi's Plan.

more likely to have been the procedure of Jones than of Webb. The façade of the banqueting house is a close imitation of a Venetian front, and Inigo has noted that when he revisited Italy in 1614, he saw and spoke with Scamozzi, and it is not improbable that the Italian master showed him the plates for his work. I have also pointed out on some former occasion that the large staircase blocks of the design for Whitehall Palace contain double spiral stairs, devised after the manner of those at Chambord, and we also know that Inigo visited that palace.

When we consider these facts together with the traditional view that the Whitehall plan was the work of the older master, and with the likelihood that Inigo would have made complete schemes for a palace of which the Banquet Hall was admittedly only a part, we shall find a strong case against the new criticism. Webb may have been the draughtsman for existing plans, but I cannot doubt that Inigo Jones was the designer.

*"The Villas of Pliny the Younger." By Helen H. Tanzer. (New York and Oxford University Press.) Price 12/6 net.

BOOK REVIEWS

The Cathedral Church of England. By W. B. TUTHILL, M.A. (London: The Macmillan Company.) Price 10s. 6d. net.

As is generally known, a great number of the cathedral churches of England were not built for the particular purpose they now fulfil, but have been devoted to that purpose in the process of time on account of the creation of new sees. Most of them originally formed the churches of conventual orders, or collegiate bodies. Some became the episcopal seats of new dioceses while still retaining their conventual status, as in the case of Ely; five of them, Bristol, Oxford, Chester, Gloucester, and Peterborough, became cathedrals of new sees on the suppression of their monastic orders in 1539; while others, as Manchester and Southwell—both collegiate churches—have been made cathedrals in modern times. It is, therefore, impossible to treat the cathedral churches of England architecturally as though they belonged to a particular class of building to be compared with others of a similar class elsewhere. The plan, general arrangement of parts, position of doors, disposition of cloistral buildings, and the whole character of the structure, bore direct relationship to the particular requirements of the conventual body by whom it was to be occupied—Benedictine, Cistercian, Augustinian, &c. The architectural requirements of a cathedral chapter, in regard to the church and chapter house, differ so little from those of a monastic body that little or no alteration is necessary in the conversion of an Abbey church into a cathedral.

The book before us is an extended essay in which the cathedrals of England are treated as forming a class, and compared with Continental examples. As a result of this method of examination, without reference to the particular purpose for which the church was built, we give one extract: "Some [*i.e.*, the English cathedrals] can lay little claim to be of inspired design, and in other instances, were it not for the surroundings, they might be considered ordinary. For instance, the cathedral church at Manchester is a commonplace building without distinction for size, or without any vicarious help from the constructions or areas about it." A discussion of the various phases of Gothic architecture and remarks on the plans, positions of doorways, transepts, towers, &c., is followed by notes on individual churches.

A History of Ornament, Renaissance and Modern. By A. D. F. HAMLIN, Professor of the History of Architecture in Columbia University. (London: B. T. Batsford; New York: The Century Co.)

The treatment of a subject such as the history of ornament, so that it can be presented to the public in a convenient form but still in some measure cover the ground attempted, presents enormous difficulties. Not only is it necessary to traverse the whole field of the decorative arts, but selection must be made in every quarter from a prodigality of varieties and examples. Particularly is this so in respect to the periods reviewed in this volume, and it was therefore considered advisable to exclude from it all reference to the wide field of Oriental art. The present volume is the second by the same author, the first dealing with ancient and mediæval ornament. After a sketch of the history of Renaissance art in general, the development of ornament is traced in Italy, from the early Renaissance to the Italian Baroque, and in France, Spain, the Netherlands, Germany, Great Britain and America during the same period. The final three chapters are devoted to the work of the nineteenth and twentieth centuries in Europe and America.

About one-third of the volume is devoted to the productions of the Italian schools, the sources and inspiration of all Renaissance art. Although the beginnings of this art may be traced to periods well back in the Middle Ages it was not until the fifteenth century that the movement became definitely established. But from that time it became supreme in Italy where the classic traditions had never been entirely abandoned, and under the great masters, Brunelleschi, Lorenzo Ghilberti, and Lucca della Robbia, art received a new impulse which was destined to have a world-wide effect. Generally the forms of Italian Renaissance ornament were architectural in character, and, although they find expression in all the decorative arts, that character predominant, and is to be observed particularly in such work as the carving and inlay of church stalls and of domestic furniture, and, indeed, in almost all branches of decorative work. This is principally due to the astounding versatility of the artists employed in the work—who were at once architects, sculptors, painters, and workers in wood and the precious metals. Most of the fundamental features of decoration adopted by these early masters of the Italian Renaissance may be traced to Roman prototypes, but the artists were no mere plagiarists. The general composition of the ornament is so changed and the proportions and character of the details so varied that the design is practically original and the effect produced entirely new. Thus the acanthus leaf, the egg and dart, the dentil and the modillion were varied and transformed in an infinite number of new forms, the grotesque and symbolic figures of classic ornament were employed with great freedom of drawing and given a new significance, and the festoons, wreaths and masks of Greek and Roman ornament also provided the inspiration for similar forms of a more elaborate character. For the just and due relationship of all the various elements of a design to the composition as a whole, the proper distribution of ornament over the whole space to be decorated, is never lost sight of by those artists of the Italian Renaissance, and their work therefore forms an invaluable field for the study of this subject.

The productions of other countries and periods are also reviewed, but in a more cursory manner. The illustrations throughout, photographs and drawings are profuse and excellent: four plates of illustrations are in colour. There is also a useful bibliography

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ILLUSTRATIONS

Royal National Orthopædic Hospital, Country Branch, Brockley-hill, Stanmore.

e new nurses' home was erected during 1923 Messrs. Holloway Bros. It consists of two , provision being made for the addition second floor at a later date. The accomtion provided includes twenty-five sisters' nurses' bedrooms, with sisters' and nurses' g rooms. At the junction of the nurses' with the main block of the old buildings, an y room and surgeon's bedroom and sitting- have been arranged. The floors were conted by the Kleine Co.; Messrs. Benham & carried out the heating work; Messrs. on supplied the sanitary ware; and other ontractors included Messrs. Bratt, Colbran ., and Messrs. Bainbridge & Reynolds. rs. Drake & Gorham have recently com- a new electrical installation to the ry Branch of the Hospital.
e architects are Messrs. H. F. Murrell and . Pigott, AA.R.I.B.A.

New Premises at Liverpool.

ssrs. P. Westwood & Emberton are the ects for the new premises of Messrs. n Reed, at Liverpool, illustrated this

n Pavilion at the International Exhibition in Paris.

Pavilion is to be erected in connection he International Exhibition to be held in next spring. A feature of the exhibition exclusion of any work which is a repron of the antique.
design of the Pavilion was selected in competition between six firms of archi- Mr. Goodhart-Rendel was the assessor, e award was subject to the approval Fine Arts Commission. The site for the Pavilion is a particularly fine one north side of the Seine, adjoining the Alexandre III and the Cours La Reine.
authors of the selected design are Mr. d Robertson, F.S.Arc., and Mr. J. Easton, A.R.I.B.A.

St. Andrew's Vicarage, Sudbury.

new church of St. Andrew at Sudbury lustrated in our last issue. Mr. W. Waymouth, F.R.I.B.A., is the archi-

LONDINIUM *

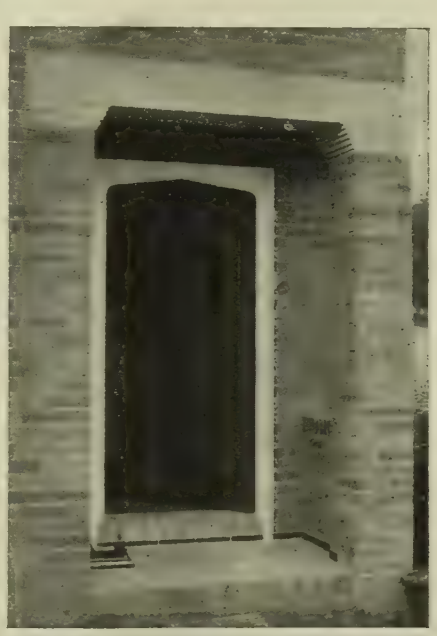
Professor Lethaby, writing of the Roman city of Londinium, from which our London has been evolved, does not confine his outlook altogether to archæology. He is ever on the alert to discover what practical lessons applicable to present-day affairs may be drawn from the historical details his researches enable him to lay before his readers. Londinium differed immensely from the London of our own time, but the contrast of Roman and modern methods is not by any means always in our favour. The arts of Roman Britain were admittedly tinged with provincialism, and depart very considerably from the standards of Classic art as they appear in the text-books: they were, however, often instinct with sound sense, without which quality the finest proportion and the greatest delicacy of execution may become merely wearisome. One department in which the Romans in Britain showed their excellence was in the setting out of inscriptions and adjusting the beautiful capital letters of their alphabet to occupy a space and be at once legible and decorative. Several examples are mentioned and illustrated, including the beautiful inscription from a Roman tomb now preserved in the entrance of the chapter house at Westminster.

The part played by the tool in the finished work is indicated by the author in the illuminating sentence: "The chisel, like the pen, is thin and wide, and thus perfectly fitted to develop the habit of the pen. The cut letters were themselves usually finished by painting. Whoever wishes to design inscriptions must begin on the writing basis, and I should like to advise every student . . . to take up the practice of writing capital and small letters with single strokes of the pen, not 'touching up' or 'painting' the letters, and, above all, not 'designing' them with high-waisted bars, swollen loops, little-headed S curves, and other horrors of ignorance and vulgarity, but learning once for all a central standard style." The use of colour was not confined to inscriptions, but appears in every department of architecture. Alternate courses of red and yellow bricks and ruddy mortar composed of ground-up pottery introduced colour into ordinary building, while mosaics, wall paintings, and painted statuary carried the colour scheme into the decorative details. In his chapter on sculpture the author seems to share Wordsworth's appreciation of the beauty of natural things as seen by Pagan eyes, but obscured for us by our so-called civilisation. "In Roman days," he writes, "every place and almost every field had its *genius loci*—an idea which we still timidly preserve as a figure of speech. Many British inscriptions and sculptures relate to Silvanus, rivers, and fountains; to the deities of the fields of Britain (think of that now!), to nymphs of the springs (think, again, of ours choked with tins and old shoes), and to the god of ways and paths (perhaps such an image would do some good at Liverpool-street and King's Cross)."

The embodiment of the civic unit in a statue is also praised. "Our French friends, in their images of the city of Paris or of Strasbourg, still make use of the idea, but we have ceased to know that a city is more than a congested area where landlords hire out what they call houses. I wonder if London were given an image whether it might not acquire a new sense of soul." The encouragement of public tidiness may well have been an auxiliary motive for the erection of symbolical statues in Pagan days, but manners have changed since then, and it may be doubted whether we are not now far too cultured to take kindly to such a useful suggestion. The statues we possess at present are only kept clean by the care of the police and the periodical labours of public bodies, such as H.M. Office of Works and the L.C.C. The many neglected war shrines up and down the country give ground for the prediction that an unprotected statue in a rural area would soon be made to serve as a nucleus to the village dump heap. The characteristic severity or brutality of the Roman has been so often remarked upon that readers will be surprised as well as delighted at the more humane side of Roman life expressed in some of their carvings and sculptures illustrated and commented upon in the book. Constructional methods are ably described, and the author's praise of the hypocaust system of heating in vogue, not only in the hot baths but in the private houses of the citizens, may give a hint to modern heating engineers. East and West are shown to have been united in the tradition of city wall construction. The same precautions adopted in England to make the bastions act in conjunction with the curtain wall despite possible variations in their respective rates of settlement may also be recognised in the walls and towers of cities in the Near East. This large-minded treatment of structural expedients is fully described in Professor Lethaby's book, and makes delightful reading in these niggling days, when constructional interest has been boiled down to the minutely tabulated strengths of steel joists and riveted connections. The text is illustrated by a great many explanatory sketches by the author.

Readers of *The Builder* will recognise in the book the series of articles which appeared in our pages in 1921.

* *Londinium: Architecture and the Crafts.* By W. R. Lethaby. With 175 figures. (London: Duckworth & Co., 3, Henrietta-street, Covent Garden. 1923.) Price 12s. 6d. net.



St. Andrew's Vicarage, Sudbury: A Doorway.

Mr. W. Charles Waymouth, F.R.I.B.A., Architect.

Architectural Prize Award.

In connection with the prize scheme of the Incorporation of Architects in Scotland, the jury has awarded the Rowand Anderson Medal and prize of £100 to Mr. L. G. Farquhar, St. Margaret's, Bridge of Weir, the subject of competition being "A College to Accommodate 600 Boys."

New Hospital, Balloch.

A new cottage hospital has recently been established at Broomley House, Balloch. The necessary additions and alterations were carried out by Mr. J. W. Weddell, Lic.R.I.B.A.





St. Andrew's Vicarage, Sudbury. MR. W. CHARLES WAYMOUTH, F.R.I.B.A., Architect.

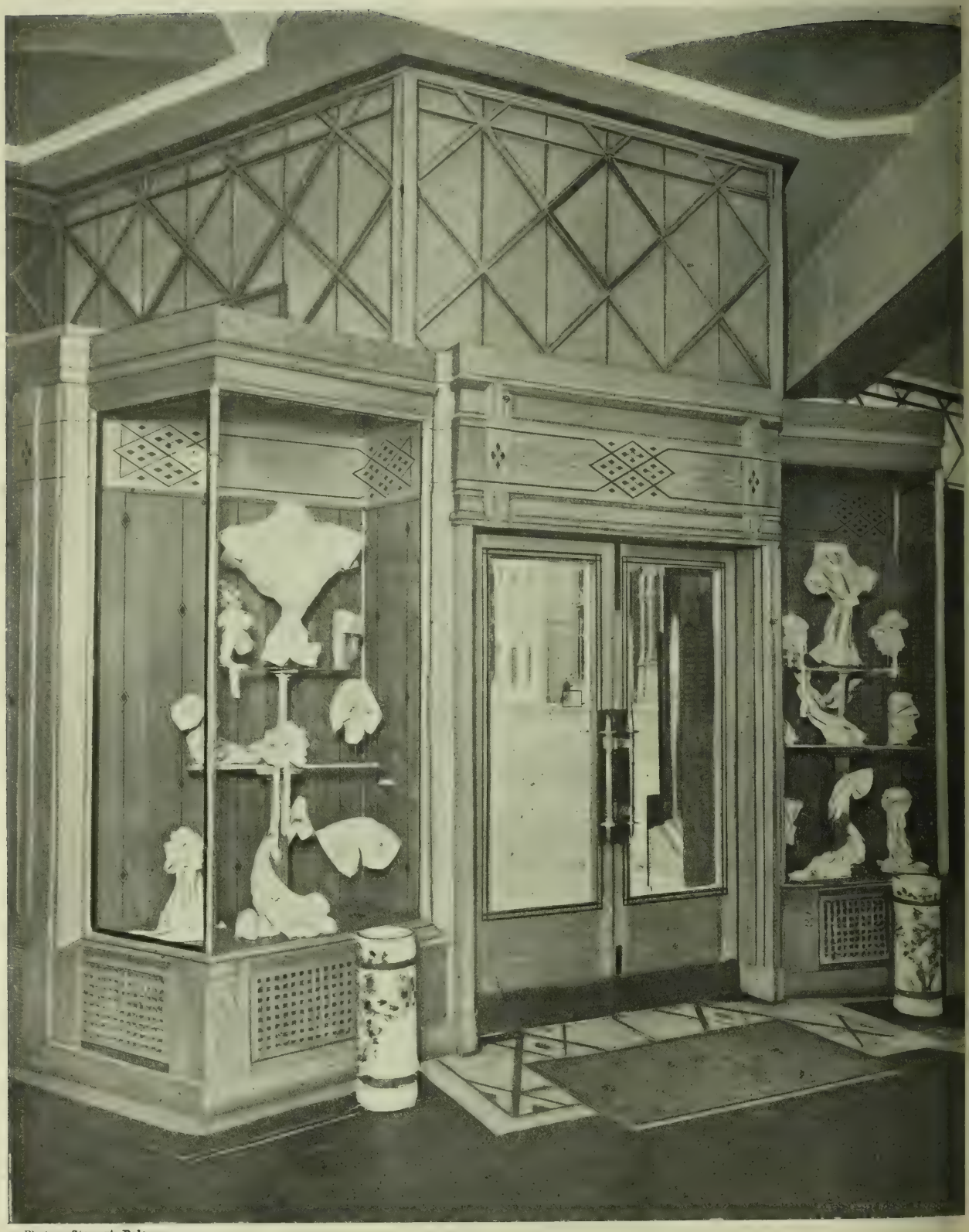


Photo: Stewart Bale.

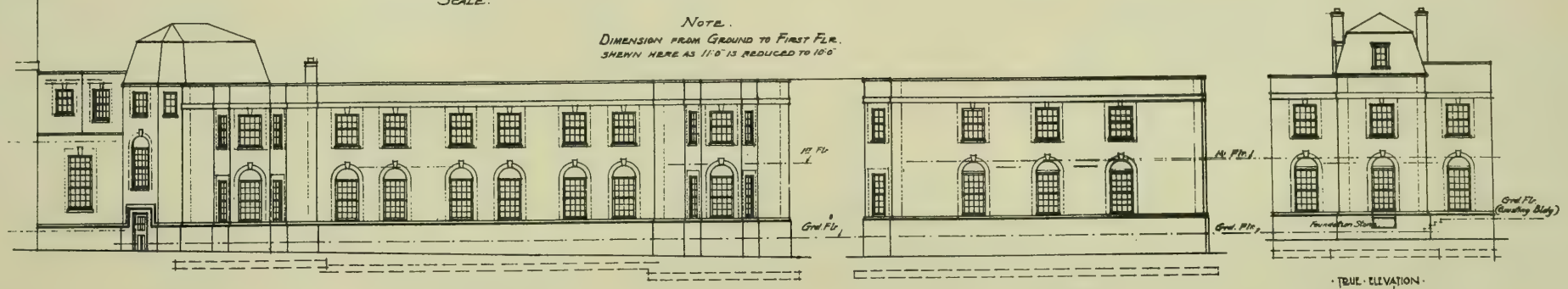
New Premises at Liverpool :] Entrance.

Messrs. P. Westwood & Emberton, Architects.

ROYAL NATIONAL ORTHOPÆDIC HOSPITAL.
NEW NURSES HOME - BROCKLEY HILL.



Note.
Dimension from Ground to First Flr.
shewn here as 11'0" is reduced to 10'6"



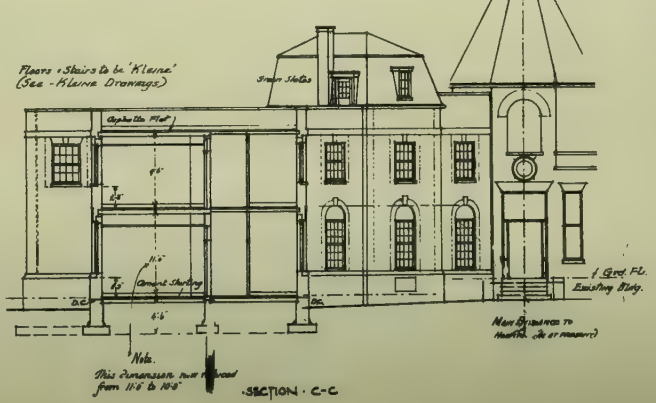
·SOUTH · ELEVATION·

·EAST · ELEVATION·

·TRUE · ELEVATION ·
·STAIRCASE · BLOCK · EAST · SIDE·

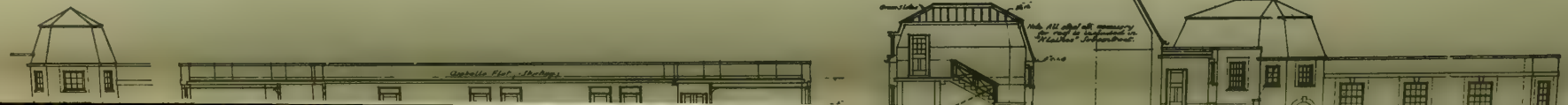


·NORTH · ELEVATION·

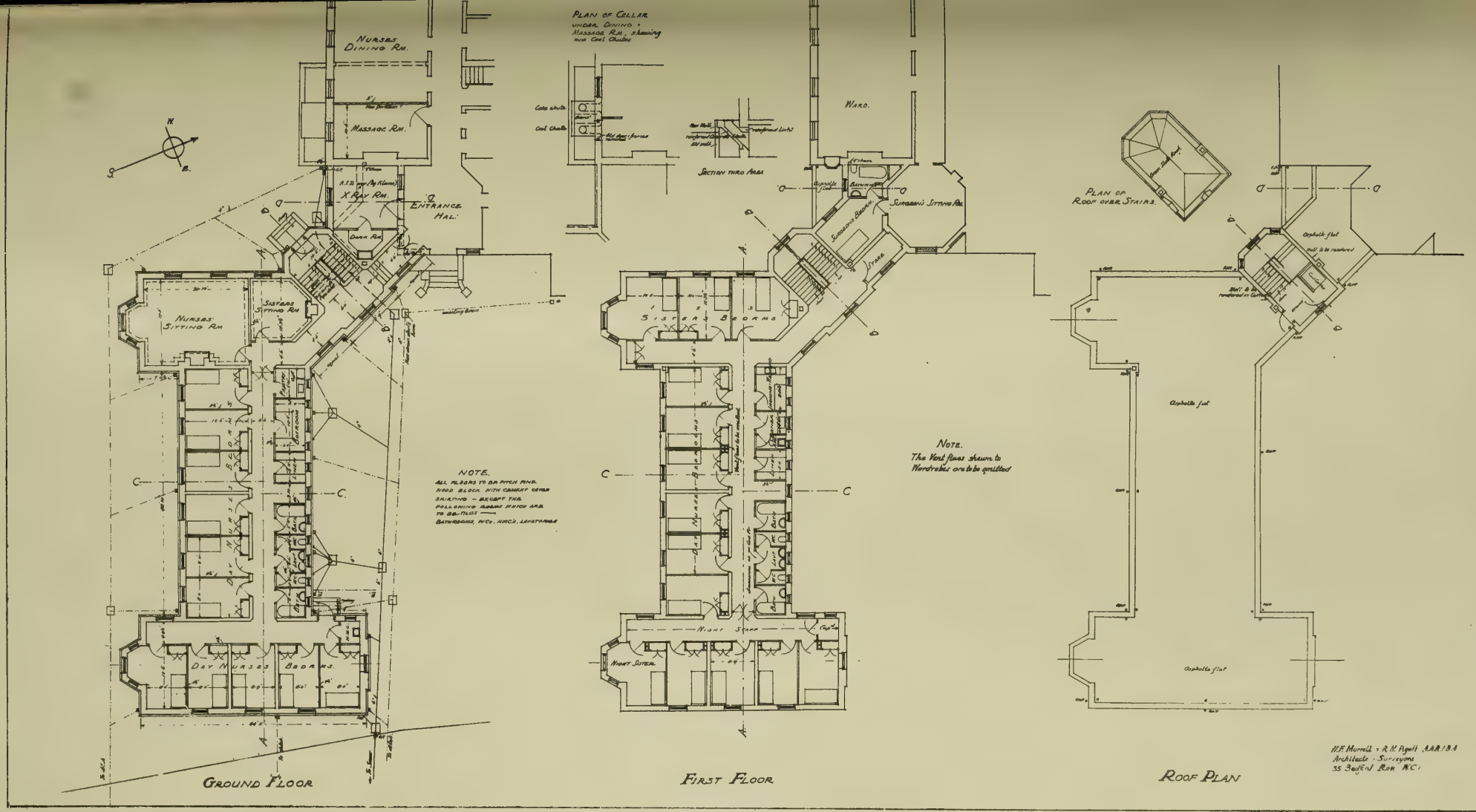


·SECTION · C-C

·ELEVATION · ON
·LINE · E-E (see plan)



THE BUI



MESSRS. H. F. MURRELL & R. M. PIGOTT, AA.R.I.B.A., ARCHITECTS.



NEW PREMISES, LIVERPOOL. MESSRS. P. WESTWOOD & EMBERTON, ARCHITECTS.



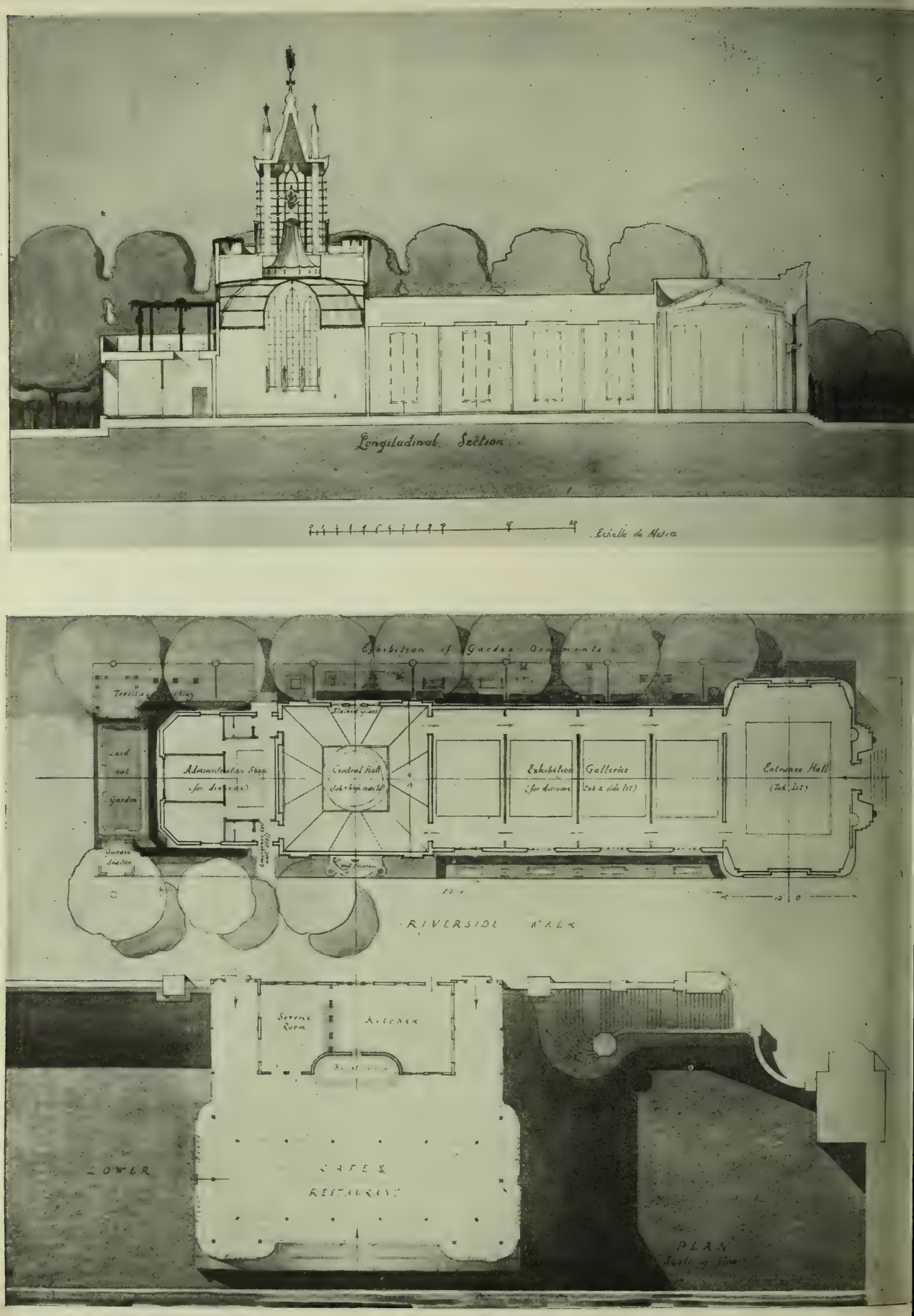
oto: Stewart Bale.

New Premises at Liverpool: Staircase to Lower Ground Floor.

Messrs. P. Westwood & Emberton, Architects.

British Pavilion for the International Exhibition of Modern Decorative and Industrial Art, Paris, 1925.

MESSRS. HOWARD ROBERTSON, S.A.D.G., F.S.Arc., & J. M. EASTON, A.R.I.B.A., Architects.

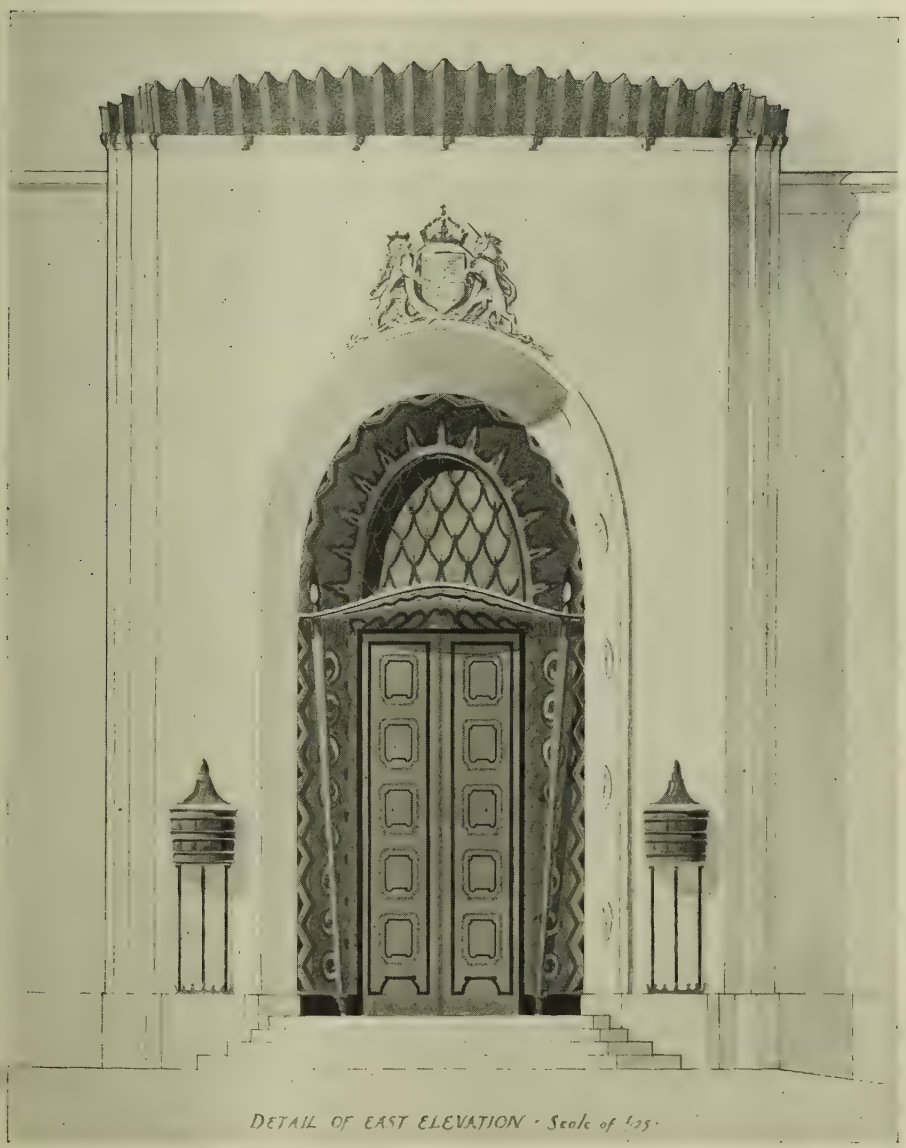


British Pavilion for the International Exhibition of Modern Decorative and Industrial Art, Paris, 1925.

MESSRS. HOWARD ROBERTSON, S.A.D.G., F.S.Arc., & J. M. EASTON, A.R.I.B.A., Architects.



Échelle de Mètres.



British Pavilion for the International Exhibition of Modern Decorative and Industrial Art, Paris, 1925.
MESSRS. HOWARD ROBERTSON, S.A.D.G., F.S.Arc., & J. M. EASTON, A.R.I.B.A., Architects.

North Elevation to Cour de Rome

Exhibition of Modern Decorative and Industrial Art, Paris, 1925.

TEACHING ART AND HITECTURE OF WALES

ıe opening meeting of the Honourable of Cymmrodorion at Pontypool "The g Art and Architecture of Wales" was d.

Lord Treowen had opened the meeting, Villiams-Ellis, addressing the meeting on Architecture," said of all the arts the ily expensive one of building required ge, and so long as they were numb and ve to good building, so long would they they deserved—ugliness, meanness, and incompetence. If they had only half a nthusiasts to spend their time going he schools, elementary and secondary, g the gospel of beauty, they would soon nation in which architecture and the ual arts could thrive. If they as the served good art and good artists, good ure and good architects, they would n. In Wales at present they were ned to mean and incompetent architec- Fortunately there were a few really good Welsh buildings, as well, of course, as ble old ones, to console the minute ublic that did care.

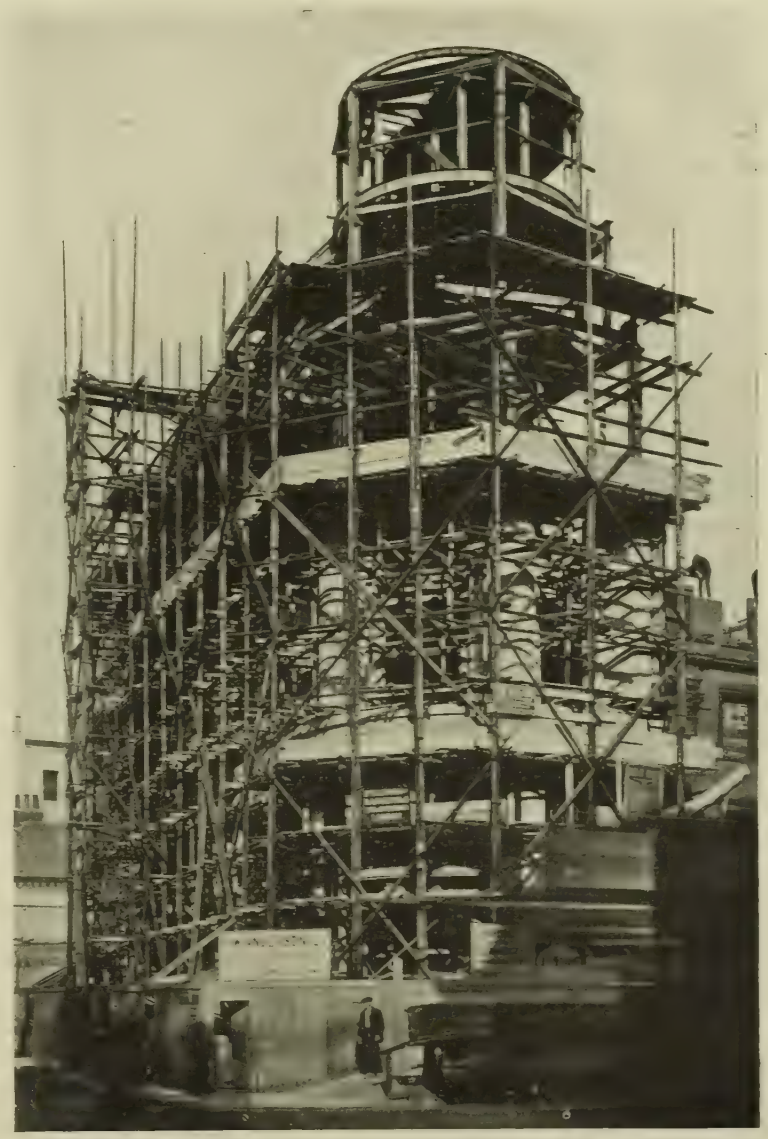
. Trystan Edwards, A.R.I.B.A., urged rability of instituting a class in the d forms of secondary schools and l colleges which would have as its object eration of the social function of the visual y this means architecture, painting, and e, and the other branches of design e better correlated, and the student e encouraged to consider how best he ake use of the technical gifts he had . What they saw to-day was very chnical proficiency in all the arts, and y of those modern works were lacking ral value. In architecture one of the tragedies was that very great skill in tion, and superb craftsmanship were asted upon the most vulgar designs. edy was not still more lessons in con- and craftsmanship, but more considera- he social qualities of buildings, what e described as their deportment, the deference which one building had for and for the city of which it was a part. a question of civic order on which the public was competent to express an

tics, however, like artists, did not grow wn accord. They must be trained, and was the hey-dey of bad artists, one s that they had an insufficient number ritics.

. Alwyn Lloyd, F.R.I.B.A., said a got the architecture which it deserved, ld never produce fine buildings unless a public sufficiently educated to appre- cherish them. The new School of ure for Wales at the Cardiff Technical as not yet as widely known as it should as doing a fine pioneer work in difficult the encouragement given to it by such s as the present one, and by the terest by those who had at heart the nt of the right spirit in relation to the re of Wales was very welcome. It was e having the most perfectly organised ss it was backed up by an instructed nion. He hoped that in Wales they satisfied with nothing less than the small country with splendid traditions to the spiritual aspirations of their y had an opportunity which was not ven to larger countries. One would a new movement for fine craftsman- he creation of an æsthetic sense grow- their traditional peasant culture and of the beautiful in religion, music, and which they felt so proud, supple- the love of art. Much could be done, the training of students by the Architecture at Cardiff, in the way of or non-professional people and of s. Classes in building construction, ng, and craftsmanship should be in on with the School of Architecture, rather than run as separate departments, which, he believed, was now the case.

Mr. W. S. Purchon, M.A., A.R.I.B.A., head of the Department of Architecture and Civic Design in the Technical College, Cardiff, dealt with the teaching of architecture in Wales, and referred to the establishment and work of the Royal Institute of British Architects. About four and a-half years ago the School of Architecture at the Technical College, Cardiff, was started on lines modelled on those of the older schools in England, with a three years' full-time day course, followed by two sessions of six months each, spent at the college, the intervening six months being spent in an office. The school was already "recognised" by the R.I.B.A., which granted exemptions from its own intermediate examinations to students who passed with success through the three years' course. Some of the students had already obtained the associateship of the Institute, and a number of them had passed the R.I.B.A. intermediate exam. Two students had held the R.I.B.A. Henry Jarvis Ex-service Travelling Scholarship, and good work had already been done by students in the school in the study of worthy buildings in Italy, France, and in Bath, Cambridge, and London, while through the efforts of students in the school Wales was enabled to be well represented in the great exhibition of the work of students of architecture recently held in London. A certain amount of work had already been undertaken in the direction of stimulating interest in architecture by the giving of lectures to High School students and the public.

If the response to the offer of prizes for architecture in connection with that Eisteddfod had not been satisfactory it was due in all probability to the reasons which were leading the R.I.B.A. to reconsider its great and important prize scheme. It was important that such prizes be awarded in Wales, and it might be suggested that they should be of two kinds, one for the best actual building or group of buildings designed and completed by an architect, the other for the best design submitted by a student and prepared during the normal course of his studies. The future development of architectural education in Wales would be best achieved by concentrating on one really strong and vigorous school. If possible, and it would be possible if any difficulties in the way were treated as difficulties ought to be treated, degrees should be awarded to the successful students. Such a school would not only provide an adequate professional education, but would also have a valuable influence on the various allied arts and crafts. Facilities should be given to non-architectural students to study living art, such as architecture in working for the arts degree.



Vigo House, Regent-street, during Construction.

Sir J. Burnet, A.R.A., & Partners, Architects.

[This building was illustrated in our issue for May 16.]

A HOUSING SCHEME

We have received from the Greenock Housing Council a copy of a scheme which is described in a covering letter as being put forward as a constructive proposal towards remedying the present national deficiency in housing. We do not find the proposals as outlined in the scheme very easy to follow, and if we do not adequately describe them it will be from lack of apprehension and not from intention.

We understand that the authors of this scheme in the first place take exception to the Government scheme on the ground that the charge on the local rates will vary in localities whilst they contend it should be equalised. They put the charge on every house built under the Government scheme as representing a demand on the rates of 2s. a week, or £5 a year, falling, when the scheme is completed, to at least 10d. on each house, and this burden, they contend, will be unfairly divided as between industrial and residential districts. We understand the proposal to be that at any rate this burden should to some extent be equalised and that it is suggested that if the weekly premium of the 15 million contributors to National Health Insurance were raised by a penny, three million pounds would be raised by that method, whilst an extra 2d. on the Income Tax would represent 5¼ million pounds, or 8¼ million pounds in all. Taking the Government statement that each house is to cost £500 and be rented at 9s. a week, the authors of the scheme then say that the above sum of 8¼ millions would build 16,500 houses, and as these houses would be free of "bond or interest," the 2s. a week in rates would be wiped away.

So far this statement can be easily followed, and it is only necessary to point out that the only sum from fresh sources brought into operation is the proposed 3 million pounds derived from the contributors of Health Insurance, for the other 5¼ millions derived from Income Tax is only another way of proposing an increase of the subsidy of £9 as laid down by the Government scheme.

Under the Council's scheme the 16,500 houses erected out of the above fund of 8¼ millions being interest free are treated as revenue producing, the report of the scheme says: "They would provide a revenue for the Building Scheme. Put it as low as £7 a house per annum and you have a new contribution of at least £115,200, increasing annually by that amount. At the end of 25 years you have a sum of £2,927,000 from that source alone for one year, with a total for the 25 years of over 18¼ million pounds and the existence of 418,000 houses."

The scheme, it is admitted, would be too slow in the production of houses by itself and the report contains an account of how the scheme would operate in conjunction with the Government scheme. We give this in part.

"120,000 houses annually are to be built at a cost of £500 each. At the end of fifteen years, there are 1,800,000 houses, of which 325,000 are interest free and paying their way. The remainder are bearing a burden of at least £20 interest each. In ten years more the 3,000,000 are built. This scheme of ours has put in 418,000 interest-free houses, while the rest are costing in interest £48,000,000. Our scheme continuing pays off the burden on 16,500 houses annually by annual contribution, and almost 6,000 houses from the profits of non-interest paying houses. This annual 22,500 change over of houses from interest-paying to debt-paying means a progressive increase in the clearing of the debt scheme. In five years 115,000 are freed. In the next five years, 123,400, and in the next 132,000—a total in fifteen years of over 370,000 houses additional at interest free. In all a quarter of the three millions stand as a profitable national investment. If one adds the advantage of having the building scheme made national in a true sense, the advance on previous proposals is clear."

In this comparison the Government scheme houses are treated as follows. We quote from the Report. "It is to be noted that the figures officially given allow on each house interest charges of £22 10s., and a local rate of 2s. per week, equal to £5 4s. per annum." Then it is stated, "A house interest free would, on the same rental and without a local rate, show a profit of £17 6s.," and it is claimed that the figures on which the scheme is based are too low, for a "profit" of £7 is the basis of the £115,200 given above, and, therefore, either the rent is placed too low, or, alternatively larger results could be achieved.

As we have said, we find the scheme as outlined in this report difficult to follow, and we hope we have stated it fairly; but if we have read the scheme aright then there is this fallacy: the houses treated as "non-interest paying houses" and as yielding revenue are only distinguishable from the Government scheme by being paid for from two sources (the Health Insurance contribution and an increase in the Income Tax), which do not bear interest. The only new source of revenue is that levied on the Health Insurance contributors, which is put at three million pounds in the first year. In the White Paper, the contribution to the Government scheme from charges on local rates commences at £135,000 in 1924-5, and mounts to three millions in 1930-1 still rising, but in the years 1940-1 to 1963-4 it amounts to an annual charge of eleven-and-a-quarter million pounds.

Thus this scheme starts with a larger contribution for the first six years out ide the Exchequer contribution, and it is not levied on any territorial basis, but how it can be said to be revenue-producing is difficult to be seen. It is no more revenue-producing than is the Exchequer subsidy, which gradually mounts to £23,156,000, and we cannot see that it can be called revenue-producing because the sums are raised by taxation and do not bear any interest, any more than can the subsidy itself, or that the result is different except for the contribution from Health Insurance from what it would be if the Exchequer contribution was simply raised at once.

If the whole sum were thus raised, all the houses built could, as it appears to us, equally well be termed "revenue-producing houses" simply because they were built at the taxpayers' expense and the rents obtained were treated as revenue. If we have failed to comprehend the scheme we apologise to its authors.

LAW REPORT

Alleged Red Oxide Unusable.

In this action, held recently before Mr. Justice Snagge, Messrs. Hemingways & Co., Ltd., Stratford, colour and chemical manufacturers, sued Messrs. Nuroads, Ltd., King's Cross, flooring and paving contractors, to recover £12 13s. 3d., for red oxide supplied. There was a counterclaim for £8 10s., as damages for loss sustained, owing to the red oxide being defective, and not suitable.

Mr. A. Cohen, barrister, appeared for the plaintiffs, and Mr. Shelley, barrister, for the defendants.

Mr. Herbert John Jones, general manager to the plaintiffs, said that in February they sent along a sample of red oxide, suitable for jointless flooring, and in all they afterwards executed four orders, at varying prices, 14s. 10d. per cwt. and 14s. 6d. The goods were sent to Wicklow-street, and to Towcester.

Mr. Shelley here interposed, and said that they only complained of the last two deliveries, of 5 cwt. each, and they did not complain of the chemical composition, or the colouring power, but simply that it was lumpy, which had caused a lot of labour to pulverise. He produced a box, containing some of the red oxide, some of which was in lumps larger than a walnut.

Mr. Jones picked up several of these lumps, and crushed them quite simply with his fingers, and said there would have been no difficulty in doing this at the time of mi with the ingredients. The lumpiness a from compacting into bags, or by the pres of weight of bags on bags in transport. The oxide was used with various ingredients to n a jointless flooring, which was the sam linoleum. Magnesite was mixed with oxide, on a floor if done by hand, by m of a spadeful of each alternately. Any lu would run down the mound, and could broken up by the shovel quite simply. might be that there would be little pe lumps left even then, but at the finish of mixture it was mixed with magnes chloride, and when in this wet state lumps of red oxide would disintegrate.

At the resumed hearing of this case, Jones mixed a quantity of the red oxide magnesite and it appeared as if the red broke down when wetted.

Mr. Webb, a manufacturer and laye jointless flooring, said that in March April he had consignments of red oxide the plaintiffs. The March consignment a bit lumpy, but he used it all, and not was wasted. He mixed his by hand. there were lumps of magnesite, or colour, would roll down the sides. Magne chloride would break down lumps, but it no use to experiment as had been done all the ingredients had to be there.—In c examination, he said a sample produced one per cent. in colour to 30 per cen other ingredients, which showed that lumpy stuff could be used with no trouble. Ever since he had started in ness, since August last, he had had al red oxide from the plaintiffs, with no plaint as to colour.

After further evidence the case for plaintiffs was closed.

For the defence, Mr. Garrow said he had twenty years' experience in jointless ing, and besides was a technical che He was told that lumps of red oxide supplied in the bulk, and if such were case, it would be useless for jointless floo as the presence of the lumps would rende colour unsuitable. It had to be powder finest ground, or you could not get a suc ful, even mixture. The mixing of colour one of the most difficult things imagin The effect of a lump on the jointless flo would be that it would show as a lump the floor would be spotted. There wa thing except force to break down lumps. tainly magnesium chloride would not as that was really the cement, and it get round the magnesite and oxide, and a ball. He thought the lumps had caused by pressure and damp.

After further evidence the case for th fence was closed.

In giving judgment, Mr. Justice S said the amounts claimed could not be of moment to either firm. It resolved into the question as to whether the red was reasonably fit and merchantable. did not complain of the chemical compo or the colour, but of the lumps, which bad results. The defendants' foreman up a mixture which turned out not satisfactory, but yet it was sent out. thought the red oxide should not be l and therefore it was not in accordance the contract. The defendant succeeded fore, on the main issue, but it was d to know how to enter judgment, as the tiffs were entitled to something for the red oxide, whilst the defendants were en to their full counterclaim, which more wiped out the claim. Finally he gave ment for Messrs. Nuroads, Ltd., on counterclaim for 13s., with costs on scale, and awarded the plaintiffs nothi

Hydraulic Power in London.

A map of Central London showing the under which their mains are laid has issued by the London Hydraulic Power Hatfield-street. S.E.1.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

Ve are glad to give questions and answers annot accept responsibility for contributed s, especially on legal matters.

y we appeal to our correspondents to it their queries on paper of a size easily and written as legibly as possible, or still, in typescript?—Ed.

Drainage.

.—I am interested in the letter from itary " in your issue of August 8, reply- Mr. Thomas Tile, on the question of ge. Your correspondent obviously recog- the insuperable objections to cesspools, with or without overflows, the former rous to health, the latter costly to the for upkeep purposes.

ould, however, suggest that your corre- ent is under a misapprehension when he ts that this difficulty may be overcome by option of a septic tank and when he goes state that the effluent from such a septic is almost pure. Any form of cesspool ge constitutes a septic drainage system, ny septic system of drainage must be panied by the insuperable dangers and ons which always attach to a cesspool, and should be prohibited by council by-laws. action is only required in connection sewage purification to break down the matter, and should preferably only act solids, not upon the liquids; hence the ity for the digesting chamber to be as as possible. This digesting chamber or tank is only the first step in the purify- ocess; it should be the smallest, and is ast important.

real purification must be produced by bacterial action which is the antithesis ic action. It is an oxidising and nitrify- ocess carried out in a filter bed of ade- capacity, provided with proper distribu- r the liquid to every portion of the bed, ways aerated so as to allow the aerobic a to exist. This combination of a small tank with an adequate oxidising filter oduce an effluent of any degree of purity, nay be passed into any ditch or stream, to the Thames, or disposed of by sur- subsoil irrigation without any danger uting the ground.

explanation of the modern system of purification may perhaps be useful and event the unconscious use of a phrase night give to an intelligent reader an tirely contrary to that which no doubt shed to impress.

Jas. Edw. Tuke, M.R.S.I.

ement and Other Foundations.

-We are sure that the letter you print issue of August 8 from "Clerk of will arouse mixed feelings in the of your readers. If this letter is a t of fact, and not a joke, and there is living and in charge of the construc- a memorial a "well-known archæolo- who requires for foundations not con- t "flints or small stones, a certain of fragments of brick or sand, and laked lime," the whole of which is to and "used without delay," then the t thing that can be done is to let us name of this archæologist in print over who it is that is responsible for a gentleman with such extraordinary charge of such an enduring piece of a memorial. We are suffering every the bad material used in old-time ons, but that we should be asked to perpetuate the mistakes our forefathers made in ignorance and to hand on the same set of troubles to future generations is really unbelievable.

T. H. Clarke.

London.

Bungalow Extension.

Sir,—Will you kindly give me the following information through the medium of your valuable paper?

Regarding breeze and cement blocks (slabs), are they strong enough to form cavity walls in the building of a bungalow? Are they durable? Are they when well made damp resisting if the outside part of the cavity walls is "stuccoed" or rough cast? Are they quite satisfactory if used in the construction of fireplaces and chimneys without the part use of bricks? What should be the proportion of cement to breeze to make a good sound "slab" (or block)? What should be the thickness compared to the length and breadth?

Failing the satisfactoriness of the breeze and cement slabs for both inside and outside of the cavity walls, would a part use of them be satisfactory, viz., using bricks (say, grizzles) for the outside and slabs for the inside part of the cavity walls.

J. E.

[Reply].

Breeze blocks would be quite suitable for the walling of a bungalow, but we think our correspondent would be well advised to use breeze for the inside leaf only and a good ballast concrete for the outside leaf—the cost would be but little more, and would be amply justified by the better results, and a stronger structure, and, what is more important, one that will be absolutely weatherproof. In themselves breeze slabs are very absorbent, and would require several applications of rendering to make them weatherproof; it would probably be cheaper to use a ballast concrete for the outside slabs and dispense with the rendering. We do not recommend breeze slabs for chimneys. A good breeze concrete is obtained from a mixture of six parts graded breeze to one part Portland cement, and a useful size for the slabs would be 18 in. by 9 in. by 4 in. thick if breeze concrete is to be used for both leaves with a 2 in. cavity.

C. H.

Machinery Depreciation.

Sir,—I should be glad to know if any of your readers could introduce me to a book giving actual facts and figures regarding depreciation of builders' plant and machinery, including woodworking machinery, mortar-mixer, concrete-crusher, scaffolding and sundry tools. I have Matheson's "Depreciation of Factories," published by Spon, but it does not seem to give clearly the points which I am investigating.

"Builder."

Bristol Cathedral Renovation.

The Dean and Chapter have made an appeal for further subscriptions towards the cost of the work of renovation now in progress at Bristol Cathedral. The work, which is nearing completion, consists of new vestries, library, heating apparatus, and certain restoration; this is the first part of the full scheme, which also includes restoration of pinnacles of nave, the Chapter House roof, releading windows of the choir, the provision of a new oak lobby at the north porch, and completion of electric lighting. The total cost of the whole scheme was estimated at about £20,000; of this amount some £13,400 has been raised, leaving between £6,000 and £7,000 to be found to pay for the work nearing completion, and to allow of the second part of the scheme to be proceeded with.

STAINED GLASS

The first number of the *Journal of the British Society of Master Glass-Painters* contains an interesting account of the fragment of ancient fourteenth century glass which had been bricked up in a window in Chelsea Old Church for some three hundred years or more, of which a good illustration in colour appears as a frontispiece. Whether the Society can effect the results it aims at of educating the public in the matter of stained glass may be doubtful, and its belief that "having behind them the whole body of the members of the Society—such a body of expe t and authoritative opinion on the subject as has never been got together before—will go far to remove the ignorance which unfortunately still exists on the subject," may seem, to those who know, something of an over statement For really the matter is more difficult than this. Are these results to be reached by experts, or is it the old fallacy that by uniting into a body all those who separately have been unable to achieve this result, a miracle will happen? Interests may be developed and archæology may be furthered, but there is no stranger belief than this one so paramount in recent years that what has failed to be done by conviction and belief can be achieved through organisation. And it is just this complacency that raises at once a doubt in the mind of any one who looks deep enough into the nature of art—whether that of stained glass or any other—to know where improvement lies.

Mr. Noel Heaton's contribution to the pages on mediæval materials is well informed and instructive. When there are so many forgeries and "faked" examples of ancient glass, it is interesting to read that "The forger can reproduce every detail of the design and colouring of ancient glass so faithfully as to deceive any one, but he cannot reproduce the materials and conditions of working on mediæval lines so as to hoodwink those who can understand the evidence afforded by the glass itself of the conditions under which it was produced."

We must accept Mr. Heaton's statement that thirteenth century glass was of better manufacture than that of succeedlng periods, but even if the thirteenth century glass is better, we have no doubt that the artistry of the fourteenth century was of a far more beautifully developed character. The mosaic period of glass is a primitive and rather elementary one, and the value of much of this early glass is greatly over-rated. We should like to learn more of Mr. Heaton's views on the subject of firing. It appears to us in the case of staining the results obtained through gas firing do not equal those to be obtained through the slower method of the coke kiln. Is the action of the more rapid firing to be obtained through the gas kiln able to ensure results as good as those of the coke kiln? The subject is an interesting and important one, and we hope that Mr. Heaton will give us the scientific aspect of the matter at some future time in the pages of the Journal. Our own experience is that there is less richness and variety in the staining achieved through gas firing. Is there any ground for this belief? An article contributed by Mrs. Halahan on the association of flint chippings with fragments of old glass found in the mediæval glass houses at Chiddingfold, in Surrey, unfolds several very interesting particulars of our ancient method of cutting glass. The Journal contains many particulars full of interest to glass painters, and each number will include illustrated articles by specialists in every branch of the handicraft, this opening number containing the beginning of a translation of M. Olivier Merson's work, "Les Vitraux," which will be continued in serial form, the Council of the Society having been fortunate in acquiring the translation rignts of this most valuable book on the subject. The Society is to be congratulated on the first issue of its Journal, which should form a very valuable contribution to our knowledge of a most beautiful art.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

The Housing Bill.

The Housing (Financial Provisions) Bill received the Royal Assent by Commission on Thursday, August 7. The House of Commons had agreed with most of the amendments made by the House of Lords, but disagreed with four. The first was with regard to provisions for fixing rents, the second was the proposal to revise the scheme every two years, instead of every three, the third was to provide that draft Orders made under the Bill should be laid before both Houses instead of before the House of Commons only, and the fourth was the suggestion that those who rented the houses built under the Bill should be "members of the working classes." The Lords later agreed not to insist on these four amendments.

The Building Dispute.

Sir K. Wood asked the Minister of Health whether any local authorities had, in respect of their housing contracts, conceded the terms demanded by the building operatives in the present dispute; and what action he was taking in the matter?

Mr. Wheatley said that the terms of engagement of building trade operatives would primarily be a matter between the operatives and contractors concerned, and he had no knowledge whether, in connection with a contract for a local authority's housing scheme, the claims put forward by the operatives had been conceded. He proposed to take no steps favouring one side or the other in this dispute.

Sir K. Wood further asked what, if the demands of the building operatives were conceded, it was estimated would be the extra cost, respectively, of a parlour aud non-parlour house built under the State assisted housing schemes?

Mr. Wheatley said the demands of the operatives were not uniform throughout the country, but where the demand was for ½d. an hour, it was estimated that the average increase in cost of a workman's house entailed thereby would be about £4. As regarded the further demand for payment for lost time, sufficient information was not at present available to enable an estimate to be given.

The Weir Scheme.

Mr. D. G. Somerville asked the Minister of Health what steps, if any, were being taken by his department to test adequately the so-called Weir type of house construction?

Mr. Wheatley said he hoped that the method referred to would be fully dealt with in the course of the inquiry as to alternative methods of house construction just promised by the Government in the House of Lords.

Evictions by the Crown.

Sir K. Wood asked the Prime Minister whether he proposed to introduce legislation, or to give facilities for the same, with a view to further protecting tenants of the Crown against eviction proceedings and to ensure that on estates administered by departments there should be further facilities for the letting of houses?

Mr. MacDonald said he did not think that the circumstances were such as to call for further legislation. Tenants of the Crown had exactly the same legal protection as the tenants of any other landlord, and Government Departments acting as landlords gave the fullest and most sympathetic consideration to the conditions of each case.

Building Materials.

Sir F. Hall asked the Minister whether it was the intention of the Government to amend the Bill which had been introduced to deal with the question of the prices of building materials so as to enable the Government to take over building works without compensation in cases in which terms could not be agreed; and, if so, when an official announcement of the Government's policy on this matter would be made to the House?

Mr. Wheatley said the answer to the first part of the question was "No." As regarded the last part he hoped that it would be possible to take the Second Reading of the Building Materials (Charges and Supply) Bill early in the autumn Session.

Hadrian's Wall.

Major Church asked the First Commissioner of Works whether he would exercise his powers under the Ancient Monuments Acts of 1882, 1900, and 1910, as well as under the Consolidation and Amendment Act of 1913, so as to schedule Hadrian's Wall in order to ensure its preservation?

Mr. Jowett said that unless in cases of immediate urgency, his department awaited recommendations from the Ancient Monuments Boards before scheduling monuments. He was not aware that there was any need to depart from this practice in the case of any portions of the Roman Wall. The Ancient Monuments Board for England recently recommended for scheduling a few of the sections of the Wall which were still preserved, and they would no doubt deal with other sections in due course. The power of scheduling was confined to that given by the Act of 1913. The Act of 1913 repealed the earlier Acts. Scheduling only imposed on the owner an obligation to give the Office of Works notice before altering, adding to, or removing the scheduled monument. It gave no power to require the owner to keep it in repair.

Historic Buildings.

Major Church asked the First Commissioner whether he was aware that there were in England, Scotland and Wales a number of ancient monuments and historic buildings of large size and major importance which were falling rapidly into decay through neglect on the part of the owners; could he state whether the dangerous and decayed condition of such buildings was reported by officers of his department, and were representations made to the owners that repairs should be carried out?

Mr. Jowett said the Office of Works, through its inspectors and their local correspondents, did what it could to keep a watch on the condition of ancient monuments and historic buildings scheduled under the Act of 1913, and when cases of neglect were reported representations were made to owners as to the need for carrying out repairs.

Parliament rose on Thursday, August 7, to Tuesday, October 28, but will meet on September 30, if the Irish question makes it necessary to do so.

THE HOUSING BILL IN THE LORDS.

THE most striking feature of the debate on the second reading of the Housing Bill in the House of Lords, where nearly all the Lords who spoke were very sceptical of the practical results to be attained by the Housing Bill, was Lord Weir's suggestion that the only way effective production could be secured, in the absence of skilled labour, was by the standardisation of houses the main structure of which should be composed of a combination of timber and steel plate, with either metallic shingles or asbestos sheets for the roofs, which resulted at the Committee stage in Lord Middleton moving a resolution that having regard to the great charge upon public and municipal funds involved by this Bill, and to the deficiency of skilled labour, and the increasing cost of building materials, and to the consequent delay and enhanced cost in erecting the necessary houses an immediate inquiry should be set on foot by His Majesty's Government as to the possibility of building houses of other materials than brick, which could be erected more rapidly and at less cost. Lord Middleton said that on the second readin the Bill not a syllable was said to induce House to believe that 2,500,000 houses coul obtained in 15 years, or that the immec shortage would be in any way accelerate the passage of the Bill.

The Government accepted this mo through the Lord Chancellor, but this m probably accounted for an amendment w was subsequently carried, though not acce by the Government, that the period of rc should be in two years' time, 1926 inste 1927, as in clause 4.

The only reason for this can be that the H considering that the Bill as framed would result in the erection of the houses aime felt it should be restricted in time as an ex mental measure, and there is much to be for this, for it would be an awful thing to template 2,500,000 houses of a novel, if temporary nature, being planted all over country under the Bill before careful experi had been made and they had been thoro tested in every way.

We have always contended that this p of review, or of terminating contributions inconsistent with the scheme as put forwa the Government, for any agreement with building trade, or any continuity of policy, w it was asserted the Bill provided, was inc tent with these provisions in clause 4. nature, therefore, the Bill as drafted b Government was never anything more tha experimental measure, and it will make difference whether or not in the Commons amendment shortening the period to two is accepted or not.

The Bill never has conformed to the scheme propounded by the Government, a in its nature more experimental than its decessors, and it has become more and obvious in its passage through Parliament under existing conditions experimental it remain. If entirely new methods of cons tion are adopted and houses can be erect considerably lower cost, then the whole fi of the Bill will require amendment, but i case we hope that the country will not be s by the erection of houses which will en alter its character, and which may be rush in large numbers without their qualiti endurance and habitability as well as appearance having been carefully tested considered.

ASPHALTE ROADS

MR. J. GARDNER, in the House of Com recently, asked the Minister of to the fact that the Middlesex County C at its last meeting accepted the recomm tion of its Highways Committee authc the acceptance of a tender for surfacing asphalte at 8s. 5d. per yd. super; w he is aware that the lowest tender was 7 per yd.; and whether, in view of the fac the managing director of the successfu was a member of the Middlesex Council and also of the Highways Comr and was present at both meetings, he withhold payment of his proportion of th of this work until he had made the investigations.

Mr. Gosling said his attention had nc viously been drawn to this tender, t had caused inquiries to be made and w formed that the tender accepted by the M sex County Council was the lowest re for mastic asphalte, the material whic the county surveyor's advice, it was cons desirable should be used on the road in tion. He was advised that the price and accepted was reasonably comparabl prices generally current for this kind of In these circumstances there was no ju tion for withholding grants. In general ever, he had always held the opinion th members of committees adjudicating o tracts should not have any personal i in the decision.

OYAL SANITARY INSTITUTE ANNUAL CONGRESS—III.

REGIONAL SURVEYS.

OFESSOR PATRICK ABERCROMBIE gave an ss on "The Preliminary Survey of a n: Including the Built-up Areas and rban Centres, with Relation to the Public h."

said the argument was sometimes advanced there was no need to prepare a civic y—consisting of a collection of compara- iagrams illustrating the life of and illumi- g the history of a town—for those who were in it; they were, or should be, familiar its every aspect and problem; its survey l be contained within their heads where ain could review and compare without the rous machinery of maps. It was perhaps ecessary to combat this fallacy, but no ad yet suggested that a region, containing tizens of its many towns, the peasants of ntryside and its villagers, could be under- by an inhabitant of any portion of it, or ss by an outsider, without some study of its ic presentation.

h group—the town, the countryside, and illage—was prone to regard itself as a te unit for the purpose of planning and h, and the artificial boundaries of local rities tended to encourage this division of ion of interdependent communities into es of insulæ. And yet the farmer knew ie lived by supplying the town with milk iry produce and the townsman relied upon the country for his recreation, and in a ed ways each relied upon the other for its xistence.

egional survey, then, was necessary to n the essential unity of an area which was ially split up for administrative purposes eparate local authorities. The occasion of ey would probably be the first time that of its problems were thought of regionally Population, for example, was generally ered as though in watertight compart- ; a national figure was, of course, fre- y mentioned, then next the population of eat cities. But it was important to think population and its distribution over some l geographical region such as a coalfield, n-milling district, or a great river estuary; ain, the violent contrast that frequently ed between a dense town and its sparse yside.

aps the one aspect which had been gener- cepted as requiring regional study was that ffic. It was manifestly absurd to cease crutiny of a stream of motors the moment rossed the municipal boundary-line. This nd dynamic quality of traffic had been useful in directing attention along its quite irrespective of the ownership of the y through which it flowed. The same netration of town and country was in ce, though less evident, in every other

ngland, regional survey had been carried h independently and as the first stage in eparation of a regional plan of develop- When the survey had been undertaken ely it had generally been outside the hands of a local authority.

a review of surveys which have been out, or are now in course of preparation, urer said in any survey natural physical s should be first dealt with. Geological on was frequently a prime determinant of growth, whether it be the economic (such as coal) of certain strata or the od of subsidence following upon coal g. In the Wirral Peninsula it was found ie older villages, with wise foresight, ced themselves upon the dry sandstone s, leaving the cold, damp clay areas upon. Modern developments were to ignore such fundamental considera- In addition to normal underground and geology, there was the important study of different types of soil, affecting agriculture, afforestation, and market gardening. Wind and rain might be thought to be constant factors for individual towns, only requiring determining once for the districts. But regional study showed remarkable variations, amounting to practically different climates, and thus vitally affected development. The importance of the maps showing contours and levels need hardly be emphasised, and in close relation was the study of watercourses, rivers, marshes, and low-lying lands generally. At an early stage of the survey it was frequently possible to determine what lands were unsuitable for building purposes, whether unhealthy for houses, or too steep and irregular for general building.

There was next the study of vegetation, both natural and agricultural, closely related to the soil map.

The historical growth of the region could sometimes be conveniently examined by itself, though usually the historical element would be introduced into the study of each aspect. But the actual area covered by the more urban parts at different periods and the gradual concentration (and at times shifting) of the population might be usefully shown in separate diagrams.

Commerce, business and industry formed one of the most important subjects for preliminary study, and it would usually be found that there was less data available in the offices of the city authorities for this than for any other aspect. It would probably be found necessary, for purposes of mapping, to group industries of a similar nature together. There might be two main divisions of "heavy" and "light" industries, and these again might be divided into different groups. There were, for example, the miscellaneous industries found in every large town, such as gasworks, brickworks, &c., and there were the specialised trades. Nor was it sufficient to show merely the area occupied by the works; this measure alone was sometimes highly deceptive and should be corrected by a corresponding diagram showing the numbers of people employed in the different factories.

One of the most important lines of investigation would concern the tendencies discoverable towards centralisation or decentralisation.



Northwood Wesleyan Church.

MESSRS. WEIR, BURROWS & WEIR, FF.R.I.B.A., Architects.

Certain works, for example, must be situated in the centres of large populations, others were equally or better situated in the country. Again, the factors controlling the placing of industries were constantly changing, *e.g.*, until recently the Lancashire cotton factories were all placed on the rivers or canals, not for purposes of transport, but for the supply of water; this was no longer necessary. It should be the function of a regional survey to examine all these conditions; commercial inertia was a very frequent retarder of town and regional improvement.

The industrial survey must also be clearly read with the transportation and labour or housing survey. Population and housing might be conveniently grouped together, as it was customary to regard the position of the population when it was at home rather than when at work or at play. The population survey would be concerned with showing existing densities, in order that, seen in conjunction with the unbuilt-on lands, a scheme of regrouping following the lines of industrial development might be attempted. If, for example, the region contained one dominating urban centre, it would have to be determined whether the overcrowding should be eliminated either by a general spreading out of the central town, or by the creation of satellite communities cut off from the parent by intervening farm belts. Though the tendencies of this regrouping would be largely directed by industrial leading, it would be no less influenced by the conditions displayed in the physical survey. In some cases there might be indirect antagonism to apparently obvious industrial needs, as, for example, where a coal pit had to be sunk, for engineering reasons, in the midst of a low-lying tract where the ground would be further let down by subsidence; in this case the colliery worker, except for a small community of pumpers, &c., must live in the nearest convenient centre which was available.

The chief object of the housing survey was to give a vivid picture of the condition of all residential property in the region. A period plan should be attempted, in which a lease of life was allotted to every house. By this means a programme of house building and replacement could be undertaken, divided up not only according to numbers of houses wanted, but the time within which they must be built. In studying the existing housing conditions, also, an attempt should be made to discover, if possible, the reasons which had governed their present position, which had usually shown a centripetal tendency in the past. With this should be equated the opposing centrifugal tendency of the present day under the influence of cheaper land, open spaces for playgrounds and allotments, and improved means of communication.

Health diagrams were very desirable, particularly from the propaganda point of view, and wherever possible attempts should be made to show the relation between conditions of environment and health. A useful comparison could be made between town and country dwellings in this respect. Conditions of environment might also include, besides density, such factors as the proportion of works to dwellings, or the prevalence of certain types of house (*e.g.*, the "back-to-back" house, which had no through ventilation).

In addition to general death rate, there were infant mortality and death from special diseases. For example, in one region containing much low-lying land where it was desired to prevent further house building, it was essential to show that the villages on these low areas suffered consistently from diphtheria more severely than the villages on higher ground. In this section of the regional survey it would be of value to attempt to fix certain standards for the health of communities. Could, for example, a number of people resident per acre be agreed upon beyond which health clearly deteriorated? And, if so, could that standard be made the basis of, not only future housing, but the clearance of existing centres of population?

Means of communication might be readily surveyed, and offered an attractive field for this work. The actual volume of wheeled traffic upon roads, for instance, might be regarded either as to its axle-load or its degree of obstructiveness. Then, again, it might be an average load (spread over some convenient long period), or a peak load (confined to some instant or short space of time) which it was necessary to emphasise.

His primary object was to demonstrate that (1) the study of public health must be undertaken concurrently with that of other aspects; (2) that it was no longer possible to confine studies of public health or other aspects to the convenient units of single authorities, more particularly in those parts of the country, such as Lancashire, where urban conditions interspersed with belts of country largely predominated.

Discussion.

MR. WILLIS (Chiswick) said regional planning should undoubtedly come before town planning. Two schemes near London (West Middlesex and the Thames Valley schemes) were now nearly complete, but in his opinion could usefully have been combined into one. There were, however, small differences between the local authorities concerned, which the Ministry of Health could not bring into line. He thought Liverpool was somewhat on the same lines as London in the matter of town planning, for Liverpool and the area on the other side of the river might be very well included as one problem. The leading part in all town or regional-planning schemes was the traffic. Open spaces were another matter which needed serious consideration. At present, the total amount of open space necessary was empirically given as 10 per cent., but unless that 10 per cent. were properly disposed it was not nearly enough; in some places it was found desirable to increase that percentage. Finance was one of the chief difficulties of all such schemes; they were finding money for the future, and it was difficult to know whether the local authorities could afford to spend more than was required for the actual present needs of the community. While he agreed that regional planning should come first, it seemed a little unfair to merge the smaller authorities with the larger, for many of the small areas were doing good work which might be allowed to continue, provided capable town-planners were employed on it; it was desirable that each of the smaller authorities should be allowed to determine its own general plan. On the question of the density, he did not think it should be laid down as a hard and fast rule that no more than twelve houses should be built to the acre. In the Chiswick scheme there was a provision that twenty houses could be built to the acre, the reason being that nearly 27 per cent. of the whole area was open space. It was absurd where there was a large amount of open space in a district, and where land was costing perhaps £1,000 per acre, to limit the number of houses to twelve to the acre.

MR. SEARLES-WOOD, in referring to the effect of geology on the population of a district, mentioned that a few years ago the valleys in the Surrey hills near London were built on but not the hillsides themselves, the reason being that no water was available; since water had been laid on, however, the hillsides were becoming more and more populated.

MR. BROWNRIDGE said industry and economics largely affected town and regional planning. For the purpose of industry, it was important that large populations should dwell on small areas, and that led to the consideration of satellite towns and the question of increasing the area of local authorities. It was found necessary to engage in regional planning, and authorities were up against the difficulty of having to extend their boundaries for that purpose. If they considered the question of extending the areas and making a regional area for planning as well as for government, the question of satellite towns could be properly handled. It was a fact that many of the difficulties of proper planning were brought about by the local authorities themselves, who did everything in their power to attract large industries in an area at the expense of adding to the housi difficulties.

MR. BRODIE said in town-planning matte there was much room for differences of opinic He had no great faith in the possibility of sm authorities being able to carry out large worl They had had experiences in that direction Liverpool, where small authorities outside t area of the city had prepared schemes f housing and the erection of residential proper but were unable to carry them out owing the cost of main roads. The backbone of to planning was the provision of adequate ma roads; if the main lines of communicati were laid down town planning became a ve simple matter. He disagreed with the limit tion of twelve houses to the acre, and he did n believe that in the neighbourhood of every lar town practical men would consent to it. did not believe it could be done satisfactori and he did not believe it ought to be done. parts of Liverpool, near the Mersey, with plen of open space, as many as fifty dwellings h been built to the acre, and there was not a me healthy and sanitary area in the city. In lar cities the cost of land was so high that t limitation of twelve houses to the acre w quite impossible. Also, it had to be remember that everybody who was used to city life d not want a garden, and many of them did n know what to do with them when they got the The question of open spaces was importa and he preferred that they should be in t form of long strips radiating from the cent of the town to the outskirts rather than in t form of parks dotted about the town. As th got nearer the outskirts, where land was cheap the strips could be wider, and there would be l distance for anyone to go to reach a playgrou than by the more usual method of having pa dotted about in different parts. The Liverpc Corporation was purchasing land with the obj of carrying out something on those lines. all matters relating to town planning it w very necessary to take a very broad view. had known Liverpool fifty years ago, when t ideas as to the development of the city we not by any means the same as they were to-da with the best intentions in the world the ide of town planners to-day would be entirely c of date fifty years hence. Twenty-five ye ago he thought 60 ft. was a reasonable wid for roads to meet requirements of the futu and he widened most of the roads in Liverpc to 60 ft. in order to provide room for a doul tramway track. It was certain, however, th with the increasing speed of traffic in the futu the present idea of what was the proper wid of a road would have to be reconsidered, a with that in view in all new roads in Liverpc he was leaving a track 150 ft. between t houses which could be added to the road necessary in the future.

MR. GARLICK (Hyde) said the time wou shortly come when the Government would ha to take a hand in the question of collaborati between one region and another, especially connection with arterial roads, which should considered in their relation to the country a whole. The provision of a belt of agricultu land around each town, as advocated Professor Adshead, would also have to considered in the near future. In Hyde th had used subscriptions for a war memorial the purchase of 200 acres of agricultural la for a permanent open space for the use of t population. There was a good deal to be sa for the provision of such a belt of open count as it would prevent continually growing tow close to one another from merging and becomi one large built-up area. In Hyde they h found great difficulty in regard to gardens housing schemes, some of which were mer unsightly patches of clay. On some garde suburb estates there was a scheme by wh each tenant paid a sum on deposit to a garc fund which was used by the trustees to ke the gardens in good order if the tenant failed do so himself, and it might be a good thing something on the same lines could be done local authorities' housing schemes.

THE BUILDING TRADE

E INSTITUTE OF BUILDERS AND EDUCATION

e recent annual Conference of the of Builders with the Teachers of in Great Britain* a paper on "The al Policy of the Institute" was read . H. Adamson, in which he said in ith such a problem it would be con- o consider it under three heads—Past, nd Future.

stitute in the past had no very definite r beyond the encouragement given to e early stages of their training (by the f prizes and medals at various technical it relied chiefly on the efforts of indi- mbers appointed to serve on the com- these schools, who had done much by peration with the teaching staffs to he training of lads destined for the

present time the Institute did not con- with the problem of general education, essarily formed the basis of a sound education, but it recognised that the ng into the industry to-day were better and had greater opportunities of ood than in the past. He thought it n the first place to the moral influence om the general home environment of ding the secondary schools; second, nd teaching received in these schools; to the splendid training in the technical here every encouragement was given te an interest in, and a love for, good ship.

n of the Institute was to give such to the teaching staff of the technical would lead to a more practical appreci- the industry's problems and their nd the Examining Board, in drawing labus of the examinations for Licen- Associates, had endeavoured to meet ese problems.

construction naturally took first he syllabus of the examinations for and Associates, and to that he ere could be no objection.

prise had been expressed that so much was placed on book-keeping, y, finance and costing, and it seemed o explain why builders should place portance on these subjects. It was uilders in the past troubled very little untancy and relied on rather rough- methods of arriving at what they s the cost of their jobs—in many cases rous results. The rough-and-ready ght serve fairly well for a small busi- ith a large and expanding business— ness conducted on sound lines should xpand—more scientific methods were man might have a sound knowledge construction, might be well versed in ence, thoroughly understand trade uilders' quantities, &c., and yet il in the management of his business lid not thoroughly understand book- countancy, and costing. The pro- king costs was one of the many night- e builder, for, owing to fierce com- l unwise tendering, contracts were aken at prices which did not allow percentage to cover working costs, t charges, and profit. Builders ew the approximate percentage on their working costs and establish- s, but how many troubled to work entage on their labour costs alone? were low the only satisfactory way profit was to increase turnover and reduce the percentage of establishment charges, but unfortunately, in the endeavour to increase turnover, prices were often cut to such an extent that the profit vanished.

Book-keeping and accountancy were as necessary for a business man as reading, writing and arithmetic, and the inclusion of this as one of the compulsory subjects in the examination should prove invaluable to the future builder, and, he hoped, check the sometimes reckless competition which had done so much harm to the industry.

Builders' quantities and trade subjects formed the third group in the examination for Licentiate members, and candidates at the recent examination had the choice of three trade subjects, viz., carpentry and joinery, brickwork, and plumbing

The five subjects under the fourth group were geometry, mensuration and trigonometry, steel and reinforced concrete construction, heating, lighting and ventilating, and building materials, any one of which could be selected by the candidates.

The future policy must be dependent upon movement in the educational world, and in the industry itself, and it was therefore only possible to anticipate the direction in which that policy was likely to develop, but he could say with certainty that its main purpose would be to secure an adequate flow of suitable and well-trained lads not only to the various crafts but to the administrative departments of the industry.

The Institute would continue to grant prizes and medals for competition to the various technical schools, to encourage good craftsmanship, and it might be necessary in the near future to organise, in co-operation with the technical teachers, a scheme of preliminary examinations still further to encourage this class of student. Builders throughout the country realised that the technical schools were turning out the right type of lad for apprenticeship, and were beginning to see that the good work of the schools would be thrown away unless they were prepared to apprentice these lads. There was room for them. They were short of skilled men, and would never improve the present chaotic condition of the industry unless both employers and employees worked together with goodwill to solve the apprenticeship question. It was true some of the lads, after completing their training at a technical school and failing the opportunity of apprenticeship, managed to get work as improvers, but the aim of the Institute, in the best interests of the industry, should be to get the lads apprenticed.

There were certain crafts which, after some preliminary training at the schools, were more easily taught under proper supervision on the building, and that again emphasised the importance of apprenticeship. Some special competition or examination in the various crafts might well be introduced to encourage friendly rivalry between the apprentices of the various employers, but he thought the Institute would first of all have to grant medals to those employers who took the largest proportionate number of apprentices and provided the best training. The practice of granting a bonus to apprentices, over and above the standard rates provided in the indentures, for special ability, good behaviour, attendance at evening classes, &c., was well worth consideration in any scheme of national apprenticeship. The whole question of an apprenticeship system which would link up with the system of technical education was at present under discussion by another body, and he need only say that the Institute would lend its assistance in framing a sound national system of apprenticeship.

In dealing with the future policy in its relation to those intending to take up administrative positions, he wished to draw attention to the great change that had come over the commercial world during the last ten years, and to remind them that many men with a university training were finding their way into administrative positions in most industries with beneficial results. They needed more of those men in the building industry, to broaden their outlook and add wisdom to their councils.

The recognition that the building industry, as much as its allied industries, needed highly trained leaders equipped in the latest developments of modern science, and that the future of this indispensable agent of civilisation depended upon the quality of its leaders, carried with it a responsibility to provide for the adequate training of the youth of the industry. As a first stage towards acceptance of this responsibility the Institute of Builders was of opinion that the University of Cambridge offered the greatest facilities and the best opportunity for the economical solution of the industry's higher education problem. Although the older Universities would prefer to diminish rather than to increase the number of their undergraduates, the authorities at Cambridge, recognising the neglect of the building industry's educational interests and the importance of their claim, were not only willing but eager that a Chair of Building Science and Art should be established there, and they would afford all the facilities within their power to develop a course of study designed to equip youth with the broad outlook and the knowledge of practical and theoretical principles of the science and art of building required from the modern master builder. The formation of courses of study in building science and art would not at present require the foundation and equipment of new schools and laboratories. There existed at Cambridge special schools, museums, and faculties dealing with exactly the subject-matter of the building industry. In the schools were the teachers and the apparatus that the scientific and practical building student required. The practical reputation of the University's schools (especially that of the engineering schools) was well-known and world-famous.

All that would be required to initiate the scheme would be the establishment of a Chair of Building Science and Art, so that the educational needs of the industry's university students might become the special care of a professor who would undertake the organisation of a school and the focusing and directing of the existing courses for the benefit of building students. The proposal for establishing a Chair of Building Science and Art had been under consideration for nearly two years; a preliminary appeal had already been issued, and it was hoped the response will justify a general appeal to builders throughout the country for the purpose of raising the sum of £25,000, the estimated cost of endowing the Chair at Cambridge.

There was undoubtedly room for closer co-operation between the architect and builder, and what more fruitful soil could be found for this better understanding than the close association which a university training would give future architects and builders, who probably for the first two years would pursue the same studies under various professors? They looked to the architectural profession for inspiration in the design of buildings, and it seemed natural that the inspiration for the establishment of a Chair of Building Science and Art should come through an architect; and he would like to state how much the Institute was indebted to Professor Beresford Pite for the invaluable help and encouragement he had given to the Committee appointed to deal with this important proposal.

The Institute had no intention of attempting to impose upon the universities or technical schools courses of study which were provided by general building practice. There was a clear

y Mr. R. J. Holliday on "The Absorption ted Youth in the Industry for Training Positions" was given in our issue for

line between instruction in principles and their practice, and the work of the educational world was more nearly concerned in a thorough grounding in principles than in their practical application. It was part of the policy of the Institute to ensure a closer co-operation between teaching and practice by every means in its power.

EXAMINATION RESULTS.

The following candidates passed the Institute of Builders' Licentiate Examination held on May 20 and 21 last :—

A. P. Belton, Shoreham.
E. Bonsall, Nottingham.
W. M. Colley, Cardiff.
C. I. V. Curtis, Dalston.
I. R. Edwards, Tredegar.
A. E. Gale, Wandsworth.
W. H. Harper, Cheltenham.
E. L. Howell, Birmingham.
G. M. Linzell, Surbiton.
B. E. Lucas, Thornton Heath.
A. C. Matkins, London.
J. Normington, Treharris.
G. A. Robbins, Peckham.
C. E. Robinson, Luddenden Foot.
A. R. Rowlands, Birmingham
F. Russon, Edgbaston.
W. H. Saunders, Hither Green.
S. T. Saunders, Wimbledon.
A. J. Taylor, Eastbourne.
F. J. Thomas, Cardiff.
C. Walker, Elland.
F. Ware, Horwich.
A. T. Westrope, Fulham.
F. C. Williams, Cardiff.
W. E. Winterson, Dulwich.

In its report the Examining Board states :—

"Generally, the degree of knowledge shown and the quality of the draughtsmanship were below the standard looked for. There was a disposition to rely too much upon text-book knowledge, and a failure to supplement this with observation and practical experience. In the construction papers there was a failure to indicate suitable as well as sound construction. In book-keeping and accountancy there was a lack of thoroughness in the answers which indicated a need for greater attention to this subject. In builders' quantities, academic quantities were not required, but a greater ability than was shown in producing a foundation for a close approximate estimate in the form of builders' quantities was hoped for. Familiarity with the standard of measurement seemed to be lacking."

DISPUTE OVER A BAND-SAW

In the Shoreditch County Court recently, before Judge Cluer, an application was made in an action by the Zeta Wood Flooring (1910), Co., Ltd., of Essex House, High-street, Stratford, which they had brought against Messrs. Guilliet, Sons & Co., of 2, Worship-street, E.C., engineers and metal merchants, to recover £100, being the equivalent in francs, at the then rate of exchange, 102, of £85, paid by the plaintiffs to the defendants for a vertical band-saw. They alleged that there was a verbal arrangement for the delivery of the band-saw in three weeks, or a reasonable time, and such reasonable time had expired, so they asked for their money back.

Mr. Rowland Thomas appeared as counsel for the plaintiffs, and Mr. Troath for the defendants.

The application to the Court, on behalf of the plaintiffs, was for leave to inspect the correspondence that had taken place between the defendants and their works in France.

The band-saw was to be made in France, and the defence was that they had tried to get it from France by correspondence, but had failed to. Mr. Thomas said he did not know what was in these letters, but he did not want to be taken by surprise, and the defendants were now claiming that they were privileged, which had forced him to apply to the Court for an order to inspect.

Judge Cluer said he considered the plaintiffs entitled to inspect the correspondence, and made an order in those terms.

At the resumed hearing of this case on August 7, Mr. Thomas said the defendants were going to contend that there was no delay in the delivery, but it was not tendered until July 5, when it was refused. Mr. Gregar, managing director of the plaintiffs, was passing defendants' showrooms on March 5, and inspected a left hand band-saw machine, and actually purchased it, subject to his right to change it to a right hand. He did change it to a right hand, and it was now contended that where they could have delivered the left hand on the spot, the right hand needed to be specially manufactured by the French makers. They had now had an opportunity of inspecting the correspondence, from which it would appear that when in June the defendants were promising delivery, they received a letter from the French manufacturers, saying they had lost the order, and asked for a copy, as they did not know what was required.

Mr. Gregar gave evidence in support of this, and said it was desired to have the right hand machine, as they wished to cut timber in a particular way. When he telephoned asking for the right hand, he was again promised delivery in a fortnight, but allowed them three weeks. He paid the £85 the next day. He now found that whereas early in June they were promising delivery in a week, they were not even in communication with the French manufacturers, and it was not until June 21 that defendants sent them an urgent telegram, and that was three days after the plaintiffs had officially cancelled their order. He had now heard that the machine was dispatched from France on July 1. They had circular saws in use, but they wanted this for straight cutting.

In cross-examination, he agreed that there was nothing as to the date of the delivery on the order, but they only told him they would have to get it from France, not that it would have to be made. In his opinion, even if it had to be made, it could have been done quickly enough from the patterns.

After further evidence Mr. Justice Cluer gave judgment for the plaintiff for £85 and costs.

THE BURDENS ON TRADE

Lord Midleton's speech in the House of Lords recently, on the burdens on trade, was very instructive. He began by pointing out that the trade of the country was still less than it was in 1913, whilst the population had increased by a million and a quarter; the unemployed numbered 1,100,000; the burden of taxation had increased from £3 11s. per head in 1914 to £15 18s. in 1923; and the general rating had increased by 120 per cent. in the same period. The expenditure to which the Government was committed on housing and old-age pensions, education extension, unemployment insurance, and workmen's compensation, &c., amounted to 130 million pounds, and industrial burdens had increased by 300 per cent. since 1913. These were some of the burdens on trade, and Lord Midleton pointed out that the only way in which they could be met was by increased productivity; but our working output of production was 16 per cent. less than it was in 1913, and there was a great demand for a reduction in hours of labour; but a reduction from 53 hours to 47 would be equal to the withdrawal of a million and a quarter workers, or an increase in the cost of production of 200 million pounds.

In the course of the debate Lord Emmott pointed out that our exports were only between 750 to 800 million pounds in value, whereas we ought to be exporting between 1,000 and 1,100 millions to attain the volume that we exported before the war. Lord Midleton also showed that some portion even of this export was carried on at a loss.

We are still intent on setting our home in order, regardless of the fact that the income to maintain that home and the standard of living is by no means assured; in other words, we are too parochial in our views. The above are the conditions we live in, but are we making the best of those conditions?

The unsheltered trades bear the full blast of competition, whilst the sheltered trades are like greenhouse plants, or at least enj protection of the "cool frame," and thi inequality of wages makes for industrial Unless foreign trade revives this steep g in wages must become accentuated, w result which we are acquainted with in tion with our weather charts that steep g create hurricanes. These hurricanes are sent merely local disturbances chiefly c to the protected trades, but they ar of unsettled conditions and must be dea Industrial peace is a necessity. Th spirit of work must be revived. Lord in the debate in the House of Lords upon this when, as reported, he said a great believer in the regulation of h labour, if it did not diminish production was fatal was not to work less hours, work less hard.

There can be no question that the is working less hard. This may still result of the reaction from the war, b it exists cannot be denied. Taking o trade, and quite apart from evidence before Industrial Courts, anyone in any building operation, who was also in a like operation before the war, can to observe that the day's work put in men is far less now than in former tim that the cost of building is seriously affe this apathy.

Has one result of our desirable, and i cases, necessary, remedial legislatio to make us look too much to the St too little to ourselves to attain what we

If this be the case, we have an objec of the true Communistic State in but a more gentle reminder of State tr provided by a Blue Book just pu dealing with the losses incurred by Gov trading during the war, losses that, like in fatigue, are still with us.

It is essential that the questions we a ing with in this short notice should sidered quite apart from the heat o politics, and our only object is to brin important points before our readers partial consideration.

HOUSING

This booklet* has been prepared v object of dispelling some of the public ig on the housing question. Unfortuna succeeds only in illuminating those w passages with which the public may familiar already, and it leaves the in questions still wrapped in a century's d When we speak of Georgian housing we think of how the Georgians found the terers, how much they paid their tile many marriages occurred yearly, and w the average rent in the home counties. all we care about is what kind of hou have handed on to us. This pamphle appointing because, in picking at th and the detail of purely ephemeral cc tions, it entirely misses the spirit of the movement, which is not only to grant bodily comforts, but to provide dwel for intelligent persons to live in. This be achieved if our buildings are an adc the beauty of our country instead of sores to which we are accustomed. I enough for them to be free from smells overcrowded if they continue to be ugl ignore the very elements of architectur cannot live on bread alone. This boc sided view of our most important social is what one would expect of the " hard-headed business man," but on have expected from women a practic pretation of the longer view that would itself with presenting our grandchildr something worth having. Statistics plasterers, rentals, sanitary convenien apprentices are all of great importanc is disastrous to allow them to occ whole of the stage.

* The Housing Problem. (London: The Sub-Committee of Women's Organisation 1s. net.)

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A., F.R.San.Inst. (Barrister-at-Law).

XII.—SUPERVISION OF WORK.—PROVISIONAL AND PRIME COST ITEMS.

Delay in Commencing the Work.

The contractor must begin operations without delay, and carry the work to completion within the period fixed in the contract. If no date of completion is fixed, then he must finish within a reasonable time. There may be certain preliminary works to be done, as stipulated, by the employer himself; and he, on his side, must do these with due expedition; if he is guilty of unnecessary dilatoriness, the contractor may hold him liable for any loss he (the contractor) may sustain owing to such unreasonable delay. See Lawson *v.* Weldasey, L.B. (1882), 11 Q.B.D. 229.

Compliance with Instructions.

Again, the contractor must do the work according to instructions authorised by, or contained in, his contract. Otherwise, the employer may be able to prove that the work, when executed, is of little or no use to him for his purpose, and therefore not of the value of the agreed price.

Nature of Soil.

Unless there are specific guarantees, or definite representations, made by the employer or his agent, as to the nature of the soil, a contractor cannot put up, as a sufficient excuse for abandoning his contract, that he has subsequently discovered that the nature of the soil is such as to make it apparent that the cost will exceed his tender as accepted. It is his business to satisfy himself on this point at the outset. See Bottoms *v.* York Corp. (1892), Vol. II Hudson on Building Contracts 208.

Restrictive Covenants on Land.

Where a covenant is in existence that the approval of the original vendor must first be obtained to any proposed building or structure before erection on the land, and a purchaser of the land erects any building or structure without first obtaining such approval, he may be ordered to pay damages. See Kilby *v.* Haviland (1871), 24 L.T. (N.S.)

Approval Precedent to Payment.

Where the contract does not contain any stipulation that the work and materials shall be approved by any specified person, then these must be such as to satisfy any reasonably-minded person. And it would appear that there is no obligation on the part of the contractor to satisfy the employer or his architect in particular in these circumstances.

However, it is usually made a condition precedent to payment that either (1) the employer, (2) the employer with the architect, or (3) the architect shall certify his, or their, satisfaction.

In each case, the right of approval must be exercised reasonably, and not arbitrarily or capriciously, but in good faith and not for the purpose, merely, of defeating the contract.

Nevertheless, there may be an express stipulation that any specified approval shall be final; in which case, so long as it is not withheld for the purpose of fraud or to defeat the contract, it would appear to be a condition precedent to payment, however unreasonable and excessive the refusal may be.

Approval by Employer Alone.

Where the approval of the employer is stipulated, he must have free access and opportunity to inspect the work.

The approval cannot be unreasonably withheld. The legal maxim that "no man can be judge in his own cause" raises the presumption against any *implied* contract that the approval is a condition to payment—and the jury would decide if he were acting in a reasonable manner. In Andrews *v.* Belfield (1890), 2 C.B. (N.S.) 779, the plaintiff (a carriage builder) had contracted to build a carriage of a particular description, also to the approval of the defendant as to convenience and taste. It did not meet his convenience and taste and he rejected it. The Court upheld his action. This principle is applicable to building contracts. It is to be noted, also, that, since the building becomes affixed to the freehold, the employer has the benefit of it, whether he approves it or not.

Hence, a contractor needs to exercise great caution before entering on such a contract.

Approval by Employer and Architect.

When approval is to be by both employer and architect, each would appear to have the power to exercise the right independently. However, when such dual approval has been given, even if defects appear in the work subsequently, the employer cannot retract his approval and recover against the contractor, unless he can prove that his approval was obtained by fraud. In Bateman (Lord) *v.* Thompson (1875), Vol. II, Hudson on B.C. 36, the contract made the certificate of the architect binding upon the employer, in certain cases. In one such case, the employer and his architect had approved certain building materials, and it was held that no action against the builder could lie, in respect thereof, subsequently.

Approval by the Architect Alone.

However, as the employer is usually not an expert, it is customary to make the approval of the architect, or, in some cases, of another third person not a party to the contract, all that is necessary. If the conditions of the contract make it clear that the architect is to act independently and impartially between the parties to the contract, or that his decision shall be final, then his approval is a condition precedent to payment.

Such approval must be given, or withheld, without undue influence of either party, and is binding on both parties, unless such undue influence or collusion can be shown; and it must be clearly stated in an approved manner. In Morgan *v.* Birnie (1833), 9 Bingham 672, the contract under question stipulated the reasonable satisfaction of the defendant's architect; the latter merely checked the builder's (the plaintiff's) charges and forwarded the account to the defendant. It was held that this was not a certificate of satisfaction, and did not enable the builder to sue the employer; although the employer had not refused payment on the plea of the insufficiency of the architect's certificate. Tindall C. J. said: "It appears to me that the effect of a certificate would be altogether different, applying to the manner in which the work had been done, whilst the checking of the accounts applies only to the propriety of the charges."

Architects' Instructions: Bad materials or work, variations, etc.

The architect acts, in general and normally, in a dual capacity as:—

(1) Agent of the employer—watching his interests.

(2) Quasi-arbitrator—to see fair dealing between the parties, under the terms of the contract.

For example:

(*a*) He must check all work and materials to see they are of specified quality.

(*b*) He cannot vary items of work, or waive any condition of the contract at the request of either party, without the consent of the other party; only as the agent of the employer if he has abrogated his authority expressly. See Cooper *v.* Langdon (1841), 9 M. & W. 60.

(*c*) He cannot dismiss the contractor for refusal to follow out his instructions; this is the prerogative of the employer.

The written contract and plans and specification define the scope of the architect's authority during supervision of work, and in relation thereto; and any tendency on his part to exceed his authority should be regarded with caution by the builder.

In general the architect is empowered:

(*a*) To inspect work; and, at his discretion, to have uncovered any work covered up without his inspection.

(*b*) To have any defective work or materials taken out and replaced by those of specified quality.

(*c*) To grant interim and final certificates for payment.

His powers should be discreetly and conscientiously exercised with a view to ensuring the contractor's compliance with the terms of the contract; and also with a view to his own responsibility in granting the final certificate of satisfaction.

Approval Written, Verbal or by Conduct.

Approval may be in writing, and must be written if such is stipulated in the contract; but it may also be verbal, or implied by conduct. It is left to the jury to decide whether there has been verbal approval or approval by conduct.

Provisional Amounts and Prime Cost Items.

It is difficult to draw an exact dividing line between "provisional amounts" and "prime cost items." Both are specified sums in the contract, which the contractor is to allow in his total, for work by special contractors or materials or articles from special merchants, or for goods of equal quality to those supplied by these contractors or merchants.

Under "provisional amounts" are generally included those for the work and articles supplied by sub-contractors, such as electric installation, or installation of a heating system; whilst under "prime cost" items are specified such small merchandise as locks, door fittings, etc., where "fixing only" by the general contractor is needed, and to be allowed for. "Prime cost" is understood as the net price charged by the merchant.

In both cases the contract usually requires the contractor to add and show what profit he requires, or his extra charge for "attendance on" the sub-contractor. And, if only a fractional part of the provisional sum is eventually used, the contractor is only entitled to the same fraction of his required profit which he had added. If, on the other hand, the sum provided is exceeded on the order of the employer, then the excess becomes an "extra" to be adjusted outside the contract. See Hobbs v. Turner (1902), 18 T.L.R. 235.

It is customary to allow a small profit to the contractor on the net prices of these items, even when he has not been requested to state the profit he requires.

Substitution of Sub-Contractors.

Where a specialist is named in the contract to be asked to provide any particular item, and the work is omitted or given to another specialist, the employer may be liable for loss of profit by the specialist and by the general contractor also—unless there is a clause such as "or other approved" inserted.

When no specialist is named, the architect may, at his discretion, invite the general contractor to contract for the item; in this case, however, the general contractor is not entitled to any extension of time in respect of the additional work.

Discount on Items.

When a "prime cost" is stated, it signifies the net amount payable to the merchant, and the employer is entitled to all trade discounts on items supplied.

The contractor's profit is first that which he is allowed thereon, or which he shows as added, and further he usually obtains 2½ per cent. discount by paying his account monthly to the merchant. If the contractor is also the merchant, he is entitled to all profits which another merchant would make on the same deal.

JOINT COUNCIL FOR THE BUILDING TRADE

MR. J. E. DROWER, C.B.E., F.S.I., writes: In last week's *Builder*, Mr. Stranks sets forth with a dazzling wealth of expression some wholesome truths. We know him as a convinced and extreme Socialist and yet he has found out, and has the courage to say that the abolition of what he would call the "capitalist system" cannot be done at a stroke, but must be done gradually. The revolution to which he looks forward cannot be sudden and catastrophic; it must come slowly and by consent. His words on the questions of apprenticeship and overtime are very welcome, as showing a desire on the part of a leader of trade unionism to discuss matters on which, up to now, the unions have been unyielding. And so he comes to the conclusion that the Joint Industrial Council of the Building Trade should be revived.

I confess that the last paragraph of Mr. Stranks' article is hard reading; it leaves me with the same feeling of giddiness as an attempt to read Einstein's theory of relativity. Yet in its coruscating phrases I seem to make it out dimly as a sort of peroration emphasising the need of a spirit of unselfishness and mutual forbearance.

If a body operated by such a spirit can be got together, nothing but good can come of it; the difficulty is how to get it together. As a member of the defunct Council I am convinced that to revive it with a representation and a constitution like the old, and in the hope that a new spirit would work in it, would be futile. Mr. Stranks is a strong man and a man of ability and energy; will he tackle the problem which he has set?

THE BUILDING TRADE DISPUTE

THE Conference, which we mentioned in our issue of last week, between the National Allied Building Trade Employers, including representatives of the Liverpool Employers' Association, representatives of the National Federation of Building Trade Operatives, and also representatives of the Liverpool operatives, was, after discussion, adjourned until the following day. At the adjourned conference, after a further discussion, a joint sub-committee was appointed to consider further the whole position. The joint sub-committee immediately began its work of investigation, and adjourned at half-past seven in the evening until eleven o'clock the following Tuesday.

Mr. Coppock, Secretary of the National Federation of Building Trade Operatives, in an interview to the Press, stated:—

"The Liverpool difficulty is not insurmountable, and the conference should immediately get over that question, and get down to the more fundamental questions affecting all building trade workers involved in the dispute."

On the question of the guaranteed week, or payment for lost time over which the operatives have no control, Mr. Coppock said:—

"We regard this as one of the greatest reforms in the industry for the last hundred years, and a reform that is necessary to attract the youth of the country to the industry, to make it worth while, and also to preclude any shortage of operatives in the future."

Representatives of the Liverpool building trade operatives decided that their delegates to Tuesday's London Conference should not be empowered to take part in the national negotiations. It is officially stated that the men are as determined as ever to fight for local agreements and a settlement of the local dispute without the interference of the national organisations.

The joint sub-committee appointed met on Tuesday at the Ministry, and after a day of apparently fruitless discussion adjourned until the following day. The Liverpool employers and operatives remained on at the Ministry to continue their deliberations, and the result of their sitting was reported to the joint sub-committee on Wednesday, but at the time of going to press no decision had been announced.

RATES OF WAGES IN THE BUILDING TRAD

The following are the rates of wages in the building trade in England and Wales. E endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Accrington	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Altrincham	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Ashton-under-Lyne	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Barnsley	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Barrow-in-Furness	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Barry	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Bath	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /1½
Bedford	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0
Birkenhead	1 /9	1 /9	1 /8½	1 /9	1 /9	1 /9	1 /8½	1 /4
Birmingham	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Bishop Auckland	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Blackburn	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Blackpool	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Bolton	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Bournemouth	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Bradford	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Brentwood	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /1½
Bridgwater	1 /4	1 /4	1 /4	1 /4	1 /4	1 /4	1 /4	1 /0
Brighton	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Bristol	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Burnley	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Burton-on-Trent	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /2
Bury	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Cambridge	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Cardiff	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Chatham	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Chelmsford	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Cheltenham	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /1½
Chester	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Chesterfield	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Colchester	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Coventry	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Crewe	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
Darlington	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Derby	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Doncaster	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Dudley	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /2
Durham	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
E. Glam. (Mon. Vall)	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Eastbourne	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Exeter	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /4½	1 /1½
Folkestone	1 /4	1 /4	1 /4	1 /4	1 /4	1 /4	1 /4	1 /0
Gloucester	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /4½	1 /1½
Grantham	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
Grays	1 /8	1 /8	1 /8	1 /8	1 /8	1 /8	1 /7	1 /3
Grimsby	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Great Yarmouth	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /0½
Guildford	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Halifax	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Harrogate	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Hartlepools	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Hastings	1 /4	1 /4	1 /4	1 /4	1 /4	1 /4	1 /4	1 /0
Hereford	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /4	1 /0½
Huddersfield	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Hull	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Ipswich	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Lancaster	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /2
Leamington Spa	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
Leeds	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Leicester	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Lichfield	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
Lincoln	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Liverpool	1 /9	1 /9	1 /8½	1 /9	1 /9	1 /9	1 /8½	1 /4
Llanelly	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
London	1 /8	1 /8	1 /8	1 /8	1 /8	1 /8	1 /7	1 /3
Loughborough	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Luton	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Maidstone	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Manchester	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Mansfield	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Merthyr Tydfil	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Middlesbrough	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Newcastle-on-Tyne	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Newport, Mon.	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Northampton	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /2
Norwich	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Nottingham	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Oakham	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Oldham	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Oxford	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Plymouth	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /5½	1 /2
Pontypridd	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Portsmouth	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Preston	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Reading	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Rochdale	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Rochester	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Rugby	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /2
St. Albans	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
St. Helens	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Scarborough	1 /7	1 /7	1 /7	1 /7	1 /7	1 /7	1 /7	1 /2½
Sheffield	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Shrewsbury	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
Southampton	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Southend-on-Sea	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Southport	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
South Shields	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Stockport	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Stockton-on-Tees	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Stoke-on-Trent	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Stroud	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /4	1 /0½
Sunderland	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Swansea	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Swindon	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /4	1 /0½
Taunton	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /4½	1 /0½
Torquay	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /5½	1 /1½
Tunbridge Wells	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Wakefield	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Walsall	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /6½	1 /2
Warrington	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
West Bromwich	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Wigan	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Windsor	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /5	1 /0½
Wolverhampton	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½
Worcester	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /6	1 /1½
York	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /7½	1 /2½

(For rates of wages in the Building Trade in Scotland, see page 266.

CONTRACTS, COMPETITIONS, &c.

some contracts still open, but not included in this List, see previous issues. Those with an asterisk vertised in this number. Certain conditions beyond those given in the following information posed in some cases, such as that advertisers do not bind themselves to accept the lowest or any ; that a fair wages clause shall be observed ; that no allowance will be made for tenders : and eposits are returned on receipt of a bona-fide tender unless stated to the contrary.

date given at the commencement of each paragraph is the latest date when the tender, or the names willing to submit tenders, may be sent in ; the name and address at the end is the person from whom e where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

ST 16.—**Chopwell.**—ALTERATIONS.—For alterad additions at Chopwell ex-Servicemen's Social td. Mr. J. Johnson, Secretary, at the Club.

ST 16.—**Edlington.**—POINTING.—For pointing rk and general repairs at Edlington Council Mr. L. J. Blackburn, Divisional Clerk, on Offices, 20, Christ Church-road, Doncaster.

ST 16.—**Ilfracombe.**—ADDITIONS.—Additions High-street, Ilfracombe, for Mr. Vince. Mr. Hassell, F.R.I.B.A., Architect and Surveyor, et-square, Ilfracombe.

T 16.—**Tadcaster.**—HOUSE.—For the erection taker's house at sewage works, for the R.D.C. I. Driver, surveyor, Garforth, near Leeds.

T 18.—**Bideford.**—PAINTING.—For painting of y. for the Board of Guardians. Master at ise.

T 18.—**Chatham.**—EXTENSION.—For extension uncil school at Walderslade, for the T.C. Mr. rris, Clerk to Committee, Town Hall, Chatham.

T 18.—**Cheadle and Gatley.**—SUB-STATION.—erection of a sub-station at Grove-lane, for the Mr. C. H. Wordingham, 33, Brazenose-street, er. Deposit £2 2s.

T 18.—**Eastbourne.**—EXTENSIONS.—For extene Maternity Home, 9, Upperton-road, for the . Leslie Roseveare, Borough Engineer, Town stbourne. Deposit £1 1s.

T 18.—**East Looe.**—DRYING HOUSE.—For ction of drying house on Commissioners' Quay. Barber, Clerk, East Looe.

T 18.—**Edinburgh.**—FENCING.—For (1) footps. &c., (2) fencing and gates, for 32 houses at lle-road, for the T.C. Director of Housing, mbers 329, High-street, Edinburgh.

T 18.—**Tonyrefail.**—GRAND STAND.—For the n of a football ground, erection of Grand Stand, ooms, and other works at Coedely, for the Ely ners' Welfare Scheme. Messrs. R. S. Griffiths rs. Architects, Tonypandy. Deposit £2 2s.

T 18.—**Uppingham.**—MEMORIAL.—For taking d rebuilding the memorial monument at m. Mr. G. Dolphin, North-street, Upping- posit £1 1s.

T 18.—**Winchester.**—PAINTING.—For outside t Royal Hants County Hospital, Winchester. ert Maslen, Secretary, Winchester.

T 19.—**Birkenhead.**—MOTOR BUS GARAGE. n of a motor bus garage and storage shed amway Depot yard at Laird-street, Birken- the County Borough of Birkenhead. Mr. wnridge, M.Inst.C.E., Borough Engineer and Town Hall, Birkenhead. Deposit £2 2s.

T 19.—**Cannock.**—HOUSES.—For the erection irs of non-parlour type houses at Hilton e) site, for the R.D.C. Mr. H. M. Whitehead, f Housing, Penkridge, Stafford. Deposit £5.

T 19.—**Doncaster.**—HOUSES.—For the erection ager's house and two cottages at the Sandall on Works, for the T.C. Mr. F. O. Kirby, Engineer, 2, Priory-place, Doncaster. Deposit

T 19.—**Luton.**—EXTENSIONS.—For the erection strative blocks and cubicle blocks at Spittlesea for the T.C. Mr. J. W. Tomlinson, Borough l, Cheapside, Luton.

T 19.— **Wellingborough.**— LAVATORIES.—For on of women's lavatories at the Union Workthe B.G. Messrs. Sharman, Moore & Morley, Sheep-street, Wellingborough.

T 19.—**Wigan.**—ALTERATIONS AND ADDIlterations and additions to the Post Office g Office, Wigan, for the Commissioners of sty's Office of Works. Contracts Branch, King Charles-street, London, S.W.1. l 1s. (Cheques payable to the Secretary).

T 20.—**Crewe.**—HOUSES.—For the erection es on the Alton-street site, for the Borough of unicipal Housing Committee. Mr. E. G. M.I.Struct.E., &c., Architect to the Housing , Municipal Buildings, Crewe. Deposit

T 20.—**Forden.**—PAINTING.—For painting at . for the Board of Guardians. Mr. C. S. rk, Montgomery.

T 20.—**Leeds.**—PAINTING.—For painting at buildings, Corporation Hotel, Beeston-road for the T.C. Mr. W. T. Lancashire, City Leeds.

T 20.—**Popham.**—BRIDGE.—For the erection e with stone abutments and iron girders at ear Newtown Bridge, for the Barnstaple and lton Rural District Councils. Mr. W. S. urveyor, Chittlehampton.

T 20.—**Selkirk.**—HOUSES.—Erection of five atted houses, Type C (20 houses) at Goslawhe T.C. Burgh Surveyor, Municipal Buildrk. Deposit £1 1s.

T 20.—**Swinton.**—HOUSES.—For the erection es, for the U.D.C. Mr. H. Birks, Surveyor, ear Rotherham. Deposit £2 2s.

T 21.—**Birr.**—PLASTERING.—For the external of cottages in the Birr No. 1 Rural District. Sailors and Soldiers' Department, Colonial h Branch), 30, Lower Fitzwilliam-street, Deposit £1 1s.

AUGUST 21.—**Dewsbury.**—MORTUARY.—For the erection of a mortuary at Whitley Grange Hospital, for the T.C. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

AUGUST 21.—**Durham.**—HOUSES.—For the erection of 48 houses at Lowes Barn, for the Durham County Garden Villages, Ltd. Mr. S. Wilkinson, architect, Irving House, Westgate-road, Newcastle.

AUGUST 21.—**Lochgoilhead.**—REPAIRS.—For repairs to public hall. Rev. D. M. Maclean, The Manse, Lochgoilhead.

AUGUST 21.—**Spalding.**—HOUSE.—For the erection of a residence in Love-lane, Spalding, for Lt.-Col. G. J. Barrell. Mr. W. St. Leger Crowley, architect, 32, Hallplace, Spalding.

AUGUST 21.—**Sunderland.**—SHOWROOM.—For structural alterations and the fitting up of a showroom and offices at 27, Fawcett-street, for the T.C. General Manager, Electricity Offices, Dunning-street, Sunderland. Deposit £1.

✱AUGUST 21.—**Watford.**—NURSES' HOME.—For the erection of a Nurses' Home at the Infirmary in Vicarage-road, for the Watford Union. Messrs. A. Saxon Snell & Phillips, 9, Bentinck-street, Manchester-square, London, W.1. Deposit £5.

AUGUST 22.— **Clydebank.** — PAINTING, &C. — For painter, fencing, and hedging work in connection with erection of houses, for the T.C. Town Clerk, Municipal Buildings, Clydebank. Deposit £1 1s.

AUGUST 22.—**York.**—SUB-STATION.—For the erection of a sub-station at York, for the L. & N.E. Railway Co. Mr. S. Wilkinson, Architect, N.E. Area, L. & N.E. Railway, York.

AUGUST 23.—**Bromley.**—BUILDINGS.—For the erection of a bowling pavilion, women's convenience, dressing-rooms, &c., on the Whitehall Recreation Ground, Bromley Common, for the T.C. Borough Engineer, Municipal Offices, Bromley. Deposit £1 1s.

AUGUST 23.—**Hove.**—PAINTING.—For painting the external wood and ironwork, and painting, distempering, &c., the interior of the Ward Blocks "A" and "C.D.," the Lodge, and Laundry Block, at the Hove Sanatorium, for the T.C. Borough Surveyor (Mr. H. H. Scott), Town Hall, Hove.

AUGUST 23.—**Londonderry.**—ADDITIONS.—For additional buildings at Hospital. Messrs. Robinson & Elliott, 7, Market Buildings, Londonderry. Deposit £2 2s.

AUGUST 23.—**Poole.**—HOUSES.—For the erection of 10 houses, with drains, fences, &c., at Granville-road, Upper Parkstone, for the T.C. Borough Surveyor, Municipal Offices, Poole.

AUGUST 25.—**Aylesbury.**—COTTAGES.—For erection of 36 cottages in four contracts, for the T.C. Mr. Wm. H. Taylor, Borough Engineer, Town Hall, Aylesbury.

AUGUST 25.—**Bradford.**—SANITARY.—For the conversion of six privies into water-closets at 83 to 93, Grantham-road, for the T.C. Chief Inspector, Sanitary Department, Town Hall, Bradford.

AUGUST 25.—**Dunfermline.**—FENCING.—For the supply and erection of about 1,200 lineal yards of stob and wire fencing in connection with the widening at Halbeath-road, for the T.C. Burgh Engineer, City Chambers, Dunfermline.

AUGUST 25.—**Hemsworth.**—EXTENSION.—For extensions to secondary school, for the West Riding E.C. Education Dept., County Hall, Wakefield.

AUGUST 25.—**Hertfordshire.** — COUNTY SCHOOL.—Erection and completion of a new County Council School, to accommodate 120 scholars, at Hunsdon, near Stanstead Abbots, for the Hertfordshire C.C. County Surveyor's Office, Hatfield, between the hours of 10 a.m. and 4 p.m., except on Saturdays. Deposit £1 1s.

AUGUST 25.—**Leeds.**—PAINTING.—For painting at Corn Exchange and polishing of Market Hall shops, and painting of exteriors of houses on the Harehills, Barkley, Middleton, Wyther, and Hawksworth Wood housing estates. Mr. W. T. Lancashire, City Engineer, Leeds.

AUGUST 25.—**Manchester.**—OFFICE.—For the erection of a tramway office, Stockport-road, Levenshulme, for the T.C. City Architect, Town Hall. Deposit £1 1s.

AUGUST 25.—**Morley.**—HOUSES.—For the erection of 48 houses and for the several other works in connection therewith on the Middleton-road Housing Estate, for the T.C. Mr. F. Turner, Borough Engineer, Town Hall, Morley. Deposit £1 1s.

AUGUST 25.—**Pontypridd.**—BUILDINGS.—For the erection of (a) battery room, (b) blacksmith's shop, at Treforest Depot, for the U.D.C. Surveyor, Municipal Buildings, Pontypridd. Deposit £1 1s.

AUGUST 26.—**Bathgate.**—FLOORING.—Laying hall with maple flooring for the Bathgate Co-operative Society, Ltd. Managing Secretary, Co-operative Society, Jarvey-street, Bathgate.

AUGUST 26.—**Bradford.**—PAINTING.—For (1) internal and external painting, Rawson-place Market and James-street Market ; (2) vacuum cleaning work, Rawson-place Market and James-street Market ; (3) external painting to shops and warehouses, Nos. 71 to 83, Diamond-street. City Architect, Town Hall, Bradford.

AUGUST 26.—**Cardiff.**—POST OFFICE.—For the erection of a head Post Office for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s.

AUGUST 26.—**Leeds.**—PAINTING.—For painting at various parks and recreation grounds, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

AUGUST 26.—**Wallasey.**—HOUSES.—For the erection of 56 houses on the Poulton-road and Surrey-street housing site, for the C.B. Mr. L. St. G. Wilkinson, M.Sc., A.M.I.C.E., Borough Engineer and Surveyor, Town Hall, Wallasey. Deposit £1 1s.

AUGUST 27.—**Chester.**—BUILDING WORKS.—Erection and completion of new dairy and hostel buildings at the Reaseheath School of Agriculture, near Nantwich, for the County of Chester. Mr. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £2 2s.

AUGUST 27.—For cleaning, painting and repairs at T.S. *Exmouth* Infirmary, Grays, Essex, Queen Mary's Hospital, Carshalton, Surrey, Princess Mary's Hospital, Margate, Leavesden Mental Hospital, King's Langley, Herts., Fountain Mental Hospital, Tooting, S.W.17, South Eastern Ambulance Station, New Cross-road, S.E.14, Paddington Casual Ward, Woodfield-road, Harrow-road, W., St. Luke's Hospital, Lowestoft, for Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 for each work.

AUGUST 27.—**Hove.**—PAINTING.—For painting the external wood and ironwork, &c., at the Public Baths, Livingstone-road, for the T.C. Borough Surveyor (Mr. H. H. Scott), Town Hall, Hove.

AUGUST 27.—**London and Margate.**—VARIOUS WORKS.—For erection of new offices at South Western Ambulance Station, Landor-road, Stockwell, S.W.9 ; repairs to concrete paving at North-western Ambulance Station, Lawn-road, Hampstead, N.W. Erection of new concrete sun platforms at Princess Mary's Hospital, Margate ; erection of new concrete boundary wall at Mead Works, Carnwath-road, Fulham, S.W.6 ; building repairs at Hackney Casual Ward, Gainsborough-road, Hackney Wick, N.E. ; and minor alterations in laundry at Brook Hospital, Shooter's Hill, S.E.18, for Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 each work.

AUGUST 27.—**Tooting, S.W.17.**—SLATING WORKS.—For slating works at Tooting Bec Mental Hospital Extension, Church-lane, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

AUGUST 27.—**Wallasey.**—CONVERSION.—For conversion of premises No. 177, Borough-road to Branch Library, for the T.C. Mr. L. St. G. Wilkinson, Borough Engineer, Town Hall, Wallasey. Deposit £1 1s.

AUGUST 28.—**Leeds.**—PAINTING.—For painting at Armley and Holbech Libraries, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

AUGUST 28.—**Sunderland.**—ADDITION.—For erection of bathroom in Richardson pavilion, for the Borough Sanatorium, for the T.C. Borough Engineer, Sunderland.

✱AUGUST 29.—**Pewsey, Wilts.**—HOUSES.—For the erection of 24 houses for the R.D.C. Mr. Raphael V. Hall, Architect, Borough Buildings, Abingdon. Deposit £1 1s.

AUGUST 30.—**Annfield Plain.**—WAR MEMORIAL.—Prices and designs for erection of war memorial in the Annfield Plain Park between £250 and £400. Hon. Secretaries, Council Offices, Annfield Plain.

AUGUST 30.—**Brentford.**—ROOFING.—For the supply and erection of constructional steelwork, roofing, and contingent works necessary for the covering-over of stands in Brentford Market. Mr. W. J. W. Westlake, Surveyor, Clifden House, Boston-road, Brentford.

AUGUST 30.—**Hatherleigh.**—MANSE.—For building a new United Methodist minister's manse at Hatherleigh. Mr. S. T. Follands, Hatherleigh.

SEPTEMBER 1.—**Belfast.**—ADDITIONS.—For additions and alterations at Infectious Diseases Hospital, Purdysburn, for the T.C. Mr. A. Ferguson, Quantity Surveyor, Scottish Provident Buildings, Belfast. Deposit £3 3s.

✱SEPTEMBER 1.—**Chelmsford.**—INFIRMARY, &C.—For the erection of an Infirmary and Nurses' Home at the Institution, Wood-street, for the Guardians of Chelmsford Union. Messrs. Tooley & Foster, FF.R.I.B.A., Council Offices, Buckhurst Hill, Essex. Deposit £2 2s.

SEPTEMBER 1.—**Fishguard.**—MASONIC TEMPLE.—For the erection of a new masonic temple at Fishguard, for the Fishguard and Goodwick Joint Lodges. Sir Hugh Thomas & Ingleton, M.S.A., architects, 11, Victoria-place, Haverfordwest. Deposit £2 2s.

✱SEPTEMBER 1.—**Lewisham, S.E.13.**—PAINTING.—For external painting at Lewisham Hospital, for the Lewisham Union, Guardians' Offices, 394, High-street, Lewisham, S.E. Deposit £1 1s.

SEPTEMBER 1.—**Preston.**—HOUSES.—For the erection of 50 concrete houses for the T.C. Borough Surveyor, Town Hall, Preston.

SEPTEMBER 1.—**Swanage.**—ROOFING.—For the roofing in of the water reservoir at Langton, for the U.D.C. Mr. C. Ratcliff, Surveyor, Swanage.

✱SEPTEMBER 1.—**Swindon.**—SCHOOL.—Erection of Ferndale-road Council School for the Corporation. Mr. W. Seaton, Secretary, Education Offices, 22, Regent-circus, Swindon.

✱SEPTEMBER 1. — **Willesden.** — EMPLOYMENT BUREAU.—Erection of a juvenile employment bureau to adjoin Pound-lane Schools, for the Willesden D.C. Mr. F. Wilkinson, Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W. 6.

SEPTEMBER 2.—**Bethnal Green.**—PAINTING.—For the external painting and repair of their hospital in Cambridge-road, E.2, for the Board of Guardians. Mr. C. F. Jones, Clerk, 79A, Bishop's-road, Bethnal Green, E.2. Deposit £2 2s.

SEPTEMBER 2.—**Birmingham.**—REPAIRS, &C.—For execution of ordinary works and repairs at The Beacon and Lickey Hotels, for the Commissioners of His Majesty's Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit 10s. 6d.

SEPTEMBER 2.—**Cardiff.**—PAINTING.—For external painting at back of 62, Charles-street, for the Board of Guardians. Mr. R. Stephenson, Clerk, Union Offices, 11, Park-place, Cardiff.

✱SEPTEMBER 2.—**London, E.2.**—PAINTING, &c.—For the external painting and repair of hospital in Cambridge-road, for Bethnal Green Board of Guardians. Mr. C. Faulkner Jones, Clerk to the Guardians, Administrative Offices, 79A, Bishop's-road; Bethnal Green, E.2. Deposit £2 2s.

✱SEPTEMBER 2.—**London, S.E.**—TELEPHONE EXCHANGE.—For the erection of a telephone exchange at Walworth, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 2.—**Orpington.**—REPAIRS, &c.—For the execution of ordinary works and repairs at buildings in the Orpington district, for the Commissioners of His Majesty's Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit 10s. 6d.

✱SEPTEMBER 2.—**Teddington.**—LABORATORY, &c.—For the erection of a laboratory, &c., at the National Physical Laboratory, for the Commissioners of H.M. Works. The Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

✱SEPTEMBER 3.—**Lowestoft.**—REPEATER STATION.—For the erection of a repeater station for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 6.—**Congleton.**—SCHOOL.—For the erection of an elementary school for 600 scholars at New-street, for the T.C. Mr. J. H. Walters, architect, Moody-street, Congleton. Deposit £2.

SEPTEMBER 12.—**Clay Cross.**—COTTAGES.—For the erection of a pair of cottages on the Council's site adjoining the Derby main road at Clay Cross, for the Derbyshire C.C. Mr. J. W. Horton, County Surveyor, St. Mary's Gate, Derby.

NO DATE.—**Baltinglass.**—PREMISES.—For the reconstruction of premises at Baltinglass, for Mrs. Evalene Farrell. Messrs. Foley & O'Sullivan, architects, 102, Grafton-street, Dublin. Deposit £5.

NO DATE.—**Manchester.**—EXTENSION.—For extensions to the Deansgate Hotel, Manchester (Section No. 1), for the Manchester Temperance Hotels, Ltd. Mr. S. W. B. Jack, Architect, Lloyd's Bank Chambers, Carlisle. Deposit £2 2s.

FURNITURE, MATERIALS, etc.

AUGUST 18.—**Dewsbury.**—SIGNS, &c.—For supply of standard road direction signs and mileage plates to the T.C. Mr. H. Dearden, Borough Engineer, Dewsbury. Deposit 10s.

AUGUST 20.—**Chester-le-Street.**—MATERIALS.—For supply of highway materials to the R.D.C. Mr. R. V. Dickinson, Clerk, Union Offices, Chester-le-Street.

AUGUST 20.—**Dublin.**—MATERIALS.—For supply of various materials for six months to the T.C. Mr. M. J. Buckley, Borough Surveyor, Dublin. Charge 1s. 6d.

AUGUST 22.—**Newburn.**—MATERIALS.—For supply of highway materials for six months to the U.D.C. Mr. T. Gregory, Surveyor, Council Offices, Newburn-on-Tyne.

AUGUST 22.—**Sleaford.**—MATERIALS.—Supply of granite, slag, &c., to the R.D.C. Mr. E. H. Godson, Clerk, Sleaford.

AUGUST 26.—**London.**—CEMENT.—For supply of Portland cement to the India Store Department. Branch No. 12, Belvedere-road, S.E.

AUGUST 28.—**Lambeth.**—MATERIALS.—For highway materials for six months, for the B.C. Mr. T. Cattlin, Borough Engineer, Town Hall, Brixton Hill, S.W.

AUGUST 30.—**Stockton-on-Tees.**—MATERIALS.—For stores for six months, for the T.C. Borough Engineer, Victoria Buildings, Stockton-on-Tees.

ENGINEERING IRON AND STEEL.

AUGUST 16.—**Kidwelly.**—TIDAL GATES.—For the renewal of the tidal gates of Commissioners' Bridge and Culvert, near Kidwelly, by new gates of thoroughly seasoned oak timber, together with the construction of a new culvert, for the Carmarthen C.C. Mr. R. W. Jones, County Surveyor, Carmarthen.

AUGUST 18.—**Clones.**—BRIDGE.—For the reconstruction of a steel underline bridge, between Newbliss and Clones, for the Great Northern Railway (Ireland) Co. Mr. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

AUGUST 18.—**Dublin.**—RAILINGS.—For an iron railing to be erected along the new road between Annesley Bridge and the Great Northern Railway embankment, for the T.C. City Treasurer, Exchange Buildings, Lord Edward-street, Dublin. Deposit £1 1s.

AUGUST 19.—**Birmingham.**—BRIDGES.—(a) Reconstruction of the canal bridge, Tipton-road, Tipton; (b) the construction of a new bridge over the Birmingham canal navigations, Dudley Canal, for the T.C. Mr. Herbert H. Humphries, Engineer, Council House, Birmingham. Deposit £2.

AUGUST 21.—**Tarbert.**—WHARF WORKS.—For works on the passenger wharf and goods quay at Tarbert, Lochfyne. Mr. J. S. Henderson, Clerk to Harbour Trust, The Hollies, Lochgilphead.

AUGUST 22.—**London.**—BRIDGES.—Supply to India Store Department of girder bridges, four 83-ft. spans. Branch No. 11, Belvedere-road, S.E.

AUGUST 23.—**Girvan.**—QUAY WALL.—For the reconstruction of the old quay wall, comprising reinforced concrete sheet piling with concrete superstructure, for the T.C. Messrs. Henderson & Nicol, chartered civil engineers, 21, Bridge-street, Aberdeen.

AUGUST 25.—**Bristol.**—PILES.—For the construction at the Avonmouth Docks of 200 ferro-concrete piles. Mr. Thomas A. Peace, Chief Engineer, Avonmouth Docks. Deposit £5.

AUGUST 25.—**Stalybridge.**—STEELWORK.—Supply and erection of structural steelwork for power station, for the Stalybridge, Hyde, Mossley, and Dukinfield Tramways and Electricity Board. Messrs. W. H. George & Son, architects, Ashton-under-Lyne. Deposit £1 1s.

AUGUST 27.—**Tooting, S.W.17.**—GUTTER, &c.—For supply and delivering cast-iron rainwater gutter and down pipes at Tooting Bec Mental Hospital Extension, Church-lane, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

SEPTEMBER 1.—**Dublin.**—STEELWORK.—Steelwork for bridges, for the Midland Great Western Railway of Ireland Company. Chief Engineer, Broadstone Terminus, Dublin. Charge 4s.

SEPTEMBER 1.—**Lochaber.**—AQUEDUCT.—For the construction of an aqueduct between Loch Treig and Fort William, Inverness-shire, including fifteen miles of pressure tunnel with intake shafts and other works, for the North British Aluminium Co. Messrs. C. S. Meik & Buchanan, 16, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER 10.—**Liverpool.**—ENGINEERING WORK.—For the engineering work required at proposed public baths and washhouse, Minshull-street, Low-hill, for the T.C. Chief Superintendent, Baths Department, 75, Dale-street, Liverpool. Deposit £1 1s.

SEPTEMBER 16.—**Walsall.**—RETORT HOUSE.—For reconstruction of horizontal retort house, &c., for the Gas Committee. Mr. E. Davies, Manager, Gasworks, Walsall. Deposit £5 5s.

SEPTEMBER 19.—**London.**—STEELWORK.—For supply of structural steelwork for underframe shop, for the South Indian Railway Co. Secretary, 91, Petty France, S.W. Charge £1.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

ROAD, SANITARY, AND WATER WORKS.

AUGUST 18.—**Barnet.**—ROADS.—For the making-up of Wentworth-road, No. 3 portion, for the U.D.C. Surveyor, Council Offices, Wood-street, Barnet.

AUGUST 18.—**East Riding of Yorks.**—ROADS.—For construction of new roads at Brandesburton, Lissett, Ottringham and Hollym, for the C.C. County Surveyor, County Hall, Beverley. Deposit £2 2s.

AUGUST 18.—**Merton and Morden.**—SEWERS.—For the construction of 3,180 yards run reinforced concrete culverts from 9 ft. to 4 ft. in width; 300 yards run brick culverts, 9 ft., to 8 ft. 6 in. in width; 2,950 yards run concrete and stoneware pipe sewers, &c., for the U.D.C. Mr. G. Jerram, Engineer, Council Offices, Kingston-road, Merton., S.W. Deposit £5.

AUGUST 18.—**Whitchurch (Hants).**—DRAIN.—For construction of outfall drain, for the R.D.C. (extension of time). Mr. J. T. P. Clerke, Clerk, Whitchurch.

AUGUST 19.—**Easington.**—ROADS.—For the making-up of Office-street, back (south), and two side streets, Shotton, for the U.D.C. Mr. R. Urwin Harper, Highway Surveyor, Castle Eden, co. Durham.

AUGUST 19.—**Cannock.**—ROADS, &c.—For construction of roads, sewers, and storm water drainage at Featherstone, for the R.D.C. Mr. H. M. Whitehead, Director of Housing, Council Offices, Penkridge, Stafford. Deposit £5.

AUGUST 19.—**Dunfermline.**—SEWERS.—Providing and laying 5,450 lineal yards of 9 in. and 6 in. diameter fireclay pipe sewers, with other works, for the Fife C.C. Mr. H. F. Hodge, District Engineer, County Buildings, Dunfermline. Deposit £2 2s.

AUGUST 20.—**Dublin.**—ROADS.—For resurfacing certain roads, for the Dublin C.C. County Surveyor, 11, Parnell-square, Dublin. Deposit £2 2s.

AUGUST 20.—**Scunthorpe.**—ROADS.—For the making-up of several streets and 10 ft. roads in the Buckingham-street and Parkinson-avenue areas, for the U.D.C. Mr. W. Farrar, Surveyor, Council Offices, Scunthorpe. Deposit £2.

AUGUST 21.—**Edgware.**—SEWER WORK.—For construction of 566 yds. of 12 in. stoneware pipe sewer, together with manholes, &c., at Edgwarebury-lane, for Hendon R.D.C. Mr. H. W. Rackham, Engineer and Surveyor, Council Offices, Stanmore. Deposit £3 3s.

AUGUST 21.—**Erith.**—ROADS.—For road works in Bexley-road, for the U.D.C. Surveyor, Council Offices, Erith. Deposit £1.

AUGUST 21.—**Leyton.**—DEMOLITION.—For demolishing a sewage disposal tank, filters, &c., for the U.D.C. Surveyor, Town Hall, Leyton.

AUGUST 22.—**Dorking.**—SEWERS.—For the construction of stoneware sewers, &c., at Capel, for the R.D.C. Messrs. J. Taylor & Sons, 36, Victoria-street, S.W. Deposit £5.

AUGUST 22.—**East Barnet Valley.**—ROADS, &c.—For the construction of roads and sewers on Long-street housing estate, for the U.D.C. Mr. H. York, Surveyor, Council Offices, New Barnet.

AUGUST 22.—**Manchester.**—ROADS.—For sewering, draining, paving (with concrete), flagging (natural flags), &c., a number of roads, for the T.C. Paving, &c., Department (District Surveyor's Office), Town Hall, Manchester. Deposit £1 1s.

AUGUST 23.—**Bromley.**—ROADS.—For the construction of 9,700 yards of resurfaced concrete roads, for the T.C. Borough Engineer, Town Hall, Bromley. Deposit £2 2s.

AUGUST 25.—**Dunfermline.**—ROADS.—For the widening and reconstruction of Halbeath-road to a width of 60 ft. for a length of 800 yards, for the T.C. Burgh Engineer, City Chambers, Dunfermline. Deposit £2 2s.

AUGUST 25.—**Renfrew.**—FILTERS, &c.—For the construction of additional filters and tank at South Moorhouse, for the Renfrew C.C. Messrs. W. R. Copland & Sons, C.E., 146, West Regent-street, Glasgow. Deposit £1 1s.

AUGUST 25.—**Renfrew.**—WATER MAIN.—For providing and laying of 3,500 lineal yards of diameter cast-iron water pipes from Red Lion Housecraig Farm, &c., for the Renfrew C.C. Messrs. R. Copland & Sons, C.E., 146, West Regent-Glasgow. Deposit £1 1s.

AUGUST 25.—**Woodford.**—ROADS.—For road construction, Chigwell-road, Woodford Bridge, for U.D.C. Mr. W. Farrington, Surveyor, Wo Green. Deposit £2 2s.

AUGUST 27.—**Lambeth.**—ROADS.—For (a) creosoted deal paving in Dulwich-road, Water-lan Westminster Bridge-road; (b) laying granited mastic asphalte paving in Stockwell-avenue, B.C. Borough Engineer, Town Hall, Lambeth,

AUGUST 27.—**London and Sutton.**—ROAD R —For repairs to tar paving at Fountain Menta pital, and repairs to roads at The Downs Hospi Children, Sutton, Surrey, for Metropolitan A Board. Office of the Board, Victoria Embani E.C.4 Deposit £1 in respect of each work.

AUGUST 27.—**Southborough.**—WATER MAIN.— laying of 1,500 yards of 6 in. cast-iron water mai for the U.D.C. Messrs. G. & F. W. Hodson, Chambers, Loughborough. Deposit £5 5s.

AUGUST 27.—**Watford.**—ROADS.—For the struction of Station-road and Woodford-road an of Queen's-road and Cassio-road, for the T.C. Waterhouse, Borough Engineer, Municipal Watford. Deposit £2 2s.

AUGUST 28.—**Hemsworth.**—SEWAGE WORKS the erection of engine house and pump well, sew at Havercroft, for the R.D.C. Mr. W. T. Engineer, Hemsworth.

AUGUST 29.—**Thurnscoe.**—SEWERAGE WORKS the construction of 2,640 yards of stoneware pipe &c., for the U.D.C. Messrs. W. H. Radford Albion Chambers, King-street, Nottingham. £5 5s.

AUGUST 30.—**Buxton.**—ROADS.—For the mai of Windsor Park and Windsor Park-road, Fairfi the T.C. Mr. F. Langley, Borough Engineer, Hall, Buxton.

AUGUST 30.—**Erith.**—ROADS.—For wideni corner at Albert- and Bedonwell-roads, for the Surveyor, Bexley-road, Erith. Deposit £1.

AUGUST 30.—**Featherstone.**—ROADS, &c.—F making of roads and laying of sewers in connectio the erection of 50 houses at Streethouse, near fract, for the U.D.C. Mr. Samuel Chesney, A.R. Council Offices, Featherstone. Deposit £2 2s.

AUGUST 30.—**Mansfield Woodhouse.**—SANIT For conversion of 320 pail closets at Forest Tow water closets, and construction of the sewe drains, for the U.D.C. Mr. L. Walker, Su Council Offices, Mansfield Woodhouse. Deposi

SEPTEMBER 1.—**Coseley.**—SEWAGE WORKS.— construction of storm water and liquefying tank for the U.D.C. Messrs. Berrington, Son & W Prudential Chambers, Lichfield-street, Wolverha Deposit £5 5s.

SEPTEMBER 1.—**Hertford.**—ROADS.—For th struction of the new road from Bayford to Brick for the R.D.C. Mr. J. W. Riggs, Surveyor, 21, grove, Bengeo, Hertford.

SEPTEMBER 1.—**Woodford.**—SEWER.—For sewer, &c., in Snakes-lane, for the U.D.C. Farrington, Surveyor, Council Offices, Woodford Deposit £2 2s.

SEPTEMBER 1.—**Woodford.**—SEWAGE WORK extension to eastern sewage works, for the U.D. W. Farrington, Surveyor, Woodford Green. Deposit £2 2s.

SEPTEMBER 2.—**Dublin.**—SANITARY WORKS For sanitary works and the adaptation of the b at the Irish Land Commission, Upper Merrio Dublin, for the Commissioners of Public Work J. J. Healy, Secretary, Office of Public Works,

SEPTEMBER 5.—**Portsmouth.**—MAIN DRAI For the construction of reinforced concret suction chamber, laying of cast-iron pipes, their Eastney Sewage Pumping Station of t Mr. G. Midgley Taylor, 36, Victoria-street, Deposit £5.

SEPTEMBER 6.—**Haddington.**—ROADS.—For whinstone causeway in Court-street, for the T. Wm. Lee Hogg, Burgh Surveyor, Haddington. £1 1s.

SEPTEMBER 8.—**Hong Kong.**—WATERW Driving and lining of two tunnels, approx 2,160 ft. and 4,680 ft. in length, through the Sn Ridge and Golden Hill respectively; the cons of an open conduit, approximately 2,000 ft. in and contingent works. Crown Agents for the 4, Millbank, London, S.W.1.

SEPTEMBER 8.—**Southampton.**—ROADS.—F reconstruction of roads in part of High-street, Buildings, Onslow-road, and Grove-street, for Borough Engineer, Southampton. Deposit £1 work.

Competitions.

(*See Competition News, page* 23

Auction Sales, Tenders,

✱AUGUST 19.—**Grays.**—Mr. Edward R. Pc sell a quantity of new timber at Town Wharf, a Auctioneer, 27–31, New-road, Grays.

✱AUGUST 19, 20, 21 & 22.—**Hayes (Midc** Messrs. R. & W. Mack will sell, by instr Messrs. Lyon & Co. (Dudley), Ltd., Dudley. 20 corrugated iron, timber and steel-framed 100 tons rolled steel joists, 100 tons 14 lb rails, 260 tons "Bull Head" rails and cha motive), very large quantity of building mate at C.S.D. Depot. Auctioneers, "Academy Blackett-street, Newcastle-upon-Tyne.

ST 20.—**Peckham, S.E.15.**—Mr. C. E. Clark without reserve, at Rollin's Wharf, Canteridge, Peckham, S.E.15, large quantities of w timbers (landed and piled away to length). ers, Beddington House, near Croydon.

UST 26 AND 27.—**Cirencester.**—Messrs. Henry & Co., in conjunction with Messrs. Moore, Innocent, will sell, by order of the Receiver, re Saunders & Sons, Ltd. (in Liquidation), builders' tractors' material, plant, and office furniture, W. E. Midwinter, Chartered Accountant, Chambers, Cirencester.

UST 27, 28 AND 29.—**Near Evesham.**—Messrs. Phillips will offer for sale by auction interior ior fixtures and fittings, The Mansion, Wood ith whole estate of 683 acres (or with 95 acres, ld, and after sale of fixtures the fabric of the for demolition. Auctioneers, 59, High-street, rth.

ST 28.—**London, E.**—Messrs. Weatherall will sell, at 68, Cambridge-road, Mile End, E. retiring from business), builders' material, achinery, and office furniture. Auctioneers, ncery-lane, W.C.2.

MINARY ANNOUNCEMENT. — **London, W.**— Knight, Frank & Rutley will sell, in a number the Hanover-square Estate Room, in Septemss previously sold privately), a freehold buildknown as Broadfields Manor, Edgware, about s. Auctioneers, 20, Hanover-square, London,

Public Appointments.

T 16.—**Leeds.** — INSTRUCTOR.—Instructor in esign required by the Director of Education, eds School of Art, Department of Architecture. Graham, Director of Education, Education ent, Calverley-street, Leeds.

T 22.—**Swansea.**—Lecturer and Instructor ing Subjects required by Swansea Education ce. Mr. T. J. Rees, Director of Education, n Offices, Dynevor-place, Swansea.

UST 23.—**Southend-on-Sea.**—Clerk of Works by the C.B. for the new Secondary School. Farrands, M.A., Director of Education, Educaces, 20, Warrior-square, Southend-on-Sea.

UST 26.—**Neath.**—Architectural Assistant by Glamorgan C.C. Mr. James Nash, A., County Architect, Midland Bank Chambers, Glam.

T 28.—**Liverpool.**—Chief Architectural t required by the Finance Committee of the Liverpool. The Land Steward and Surveyor, l Buildings, Liverpool.

UST 30.—**Dorchester.**—Architectural Assistant for education work. Mr. E. A. Ffooks, Clerk unty Council, County Offices, Dorchester.

MBER 1.—**Greenwich.**—Architectural Assismmercial Clerk, and Grade "A" Clerk required Metropolitan Borough of Greenwich. Mr. J. Simpson, Town Clerk, Town Hall, Greenich, S.E.10.

TEMBER 1.—**Portsmouth.**—Additional Costing uired in the Borough Engineer's Department. W. Ward, A.M.I.C.E., Borough Engineer, ll, Portsmouth.

TEMBER 8.—**St. Marylebone.**—Engineering and ural Assistant required by the Metropolitan Mr. J. Paget Waddington, M.Inst.C.E., Engineer and Surveyor, The Town Hall, ne-road, N.W.1.

BER 9.—**London, S.E. 1.**—TECHNICAL ASSIStechnical (engineering) assistant on the perstaff in the Architect's Department required C.C. Clerk of the Council, The County Hall, ster Bridge, S.E.1., with stamped addressed envelope.

BER.—**London, S.E.1.**—(*a*) Lecturer in ure and Building; (*b*) Instructor in Brickquired by the Governors of the Borough Polystitute, for two evenings a week. Mr. J. W. Principal, Borough-road, London, S.E.1.

BER.—**Wimbledon, S.W. 19.**—Evening Lec(a) Surveying, (b) Brickwork and Masonry, to ard of Grade 1 City and Guilds Syllabus. The Technical Institute, Wimbledon, S.W.19.

DATE.—**China.**—Assistant Architect required inese Maritime Customs Service. The Secree of Chinese Maritime Customs, 26, Old eet, Westminster, S.W.1.

Guildford Hospital Extension.

mmittee of management of the Royal unty Hospital, Guildford, has started of providing a new west wing to the costing £10,301. The new wing will twelve additional beds for women, a rd balcony for open-air treatment, and athological department.

West Indian College.

hole of the flat roofs and paving of galleries for the West Indian Agricullege, Trinidad, is being carried out in aldo's Seyssel asphalte. The building rected in reinforced concrete, the conbeing Messrs. Foster & Dicksee, of Major H. C. Corlette, 2, New-square, Inn, is the architect.

PROPOSED NEW BUILDINGS & OTHER WORKS *

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERDEEN.—Plans passed by T.C.: House, Queen's-road, for Miss Mary H. Walker, per Mr. George Watt, architect; reconstruction of building, College-street, in connection with the Union Works, for Pirie, Appleton & Co., per Messrs. Jenkins & Marr, architects: two houses, Albury-place, for R. & J. Reid, Ltd., per Mr. William E. Gauld, architect; boys' club, Gallowgate, for the Aberdeen Lads' Club Committee, per Mr. George Watt, architect; two houses, Hammerfield-avenue, for the Bon-Accord Builders, per Mr. T. S. Sutherland, architect; house, Deemount, for Miss Johanna Proctor, per Messrs. D. & J. R. M'Millan, architects; two bungalows, Royfold-crescent, for Mr. George Laing and Miss Margaret B. Laing, per Mr. William E. Gauld, architect; house, Norfolk-road, for Mr. Robert W. Robertson, per Messrs. Jenkins & Marr, architects; alterations, 50–52, St. Nicholas-street, for F. W. Woolworth & Co., per Mr. Stewart Kaye, architect, Edinburgh.

ABERYSTWYTH.—The R.D.C. has prepared a plan for a bridge near Trefeirig.

ALNWICK.—Sanction has been received by the U.D.C. from the M.H. for the borrowing of £10,250 for the erection of 24 new houses on the Swansfield Park-road site.

ASHINGTON.—Plans and specifications have been prepared for a proposed new road between Ashington and Ellington, at an estimated cost of £44,000. The scheme has been promoted by the Ashington U.D.C. and the Morpeth R.D.C. has undertaken to bear a portion of the costs. A grant is being applied for from the M.T. —The U.D.C. is to proceed immediately with the erection of a small isolation hospital to contain 24 beds.

BASINGSTOKE.—The Works Committee recommends the extension of the sewer from Worting Bottam to connect the sewer behind Messrs. Thornycroft's works, at a cost of £2,000. Plans have been prepared for the widening of Worting-road, the cost being estimated at £3,990. Loans are to be obtained of £1,162 for Basing-road improvement, and £1,133 for Chapel-street widening. Plans passed: House, Wallis-road, for Mr. Sidney Tew.

BATLEY.—Plans passed by U.D.C.: House, Oakhill-road, for J. W. Pickles; house, Purlwell Hall-road, for N. W. Wilson; re-erection of warehouse, Fountains Hill, for Wildsmith, Carter & Co.

BEDWAS.—The Bedwas Navigation Colliery Co. is to receive subsidy for 148 houses which will be erected. The Company's architect is Mr. George E. Withers.

BELFAST.—Plans passed: Houses, Malone-avenue, for N. B. Kilpatrick; clinical theatre and X-ray room, in Grosvenor-road, for Board of Management, Royal Victoria Hospital; shop and house, Ballygomartin-road, for S. A. Martin; house, Sans Souci Park, for Mrs. E. Nixon; house and store, Antrim-road, for R. M'Intyre; house, Palmerston-road, for the Dixon Estates, Ltd.; two houses, Kincora-avenue, for T. J. Robinson; church in Donegall-road, for Committee of Sandy-row Methodist Church; shop and store, Newtownards-road Upper, for J. M'Clea; premises, Millfield, for Campbell Bros.; six houses, new street off Linden Gardens, for W. Bennett; conversion of house into shop and house, Woodstock-road, for J. Stewart; house, Irwin-avenue, for J. H. Barton; 13 houses, Moonstone-street, for F. Curley; house, Sandown-road, for Mrs. V. Neill; house, Myrtlefield Park, for A. M'Dowell; house, Ravenhill-avenue, for R. J. Kerr; two houses, Ebrington gardens, for J. Moore; two houses, Earlswood-road, for J. Wilkinson and T. Simpson; motor showrooms, Newtownards-road Upper, for J. Rea; house, new street off Stranmillis-road, for C. W. Hinds; bank premises, Woodstock-road, for the Northern Banking Co., Ltd.

BILLINGHAM.—The U.D.C. has resolved to purchase a site adjoining Hope-street as a preliminary to the erection of suitable municipal buildings. The Council have decided to purchase seven acres of land from the Synthetic Ammonia & Nitrates, Ltd., for housing purposes, and are opening negotiations with the Furness Shipbuilding Co. for nine acres on the west side of Cowper Bewlay-road, Haverton Hill, for a similar purpose.

BLACKPOOL.—Subject to the approval of the M.H. and providing a Government unemployment grant, a big improvement scheme in the borough will be proceeded with, by the linking up of the promenade with the Blackpool extension to Squires Gate, and also with the construction of a seawall.—Plans passed by the Corporation: New streets, Vicarage-lane, by J. Jackson; new street, Stopford-avenue, by Blackburn Co-operative Society, Ltd.; two houses, Lyndhurst-avenue, by J. E. Wright and Mrs. Bramwell; two bungalows, Wembley-place, for S. Barton; four houses, Bispham-road, for H. Saynor; eight houses, Ashburton-road, for J. Fielding & Sons; two houses, Gosforth-road, for T. & C. Hilton; house, St. Clement's-road, for R. H. Gale; bungalow, St. Clement's-road, for S. Hurk; house, Central-drive, for H. Carver; four bungalows, Fleetwood-road, for R. Jackson; two houses, Condor-grove, for Staunton Bros.; two houses, Highbury-avenue, for J. Walton; two houses, Coniston-road, for Lytham St. Annes Building Co., Ltd.; six houses, Vicarage-lane, for T. Croft; house, St. George's-avenue, for Sir Lindsay Parkingson & Co., Ltd.; four houses, Westwood-avenue and Breck-road, for Park Estate Syndicate; bungalow, Watson-lane, for J. Wheatley; two bungalows, Thirlmere-road, for B. Pearson; two houses, Woburn-road, for A. & E. Fielding; two houses, Acton-road, for E. Lumb; two houses, Gloucester-avenue, for Taylor & Woodrow; two bungalows, Wembley-avenue, for J. Brindley; six bungalows, Wembley-avenue, for R. Lancaster & Sons, Ltd.; four houses, Conister-road, for W. Lawton and Mrs. Hulme; house, Highgate, for F. Aynxcough; bungalow, Layton-lane, for Miss A. Westray; two houses, Ilford-road, for R. Stockwell; six houses, Acton-road, for Crabtree; eight houses, Acton-road, for E. Lumb; bungalow, Fleetwood-road, for R. Singletob; transformer chamber, Hoo-hill, for Tramways and Electricity Committee; two shops and offices, Bloomfield-road, for H. Ainsworth; alterations, 86, Caunce-street, for F. Moorhouse; new streets, Anchorsholme-lane East, for Cleveleys Hydro, Ltd.; house, Blackpool-road, for Wilson; two houses, Blackpool-road, for Hogarth & Pollar; six cottages, Nelson-road, for B. Johnston; four houses, Norbreck-road, for A. E. Murdock; house, off Mere-road, for F. Taylor; two houses, Wyre-grove, for Mrs. Jackson; two houses, for J. Houseman and a bungalow, for W. J. Cowpe, Nawes Side-lane; eight houses, Bloomfield-road and Cunliffe-road, for Wilkinson & Co.; two bungalows, Little Bispham-road, for Fielding Bros.; two bungalows, Rectory-road and Ryeburn-avenue, for T. Makin; two bungalows, Norbreck-road, for Foster and P. Rutter; 10 houses, Grenfell-avenue, for E. Mason.—The Borough Surveyor submitted section of scheme for the proposed lay-out of the promenade at South Shore, which was approved; and he received instruction to prepare estimates of cost as a basis for an application for sanction for the necessary loan. He also submitted an application for the erection of five tramway shelters.—The Finance Committee was recommended to direct an application to the M.H. for sanction to the borrowing by the Corporation of the sum of £6,800, for the diversion of main dyke, through the Public Park.—The E.C. is to invite tenders for re-flooring the secondary school with rift sawn pitch pine blocks, and recommended that tenders be obtained for roofing the main building of the Revoe School, together with separate tenders for the play sheds.—It was resolved to proceed at once with the erection of a central hall at the Tyldsley Council School. It was also resolved that the Finance Committee be asked to make arrangements for raising an additional loan of £2,569 in connection with the Tyldesley School, the additional loan being required for the erection of a central hall and the furnishing of the cookery and manual rooms.—It was resolved that application be made to the M.H. for sanction to borrow £2,613 for the formation of proposed street at Hoo-hill, and also an application for £2,937 for the proposed sewering of said road. —— A request for the provision of a sports ground for the elementary schools has been referred to the T.C. for consideration.

BLYTH.—Plans passed: For parish hall in Church-street, for the Rev. C. F. Medd.—The Development Committee is to consider proposals of the United Automobile Services, Ltd., for the erection of a workshop and garage in Plessey-road.—The T.C. is to erect a new fire station at a cost of £7,080 8s.

BOGSIDE.—Mr. E. Beatty, architect, of Manchester, has been instructed to prepare plans for carrying out a scheme for improvements at Bogside Racecourse. The stand accommodation is to be considerably increased.

BOLTON.—Plans passed by T.C.: Robinson Brooks, for show room and office, 426, Bury-road; C. W. Laxton, bakehouse, 655, Bury-road; Lord Bradford, new sewer, off St. Michael's-avenue; Lady Beaumont, streets and levels, Sherburne-road and Rydal-road; A. S. Woods, eight houses, Sherbourne-road and Rydal-road; William Astley, house, Markland Hill-lane; Wm. Reddyhough, two bungalows, Regent-road; W. Gornall & Sons, Ltd., two houses, Coverdale-avenue; S. Hurst, house, Regent-road; Geo. Temperley & Son, four houses, Rydal-road; Rd. Mosley, two houses, Regent-road; Eckersley & Charnley, four houses, Lever Edge-lane; D. Constantine & Sons, two houses, Breightmet Fold; A. Coward, two houses, Withins-lane; E. & S. Street, two houses, new road off St. Michael's-avenue; G. Sixsmith, house, Chorley New-road; E. Calvert, house, Regent-road; William Draper, five houses, Wordsworth-street; Gertrude Heaton, house, Monserratt, Chorley Old-road; Leigh Bros., Ltd., 12 houses, Chorley Old-road; T. H, Cartwright, 16 houses, Hulton-lane; Leigh Bros., Ltd., house, Cloverdale-square; W. E. Yates, three houses, Westbourne-avenue; W. W. Pickup, six houses, Harper's-lane; R. Harwood & Sons, Ltd., new offices, Darley-street; SS. Peter and Paul's B.C., club house, Nugent-road; W. Reddyhough, two bungalows, Regent-road; W. E. Yates, four houses, Waverley-road; B. Winstanley, two houses, Northland-road; H. Adamson, bungalow, Blackburn-road. —The Council have confirmed the appointment of Messrs. Bradshaw, Gass & Hope, as architects and surveyors for the town hall extension scheme, and the erection of other public buildings.—A committee has been asked to consider the provision of central accommodation for the Streets Department. —Plans have been approved by the Cor-

* See also our List of Contracts, Competitions, etc.

poration for 51 additional subsidy houses. The Streets Committee are to apply to the M.H. for sanction to the borrowing of £4,253 for improvement of the surface of Chorley Old-road and £6,189 for the same purpose on Chorley New-road.

BOWLAND.—The R.D.C. propose to carry out a road and bridge widening scheme at West Bradford, at an estimated cost of £1,500. Twenty houses are to be erected in the R.D. by private enterprise.

BRANDON.—It is proposed by the U.D.C. to apply for borrowing powers of £12,000 for road and sewer works.

BRIGHTON.—Plans passed: House, Ewhurst-road, J. Ayling for G. Ayling; electricity sub-station, The Rookery, Preston Park, for Brighton Corporation.

BURNLEY.—Designs submitted by the Imperial War Graves Commission for a proposed war memorial at Burnley Cemetery have been approved. The R.D.C. propose to complete the Thursden water scheme at Briercliffe, at a cost of £1,550. —The E.C. have decided to organise the Todmorden-road Senior School as a central school, and also to erect a new central school on a site in Lionel-street.—In regard to the proposed Central Library it has been decided to erect a two-story building on a site between Parker-lane, Grimshaw-street, Croft and Red Lion-street.

BURTON-ON-TRENT.—The Borough Surveyor has been empowered to accept a tender for the erection of a shelter in Uxbridge Recreation Ground.—Vacant sites in the town suitable for the erection of houses are to be scheduled.—The Council has decided to invite tenders for the erection of houses on Derby-road and Eton-road sites on the following terms: The houses to be erected in blocks of four.—The Consolidated Charities have made a grant of £2,000 towards the infirmary extension scheme.—Plans have been passed for a sewer in connection with a scheme prepared by Messrs. Kennaway & Whitbread, surveyors, for the development of Field-lane on the Wyggeston Hospital estate.

BURY.—The Sewering, Paving and Streets Committee had before them plans prepared by the Borough Engineer, showing the proposed street improvements to be included in the provisional order, and it was resolved that the plans be approved. They relate to Walmersley-road, Paradise-street to Fox-street, Paradise-street, Boundary-street to Walmersley-road, Tithebarn-street and Fleet-street, Cross-street and Rock-street.—The plans of a new building line in Fleet-street and Rock-street, between Union-street and Cross-street, and also in Stanley-street and Waterstreet, were also presented by the Borough Engineer. They were approved.—Sanction has been received from the M.H. to borrow £2,529 for the concreting of the open market. Plans for 21 houses have been approved by the T.C. Plans submitted by the Co-operative Wholesale Society, on behalf of the Radcliffe and Pilkington Co-operative Society, for the erection of houses on land between Ainsworth-road and Bolton-road, were approved. The Committee approved of a plan for rounding off the corner of Wellington-road and Manchester-road on the recreation ground site. The Unemployment Grants Committee approved the drainage scheme of the Mosses for grant purposes, and the M.H. notified that they were prepared to approve the scheme generally. The Corporation have applied for power to borrow £15,100, and for a grant towards the same. The Borough Engineer was instructed to prepare the necessary plans and obtain tenders.—Sanction has been received from the M.H. for the borrowing of £3,000 for alterations at Aitkin Sanatorium by the Corporation.

CAMBRIDGE.—Plans passed by T.C.: Pair of houses, Belvoir-road, for P. A. C. Booth and S. Pauley; 50 houses, Vinery-road, for Corporation; 10 houses, Chesterton Hall Estate, for Corporation; house, Barton-road, for Mrs. J. H. Thomas; pair of semi-detached houses, Union-lane, for H. Buttress and H. Richardson; pair of semi-detached houses, Luard-road, for P. S. Stevenson; pair of houses, Blinco-grove, for P. S. Stevenson; pair of houses, Huntingdon-road, for H. C. Buttress; house, Millington-road, for Miss N. Alexander; house, French's-road, for S. T. Burr; house, Milton-road, for P. Wheatley, jun.; house, Cherryhinton-road, for A. Hardingham; house, Highworth-avenue, for W. Boyton; manuscript room, Trumpington-street, for University of Cambridge; pair of houses, Union-lane, for H. Richardson; house, Huntingdon-road, for E. Appleton; house, Milton-road, for H. McIntyre; furniture store, King's-lane, for the Master and Fellows of King's College; house, Leys-road, for C. Ellwood; bungalow, Milton-road for H. T. Glover; pair of houses, Haig-road, for W. H. Spencer and C. W. Runham; two pairs of houses, Hartington-grove, for D. R. W. Stevenson; two houses and shops, Mill-road, for H. & H. J. Twinn; three pairs of houses, Coniston-road, for G. R. & H. B. Howes; house, Harvey Goodwin-avenue, for W. E. Amps; house, Bentley-road, for Mrs. E. M. Bishop.

CARLISLE.—Plans passed by R.D.C.: By Mr. J. H. Martindale, architect, Carlisle, for Mr. Harold Bindloss, of Cote Bank, Skinburness, detached house at West End, Burgh-by-Sands; by Mr. H. H. Hodgkinson, architect, Carlisle, for Miss Smith, Blackwell Lodge, for conversion of Blackwell Lodge into two dwellings.

CARMARTHENSHIRE.—The County Main Roads Committee is to expedite the putting in hand of several road improvement and construction works.—The Amman Valleys School Managers propose to erect a school for 300 children at Penybank, and are considering the erection of new schools at Tirydail and Hopkinstown.

CHELMSFORD.—Plans passed by T.C.: Six houses, Bishops-road, for Messrs. Golding & Hadler; eight shops and four flats, Rainsford-road, for Mr. F. Collins; house, for Mr. G. Slade, St. Fabian's-drive; four shops and two flats, The Friars and Moulsham-street, for Mr. E. C. Ashton.—Plans have been provisionally passed by the T.C. for 50 houses on the Boarded Barns Estate.

CHERITON.—Plans passed: Five houses, Dunnett-road, for Mr. T. W. Peel.

CHESTER.—At the Denbighshire E.C. meeting it was announced that a scheme was on foot for the provision of central schools at Colwyn Bay, Acrefair, and Rhosllanerchrugog.

CHESTER-LE-STREET.—The R.D.C. has resolved to seek permission from the M.H. to erect an additional 20 houses for the Lamesley parish at a cost of £10,022. A local builder, Mr. Paget, has entered into an arrangement with a building society to erect 100 houses for owner occupiers at Washington.

CHINLEY.—Thirty houses of the semi-detached villa type are to be built on the Buxton-road, and a number of houses are also to be built in Prince's-road. Plans of several blocks of houses were passed by the Chapel-en-le-Frith R.D.C.

DARLINGTON.—Plans passed by the T.C.: Eight houses, Haughton-road, for H. Parvin; five houses, Belgrave-street, for Kellett & Clayton.

DARTFORD.—The U.D.C. is borrowing £29,175 for the erection of more houses, &c.—The Surveyor has prepared an estimate of £4,400 for widening Burnham and Victoria-roads.—Plans and estimates are to be prepared for the construction of a footpath on the south side of East-hill.—Plans passed by U.D.C.: Bungalow, Pilgrim's-way, for Mr. Goorle Hills; bungalow, Havelock-road, for Mr. F. A. Walters; two houses, Bow Arrow-lane, for Dartford Estates, Ltd.—The Council is to erect two houses in Mead-crescent in place of two demolished for the bye-pass scheme.

DEWSBURY.—Plans passed by T.C.: Mr. George Kitson, house, Healds-road; Mrs. A. E. Wilkinson, house, Wakefield-road; Mr. W. Morrison, shop premises, Foundry-street; Mr. J. Hemingway, lock-up shop, Moor End-lane; Mrs. Matthewman, alterations to building for dwelling-house, 10, Pit-lane, Ravensthorpe; Mrs. Hickling, lock-up shop, Scopsley-lane, Whitley; Mr. H. Lumb, house, Leeds-road; Mr G. Broadhead, extension to house, 605, Lees Hall-road.

DOMOCH'S COTE.—Cambridge C.C. proposes the erection of a bridge across the River Cam, and has applied for a grant from the M.T.

DONCASTER.—The Borough Surveyor has submitted plans for the erection of a proposed infectious diseases hospital and a sub-committee has been appointed to consider same.—The T.C. has decided to invite tenders for the erection of 400 houses. The houses are to be erected equally on the Wandsworth-road site.—Plans passed by the Housing Committee include: Eight houses on the Wheatley Hills Estate, and off Armthorpe-lane; six houses in Strafford-road; four houses in Raby-road; 11 houses in Springwell-lane; four houses in Mansfield-road, and four houses in various parts of the town.

DURHAM COUNTY.—The Weardale Coal & Iron Co. have completed arrangements to erect 75 houses at Wheatley Hill, and 60 at Deaf Hill. The houses will be of two types, one containing two bedrooms, and the other three bedrooms. Each house will have a bathroom. The Company are also building 125 houses at Thornley.—The Durham Aged Mine-Workers Homes Association proposes to erect 20 homes each at Shotton and Horden, and 10 at Blackhall.

EASINGTON.—Plans passed by the R.D.C.: Bungalow, three houses; four bungalows at Shotton; house and shop at New Seaham; extension to Independent Methodist Church at New Seaham; house and shop at Morton; and two houses at New Seaham.

EASTBOURNE.—The B.S. has been asked to prepare plans of buildings for the motor bus department. He is also to prepare plans of a convenience at the Old Town Recreation Ground.—Alternative plans are under consideration for a public library at the seaside.—The B.S. is to report on the possibility of providing additional accommodation for women at the Old Town Baths.

ELY.—The R.D.C. has purchased a site at Pymoor for the erection of two houses.

EXETER.—The City Council adopted a scheme for the erection on a site in the Rougemont Grounds of a new public library, estimated to cost approximately £70,000.

FILEY.—Plans passed by U.D.C.: Four houses, 22, The Crescent, by Mr. A. Easton, on behalf of Mr. Benno Pearlman; and electricity generating house on Muston-road, by Messrs. Massie & Holdsworth, on behalf of Mr. R. S. Massie.

FINCHLEY.—Plans passed by U.D.C.: Four houses, Litchfield-way, for Mr. G. C. Swanson; six houses, Birley-road, for Messrs. A. J. Harris & Sons; two houses, Wildwood-road, for Mr. W. S. Gibson; house, Meadway, for Mr. W. S. Gibson; house, The Bishop's-avenue, for Sir Leo Chiozza Money; eight houses, Brookland Hill, for Messrs. Garsubil, Ltd.; five houses, Windermere-avenue, for Mr. R. Ellwood; house, The Bishop's-avenue, for Mr. Wm. Cook; four houses, new road near Argyle-road, for Mr. E. S. Gattell; six houses, Elmhurst-avenue, for Messrs. Heywood & Bryett; house, Middleway, for Mrs. Cash; 34 houses, The Forresters Estate, for Messrs. C. F. Day, Ltd.; new schoolrooms, North Finchley Congregational Church, for Trustees.

FLEETWOOD.—The authorities have commenced operations on the new open-air baths, which will be 265 ft. long and 110 ft. wide. The depth of the water at one end will be 2 ft. and the other 6 ft. 6 in. In the centre is a rockery and fountain, with a centre jet to play to a height of 25 ft. and lesser sprays surrounding. The estimated cost of the works now in progress is £25,000, the completed scheme will cost about £39,000.

FYLDE.—Plans passed by R.D.C.: House at Highgate-lane, Warton, for Mr. Sutcliffe; pair of houses, Weeton-road, Wesham, for Mr. R. E. Kent; ten pairs of houses, Preston–Blackpool main road, Ribby-with-Wrea, for the Earl Estate Agency; 16 houses, Straits-road and Mereland-road, Marton, for Mr. J. Taylor; two pairs of houses at Bank-road, Marton, for Messrs. W. Townshon & Son; pair of bungalows at Bank-road, Marton, for Mr. F. Brook.—In connection with the proposed new Preston to Fleetwood road the Surveyor is preparing a complete new Ordnance plan for submission to the County Main Road and Bridges Committee.

GARSTANG.—The County Surveyor informed the D.C. that the Main Roads Committee had agreed to construct a new bridge and carry out a short diversion of the road at Carr Bridge, Stalmine, at an cost of £4,240. The B.G. are proposing to the office grounds, estimated at cost £1

GATESHEAD.—The T.C. has decided erection of 104 additional houses, this second section of the borough housing scher

GLAMORGAN.—The Port Talbot B.C. is new slaughter house.—A welfare scheme fo Fardre, Tynant and Beddau districts (ne pridd) embraces the erection of a workm swimming baths, institute and the lay-out courts at an estimated expenditure of £25 architect is Mr. J. H. Davies, Pontypridd local secretary Mr. G. O. O'Neill, Church The Penarth U.D.C. is to expend £12,500 on r to the pier, £600 on the lay-out of Plassey £200 on the Beach Gardens.—The Mert B.S. has submitted plans for a municipal g cost of £3,800. The Council has adopted and the work is to be undertaken as soon as The Council has decided to limit the cost public library, which it is to erect, to £10,0 Council has submitted to the Industria Council a scheme for the lay-out of Coff field.

GLASGOW.—Linings granted: Allen-Liver London, to erect works at Helen-street, Go poration Tramways Department, to erect stand at sports ground, Helenvale-street,

GOREFIELD.—The Council school is to l by the Isle of Ely C.C., at a cost of £1,400.

GRIMSBY.—It is proposed to erect a t mortuary, &c., at the new cemetery, at an cost of £550.

HAMPSHIRE.—The County Main Roads has prepared a scheme to cost £250,000 for th ment of the main road from London to So between the county boundary at Blackwa city of Winchester.—The County Small Ho mittee proposes the purchase of land and b a cost of £8,000, and an expenditure of adaptation and equipment as small hold

HASLINGDEN.—The Housing and Town Committee of the T.C. have instructed th to prepare plans for the erection of 32 ho Sykeside site.

HETTON.— The U.D.C. has received that the M.H. is recommending their app £9,850, for housing purposes, to the Pu Loan Commissioners.—The Council has ac tender of Messrs. Gibson & Son, Ltd., for t of 25 houses.

ILFORD.—Plans passed by U.D.C.: bungalow, No. 46, Stainforth-road; Leona 20 houses, 13–35, Meads-lane and 146–160, road; Chesterson & Sons, two houses, 47–49 road; W. S. Wilson, eight bungalows, No Longbridge-road, near Water-lane; H. bungalow, "Dilkusha," Tomswood Hill; & Miles, Ltd., house, 2, Perth-road; J. three houses and a garage, 234–238, Well E. Meredith, four shops and houses and c shop, 325A–331, Green-lane; L. & N.E. Rai premises, Station-approach; L. & N.E. parcels office, Ilford Hill; W. H. Knox, Frimley-road.

KENDAL.—Plans passed by T.C.: Tw Howard-street, Messrs. Shaw & Stables, Bateman; conversion of warehouse into Market-place, for Mr. Garnett.

KIDDERMINSTER.—The T.C. has accepte to purchase surplus land at Aggborough from the Holwin Building & Construction for the erection of 200 houses.

LANCASHIRE.—The C.C. have received t of the M.T. to proceed with the widening at ment of the road over Clifton Marsh, als struction of a new road over Newton and Marshes. The estimated cost of both the is £71,995. The M.H. has sanctioned the a loan of £7,700 for the purpose of erectio school at Longton, the erection is estima £6,881.

LANCASTER.—Plans passed by T.C.: Two Lincoln-road, for Mr. W. S. Higginson; bu Carr House-lane, for Mr. H. Harris; bunga Hall Park Estate, for Mr. C. Payne; two lo in Dalton-square, for The Hippodrome Ltd.

LEEDS.—The E.C. has decided to ac 480 children in the new elementary school propose to erect on the Middleton Housing

LEVERINGTON.—The Isle of Ely C.C. has enlarge the Council school, at an estima £1,050.

LITTLEBORO'.—The Clerk to the D.C instructed to write to the district value the offer of £1,190 for the land on the housing site. A sub-committee of the inspect the Lake Bank with a view to th widening of the road in that locality.

LIVERPOOL.—Plans passed by the C Aigburth-road, corner Alresford-road, R Son, for E. R. Jones, two houses; Beaco E. B. Bailey, for Miss Hope, house; Mar O. Williams & Sutcliffe, for W. & T. A. houses and 12 garages; Calderstones-ave Calderstones-road, J. D'Arcy & Son, Ltd Hughes, two houses; Townsend-lane, H Lewis, for Henry Youds, proposed nc Queen-square, A. E. Shennan, for T. & P. rebuilding of premises; Crompton's-lane, & Sons, Ltd., for Lloyd Thomas, house road, Mersey Building Co., Ltd., for selves, Orchard-lane, H. J. Trantom, for Mr. R. bungalow; Rosedale-road, O. Williams for J. L. Jones & J. Williams, 21 house drive, plots 64 and 65, Gray & Evans, for two houses and two garages; Fleet-st Rimmington, for R. Jackson & Sons, rel extension to works premises; Bath-stree Brook-street, J. & A. Burroughs, for F. Sons, offices and stores; Orchard-lane, Ma

houses; Lanville-road, and two proposed
ossley Hill Estates, Ltd., for selves, 16
nerville-road, F. H. Peate, for Scarrett
ies. eight houses; Sinclair-drive, plots 74
& Evans, for T. Jones, two houses;
, plots 72 and 73, Gray & Evans, for T.
houses; Rathbone-avenue, south-west
s & Son, for W. J. Williams, two houses;
orth, T. Wainwright & Sons, for W. J.
houses; Great Homer-street, near
t. Francis Jones & H. A. Dalrymple, for
t. Ltd., new bank building; Hatton's-
ge, and Allerton-road, Land Steward and
Corporation of Liverpool, electric sub-
n: Aigburth-road, corner Dulverton-
Martin, for Brierley Building Co., two
wo garages; Menlove Gardens West,
e-lane, J. W. Jones & Sons, Ltd., for
Mersey-avenue, south side, J. C. Martin,
house; Primrose-road, Sealey & Lucas,
o houses and two garages; Garden-lane,
W. Nicholson, for H. J. Guthrie, two
Lowther-street (rear of No. 34, Falkner-
J. Tranton, for J. Masterson, garage;
Walton, T. Wainwright & Sons, for
s & Co., 10 houses.—A memorial fund
d for an extension of the X-ray de-
provision of additional accommodation
g staff of the Newbolt Hospital.

—As the result of arbitration the B.C.
00 to obtain London House and part of
t. in connection with a big road and
vement scheme. Sanction has been
he B.C. to borrow £10,000 for disburse-
he Small Dwellings Act provisions.

AMPSTEAD).—A tender has been accepted
letion of St. Michael's Church, Golders
ving an expenditure of about £9,000.
posed to erect a parish hall at a cost of

N.—A contract has been sealed by the
the Co-operative Wholesale Society for
of 40 houses at Forest Hall, under the
sing scheme. Application is to be made
for sanction to borrow £20,400 for the

T. ANNES.—Plans passed: Warehouse in
escent, for Mr. A. Nuttall; pair of semi-
galows at St. Patrick's-road North, for
haw; pair of semi-detached bungalows,
ad, Ansdell, for Mr. W. B. Mackenzie;
detached bungalows, in Nelson-street, for
nton & Tite; four houses in Church-road,
Hunt & Riley; pair of semi-detached
Alexandra-road, for Messrs. Yates &
of semi-detached bungalows in Nelson-
Messrs. Cottrill & Hill; electricity sub-
ner Promenade, for the Electricity Com-
T.C.; pair of semi-detached bungalows
eet. for Messrs. Walsh & Taylor; four
galows at York-road, Ansdell, for Mr. J.
pairs of semi-detached bungalows, off
for Wooler & Son; pair of semi-detached
Norwood-road, for Wooler & Son;
Norwood-road, for Mrs. Steeple; one
nd one pair of bungalows at King's-road,
E. Myerscough, Ltd.; pair of semi-
ngalows at Leamington-road, for J.
ns: pair of semi-detached bungalows in
ad North, for Mr. F. W. Sellars; four
ngalows at Cambridge-road, for Mrs.
nd shed at Holmefield-road, for Mrs.
Application is being made for sanction
9,040 for the purposes of erecting 92
ous parts of the borough. The Hargate
Ltd., are to erect 28 non-parlour type
ton-road, Lytham; 44 non-parlour type
hbury-road, St. Annes; and 20 parlour
t the Tramway depot, in Squires-gate,
n and St. Annes T.C.

LD.—The Governors of the College are
rovide additional accommodation by the
ew classroom.

Plans have been approved by the
bungalow in Delamere-road for Mr.
a house, at West Malvern, for Mr.
: and a bungalow in Tan House-lane,
l. for Mr. Preece.

.—Plans passed by the Corporation:
. boiler-house to works, Dark-lane,
art & Thompson, revised plan of drains
house, Ayton-street; Gleavis, Richards
ffices and warehouse, Toxteth-street,
swick Co-operative Society, branch
-street, Gorton; Fine Cotton Spinners,
Murray-street; J. C. L. Yates, house,
Blackley; L. W. Heatley, house, Pole-
ckley. A special Sub-Committee
nsider the scheme of proposed exten-
ie Sanatorium, for the Public Health
o sketch plan of proposed public con-
st Point, approved, and also proposed
nces in the basement of the West
approved. The E.C. intimated their
ake over on certain terms an area of
ckley Estate for a school. The Art
ee were requested to take the necessary
ompetitive plans for the erection of an
on the Infirmary old site.

e Governors of Baines Charity have
plans for the erection of a new school
500 scholars. The plans have been
. Halstead Best, of Blackpool, and
been given by the Governors for the
eeded with.

E.—The County E.C. is to erect
ws: Chepstow (£4,800), Rhymney
lo (£3,700), Pontllanfraith (£7,000),
9), Cwmcarn (£10,000), Markham
. Blaenavon (£4,000), Pontypool
stown (£2,050), Cwmbrau Central (£15,000), Argold (£6,000), four mining schools (£18,400) agricultural institute, Usk (£20,000), cookery centre at Tredegar (£2,500). In addition the E.C. has forwarded to the B.E. plans of new school proposed to be erected at the Trauch, Pontypool, for final sanction to proceed. The committee is also considering the erection of a new school at Cwmffrwdoer.

MORETON.—Arrangements are being made for the erection of a church at Hoylake. A site has been secured near the Cottage Hospital.

MYNYDDISLWYN.—The U.D.C. has approved the scheme of the Industrial Housing Committee to erect 180 houses at Tylagwyn, between Ynysddu and Pontllanfraith. The architect is Mr. A. F. Webb.—The Pontllanfraith local Welfare Committee (secretary, Mr. S. Bater), has a scheme in preparation for lay-out of grounds and erection of houses.

NELSON.—Preliminary parleys in respect to the new secondary school are still in progress between the local E.C. and the county authorities. Sketch plans of the building have been prepared and considered at a joint meeting of the representatives of both authorities, and following this the committee have decided to make a request for the building to be of two stories instead of three, as shown on the plans. They also favour the erection of a caretaker's house on the site, in order to ensure proper supervision and protection of the property, and the County Committee have been asked to consider the amended proposals. The new school will occupy a prominent site off Walton-lane, near to the Nelson and Colne boundary. Revised plans of the proposed new St. George's R.C. school rendered necessary by the decision to erect a church above the school, but excepting the roof this does not effect the plans of the school already approved by this Committee. The B.E. will raise no objection to this alteration, but require the revised plans to be submitted for this Committee's approval.

NEWCASTLE.—The Corporation Town Improvement Committee has adopted plans for the erection of 30 self-contained houses.—The City Licensing Justices have approved plans on the application of Mr. E. Gibson, for extensions at the "Crown" Hotel, Clayton-street, Newcastle. It is proposed to make a dining hall large enough to accommodate 250 persons.

NEWCASTLE-ON-TYNE.—The contract for rebuilding the premises of Messrs. Hindhaugh, Cloth Market, has been let to Mr. H. Waller, Newcastle. Large new buildings are to be erected and the archway from the Cloth Market to the new premises at the rear is to be considerably widened. The architect for the work is Mr. M. K. Glass, Saville-row, Newcastle.

NEWHAVEN.—House, Meeching-avenue, for the Rev. W. J. J. Cornelius.

NITSHILL.—The District Committee of Upper Renfrewshire has decided to proceed with the construction of drainage works. The estimated cost is £6,612.

NORBRECK.—A lay-out plan of the Norbreck Garden City Estate, prepared by Mr. Halstead Best, of Blackpool, provides for the erection of 500 houses.

NORTHAMPTON.—Plans passed by T.C.: House, Thursby-road, for Mr. S. Smith; house, Clarence-avenue, for Mr. F. Noon; conversion of factory into two premises, Roe-road factory, for Messrs. Wallis & Linnell, Ltd.; house, The Drive, for Mr. J. Jackson; house and carpenter's shop, Clarence-avenue, for Mr. H. Holloway; house, Crescent-road, Far Cotton, for Mr. L. C. Lovell; two houses, Beech-avenue, for Messrs. J. H. Welch & Co.; seven houses, Kingsthorpe-grove and Stanhope-road, for Messrs. A. L. & H. W. Chown; lavatories and cloak rooms, 6, The Parade, for the Royal Insurance Co., Ltd.—The T.C. have approved as winter work for the unemployed a scheme of road making on the Abington Estate, and also the construction of storm sewers, at an estimated cost of £15,000.—The Unemployment Grants Committee have approved of road construction schemes, and application is being made to the M.T. for sanction to raise a loan of £73,134 3s., the estimated cost of the schemes.

NORTHFLEET.—Plans passed by U.D.C.: Nine houses Burch-road, for Mr. H. W. Martin.

NORTHUMBERLAND.—Nineteen new schools, involving an expenditure estimated at £147,000, are required to bring the Northumberland B.E. Committee into line with the B.E.'s new policy of reducing the size of classes. To meet the requirements new schools will be necessary at Ashington, Hirst North, Hirst South, Hirst East, Bedlington Station, Bedlington Village, Stakeford, Choppington Guide Post, Nedderton, Cramlington, Shiremoor, Gosforth, South Gosforth, Forest Hall, Holystone, Newbiggin (West) East Denton, Newburn, Walbottle and Eltringham. It is suggested that the committee should consider the advisability of coping with this large programme over a period of five years.

NOTTS.—The annexe of the Shire Hall is to be converted into county offices, at a cost of £2,200, whilst it is proposed to adapt the servant's hall into a muniment room, the County Architect having declared it reasonably protected from exterior fire. It is built on brick arches and ceiled with steel girders, upon which rest concrete slabs. A load of £6,000 has been sanctioned for buildings at the Ransom Sanatorium. The Board of Control has asked the C.C. to provide accommodation for 400 or 500 mental defectives.

OLDHAM.—Funds are being raised by the congregation of the Glodwick Baptist Church for the erection of a new Sunday school.—A Committee of the T.C. has visited King's-road and instructed the assistant Borough Engineer to prepare bridge schemes. Bridge schemes are proposed at Goddard-street and Honeywell-lane.—The Borough Engineer has been instructed to prepare a scheme for levelling and draining the Salisbury-road market ground.—The extension and re-arrangement is proposed of the gas showroom.

OTLEY.—Relief schemes suggested by the U.D.C. include the widening of Otley Bridge, enlargement of swimming bath at Wharfmeadows, new footbridge from Sandbeds to East End, extension of water main in Farnley-lane widening of Pool-road and Weston-lane, and the continuation of Farnley-lane to the Ings.—Major F. H. Fawkes has given the Council additional woodland adjoining the Wharfmeadows Estate.—Plans passed: Two houses, Weston-lane, for Messrs. O'Brien & Richmond; house, Weston-lane, for Mr. W. L. Rhodes; house, Burras-lane, for Mr. E. Firth.

OSSETT.—The T.C. has now purchased a site from the Rowley Trustees for the erection of an elementary school at Gawthorpe.—A gas main is to be laid in Denby Dale-road, at a cost of £1,000.—Land is being purchased at Horbory-road, at a cost of £2,000, for a housing scheme.—Land is being purchased at a cost of £1,280, for playing fields, for the Grammar School.—Plans passed: Warehouse, Wakefield-road, for Mr. J. H. Nettleton.

OSWALDTWISTLE.—Plans passed by the D.C. House in Hawthorne-avenue, for Mr. A. Holgate; two bungalows in Sunny Bank-drive; and bungalow in New-lane. The D.C. have decided to acquire the Paddock Estate for housing purposes, and to borrow £2,613 for the construction of a new road across the estate.

OXFORD.—Plans passed by T.C.: Two houses, Bedlow-street, for Mr. D. Malling; house, Portland-road, for Mr. H. M. Argyle; house, Hamilton-road, for Mr. C. G. Eden; printing works, St. Aldate's-street, for Messrs. Fox, Jones & Co.; new wing to College building, for Governors of Lady Margaret Hall. A site in Cowley-road is suggested for the erection of a public convenience. It is recommended that a site in Broad-street be let to Mr. Arthur Pearson on condition that not less than £14,000 is spent on buildings.—To provide emergency accommodation for evicted tenants, the Housing Committee have prepared a scheme for the erection of 20 huts at a site in Gipsy-lane, at a cost of £3,600.

PADIHAM.—A proposal is under consideration to erect a bandstand with shelters in the Memorial Park, and to also place there a suitable memorial to the late Mr. Clayton, the donor of the park.

PARK PREWETT (HANTS.)—A house is to be erected at the county mental hospital for the assistant medical officer, at a cost of £2,000, and the plans have been passed.

PEMBROKESHIRE.—The Narberth Council will shortly invite tenders for the repair of the three arches, Norchard bridge, with alteration of the parapets.—The Haverfordwest R.D.C. has passed plans for a bungalow at Porthstinard, for Mr. Edwin Thomas, and a house at Llanychaer, for Mr. T. H. Phillips. A road improvement scheme is to be embarked upon by the Council, and grants have been applied for.—The Haverfordwest B.C. has decided to spend £3,000 upon repairs and extensions at the gas works and plant renewals. The work is to be put in hand at once.

PLYMOUTH.—The T.C. has accepted a tender at £79,874 for the erection of 134 houses at North Prospect.

PONTEFRACT.—Plans passed: Shop in Broad-lane, for Mr. W. J. Wilby; house in Halfpenny-lane, for Mr. W. Hodgson.

PRESTATYN.—It was announced that the Unemployments Grants Committee had promised grants towards the Dyserth and Meliden sewage disposal schemes, and the Waen water supply scheme, provided the M.H. sanctioned the necessary loans.

PRESTON.—The M.H. are to be asked to approve of the lay-out of the site of 50 new houses which it is proposed to erect between the arterial road, the Cemetery, and Miller-road. In order to give a better supply of water to Penwortham, the Water Committee recommend the laying of a 12 in. main from Jordan-street, along Fishergate Hill, to Penwortham Bridge, at an estimated cost of £1,550. The Lancashire C.E.C. decided the ask the C.C. for permission to raise a loan for £5,500 for the purpose of adapting and purchasing the St. Matthew's Free Church of England school for use as an engineering department and workshop for the Accrington Technical School. It was resolved, on the recommendation of the Architectural Sub-Committee, to seek power to borrow £700 to cover the cost of improvements in connection with the sanitary accommodation of Fleetwood Blakeston-street Council School. It was reported that the M.H. had sanctioned the raising of a loan for £7,700 to cover the cost of erecting a new school at Longton, the building itself to cost £6,881. The tender, £8,245, was accepted, and application was made and approved by the C.C. to raise the additional £1,364. The E.C. have resolved to utilise the Frenchwood school site for the erection of a central school, a junior elementary school, and a school for defective children. Competitive plans are to be invited for the lay-out of the site, and the erection of a junior elementary school.—The Water Committee recommend the laying of a new 12 in. main from Jordan-street to Penwortham Bridge, at an estimated cost of £1,550.—The Main Roads and Bridges Committee approved a scheme for widening a portion of the Preston, Lytham and St. Anne's main road, between Dock Bridge and the bridge across Liggard Brook, and for the reconstruction of the latter bridge. The total estimated cost of the work is £12,941.

RAWTENSTALL.—An enquiry has been held by the B.E. regarding a proposal of increasing the accommodation at Edyside School for the provision of 120 additional scholars.

REDCAR.—The T.C. has decided to erect another 50 houses.

RHOS (WREXHAM).—The North Wales Miners' Welfare Committee have made a grant of £8,000 to erect a Miners' Assembly Hall at Rhos. The scheme comprises an assembly hall to seat 1,000 persons, with a reading room, games room, baths, &c. The total estimated cost of the building is £15,000.

RHYDYPANDY.—A bridge is to be erected by the Tregaron District Council.

ROWLEY REGIS.—The erection of swimming baths, the paving of all footpaths, and the widening of numerous roads, at an estimated cost of nearly £60,000 are among the schemes adopted by the Rowley Regis (Staffs) Council.

RYE.—Plans passed by R.D.C.: Pair of cottages, Northam, for W. Tedham; bungalow, for Mr. Harvey.

SALISBURY (HANTS).—The P.C. has purchased land at Lock's Heath, for a burial ground, for £400, and is now laying it out at a cost of £100.

SCALBY.—Plans passed by U.D.C.: Bungalow for Mr. Beaumont, on Cross-lane; bungalow for Mrs. Rowe, on Burniston-road; bungalows for Mr. Firth and Mr. Boston, on Cross-lane.

SEDGEFIELD.—Plans passed by the R.D.C.: House at Chilton Buildings, for Mr. J. P. Coulson; bakery at The Broom, Ferryhill, for Mr. E. Callend.

SHEFFIELD.—Plans passed by T.C.: Bungalow, Cairns-road, for Mrs. E. Bolsover; two houses, Main-road, Handsworth, for Mr. G. Payling; 12 houses, Sandygate-road, for Messrs. T. W. Knowles & Son; four houses, Norton Lees-lane, for Messrs. Bonser Bros.; two houses, Norton Lees-lane, for Messrs. Bonser Bros.; two houses, Norton Lees-lane, for Messrs. Hammett & Co.; two houses, Richmond-road, for Mr. Thos. H. Ellis; four houses, Folds-crescent, for Mr. T. Leadbeater; two bungalows, School Green-lane, for Mr. L. Woodhead; house, Richmond-road, for Mr. J. Lee Hanstock; house, Cairns-road, for Mrs. E. Bolsover; four bungalows, Kennedy-road, for Messrs. S. Higton & Sons; house, Warmister-road, for Mr. A. Siddall; house, Prince of Wales-road, for Mr. Ernest Jennings; house, Shiregreen-lane, for Mr. Ernest Reeder; two houses, Richmond-road, for Messrs. E. J. Carey and W. Taylor; house, off Dalewood-road, for Mr. W. C. Davies; four houses, Abbey-lane, for Mr. J. Harold Stevens; bungalow and garage, Moorbrook-road, for Mr. H. Bartholomew; two houses, Toftwood-road, for Mr. F. Hessey; house, Bentley-road, for Mr. Margerison; two houses, Whirlowdale-road, for Mr. C. L. Marcroft; house, School Green-lane, for Mr. E. B. Ash; house, School Green-lane, for Mr. E. F. Cliff; house, Scott-road, for Mr. W. Harrod; house, saleshop and garage, Coleridge-road and Henson-street, for Mr. J. W. Jackson; six houses and garages, Bents-road, for Mr. J. H. Smith; bungalow, Abbey-lane, for Mr. E. Rosten; two houses and garages, Ecclesall-road South, for Messrs. J. Tofield and A. J. Belton; house, Leadstone and Havercroft roads, for Mr. Jno. Gibson; bungalow, Main-road, Handsworth, for Mr. L. C. Reading; bungalow, Main-road, Handsworth, for Mr. Ernest Williams; bungalow, Southey-lane, for Mr. A. Hathaway; bungalow, Cairns-road, for Mr. Frank Lane; house, Dalewood-avenue, for Mr. G. R. Parkin; two houses, Dalewood-avenue, for Mr. G. R. Parkin; four houses, Cairns-road, for Messrs. Spooner & Harrison; three houses (flats), Stoors Hall-road, for Mr. Charles Glossop; two houses, Carter Knowle-road, for Mr. Norman Booth; house, Severn-road, for Mr. J. E. Cooke; house, Cobnar-road and new road, for Messrs. S. Higton & Sons; four houses, garages and shops, Middlewood-road, and Langsett-avenue, for Mr. A. Lonsdale; house and garage, off Millhouses-lane, for Mr. J. H. Allen; house, School Green-lane, for Mr. A. Clayton; four houses, Brooklands-crescent, for Mr. G. Womersley; house, Muskoka and Barnet-avenues, for Mr. G. M. Taylor; house, Whiteley-lane, for Mr. W. H. Bland; two houses, Dalewood-road, for Messrs. Gillam & Co.—The Corporation Markets Committee has generally approved data and explanatory statement by Mr. Hal Williams as to preliminary design in connection with the proposed abattoir scheme. A scheme will shortly be submitted by the Committee to the Corporation.—The City Architect has been asked to prepare plans for various works at the Intake Village Cemetery and the Woodhouse Cemetery.—A loan of £24,000 has been sanctioned for the widening of the Handsworth main road.—The Estates Committee has been asked to include in a future housing scheme 31 houses to replace a similar number to be demolished on the site to be cleared in connection with the proposed public hall.—The L.N.E.R. bridge which crosses the Retford-road at Woodhouse is to be widened at a cost of £23,000.—The M.H. has approved a scheme for the erection of a further 382 houses.

SOUTHPORT.—Plans passed by T.C.: Two houses, Haig-avenue, for Mr. H. Sutton.—New buildings for the electricity department are to be erected, at a cost of £1,150.—The B.S. has been authorised to continue negotiations for the acquisition of land at Ainsdale, on the Ince-Blundell Estate, for a recreation ground.—Plans have been passed for the lay-out of the Ainsdale Estate.—A site is to be secured for a new senior school.—The Electricity Committee has prepared a scheme for a new boiler house and equipment, to cost £35,000.

SOUTH SHIELDS.—The construction of the Coast-road from South Shields to Whitworth Colliery has commenced. An underground convenience is to be constructed at Imeary-street. The B.S. has prepared a design for a bowl house and aviary at North Park estimated to cost £730. Gipsies Green is to be laid out as a park, at a cost of £26,000. Plans passed: Messrs. T. A. Page & Son, for The Harton Colliery Miners' Lodge, per Jas. Stewart, secretary, proposed 4 self-contained houses, Harton-lane, adjoining the Workhouse; Messrs. T. A. Page & Sons, for Mr. Milton Swales, proposed self-contained house, North-avenue, Harton; Messrs. T. A. Page & Sons, for Mr. Alf. Ridley, proposed self-contained house, North-avenue, Harton.

STALYBRIDGE.—The T.C. has appointed the Mayor to represent the Corporation on the D.C. proposed to be established for the area of Lancashire and Cheshire in regard to town planning.—A site near Grey-street is being considered for the erection of a school.

STOCKTON.—The management committee of Stockton and Thornaby Hospital is to give consideration in the near future to the question of providing additional accommodation at the institution. A scheme under contemplation will entail an expenditure of approximatly £40,000.—Plans passed by the R.D.C.: Bungalow, Thorpe Thewles, for Mr. W. Howe; house at Wynyard-road, Wolviston, for Mr. Loughran, Port Clarence; house, Wolviston Green, for Mr. Dearlove; bungalow, Preston, for Mr. J. Wheatley; house, Preston, for Mr. F. Hay; house, Elton Back-lane, for Mr. W. Beswick, Stockton.—In order to provide accommodation for families who will be houseless by the clearance of the riverside slum area, the district valuer has been requested to negotiate with the owners of land at Mount Pleasant, Norton, for the purchase of 10 acres, on which it is proposed to erect 20 parlour type houses, 74 kitchen type, and 72 flats.

STOCKTON-ON-TEES.—Plans passed by T.C.: One hundred semi-detached houses on the Blue Hall Estate, Stockton Corporation; pair of semi-detached bungalows, Barnard-avenue, Mr. H. Lowry; pair of semi-detached houses, Barnard-avenue, Mr. J. F. Hornsby and Mrs. C. W. Piper.

STOKE-ON-TRENT.—Plans passed by T.C.: Lay-out of land at High-lane, Burslem, for Rev. J. R. Mee's trustees; lay-out of land at High-lane, for Mr. H. J. Steele; two houses off High-lane, for Messrs. Sharratt & Austin; house, Stone-road, for Mrs. Boden; two houses, Stone-road, for Mr. A. Bates; house, Stone-road, for Mr. L. Carblidge; two houses, Harpfield Estate, for Messrs. Dimbleby & Randalls; two houses, Oakhill Hall Estate, for Mr. William Ball; house, Stone-road, for Mr. E. V. Hammersley; house, Stone-road, for Mr. S. E. Watts; two houses, Harpfield Estate, for Mrs. E. G. Brown; school buildings, Oakhill School, for E.C.; four houses off Trentham-road, for Mr. W. Ball; two houses, Longfield-road, for Mr. T. Horwell; house, Victoria-road, for Mr. J. Foskett; house, Chell Green, for Mr. W. Collear; two houses, High-lane, for Mr. E. Kilgour; bungalow, Weston-road, for Mr. W. J. Blakeman; four houses, Market-square, for Messrs. J. Moss & Son; two houses, Milton-road, for Messrs. Shenton Bros.; house, Birches Head-road, for Mr. C. Brandrick; house, Rough Close, for Mr. W. H. Edwards. "The Foaming Quart" public house, High-street, Burslem, is to be rebuilt. A parish hall is to be erected at the corner of Mulberry-street and Wellington-street, Hanley. The B.S. has been asked to prepare plans for a bridge across the canal in connection with a new road at Hanley to the destructor works. The Sutton Trustees propose to build 160 houses on the Stoke Lodge site. A site at Hanley-road has been purchased by the T.C. at Hanley-road, for £2,672 for housing purposes.

STOKESLEY.—Plans passed by the R.D.C.: Six bungalows in Worsall-road, Yarm, for R. Seymour; three cottages and one shop at Great Ayton, for S. R. W. Moody; three cottages at Great Broughton, for W. H. Whitfield.

STRETHAM.—Revised estimates have been prepared by the county surveyor of the Isle of Ely for the erection of a bridge across the Old West River, showing costs of £3,000 for bridge and culvert, and £1,400 for approaches and roadway. The plans have been approved by the M.T. engineer and by the Ouse Drainage Board.

SUNDERLAND.—The Corporation Parks Committee has approved a scheme for the erection of a shelter, shops, and bathing bungalows on the low promenade at Roker, at a cost of £6,000.

SUTTON.—Plans passed by U.D.C.: House, Aultoneway, Garden Suburb, for Mr. H. T. Jackson; five houses, Lower-road, for Mr. W. J. Wyatt; two houses, Aultone-way, Garden Suburb, for Lovatt & Shaw; five houses, Greenhill, Garden Suburb, for Mr. C. A. Hudson, submitted by Mr. T. S. Town; pavilion for Sutton United Football Club; shop, with living rooms over, at the corner of London-road and Aultone-way, for Mr. H. Chessell; four cottages, Gander Green-lane, for Mr. F. Kennett.

SUTTON COLDFIELD.—Plans passed by T.C.: House, Belwell-lane, for Messrs. W. Hastilow & Sons; two pairs of houses, Beech-road, for Mrs. R. Hill; house Chester-road, for Mr. J. Whitehouse; house, Chester-road, for Mr. F. W. Harrison; house, Green-lanes, for Mr. Dineage; memorial church, Hollyfield-road, for rector and churchwardens; bungalaw, Hollyfield-road, for Mr. F. W. Falkener; house, Lindridge-road, for Mr. A. Showell; pair of houses, Penns-lane, for Mrs. Hall; house, Penns-lane, for Mr. W. E. Box; house, Penns-lane, for Mr. T. Grainger; house, Penns-lane, for Mr. C. J. Turrell; house, Penns-lane, for Mr. J. E. George; bungalow, Penns-lane, for Mr. B. G. Sheldon house, Somerville-road, for Mr. B. King; bungalow, Rectory-road, for Mr. H. W. Walker; house, Sherifoot-lane, for Mr. E. Goldsworth; two houses, Walsall-road, for Mr. F. R. Genders.

THAME.—Plans passed by U.D.C.: Two bungalows, Southern-road, for Messrs. W. Howland & Son.

THETFORD.—The Corporation has decided to construct a reinforced concrete wall to protect the south bank of the Little Ouse river from the Town Bridge to the Driftway.—The medical officer of health urges the need for a small pox hospital and a general infectious diseases hospital.

TORQUAY.—Land at Torcrest is to be laid out for development.—The T.C. has instructed the Harbour Engineer to proceed with the preparation of the detailed plans and drawings for forwarding to the Board of Trade and M.H. in connection with the application of the Corporation for sanction to the work and to the borrowing of the necessary money.—The B.S. has been authorised to proceed with the sea defence works, involving the construction of a length of concrete platform.—The B.S. is to prepare schemes for widening Newton-road. The water mains are to be extended to the Higher Erith-road district, at a cost of £2,250.—Land at Westhill is being purchased for £990, for an elementary school.—The M.H. has sanctioned a loan of £13,600 for the erection of 25 houses at Stentiford's-hill, in connection with the scheme for dealing with the Pimlico insanitary area.—Lymington-road, outside the Town Hall, is to be improved.—Plans passed by T.C.: Twelve houses at Barton, for Messrs. Ball & Wilkinson; house, Barton-road, for Mr. Yeo; two houses, Hampton Estate, for Mr. J. V. Harris; bungalow, Teignmouth-road, for Mr. R. W. Dobell; house, Teignmouth-road, for Mr. H. Kershaw; houses at the Mallock Estate, for Miss L. Ba... Messrs. W. Hearn, W. B. Evans, G. J. Parne... Horton, T. W. Allsop, and J. W. Harties... Sherwell Valley, for Mr. H. P. Green; hou... berry Vale, for Mr. S. Blatchford; two house... wylle-road, for Messrs. Donabie & Lang; tw... Sherwell Valley, for Mr. J. Donabie; house, ... Vale, for Mr. Wadham; house, Castle-road, ... R. C. Bruce; house, Windsor-road, for Mr. ... castle; bungalow, Teignmouth-road, for ... Kershaw; warehouse, Market-street, for ... Williams & Cox; bungalow, Mallock-road, ... Woods.

TRECEFEL.—Cardigan County Surveyor h... authorised to prepare a scheme for a new bri...

TREDEGAR.—The U.D.C. has received pl... estimates of its proposed erection of ladies' an... men's lavatories at the entrance to the pa... amount involved is £1,200.

TROWBRIDGE.—Mr. W. Snailum, the archi... been instructed to prepare plans for 20 hous... Rock Estate. Plans passed: Two bungalows, ... road, for Mr. C. H. Goater.—The fire station ... repainted.

TYNEMOUTH.—The T.C. has received sanct... the M.H. to borrow £1,555 for widening and ir... the junction of Preston-road and Rake Ho... It has been decided to reconstruct the Unio... The work includes the completion of the ... extension of the Quay, and the provision of ... barrier below the projected jetty as well as ... reconstruction.

WALLASEY.—The housing Committee of the ... to invite tenders for the erection of 56 house... construction on the Poulton-road and Bal... site. During the next twelve months it is ... to spend upon roads an amount of appro... £70,000.

WARWICK COTEN.—Plans have been prepa... handicraft centre at the Coten End Scho... extension of the County Hall has been comm... Messrs. Hyam & Sons, Ltd., whose contract ... has been accepted.

WELNEY.—Norfolk C.C. proposes the constr... a bridge across the River Oule to replace the su... bridge.

WEST HARTLEPOOL.—Plans passed by T.C... Hardy, bungalow, Hart-lane; A. Jolly, hou... donian-road; A. V. Spensley, conversion o... into flats, Stainton-street; Gledden & John... villas, Stockton-road.

WEYBRIDGE.—The U.D.C. has instruct... architects to prepare plans and estimates of ... of building 15 parlour and 32 non-parlour co... the existing municipal housing site.

WHITBY.—An enquiry has been held by ... into the U.D.C.'s application for sanction t... £2,700 for works of sewerage and sewage di... Whitby.

WHITLEY BAY AND MONKSEATON.—Plans ... passed by the U.D.C. for the erection of 20 ne... in various parts of the area.

WILLINGTON.—Application is being made ... U.D.C. to the M.H. for sanction to the erec... further 60 houses.

WILNCOTE.—Warwick C.C. proposes a ... Watling-street, between Wilncote and Tw... for the erection of a mining school, for ... Miners' Welfare Fund has made a grant of ...

WIMBLEDON.—Plans passed by B.C.: Mr ... Bell, house, 24, Hubert-road; Messrs. W. ... head & Co., house, Mount Ararat-road; ... Pritlove, billiard hall in Merton High-street; ... Burt, Boulton & Hayward, Ltd., house, Pep...

WOMBWELL.—Plans have been prepared ... erection of a new picture house; tenders for ... are shortly to be invited by the architect... Castlelow, Park-row, Leeds.

WORKSOP.—Plans have been passed by ... for the erection of remaining sections of the N... lane council school, to accommodate 440 ... and also for the erection of a school for 568 ... Wells-road.

WORTHING.—Plans passed by T.C.: T... King Edward-avenue, for F. Sandell & S... street, leading west from Heene-road, Sin... & Son, for C. Jarvis; house, St. Andrew's-... A. Churcher; lock-up shop and flat, Railway-... F. G. Abell for H. P. Brazier; two houses, St. ... avenue, R. C. Turnham, for W. J. Webb; t... St. Thomas's-road, C. E. Parsons, for W. C... W. and C. E. Parsons; two houses, Pem... J. E. Lund, for J. Goodman; 14 houses, ... road and Church-walk, for E. H. Barton; t... Bulkington-avenue, J. E. Lund for H. A. Wel... St. Lawrence-avenue, for J. Banfill; shop ... and two flats, High-street, A. M. Butler for A... seven lock-up shops, lounge and lavatory, ... road, G. H. Treacher, for M. S. Crane; two ... joining up Pavilion-road and Bulking... (Sports Ground), Denman & Son, for H. ... house, Grand-avenue, for S. W. Phillips v ... and garage, Grand-avenue, H. J. Sparks for J... house, Homefield-road, J. E. Lund, for ... house, St. Andrews'-road, E. Nutter, for W. ... two houses, St. George's-road, H. M. Potte... World; gymnasium, rear of "Homefield," ... road, Denman & Son, for G. B. Bennett; ... road, E. W. Sparks, for F. W. Pannett.

FIRES.

LONDON, E.—A fire broke out recently at ... premises of Messrs. Rylands & Sons, Lt... manufacturers, Bethnal Green-road. Dan... extent of many thousands of pounds was c...

SWANSEA.—Considerable damage has be... fire to the ship chandlery stores of Me... Evans & Co., in Gloucester-place.

PRICES CURRENT OF MATERIALS

the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Alongside, in River Thames
o London Bridge. £ s. d.
.... 4 3 6
ocks..... 3 18 6
Delivered at London Goods Stations.

£ s. d.		£ s. d.
2 13 3	Best Blue Pressed Staffs.	9 5 0
2 15 3	Do. Bullnose ..	9 15 0
3 8 3	Blue Wire Cuts	7 5 0

e Fire brick:—
8 11 0 3 in..... 10 3 0

	D'ble Str'tch'rs	31 10 0
	D'ble Headers	28 10 0
	One Side and two Ends ..	32 10 0
	Two Sides and one End	33 10 0
	Splays and Squints	31 0 0

23 0 0
22 10 0
29 10 0
ty. £1 per 1,000 less than best. Cream
tra over white. Other colours. Hard
xtra over white.

EZE CONCRETE SLABS.

Delivered London.

s. d.		s. d.
er 2 1	3 in. per yd. super	2 11
2 6	4 in. "	3 6

s. d.		
10 6	per yard.	
14 9	" "	
15 6	" "	delivered 2 miles radius Padding-ton.
15 6	" "	
14 0	" "	
15 0	" "	
10 6	" "	
7 6	" "	

red in London area in full van loads.
Cement, British
cification Test £2 18 0 to £3 3 6
e at Vauxhall in 80-ton lots.
n extra on above..... 0 10 0
.... 4 8 0
..... 8 15 0
..... 5 15 0
, White..... 5 15 0
Pink 5 10 0
Pink 3 0 0
White 3 12 6
..... 5 12 0
..... 3 9 0
..... 3 17 0
..... 2 11 9
..... 2 11 9
ne Lias Lime..... 2 4 6
..... 17 0 0
ngs 1 12 0
re charged 1s. 9d. each and credited
rned in good condition within three
pd.
clay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

elivered in railway trucks at s. d.
ark, Paddington, G.W.R., or
h, G.W.R., per ft. cube..... 2 9½
ed in railway trucks at Nine
W.R., per ft. cube..... 2 11½
E—
ed, in random blocks of 20 ft.
livered in railway trucks at
L. & S.W.R., South Lambeth
W.R. and Westbourne Park,
, G.W.R., per ft. cube..... 4 4
red on road wagons at above
r ft. cube..... 4 5
d, 3d. per ft. cube extra.
cube extra for every foot over 20 ft.
½d. beyond 30 ft.
STONE.
t any Goods Station, London.
ocks, up to 10 ft. cube. Per ft. cube 7 /-
from 10 ft. and over " 17 /-
..... " 27 /-
our sides ..... " 32 /-
E—*Robin Hood Quality.*"
any Goods Station London. s. d.
ides landings to sizes (under
.....Per Ft. Super 5 6
sides, ditto..... " 6 0
es slabs (random sizes) " 2 3½
sawn one side slabs
..... " 1 6½
o, ditto ..... " 1 4
any Goods Station London.
blocks.....Per Ft. Cube 6 3
ides landing to sizes (under
.....Per Ft. Super 5 1½
ides ditto ..... " 6 1½
es slabs (random sizes) " 2 10
ditto " 2 1½
ndom flags..Per Yard Super 9 0

TIFICIAL STONE.

ion Area in full van loads. s. d.
..... per ft. cube 6 6
..... " " 7 9
..... " " 8 3

WOOD.

D BUILDING DEAL.

per stan.	Inches.		per stan.
£34 0	3 × 6	£24 10	
32 0	3 × 11	30 0	
26 0	2 × 11	30 0	
26 0	3 × 9	26 0	
25 10	2½ × 9	27 0	
25 10	3 × 4½	25 0	
24 0	3 × 4	24 10	

WOOD (*Continued*).

PLANED BOARDS.

1 × 11 .... £37 10 | 1 × 9 .... £36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	33/6
⅞	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
½	17/6
¾	21/-
1	26/-

Inches	BATTENS	s. d.
¾ × 2	.....	2 6 per 100 ft.

SAWN LATHS.

Per bundle				0	2 8
Dry Wainscot Oak, per ft. super, as inch	0	2 0	to	0	2 6
¾ in. do. do.	0	1 6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1 9	to	0	2 6
Cuba Mahogany	0	3 0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per load	45	0 0	to	50	0 0
American Whitewood planks, per ft. cube ..	0	14 0	to	0	16 0
Best Scotch Glue, per cwt.	4	10 0	to	—	
Liquid Glue, per cwt. ..	4	7 0	to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

£ s. d.		£ s. d.
24 by 12..... 37 12 6	18 by 10	21 2 6
22 by 12 .... 34 0 0	18 by 9	18 12 6
22 by 11..... 31 5 0	16 by 10	17 12 6
20 by 12..... 29 15 0	16 by 8	13 15 0
20 by 10..... 25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Hip and valley tiles (per dozen) { Machine made	0 9 6

METALS.

JOISTS, GIRDERS, &C., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ¾ in...	13 10 0
⅜ in.	14 10 0	⅞ in. to 2¼ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	..... 50 %	..... 60 %
Water	45 %	..... 45 %	..... 55 %
Steam	40 %	..... 40 %	..... 50 %
Galv'd—			
Gas	35 %	..... 40 %	..... 50 %
Water	28½ %	..... 35 %	..... 45 %
Steam	22½ %	..... 30 %	..... 40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.....	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.....	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.....	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.....	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.....	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.....	2/1½	1/9	5d.

RAIN-WATER PIPES, &C.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. "	6 3	6 8	11 4
5 in. "	7 6	11 6	18 2
6 in. "	8 10	14 4	23 5

Per ton in London.

	£ s. d.		£ s. d.
IRON—			
Common Bars.....	13 10 0	to	14 10 0
Staffordshire Crown Bars—			
—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 10 0	..	13 10 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..	14 0 0
Hoop iron, basis price	16 10 0	..	17 10 0
Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g...	15 0 0	..	16 0 0
" " " 24 g...	16 0 0	..	17 0 0
" " " 26 g...	18 0 0	..	19 0 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..	22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..	22 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..	24 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22 0 0

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet. English, 4 lb. and up	43 0 0
Pipe in coils	43 10 0
Soil Pipe	46 10 0
Compo pipe.....	49 10 0

NOTE—Country delivery, 30s. per ton extra: lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton	30	0	0 ..	—
Do., ex country, carriage forward ..... per ton	31	0	0 ..	—

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.P.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ..	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps ..	35/-	45/-	66/-	126/- "

COPPER—	£ s. d.		
Strong Sheet ....per lb.	0 2 3	..	—
Thin " .... "	0 2 4	..	—
Copper nails .... "	0 2 3	..	—
Copper wire .... "	0 2 4	..	—
TIN—English Ingots "	0 2 4	..	—
SOLDER—Plumbers' "	0 1 2	..	—
Tinmen's ..... "	0 1 4	..	—
Blowpipe ..... "	0 1 5	..	—

PAINTS, &c.

		£ s. d
Raw Linseed Oil, in pipes .....per gallon		0 3 9
" " " in barrels .... "		0 3 11
" " " in drums .... "		0 4 2
Boiled " " in barrels .... "		0 4 2
" " " in drums .... "		0 4 5
Turpentine in barrels ..... "		0 5 9
" in drums (10 gall.) .. "		0 6 0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		57 0 0
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered		80 5 0
Red Lead, Dry (packages extra)....per ton		52 0 0
Best Linseed Oil Putty.....per cwt.		0 16 0
Filocol .....per cwt.		0 15 6
Size. XD Quality.....fkn		0 3 6

[*Concluded on next page.*]

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds	10½d.
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Oxford Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak.....	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water).....		0 12 0
Brunswick Black.....		0 7 6
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine.....		0 9 0
Cuirass Black Enamel.....		0 7 0

RENT RESTRICTION NOTICES: AMENDMENT ARREARS

A CASE which was reported in the *Times*, June 3, as "a test case," Williams *v.* Britannic Merthyr Steam Coal Company, Ltd., and Others, has illustrated some of the difficult questions arising in connection with recent Rent Restriction legislation.

It appears that in respect of a dwelling-house the standard rent of which was 7s. a week four notices of increased rent had been served, but only the last three are material to the decision, which were served respectively September 29, 1920; July 11, 1921, and August 6, 1922. No notice to quit had been given except in the last of these notices, none of which complied with the statutory form in several respects, but an application had been made under the Rent Act, 1923, which was passed July 31, 1923, to have the notices amended, and this application had been granted. Section 6, subsection (1) of that Act provides, "The County Court, if satisfied that any error or omission in a notice of intention to increase rent, whether served before or after the passing of this Act, is due to a *bona-fide* mistake on the part of the landlord, shall have power to amend such notice by correcting any errors and supplying any omissions therein which, if not corrected or supplied, would render the notice invalid, on such terms and conditions as respects arrears of rent or otherwise as appear to the court to be just and reasonable, and if the court so directs the notice as so amended shall have effect and be deemed to have had effect as a valid notice."

Section 1, subsection (1) of the Rent Restrictions (Notice of Increase) Act, 1923, provides that where notice of intention to increase rent has, "whether before or after the passing of this Act, been served on a tenant in conformity with subsection (2) of section 3 of the principal Act, and a notice to terminate the tenancy was necessary in order to make such increase effective, the notice of increase shall have effect and shall be deemed always to have had effect as if it were or had been also a notice to terminate the existing tenancy. . . ."

Before proceeding with the main question raised in the case it may simplify the points to make two observations. First, it has been held in Aston *v.* Smith (*Weekly Notes*, May 3) that under the above subsection of the Increases Act retrospective effect is given to notices of increase of rent as notices to quit; and secondly, it has been held in the case we are now considering that the powers of amendment conferred by section 6, subsection (1) of the Rent Act, 1923, extend to amending a notice of increase which was not accompanied by a notice to quit.

Having thus cleared the way by showing that the notices of increase operated retrospectively, and were made valid by the amendment, we come to the main point in the case, which was what was the effect of these notices? From the report in the *Weekly Notes* (June 21), published since this note was written, it appears the plaintiff was an employee and the rent had been deducted from his wages.

The County Court Judge had held that all payments already paid by way of rent under these notices as amended could be retained by the landlord, but that sums not so paid which would become payable by reason of the amendments could only be recovered in respect of a period of six months before the order to amend, by reason of section 8 subsection (1) of the Act of 1923, but the Divisional Court has reversed this judgment.

The point depends upon a number of provisions in the Acts.

By section 8, subsection (1) of the Act of July, 1923, it is provided "No increase of rent which becomes payable by reason of an amendment of a notice of increase made by order of the County Court under this Act shall be recoverable in respect of any rental period which ended more than six months before the date of the order."

Subsection (2) is as follows: "Any sum paid by a tenant or mortgagor which under subsection (1) of section 14 of the principal Act is recoverable by the tenant or mortgagor shall be recoverable at any time within six months from the date of payment but not afterwards, or in the case of a payment made before the passing of this Act at any time within six months from the pas Act but not afterwards."

This latter subsection was held to this case except as showing ability by the tenant was still tion 14, subsection (1).

The answer given by the C conundrum appears from the re been that, as by section 8, subsect a notice amended under section (1) rent was only recovera landlord in respect of a which ended within six months the rent paid in respect of the was irrecoverable by the landlo tion 1 of the principal Act, and coverable by the tenant under se section (1) of the principal Act

At present we find the decis cult to follow, and there woul sections of the Acts which are to in the case as at present which introduce time limits. tion (3) of section 8 provides in that section shall effect the o Notices Act, 1923, and the p tion 1, subsection (1) of the N introduces a time limit as follo in this Act shall entitle a land passing of this Act to recover in respect of any period befor 1922, the increase of rent made Act, or any sums which have from the landlord before that of deduction of rent or otherwi due before that date which has by reason of such deductions made therefrom, *but section 14 of the principal Act shall not crease of rent made valid by was paid or recovered from a December* 1, 1922."

We do not know whether t before the Court, but if the Not spective and the notices were sence of notice to quit, then an appear unnecessary, and even is made of that defect section Act, 1923, is not to affect the Notices Act. In this case, hov stand that all the notices w other respects and thus had to comply with the statutory the decision.

BUILDING TRADE WAGES IN SCO

THE following are the present rates of wages in the building trade in the pr Scotland. Every endeavour is made to ensure accuracy, but we cannot be resp that may occur:—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	M
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	
Airdrie	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Alexandria	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Blairgowrie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Coatbridge	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Dumbarton	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	
Dumfries	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	
Falkirk	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	
Hamilton	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Hawick	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	
Kilmarnock	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Kirkcaldy	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	
Leith	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Motherwell	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Stirling	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	

* The information given in this table is copyright. The rates of wages in the various Wales are given on page 258.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

		s.	d.
nd throwing or wheeling and filling carts, arting away to shoot—6 ft. deep	per yard cube	11	6
clay	„ „	1	0
very additional depth of 6 ft.	„ „	0	6
and strutting to trenches	per foot super	0	5
sides of excavation, including shoring	„ „	1	0

CONCRETOR.

		s.	d.
cement concrete in foundation 1 to 6 ..	per yard cube	35	0
underpinning in short lengths	„ „	7	6
floors 6 in. thick	„ „	3	6
beams	„ „	4	0
gregate 1 : 2: 4	„ „	10	0
isting not exceeding 10 ft. beyond the 0 ft.	„ „	3	2

BRICKLAYER.

		£	s.	d.
brickwork in lime mortar and Fletton	per rod	30	0	0
stocks	„	7	10	0
Staffordshire blues	„	22	0	0
Portland cement and sand	„	2	0	0

FACINGS.

		s.	d.
facing in English or Flemish bond for 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
struck or weathered joint	„ „	0	0	3

ARCHES.

		s.	d.
to the price of ordinary brickwork :— nal in half brick rings	„ „	0	0	10
ocks	„ „	0	1	9
nd gauged jointed in putty camber or ntal	„ „	0	6	0

SUNDRIES.

		s.	d.
rse in double course of slates breaking nd bedded in Portland cement	„ „	0	1	1
linary register grates and stoves	each	1	0	0
tchener, including forming flues, &c., ll necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
horizontal damp course	per yard sup.	4	3
ter-inch vertical damp course	„ „	9	0
flats in two thicknesses.....	„ „	6	6
.....	per foot run	0	3
d fillet 6 in. high	„ „	1	3

MASON.

		s.	d.
templates fixed	per foot cube	12	6
sills fixed	„ „	21	6
and all labour fixed	„ „	10	6
one fixed	„ „	19	6

SLATER.

		s.	d.
n. × 8 in. 3 in. lap, including nails....	per square	72	9
n. × 10 in. Do. Do.	„	80	9
n. × 12 in. Do. Do.	„	90	0

CARPENTER AND JOINER.

		s.	d.
in plates .....per foot cube		5	3
joists	„ „	5	9
oofs, floors and partitions	„ „	6	3
usses	„ „	8	3

		¾"	1"	1¼"	2"
close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
ng for concrete floor, in- struts or hangers .. „		50	0
eams .....per ft. sup.....		1	0
rches ..... „		1	6
ds and bearers ..... „		1	0

FLOORING.		¾"	1"	1¼"	1½"
shot	per sq.		49/-	58/-	67/-
d and grooved	„		54/-	65/-	72/-
ngs	„	45/-	55/-		
rting, including back- d grounds .....per ft. sup.		1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
alf moulded sashes or casements	per foot super	1	10
Do. Do.	„ „	2	1
ng and fixing	„ „	0	4
rames with 1 in. inner and outer 1½ in. pulley stiles tongued to linings, od sills with 2 in. moulded sashes in double hung, double hung with pul- es and weights; average size.....	„ „	3	9

DOORS.		1¼"	1¾"	2"
uare framed .....per ft. sup.		2/1	2/4	2/6
Do.	„	2/5	2/8	2/11
oulded both sides	„	2/8	2/11	3/2
Do. Do.	„	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup	1/8	1/9	2/0
Deal shelves and bearers	„	1/5	1/7	1/10
Add if cross tongued	„	2d.	2d.	2d.

STAIRCASES.	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail; average 3 in. × 3 in.	„ „	6	0
Add if ramped	„ „	11	10
Add if wreathed	„	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/4
Sash fasteners	11½d.	Mortice locks	5/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays.....	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	17	0
Plain compound girders	„	20	0
Do. stanchions	„	23	0
In roof work	„	28	0

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints ..	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do. ..	„	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	„	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	„	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	„	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	59	0
Do. Do. in flats	„	57	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run.	0	6
Soldered seam	„ „	1	6
Copper nailing	„	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2	
Do. service	„	1/8	2/2	2/7	3/10		
Do. soil	„						7/6
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	„	1/2	1/8	2/1	2/10	3/6	
Red lead joints	„	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	„	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	„				14/7	19/6	
Bib cocks and joints ..	„	6/4	9/7	15/4	41/-		
Stop cocks and joints	„	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	2
Do. Do. Sirapite	„ „	2	4
Do. Do Keen's	„ „	3	3
Add sawn lathing	„ „	1	5
Add metal lathing	„ „	2	3
Portland cement screed	„ „	1	10
Do. plain face	„ „	3	0
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.		3
26 oz. Do.	„ „	1	0
Obscured sheet	„ „	1	1
⅛ in. rolled plate	„ „	0	9
¼ in. rough rolled or cast plate	„ „	0	10½
¼ in. wired cast plate	„ „	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	„ „	0	7
Plain painting 1 coat	„ „	0	9
Do. 2 coats	„ „	1	2
Do. 3 coats	„ „	1	9
Do. 4 coats	„ „	2	4
Graining	„ „	2	3
Varnishing twice	„ „	1	9
Sizing	„ „	0	3
Flatting	„ „	0	7
Enamel	„ „	1	1
Wax polishing	per foot sup.	0	6
French polishing	„ „	1	3
Preparing for and hanging paper	per piece	2/- to 4/-	

es apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

NEW COMPANIES.

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 117, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

PEIRSON & Co., LTD. (196,807). Registered March 28. Structural engineers and contractors. Lincoln House, High Holborn, W.C. Nominal capital, £5,000.

SYDNEY A. HUNTER, LTD. (197,041). Registered April 5. 56, Buckingham Gate, S.W.1. Builders' merchants. Nominal capital, £10,000.

HOUGHTON & JONES, LTD. (197,036). Registered April 5. 24, North John-street, Liverpool. Builders and contractors. Nominal capital, £4,000.

E. J. RAWLINS & Co., LTD. (197,035). Registered April 5. 116, Burley-road, Leeds. Manufacturers of paint, colour and varnish. Nominal capital, £3,500.

GWENT BUILDING & CONSTRUCTION CO., LTD. (197,000). Registered April 4. 20, Lucas-street, Newport, Mon. Builders and contractors, &c. Nominal capital, £600.

CANNON, GREEN & Co., LTD. (196,852). Registered March 31. 16, Walton-street, Aylesbury, Bucks. Builders, builders' merchants, house decorators, undertakers and the like. Nominal capital, £5,000.

WINGATE, LTD. (196,910). Registered April 1. 76, Lemon-street, Truro, Cornwall. Builders and contractors, &c. Nominal capital, £3,000.

TILES (LONDON), LTD. (197,042). Registered April 5. 2–3, Duke-street, St. James', Piccadilly, S.W.1. Tiles, bricks, cement, lime and mortar manufacturers and dealers. Nominal capital, £100.

GEO. HYDE & SONS, LTD. (197,201). Registered April 11. Builders and decorators. Nominal capital, £3,500.

SCUNTHORPE SILICA BRICK CO., LTD. (197,239). Registered April 12. Brick and tile manufacturers, &c. Nominal capital, £10,000.

JOHN HUNT, LTD. (197,089). Registered April 7. Builders and contractors. Nominal capital, £5,000.

JOHN HEAP & SONS, LTD. (197,068). Registered April 7. Pioneer Saw Mills, St. Andrew's-road South, St. Annes-on-the-Sea. Joiners, builders and contractors. Nominal capital, £8,100.

TRAMONTINI, LTD. (197,077). Registered April 7. Builders' merchants, contractors, decorators, sanitary engineers, &c. Nominal capital, £6,000.

HARD & DICKERSON, LTD. (197,346). Registered April 16. 12, Brunswick-terrace, Cambridge. Building contractors, ironmongers, &c. Nominal capital, £2,000.

H. & C. THOMPSON BROS., LTD. (197,311). Registered April 15. Joiners and builders. Nominal capital, £2,000.

THOS. HYAM & SON, LTD. (197,303). Registered April 15. 6, Beauchamp-avenue, Leamington Spa. Builder and contractor. Nominal capital, £1,000.

ESTATES (ST. ANNES), LTD. (197,309). Registered April 15. 20, Wood-street, St. Annes-on-the-Sea. Builders and contractors. Nominal capital, £10,000.

TIMMIS & Co., LTD. (197,359). Registered April 16. Stamber Mill, Stourbridge, Worcester. Fire brick manufacturers, tile makers, &c. Nominal capital, £35,000.

CHARLES CRABTREE (BLACKPOOL), LTD. (197,254). Registered April 14. Carter-street, Blackpool. Plumbers, glaziers, builders, &c. Nominal capital, £2,000.

WOOD & SON (CROYDON), LTD. (197,517). Registered April 26. Builders and contractors. Nominal capital, £500.

THOMAS WARRINGTON & SONS, LTD. (197,427). Registered April 22. Builders and contractors. Nominal capital, £2,500.

CHAMPION PAINT CO., LTD. (197,412). Registered April 22. 37, Canning-street, Birkenhead. Paint manufacturers and merchants. Nominal capital, £1,500.

PATENTS

APPLICATIONS PUBLISHED.*

211,359.—N. Cockburn and J. Gilroy: Vertical bath tap.

196,625.—J. Kwachin: Adjustable desks for working, or flat writing tables.

211,378.—W. H. Parkes: Chimney and ventilating shafts and shaft tops.

211,387.—J. W. Guimont: Radiators for heating buildings.

211,399.—W. Williams, Jun.: Chimney, ventilator, and other cowls.

206,129.—Signal Ges: Machines for testing materials.

211,424.—G. H. Larsson: Interchangeable crushing-plates for crushing machines.

212,289.—L. G. J. Bratt: Kitchen ranges.

212,298.—M. Vogel-Jorgensen, E. Ronne and K. Middelboe: Process and apparatus for the utilisation of the combustion gases from rotary cement burning kilns.

212,301.—J. W. Kitchen, V. Lefebure and Powell Wood Process Syndicate, Ltd.: Impregnation of timber.

212,320.—F. R. Dickinson: Overflow and waste fittings of lavatory basins, sinks, and baths.

212,321.—D. Davidson: Reinforced-concrete structures.

212,327.—W. N. Haden, C. I. Haden and F. H. Horton: Apparatus for preventing waste of water in baths.

212,328.—Major & Co., Ltd., and W. Sangwin: Reinforced-concrete road foundations.

212,340.—N. M. Bell: Domestic fire-grate bottoms.

212,356.—R. H. Macartney: Domestic tables.

212,380.—C. E. P. Gabriel: Holding or retaining devices for sliding doors and windows.

212,406.—F. Morton: Paving blocks or treads.

212,419.—J. A. Eriksson: Method of manufacturing a porous material from Portland cement.

212,460.—J. T. Spence: Hinges.

212,470.—P. Junge: Deep-boring appliances.

212,474.—K. Walter and O. Henkel: Concrete linings for mining and like tunnels.

212,477.—F. Bodson: Construction of concrete and like structures.

211,899.—P. Pench: Machines for moulding concrete blocks.

211,926.—Paton, Calvert & Co., Ltd., and J. Hastings: Kerbs or fenders for fire-places.

211,928.—C. J. Copner: Chimney tops.

211,944.—J. Hodson: Manufacture of basic bricks.

211,947.—A. A. Thornton (Naamlooze Vennootschap Korrelbeton Maatschappij voor Woningbouw in Poreuze Beton): Walls, floors, and roofs of unrammed concrete.

211,948.—W. Hopkins: Mechanism for vibrating and consolidating concrete within moulds.

211,972.—C. N. Exley and H. A. Rimmer: Process for coating walls and paper.

211,973.—R. D. Johnson: Means for connecting pipes.

211,977.—W. Mycock: Boilers of hot-water installations.

211,987.—J. Howard, jun., and I. Downing: Manufacture of pipe fittings.

211,990.—J. E. Delbridge: Hinges.

212,025.—S. Timings: Wardrobes, showcases, shop window fittings.

212,056.—S. J. Kingsman, R. D. Kingsman and A. W. Bean: Fixing of shelves.

212,074.—J. Jones: Extension tables.

212,106.—Building Accessories & Flooring Co., Ltd., H. Goodwin and H. Smith: Manufacture of coloured asphalt.

212,116.—W. H. Tonks and W. Sparks: Stays or fasteners for casements.

212,142.—G. W. Bennett: Means for attaching glass plates to walls.

212,149.—Goddard, Walker & Brown, Ltd., and E. T. Beal: Device for showing a combination of colour schemes for house decoration.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

TRADE NEWS

THE first annual outing of the Tri Construction Co., Ltd., was held on J when the members of the staff journe Bognor by chars-a-bancs. In toasting the of the staff and employees of the Compa Managing Director, Major W. H. Smith, the stormy days of the first official ou the commencement of the company's w in that the Triangular Construction Co five years ago had ventured out when t clouds of very bad trade had burst thei and made it very difficult to struggle on was largely due to the united good spirit, and determination of all the employe success was now so rapidly approaching. Smith referred to the particularly good in the Triangular Construction Co., Ltd., staff, employees and management, poin the value of master and man working in unison, whereby everyone gave of h ensuring the maximum efficiency and r in a prosperous business. He then pro vote of thanks to the outing commit which Mr. Fernandes, as hon. sec., repl on behalf of all the employees expres thanks to the Board of Directors f assistance in making the day a success the Managing Director himself as be instigator of the proposition.

In the full-page advertisement of Archibald D. Dawnay & Sons, Ltd., works-road, Battersea, S.W.11, in week's issue, it was inadvertently state underline to the illustration that the ste for the building over Mansion House was designed by the firm. We are point out that this was an error, and designer was Dr. Oscar Faber, O.B.E M.Inst.C.E., engineer.

We have received from Messrs. Lumb a copy of their new 1924 catalogue. It many new designs, including their Dreadnought unbreakable" mild steel boilers and the "unbreakable" mild s patent boilers with corrugated fire b catalogue also includes the latest mode "Royal Beacon" boilers.

Messrs. William Shepherd & Sons, L now installed a second telephone line. Rochdale number, 912, is entirely the new numbers being Rochdale 702

A demonstration was given at Manc July 23 with a view to proving the e recently-discovered processes for bitumen stable and fire-resisting. By which is the outcome of three years o work by Mr. R. O. Child, the chemist D. Anderson & Son, Ltd., it was clai the new form of roofing, only one expensive as either slates or tiles, wo flames and heat of three or four degrees Fahrenheit. The experim place in the grounds of Messrs. premises. A brick building, about 2 in three sections, and stacked with w rated with petrol, was set on fire. section was roofed with bitumenised the other two with slates and tiles. informed: 'The felt roof was the only remained intact at the end of the conflagration. These tests prove tha so treated will not support combustic the purposes for which it is used is n mable. While ordinary bitumen will by heat and liquifies at 250 deg. F., a of covered cable will allow the copp sink from the centre, bitumen tre Anderson's process will remain stable atmospheric change. Painted with bitumen every five years, a bitume last a lifetime. It is a better insulato and cold, and better protection from and wet than a roof of tiles or slate D. Anderson & Son, Ltd., were supply felts to the British Government Crimean War.

In connection with the New Wa Wing of East Suffolk and Ipswich " Bennett's Patent Bed Grip and F System" was laid by Messrs. The "Z Flooring Co., Ltd.

TENDERS

tions for insertion under this heading should to "The Editor," and must reach him not Tuesday evening.
accepted. † *Denotes provisionally accepted.*
recommended for acceptance.
accepted subject to modifications.

EN.—For construction of reservoir at or the T.C. :—
Chapman £42,215 11 3

.—For the erection of six cottages, with the Staff of the B.G. :—
Bros., Finsbury £5,285
ens, Holloway 5,140
ennett, Leytonstone 4,250
E. C. Briers, Boreham Wood .. 4,036

.—For construction of reinforced concrete nywern-road, for the U.D.C. :—
vans, Newport £549 12

HEAD.—For repairs to cabmen's shelters, :—
er £124 10

HEAD.—For the erection of a sub-station e, for the T.C. :—
lams & Co. £1,082

MOUTH.—For foundations for the erec- ilion in the Pleasure Gardens, for the B.C. g, Town Hall; quantities by Messrs. Broad, ckerill, 2, Oxford-road, Bournemouth :—
Seward, Ltd., Bournemouth .. £4,175

RD.—For construction of ferro-concrete holt, for the T.C. :—
ind & Co. £3,700

ORD.—For painting houses in Boston or the Middlesex C.C. :—

s & Son	£240	17	0
is	184	13	6
Hidden & Co.	159	5	6

ORD.—For the construction of Section 2B West road, for the Middlesex C.C. :—

Sons, Ltd.	£54,314	10	0
& Co.	52,564	0	0
s	50,548	16	0
& Co., Ltd.	48,512	2	9
croft	48,305	0	0
Public Works, Ltd. ..	48,188	11	2
nderson	48,092	12	7
& Co., Ltd.	46,718	2	6
ones & Sons, Ltd.	45,746	13	4

-WITH-BURROW.—For reconstruction Bridge, for the Lancashire C.C. :—
h & Sons, Linton-in- mel £1,429 19 10

-ON-TRENT.—Conversion of 320, Wet- to offices and caretaker's quarters, for the

ges & Sons £498

GE.—For the erection of 18 houses in y. for the T.C. :—
ell £9,450
. Ltd. 9,320
& Bailey 9,250
ennett & Sons 9,000

—For the Whitchurch to Ely pipe-line, letion of the Wenallt Reservoir, for the

es for Whitchurch–Ely main—
& Co., Ltd., Middles- gh £5,801 0 9

ngineer 4,370 19 6
with brick-faced walls, of the Wenallt oir—
Broadhead & Co., ling and Cardiff 73,863 5 0

—For construction of about 300 lin. yds. e pipe sewers, &c., for the R.D.U. Mr. urveyor, 20, Park-place :—
Llantrisant £654 11 6
lams, Newport 654 3 6
m, Barry 541 5 7
y, Nadyr 532 1 6
Contracting Co., Docks, ff 520 12 6
Sons, Llandaff 487 19 0

LD.—For alterations and repairs to at Skeet Hill, for the Kent Agricultural

helsfield £587

.—For erection of a welfare institute, Welfare Fund. Mr. S. Tod, architect, Quantities by Mr. Jas. Doig, Works Castle, Fife :—
k work—
junr., Castletown £836 16 4
r. Methil 763 9 9
. Methil 179 8 3
. Thomson, Buck- 474 18 8

or sett paving at Crook, for the Durham

Road Constructions, ... £4,852 11 3

DENHOLME.—For erection of a tennis pavilion in Foster Park, for the U.D.C. The Surveyor, Council Offices quantities by the Surveyor :—
Jas. Smith & Sons, Denholme £193
*Henry E. Roscoe, Denholme 177

DONCASTER.—For construction of roads on the Warmsworth-road housing site, for the T.C. :—
*A. Storey, Doncaster £5,845

DURHAM.—For supply of materials, for the Durham C.C. :—
*South Durham Steel & Iron Co.—
750 tons of slag penning.. £121 17 6
*Cleveland Slag Roads—
750 tons of slag penning.. 300 0 0

EASINGTON-LANE.—For sett paving, for the Durham C.C. :—
*Improved Wood Constructions, Ltd. £3,300 6 6

EASTBOURNE.—Repairs at the superintendent's house, Ocklynge Cemetery, for T.C. :—
*Miller & Selmes £118 10

EASTHAMPSTEAD.—For repairs to houses at Binfield, for the R.D.C. :—
*Seward & Co., Wokingham £216

EDINBURGH.—For alteration to slaughterhouses, &c., at Gorgie, for the T.C. Mr. J. A. Williamson, City Architect, City Chambers :—
**Mason work*—W. Swan £541 15 2
**Joiner work*—T. W. Forrest 124 17 6

FINCHLEY.—For widening Great North-road, paving, &c., for the Middlesex C.C. :—

Sir Wm. Prescott & Sons, Ltd.	£32,033	7	1
Wm. Griffiths & Co., Ltd.	30,474	5	11
Acme Flooring & Paving Co. (1904), Ltd.	29,989	11	5
*J. Mowlem & Co., Ltd.	29,872	13	0

GARFORTH.—For erection of ten houses at Garforth, for the U.D.C. :—
†G. B. Marshall & Sons, Garforth.

GLASGOW.—For erection of sub-station in Norham-street, for the T.C. :—
*John Green & Co. £397

GREENFORD.—For construction of reinforced concrete bridge over Grand Junction Canal, for the Middlesex C.C. :—

F. R. Hipperson	£18,477	0	0
Perry & Co. (Bow), Ltd.	13,318	0	0
Holloway Bros.	12,734	0	0
Roads & Public Works, Ltd...	11,726	16	8
L. & W. Whitehead, Ltd.	11,181	0	0
Allen, Fairhead & Co.	10,881	0	0
*A. Jackaman & Sons	10,792	17	1

GRIMSBY.— For construction of sewer in West Marsh, for the T.C. :—
*J. H. Thompson & Sons £2,841 1

GRIMSBY.—For construction of footpath from Park-avenue to Cemetery, for the T.C. :—
*E. R. White £225

HORSTED KEYNES.—For erection of a pumping station for the Mid-Sussex Joint Water Board. Mr. F. Martin, Engineer, Waterworks Office, Haywards Heath :—

Bagley, Mills & Co., Ltd., London	£5,172	5	9
James Bodle, Ltd., Eastbourne	4,298	0	0
Norman & Burt, Burgess Hill ..	4,178	0	0
S. Knight & Co., Cuckfield	4,126	0	0
E. H. Munnion, Ardingly	3,990	0	0
R. Cook & Sons, Crawley	3,950	0	0
*H. White, Haywards Heath	3,890	9	0
Anscombe & Sons, Lindfield....	3,768	12	4

HOWICK.—For erection of seven pairs of cottages on estate, for Lancashire Agricultural Committee :—
*E. Tomlinson & Co., Leyland £7,315

HULL.—For laying a double line of tramway track from the Anlaby-road terminus to Pickering-lane, for the T.C. :—

G. Curtis, Hull	£10,424
Sangwin, Ltd., Hull	9,950
*City Engineer's estimate	9,000

ILFORD.—For supply of 6,620 sq. ft. of roofing sheets, for the U.D.C. :—
*Witty & Wyatt ..... At 2s. 8d. per sq. yd.

KENTON.—For construction of bridge over L.M. & S. Railway at Kenton station, for the Middlesex C.C. :—

Sir W. Arrol	£31,300	0	0
Kirk & Randall	30,532	4	10
A. Jackaman & Sons	29,600	0	0
J. Westwoods & Co., Ltd.	28,445	0	0
Holloway Bros.	28,108	0	0
Sir Lindsay Parkinson & Co...	26,992	0	0
*John Mowlem & Co.	25,408	8	10

KINGSWOOD.—For erection of 11 houses on the Hanham Building Estate, for the U.D.C. Mr. H. Glynn Warne, Architect and Surveyor, Council Offices :—
Willmott Bros., Cock-road, Kingswood, Bristol £4,400

LEEDS.—For the provision of sports pavilions, for the T.C. :—
At Hunslet and Woodhouse Moors—
*Barber Bros. ..... each £157 10 0
At Armley and Cross Flatts Parks—
*H. C. Bridge ..... „ 155 0 0
At "The Hollies"—
*J. Hirst ..... „ 147 10 6

LEEDS.—For construction of two freezing rooms at rear of St. James's Wholesale Meat Market, for the T.C. :—
Bricklayer and mason's work—
*Michael Booth & Sons £869 0
Carpenter and joiner's work—
*I. E. Stott's Executors 904 10

LEEDS.—For works at "The Hollies," Weetwood for the T.C. :—
Alterations—
*E. Wooler & Son £890 10 7
Painting—
*Carter & Frankland 324 15 6

LENHAM.—For erection of four pairs of cottages at the Sanatorium, for the Kent C.C. Mr. F. W. Ruck, County Architect, 86, Week-street, Maidstone :—

R. Corben & Son, Maidstone ..	£7,726	0	0
Norman Smith & Son, Maidstone	6,795	11	0
Whiting Bros., Ospringe	6,660	14	3
E. Fuller & Sons, Ltd., Faversham	6,502	4	9
G. E. Wallis & Sons, Ltd., Maidstone	6,432	0	0
S. H. Howland, Ashford	6,383	16	4
Barden & Head, Maidstone	5,579	0	0
*Cox Bros., Maidstone	5,311	0	0

LITTLEPORT.—Erection of cottage and out-buildings at Burnt Fen Farm, for Isle of Ely C.C. :—

B. Lofts & Son, Littleport	£959 10
M. Shanks & Sons, Chatteris	780 10
‡S. S. Ambrose & Son, Ely	773 10

LONDON.—For erection of secondary school for boys at Chiswick, for the Middlesex C.C. :—
*G. Godson & Sons £33,870 0

LONDON.—For repairs to West Norwood Infant Welfare Centre, for the Lambeth B.C. :—

Walters & Blake	£1,408	15	
W. Lott & Son	1,019	0	
Bradshaw & Bradshaw	939	3	
T. H. Mansfield & Son	921	0	
*J. Potterton & Sons	648	7	

LONDON.—For painting and decorative work at the Infirmary, Plumstead High-street, for the Guardians of the Woolwich Union. The Clerk, 99, Rectory-place, Woolwich :—
*E. Proctor & Sons, Plumstead £1,298

LYTHAM ST. ANNES.—For erection of houses, for the T.C.: 28 non-parlour type, at Preston-road, Lytham; 44 non-parlour type, at Highbury-road, St. Annes; and 20 parlour type, at Squires Gate :—
†Hargate Building Co., Ltd., Lytham.

NEW ROMSEY.—For set of farm buildings at Hammond's Corner, for the Kent Agricultural Committee :—
*Turk & Apps, Lydd £153 16

OLDHAM.—Waterhead workhouse scheme, for T.C. :—
Sanitary—
*Morrison, Ingram & Co., Ltd.

OLDHAM.—Road works, for T.C. :—
*J. Brierley, for works in Beaumont-street.
*Spencer Bros., for works in Sunfield-road.
*H. Varley & Son, for works in Moorcroft-street and Glencoe-street.
*J. E. Mayall, for works in Westhulme-avenue.

OLDHAM.—Painting and decorating schools, for E.C. :—
St. Paul's, St. Stephen's, Waterhead Church, St. Peter's—
*E. Workman & Sons.
St. Mark's—
*G. Davies.

ST. HELENS.—For the erection of 60 steel frame houses, for the T.C. :—
*Joseph Dolan & Sons.

ST. HELENS.—For erection of 20 houses at Windlehurst, for the County Borough. Mr. A. W Bradley, Engineer, Town Hall :—
*H. Fairclough, Warrington.

ST. MARY CRAY.—Adaptations and repairs to buildings at Lone Barn Farm, for the Kent Agricultural Committee :—
*J. Smith, Chelsfield £637 10

SHEFFIELD.—Painting at the Townhead-street garage, for T.C. :—
‡F. A. Tinker & Sons, Ltd. £340

SHEFFIELD.—Erection of 70 houses on the Gleadless Common site, for the T.C. :—
*M. J. Gleeson £30,904

SOUTH SHIELDS.—For supply and erection of steel structure in connection with the engine house extension at the Electricity Works, for the T.C. :—
*Kelvin Construction Co. £3,772

STOURBRIDGE.—For making-up Providence-street, Lye, for the District Council :—
*Geo. Macdonald, Hunt & Co., Ltd., Harborne £2,099

SUDBURY.—For construction of an extension of Sudbury Spur, for the Middlesex C.C. :—

Sir Lindsey Parkinson & Sons	£65,899	0	0
Kirk & Randall	63,898	11	9
T. Adams	61,575	14	6
Parr, Head, Clements & Co. ..	59,987	0	0
G. Wimpey	59,506	1	11
Hiram Morecroft	59,175	0	0
R. H. Powis	58,671	4	10
Roads & Public Works, Ltd. ..	58,428	13	0
G. J. Anderson	56,909	11	4
John Mowlem & Co.	56,639	19	8
*John Cronk & Sons	53,461	0	0

SUTTON (SURREY).—For entrance lobby at Public Hall, for the U.D.C. :—
*H. H. & F. Roll £162

SUTTON COLDFIELD.—For painting at schools, for the T.C. :—
Boldmere Girls' School—
*J. Stephens & Sons £198
Town Girls' School—
*P. Cassidy 221

SUTTON COLDFIELD.—For repairing playgrounds at various schools, for the T.C. :—
*S. Sutcliffe & Son..... £140

TORQUAY.—For erection of a lych gate at Tor Parish Church. Messrs. Appleton & Bruce, architects, Scala Chambers ; quantities supplied by architects :—

R. E. Narracott, Torquay	£382	6	0
G. A. Rushworth, London	345	6	7
Thos. Leaman & Son, Torquay ..	273	17	0
*R. F. Yeo & Sons, Torquay	222	0	0

TRETTON.—Construction of bridge, for the C.C. of Isle of Ely and Holland :—

L. J. Speight, Ltd., London ..	£3,505	8	5
Baldry, Yerburgh & Hutchinson, London	3,497	2	10
Gray's Ferro - Concrete Co., Glasgow	3,298	7	10
R. J. May, Trowse, Norwich ..	3,100	0	0
*Yorkshire Hennebique Contracting Co., Leeds	2,508	0	0

TYDD.—For erection of cottage and outbuildings, Tulham's Farm, for Isle of Ely C.C. :—
Davis & Hammant, Tydd £775
M. Shanks & Son, Chatteris 594
‡H. Tann, Wisbech 560

WALLASEY.—For erection of 36 houses (steel frame type), for the T.C. :—
*J. Dolan & Son—
30 A type ..... per house £435
28 B „ ..... „ 489

WHITTLESEY.—For erection of two houses at London-street, for Isle of Ely C.C. :—

J. Spriggs & Son, Whittlesey	£1,035	16	
J. G. Kefford & Son, Whittlesey ..	925	18	
J. & W. Duddington, Whittlesey ..	892	0	
Rose & Sons, Whittlesey.....	882	0	
*Pettits, Ltd., Godmanchester	798	0	

WILLINGTON.—For sett paving at Willington, for the Durham C.C. :—
*Improved Road Constructions, Ltd..... £34,878 10

WISBECH.—Erection of two cottages in Harecroft-road, for the Isle of Ely C.C. :—

J. H. Johnson & Son	£989 10
H. Tann	980 0
H. G. Papworth	975 0
*White & Holmes	968 15

WOODNESBOROUGH.—For set of farm buildings at Walton Farm, for Kent Agricultural Committee :—
*Phillips & Son, Great Mongeham..... £165

WORKINGTON.—Construction of roads and sewers for 200 houses, for the T.C. :—
*T. Wilkinson £11,086

WORTHING.—For painting at Elm-grove School, for the T.C. :—
*C. W. Collier..... £235 10

The Professional Classes Aid Council.

The Annual Report for 1923–24 gives an account of the excellent work carried on by this Council. Six hundred and eighty-five applicants were dealt with in the year, and lette in the report show how much the w Council has been appreciated. Those give donations should send them to tary, 251, Brompton-road, S.W.3.


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o. 4255. AUGUST 22, 1924.

SAINT PAUL'S BRIDGE AND LONDON

members of the Royal Commission of Fine Arts ave not had to wait long before their services were equisitioned in regard to a matter of first-rate mportance. They have been called upon to report ubject of Saint Paul's Bridge, but only as n (1) the engineering treatment of the bridge itself; ancial aspect as regards the Treasury; and (3) the f traffic. The report deals in no uncertain manner roject of the proposed bridge, and the Commission has e conclusion that it would be a grave risk to proceed present. There are still those who favour the building bridge on the grounds of traffic convenience, but on d very serious objection is raised by many who can ve expert advice. It seems hardly possible that Parlia- sanction the erection of the bridge in view of the formed by the Royal Commission of Fine Arts. nission objects to the method of approach from an ral point of view, but the main and serious objection ible risk to the safety of St. Paul's Cathedral. Whilst development of London has been delayed for years dequacy of bridge accommodation towards the west- ommission rightly emphasizes the objection to another ween Blackfriars and London Bridge within a range of undred yards, as only imperative traffic necessities ify it. Though this is styled a practical age, y likely anyone could be found willing to risk the such a monument of national value as St. Paul's, raffic or other considerations, and if it is felt to be isk to go behind the finding of the Royal Commission, nclude that, for the present at least, the doom of Bridge is sealed. We must not question too harshly aith of those who believe in its value, but the pro- t of the Commission surely leaves no option as to .

posing issues and opinions which a project like the Bridge has brought forth afford a graphic illustra- need for some better authoritative control over the t of London. It is not fair to assume, as so many o do, that fine projects and vivid imaginings neces- wasteful and even ruinous expenditure, for the and the generous thought are of the very essence of n we are thinking of the future well-being of a great not given to many amongst us to project thoughts ation beyond the pressing needs of the moment e which can only be forecast by some real under- the forces which are at work amongst us. We do great schemes of improvement for the sake of a can only be wise by scheming for many years we to assume that steam trains will always be ross the river and enter the city? Are we to allow years as the limit for the existence of fixed tram t we rule out for ever the possibility of London on le of the Thames becoming an integral and worthy at metropolis? Shall we ever impose some sort of limitation regarding the suitability of certain buildings to particular areas? Will some reasonable control be found possible over the hideous advertisements which disgrace our streets? Will traffic ever be compelled to take such routes between certain points that undue congestion may be avoided? Will the lumber and mess of market garden business ever be relegated to areas which will prevent its disturbing the amenities and traffic of city areas like Covent Garden? Is it possible that some day a great barrage may be formed across the Thames which would entirely alter the conditions which affect the river west of London Bridge? Will our great railway termini ever be altered in position or connected with an adequate scheme of zone railways? Will there ever be for London one authoritative supreme controlling body which may rise superior to local and parochial views? These are only a few of the questions which occur to anyone who has given thought to the future of London. The creation of more open space, the making of noble streets, the encouragement of fine exhibitions, and endless other matters, would keep a London Society busy for ever.

But we can never hope for that enlightened progress which is so essential until the citizens of London wake up to the possibilities and take some earnest action to make fine possibilities into fine realities. The official bodies who can do so much for London are, of course, the various borough councils; but they have behind them the London County Council, the City Corporation and the Government of the country. It appears to many that, in the making of an Imperial city, some definite Government help and control should be expected, but if it be not in the form of direct action or interference, it should surely be ever available to encourage in every possible way the enterprise and ambition of those who can do something towards the development of a great and beautiful city. We sincerely hope the existence and wise efforts of the Royal Commission of Fine Arts will be one of the vital forces making for a nobler and better London.

The problems which lie before us affecting the future of London are so numerous that we are apt to lose sight of their more immediate and relative importance. Probably that of traffic, with which is bound up the right control and development of railways, is about the most important and urgent. When we remember that every large new business establishment, every new house of entertainment, and every new hotel has a direct bearing on the traffic question, we may see how increasingly urgent is the need to provide for the wise direction and control of traffic if we are to cope with the incessant growth of the city. One has only to note the lower end of Regent-street to see how one large new hotel has added to the difficulties of traffic.

Practical problems are before us in quantity enough, and when we turn to things which affect the beauty and dignity of the city we can find more than enough to stir the hopes and imagination of all who have an artistic vision. To those who are apt to take a roseate and comfortable view of our high culture and fine artistic sensibilities, we need do no more than refer them to the north side of Piccadilly-circus.

NOTES

Manchester Art Gallery. A COMPETITION which will interest many of our best competing architects is that for the Manchester Art Gallery and Museum, the conditions of which are just announced. The building is to cost £300,000, and quite good premiums are to be awarded. In the assessing local skill is represented by Prof. Reilly and Mr. P. S. Worthington, in conjunction with Mr. Paul Waterhouse. We hope a better fate will attend this competition than the former one, and that a fine building will eventually rise to the credit of the architect and the city. One is inclined to wonder whether the imagination of designers will permit some of the more joyful and exhilarating qualities of architecture to be joined to the monumental aroma so greatly in evidence nowadays.

Building in America. IN a report on the finance, industry and commerce of the United States, just issued, Mr. J. Broderick, Commercial Counsellor at H.M. Embassy at Washington, states that both in volume and value of construction the year 1922 surpassed all previous records, but the activity which marked that year was largely exceeded in 1923, in spite of protracted curtailment owing to labour difficulties in the summer. By the end of 1923, we learn, the shortage of building due to the war was overtaken. In seeking for the reason for this remarkable activity in the United States one is inclined to think that they cannot be beset with the same difficulties as the building trade in this country, but elsewhere in the report one finds that this is far from the case. Taking 100 as representing the figure in 1913, the cost of materials in 1923 is put at 195, and the cost of labour at 210, which give average increases considerably more than those ruling in this country. Keen organisation and an extensive use of labour-saving devices are no doubt largely responsible for keeping down costs, but the fact that they have been able, notwithstanding high prices of materials and high wages, to carry on building at a figure which has attracted so many clients as to make the year a record one suggests that a thorough investigation of American methods would be of value to builders in this country.

Housing without Subsidies. IT is interesting to note from the same report that 45 per cent. of the value of the building work carried out last year in the United States was of a residential character. It is stated: "It seems almost impossible for further expansion [in building dwellings] to take place. Indeed, warnings are being issued at the present time by building organisations against the dangerously speculative character of much of the recent residential construction." Which shows that there are other methods by which houses can be built and sold or let at prices within the capacity of those who occupy them, besides the lavish distribution of subsidies and rent restriction. It might be worth while for the Government to send a deputation to find out how it is done.

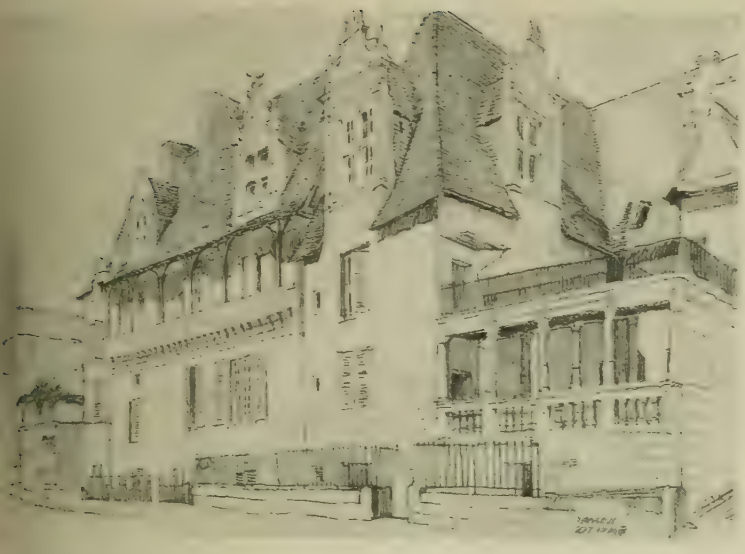
Architectural Propaganda. THE possibilities of broadcasting as a means of propaganda are obvious. The listening public is rightly protected from the persuasions of the politician or the special ple religious partisans, but a welcome is given to speakers on of general interest, especially of scientific or topical character. opportunity this presents to a rea tive speaker on architecture as i everyday life! We can imagine more useful or stimulating than quarter of an hour spent in expl the suburbs of Britain what thos are like and what could be done them more tolerable. The ave with an aerial in his back garde bothered about architecture; p has considered it beyond his st what is more important, beyond Once get him interested and h an ally; he will begin to notice a We suggest a propaganda existing for the sole purpose architecture known.

Training in Landscape Design. IT is interesting to the subject of architecture has as a profession The handbook of the School of L Architecture, an official regist Harvard University, has just b and indicates the result of muc and effort since the year 19 instruction in landscape archit first offered and given at Har versity. The object of the study outlined in the pamp provide instruction in the el technical knowledge and t application of the principles which together form the prop professional practice, whether or public work.



Sketch in Bibury.

[Bibury is one of the most delightful of all the villages, even in the beautiful Cotswold district; one portion of it, lying on the higher level, is shown in our sketch.]



Sketch in Perigueux. By Mr. F. W. Knight, A.R.I.B.A.

cape tec- e.

This Harvard pamphlet has the following opening remarks: "Landscape architecture is primarily a fine ich aims to create and preserve in the efficient adaptation of land an service, whether in the planning of cities or in the develop- of preservation of the natural of the country. In its relation to ation of buildings and the treat- f their surroundings it requires a ity with certain parts of the l field of architecture; but its ls are mainly included within the geology, forestry, horticulture, il engineering, to which it is in much the same manner that ture is related to structural ing and other similar technical With the more and more wide- ealisation of our need for beauty as efficiency in land adapted to —beauty not merely as a luxury practical necessity and as much of course as practical efficiency— e a steadily growing demand for fessionally trained in the pro- of this beauty wherever land fitted to human service. This offers a large opportunity for nen as assistants in the offices of architects or city planning ons, as park superintendents, sters, &c., and as landscape in private practice or public During the period of our war y, the economic value of the architect's training in the adaptation of land for use was ted more clearly than ever residential developments for workers and in the laying-out y and naval camps and canton- nd our Government has officially the usefulness of the land- itect in such work. Now, the of landscape architecture in its cts has received an unpre- impetus, with a corresponding r trained practitioners."

Railway Posters.

The Great Western Railway Co., to whom we are already indebted on this account, are to be congratulated on the taste and attractiveness of the new poster "Malvern," now displayed in the stations. Pictorial advertisements of such a charming character add a further pleasure to travelling, and we could name other posters, such as the most delightful "The Open Road," and the quaint diagrammatic coloured maps which grace the Underground stations, which reveal the most attractive artistry and invention. We feel sure that the example set by such delightful work, which is so great a credit to railway advertising, will become in time more reflected in the work, so often tasteless and vulgar, at present displayed by private companies. The large advertisements in the "Tube" stations, other than those of the Company itself, are often far from attractive, as the traveller waiting on the platform for his train has reason to remember, and when it is remembered that the cost of production of the better class of advertisement need be no more than that of the more vulgar kind, it is seen that the matter is one of taste rather than cost. However, with the direction so much towards improvement we may hope the worst abuses of advertising will become a thing of the past.

Tomb- stones.

We have heard a great deal about art in everyday life, but the campaign has so far touched but lightly on the cemetery. The white marble tombstone of England might well stand symbolically as a monument over the grave of beauty itself. Tombstones are ordered out of trade catalogues, like seeds, and our ever-growing cemeteries are, as a rule, sheer disfigurements. Architects might well turn their attention to this branch of design. Every well-designed tombstone would attract some admirers and would act as a missionary to the reintroduction of good taste in our graveyards. Sentiment rebels against the system of showing respect for the dead by erecting a monstrosity according to its number in a catalogue, and many who would hesitate to ask architectural advice for a cottage would (if they thought of it) not at all grudge a small fee for an adequately-designed memorial.



Archbishop's Palace, Albi.
From a Sketch by Mr. F. W. Knight, A.R.I.B.A.

GENERAL NEWS

Westminster Bridge.

The London County Council has given notice that Westminster Bridge will be closed to all traffic for a period not exceeding fifteen minutes on the afternoon of Tuesday, August 26th, about 3 o'clock. An examination is now being conducted with a view to determining the effect of the present increased weight and speed of vehicular traffic, and is not due to any doubts of the stability of the bridge.

The Society of Architects.

An Extraordinary General Meeting of The Society of Architects was held recently at 28, Bedford-square, London, W.C.1. Mr. E. J. Partridge, President, having taken the chair, the minutes of the Extraordinary General Meeting of July 24 were confirmed and signed. The chairman stated that he had received 560 proxies of which 552 were in favour of the resolution. He then moved that the following resolution, passed at the Extraordinary General Meeting on July 24, 1924, be confirmed :—

"That this meeting hereby approves, ratifies, and confirms the Provisional Agreement for amalgamation, dated the 29th day of May, 1924, and made between the Royal Institute of British Architects on the one part, and the Society on the other part, and hereby directs the Council of the Society to carry such agreement into effect either with or without modification."

Mr. E. J. Williams having seconded the resolution, the chairman put it to the meeting, and declared it to be carried unanimously.

Welsh Hill Forts.

Interesting discoveries are reported to have been made as a result of further excavations in the ancient Hill Fort, known as Dinorben, situated in Kinmel Park, Abergele. The work has been carried out under the supervision of Mr. Willoughby Gardner, of Deganwy, and it is asserted that the probings into the secrets buried beneath the vast earthworks at Dinorben show :—

(1) There were dwellers upon this hilltop prior to its fortification, as proved by relics found.

(2) There were four consecutive hill forts built by the natives upon the hilltop, and each suffered forcible destruction at the hands of an enemy.

(3) The first hill fort was defended by a stone-faced rampart with a deep ditch cut in the rock some 10 ft. in front of it. Its destruction was shown by relics to be during the later Iron Age, and it was so complete that one can hardly doubt that it was the result of a Roman invasion of the district—very probably that under Ostorius from Chester about A.D. 60. The remarkable late Celtic bronze horse trappings found with quantities of human bones at the foot of the precipice at the west side of the hill fort would seem to synchronise with this.

(4) The native builders of the second hill fort constructed oblong guard-houses at the main entrance, which points to an acquired knowledge by this time of Roman methods.

(5) The second and third constructions at Dinorben, like the neighbouring hill fort at Peny-y-Cordynn, were apparently occupied for short periods only, as shown by the paucity of relics left behind.

(6) The second and third destructions occurred before peaceful trading relations between the natives and the Romans were established, and may have been the results respectively of the dash across North Wales by Suetonius in A.D. 60, and of the conquests of Vespasian's generals completed by Agricola about A.D. 70.

The excavation of this notable hill fort is pioneer work in Wales. It is hoped that this provisional chronology for the successive constructions found upon the site may be confirmed by future work.

COMPETITION NEWS

Manchester Art Gallery.

The conditions of the competition for architectural designs for the new art gallery and museum of art to be built on the Piccadilly site have now been issued by the Manchester Corporation. The building is not to cost more than £300,000 and is to be of Portland stone. It must be approached by a flight of steps and must include a Hall of Memory to commemorate Manchester men of all ranks and services who fell in the war. The jury of assessors consists of Mr. Paul Waterhouse, Professor C. H. Reilly, of Liverpool, and Mr. P. S. Worthington, who will award four prizes, the first of £500, the second of £300, the third of £200, and the fourth of £100. The building is to occupy an area not exceeding 5,500 sq. yds., and the total floor area required for the central sculptural hall is 6,000 sq. ft.

Club Premises.

The committee of the Rhyl Conservative Club invite schemes for adding a second story to the Club premises. Particulars from the Secretary, Market-street, Rhyl.

London Hotel.

Designs for a row of shops, with an hotel over. Premiums of £150 are offered for the selected designs. Particulars from Mr. H. Walduck, Imperial Hotel, Russell-square, W.C. 1.

The closing date of the competition has been extended until September 24th.

The conditions of this competition are not in accordance with the regulations of the R.I.B.A.

The Harrogate Infirmary.

The committee of Harrogate Infirmary invite designs for the extension of this Infirmary. Mr. Sydney D. Kitson, F.R.I.B.A., has been appointed assessor. Premiums of 150, 100, and 50 guineas will be awarded respectively. Sending-in day September 30.

Other Competitions

Other competitions still open include the following (the dates given are, first the sending in date, and second the issue of *The Builder* in which full particulars were given):— Ross-Smith Memorial (Sept. 30; Feb. 22). Hamilton War Memorial (Sept. 1; May 30). Glasgow High School Memorial (Sept. 30; June 13). Public Baths, Newton-in-Makerfield (Sept. 30; July 11). Bexhill Hall, banned by the R.I.B.A. (Sept. 1; May 30).



Detail of War Memorial Design.
MR. F. LESSORE, Sculptor. (*See p.* 275.)

ST. PAUL'S BRIDG

THE report of the Royal Fine Art mission appointed to inquire into the pro connected with the proposed St. Paul's was issued recently as a Parliamentary Towards the end of May the House of on the motion of Viscount Burnham, that the Commission should be consulted question of the proposed bridge before steps were taken. The Commissioners Earl of Crawford and Balcarres (chairma Marquis Curzon, Sir Aston Webb, P.R. Reginald Blomfield, R.A., Sir George Fra R.A., Sir Edwin Lutyens, R.A., Mr. Cameron, R.A., Mr. J. A. Gotch, Presid the Royal Institute of British Architect Mr. T. H. Mawson, President of the Planning Institute. In a footnote to the Lord Crawford states that, while it ha impossible to obtain Sir Aston Webb's ture owing to his illness, he concurred general principles enunciated by the mission.

The report is as follows :—

We must observe at the outset th terms of reference preclude us from with three crucial aspects of the su namely, the engineering treatment of the itself, finance which affects the Treasury extent of £866,000, and with traffic.

The safety of St. Paul's Cathedral is the most vital of many difficult p raised by the proposal. Were it not dominant question of stability, we shou recorded a considered opinion as to th of disappointment resulting from a bridg does not lead to the southern transep axial point. Owing to financial and objections, the Act of 1911 laid down t thoroughfare running northwards fr bridge should pass the eastern end Cathedral. The road will accordingl the apse of St. Paul's, giving a part oblique view as one passes in either di A sense of failure, or of a singular opp lost, will be inevitable.

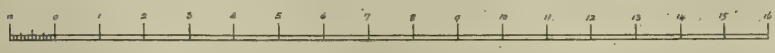
On general grounds the scheme wo largely tested by its direction, levels, gr and terminal points. It will be far fr to deal with the bridge and its approa a monumental fashion, owing to the st from the river to Old Change. On th side of the river the road will have three streets, on the north side three m one subway will also be necessary. M a sixth bridge between Blackfriars and Bridge, within a range of 1,300 yard only be justified by overwhelming necessities.

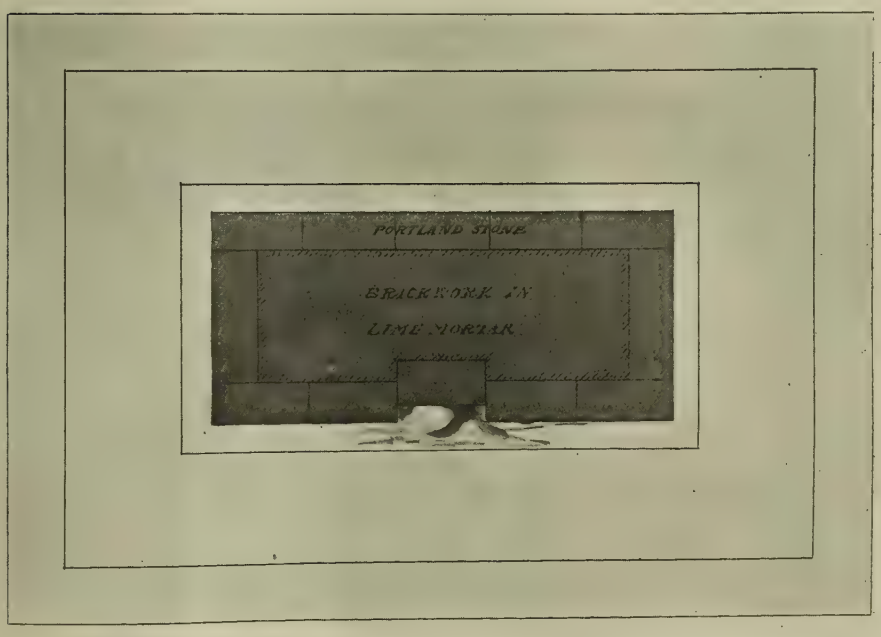
We think it unnecessary to commen proposed design or to amplify analogo ments, since all considerations of acc struction, town-planning, and vista ordinate to the central and all-import to the Cathedral structure. The piers ing the Dome are in a precarious co serious fears have been entertained a safety of the Dome itself. The D Chapter have had to appeal for £17 carry out urgent works to maintain the and after several years' work upon t are satisfied that their obligations ar means attained.

Heavy motor traffic is increasing; a serious risk from the transmissio vibration through the London clay, effect of which is now confined to the side of the Cathedral. Until the secure any further risk should be avoi intensify existing dangers by adding source of vibration at the eastern er Paul's, with inevitable reactions u perilous thrust of the Dome on the pie crossing and upon the southern wall, such grave apprehension that we beg that immediate attention may be this serious aspect of the problem. shaking of the Cathedral fabric may catastrophe.



FRONT ELEVATION





PLAN

F. Lessore, Sculptor.

Design for a War Memorial. Mr. F. Lessore, Sculptor.

[This war memorial would be about 20 ft. in height, and carved in stone. It is intended to suggest a gate, the group in bas-relief representing an angel bearing aloft the soul of the fallen warrior, while a few of his discarded trappings are left behind to remind us of his fate.]

CORRESPONDENCE

Tudor House.

SIR,—The recent building of Messrs. Liberty's new premises, Tudor House, is a typical instance of that attempt to reconcile old tradition with modern outlook, and is, therefore, the subject of much difference of view. The original Tudor style arose out of conditions, out of a life, which was essentially different from our own, was more unconscious of itself as art than are modern stylistic imitations. Our revivals of past styles are intellectual rather than intuitional, and have none of the naiveté and unselfconsciousness which so much contribute to the charm of the older work. In this light the remark of Professor Lethaby in his letter contributed to the Architectural Conference, that "all the attempts to make modern highly organised building resemble the old free architecture are doomed to failure," is of much significance. And in this new costly experiment of Tudor House there is something intellectual and theatrical; handicraft here takes a rouge and powder quality as though to manufacture artificially what nature and art in such a context refuse to supply. Handicraft becomes a convention itself, remaining only the shadow of its freer reality. If we could only have it both ways, our modern restlessness and Tudor rest, the quiet undemonstrative character of the one with the publicity aims and advertising conventions of the other, Tudor House would hold in it that sacred rather than spectacular character which is found only where nature and the human soul move together. As Professor Lethaby says so truly, "Decoration is of the nature of poetry." It is the approach, the spiritual outlook, that matters. All the talk on handicraft only obstructs our vision of this need if we neglect the one for the other. I doubt if many are really deceived by this intellectually organised substitute for really free building. Art will never yield its riches, handicraft, however much belauded or paid for, will never yield its best results though we stick it all over a building, without the freedom of its own ideals, and there is probably more vital craftsmanship in one single panel of those on the west porch of Amiens Cathedral than is contained in the work on Tudor House. Nor is this any criticism; it can hardly be otherwise, because it lacks the freedom which only the spirit of poetry and worship bestows.

"ISIS."

Architects and Small Houses.

SIR,—When Mr. J. E. Drower stated, in the valuable letter you referred to in your last issue, that the employment of architects to design small houses is one of the causes that tend to increase their cost, he no doubt meant architects who had not made the special study of that class of building that is so highly necessary to produce suitable designs that can be executed at a reasonable cost. Architects who have made that special study carefully consider "the choice of material and method of building" that Mr. Drower refers to.

W. T. H. LEVERTON.

London.

Penistone War Memorial.

Penistone war memorial, which was unveiled recently, is in the form of a cross. It is the design of Mr. J. A. Gotch, P.R.I.B.A., executed by Mr. E. T. Moore, monumental sculptor, of Penistone, and is placed in front of the Parish Church tower facing the main approach to Penistone.

£800,000 Dry Dock.

It is reported from Kingstown (Ontario) that plans are under way for the building there of a new dry dock to cost approximately £800,000 and to quadruple existing facilities. The construction of the new dry dock, it is stated, will take at least three years. It will be 300 ft. wide and 700 ft. long.

BOOK REVIEW

Acoustics of Buildings. By F. R. WATSON. (London: Chapman & Hall. Price 15s. net.)

THERE is an urgent need to-day for a book which will make the assured results of scientific inquiry on this subject available for the architect and the builder. The broad outlines are to be found in the papers of that great pioneer, Wallace C. Sabine, but they are not to be found there in convenient form, nor in the nature of the case, and his original papers convey no idea of the steady process of verification which has gone on throughout the last twenty years as his formula has been applied in case after case to the cure of existing buildings and the design of new ones. The day is past when a great daily paper can afford to commend the stretching of wires across the roof of a building as a cure for acoustic defects, and this book will contribute to its passing. The book is divided into three parts, of which the first is an introduction on the action of sound with application to buildings. This is the weakest part of the book. A much fuller though still non-technical discussion of the properties of sound waves and the mechanism of their propagation would have laid a more adequate foundation for what follows, and contributed to a more intelligent appreciation of the problems involved. Readers without previous knowledge of sound will not find their difficulties materially lessened by the introduction. Part II deals with the acoustics of auditoriums, and although a little too condensed in its treatment it deals with the subject in a very practical and convincing way, and gives numerous examples of design and cure of actual buildings by way of illustration. Only in the multiplication of these actual instances is there any hope of carrying conviction of the soundness of the methods to the architect and the builder. From an investigation of the actual time of reverberation in satisfactory buildings of various sizes designed either for speech or for music, the author shows that the ideal time increases with the volume of the building. He gives curves in which the time of reverberation in seconds is plotted against the cube root of the volume, and from these curves we can valuable information as to the best time reverberation for a building of any given whether it is to be used for speech or for m The last part (Part III) of the book is dev to the important matter of sound insulat The author's own work on this subject is bodied in Chapter VIII, and the work of o investigators in Chapter IX. Here, agai discussion of numerous practical instan telephone boxes, music rooms, hospitals, adds greatly to the value of the work. book contains an admirable list of the efficients of absorption for common buil materials, and is copiously illustrated bold and clear diagrams. Mr. Watson collected, arranged and made available a deal of information, and his book will be comed by all who desire to know more subject long regarded as mysterious, but at last taking its place within the ever-wid area of the uniformity of nature.

Books Received.

SHEFFIELD CIVIC SURVEY. By PA ABERCROMBIE. (London: Hodder & Stoug Ltd.) Price 15s. net.

CIVIL ENGINEERING. By E. E. M (London: Macmillan & Co., Ltd.) Price 7 net.

REINFORCED CONCRETE DESIGN. By MANNING. (London: Longmans, Green & Price 21s. net.

A SHORT HISTORY OF HAMPTON COURT. Ernest Law. (London: G. Bell & Sons, Price 6s. net.

THE DECORATIVE ARTS IN ENGLAND, 1780. By H. H. Mulliner. (London: Batsford, Ltd.) Price £3 10s.

SMALL HOUSES FOR THE COMMUNITY. H. James and F. R. Yerbury. (Lo Crosby Lockwood & Son.) 31s. 6d. net.

ARCHITECTURE IN ENGLAND. By Davenport. (London: Methuen & Co., Price 6s. net.

NEW RAMBLES IN LONDON. Second (London: The Homeland Association, Price 3s. 6d. net.



St. Luke's Parochial School, River Forest, Illinois: Detail of Entranc

MESSRS. DEAN & DEAN, Architects.

OPES AND FEARS FOR ARCHITECTURE

By "ISIS."

this article "Isis" expresses his own . which are not necessarily ours; we publicity to them as they are relevant ent discussions.—Ed.]

ou the extent of its recent gatherings and nes, architecture is just now very much e limelight. This is altogether good for ecture, yet it is not altogether good d it lead us to forget the problems sur- ng the art, which tend to become l under the very activities which are ised to promote it. A good many may el altogether satisfied that the recent rence on architectural education has much new light on the subject. To looker, obstinate questions obtrude them- . emphasised by the amount of pub- bestowed on architecture to-day.

roice here and there at the Conference ed a doubt, or suggested a difficulty ls the solution of which no answering replied. Indeed, though in so many informative of what the several schools ing, the discussions touched directly no rital consideration in the sense of re- g a perception of the gravest problems which the architect has to deal. We and we go away with doubts unre- . in fact still ominously clamouring."

d Crawford, in his speech at the Con- e. tells us "architecture would never stice to itself if the architect were ed from the actual handling of the al on which the result of his concep- epended," and this view, so recurrent eally, finds no nearer agreement as to that really means. Let us try to tand better the implications of such a of view as it applies to the architecture time. Few of us any longer believe r the architect to have a mere tinker- quaintance with the crafts, to dabble delling arrayed in Sussex smock, or to an amateur's acquaintance with the of modelling woodwork, stone carving, metal work, masonry, etc., when the of his present work permits him, is any n—besides it is not possible. The diffi- not thus to be got rid of; moreover, ls the distance of many architects from derstanding of the mystery of treat- nd of what constitutes vital craftsman- nat they should think in thus dabbling as to be found any key to it.

is true this defect exists it will be remedied by increased appreciation in ishing what has vision and treatment e prevailing more or less mechanical tes for both. It is not unusual to ports giving particulars of a recently church which tell us that the archi- igned everything, not only the fabric, carving, the windows, metal work, designed by the architect" the of it all. It does not matter who does k, so that it is done, nor that the should be bestowed unfairly, but it ses what is called the exceeding of the single mind. What a vast mis- n lies here, what lack of self- e that we should accept such a con- n. Either the statement is the ment of the poverty and lack of inspiration governing what has been the work is not so done. And if so affords the most striking evidence of the architect appreciated what was to a work of art. Only when he re for art will he feel the need of corporate relation through which strength is maintained and extended. re referring only to what is ob- y many, none the less recog- t there are architects fully sensible to the better view, and as anxious ualities of vital craftsmanship as

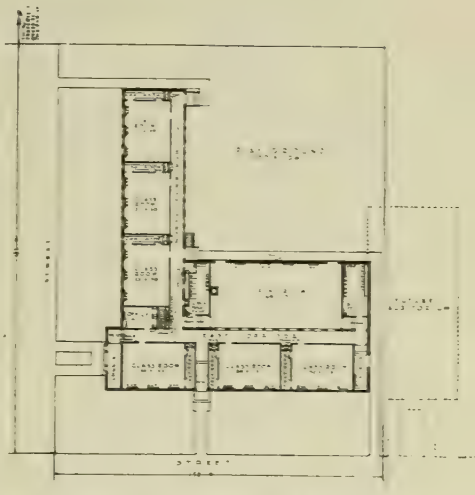
We read that at the Conference it was stated by the architect of the Woolworth building that architecture naturally reflects the spirit of the times. Does the spirit of our time and its reflection in architecture leave us in no doubt for the security and progress of architecture itself; that the influences governing the new Regent Street, for instance, are those which it may most happily absorb? Building, so we are also told, expresses the social conditions of the time. If the time were one of slum buildings should we say that such conditions were favourable to architecture? And if the time instead promotes salesman architecture predominantly, we are certain that this leads towards its best expression? The spirit of the times is, after all, only the shadow of our selves, and there is danger surely in phrases which really mean so little and yet sound axiomatic from mere repetition in the ears of those who never think.

It is not so much a question whether the architect accepts what Professor Richardson calls the "realities" of to-day, as whether those realities are as real as we think them. We are told by a speaker at the Conference that the appreciation of scale is impressed on students, but what have our streets to reveal in regard to these appreciations?

It is not quite the case, however, as is sometimes assumed, that a fine historic building, by this disregard of scale in a new building near by, is thereby destroyed, though the disregard of civic obligations for merely utilitarian advantage, ignoring the claims of other buildings and the traditions and character of the locality, is much to be deprecated. But the beauty of a fine building is not so destroyed. For to take the case of the Bush building, the beautiful little Wren church adjacent takes on quite a new loveliness from the juxtaposition. There it stands in no way dwarfed or thwarted by the building near by, the beauty of this little church is not made less, but more deeply impressive, welcoming us by its humanity.

The architect, it seems, needs rigorously to refuse ornament or addition to his building which is not justified by the reality of its conception and treatment, and which is merely a use and wont, stylistic or other, now become wholly vicious. We are told that a building should find its construction in the reality of its purpose, which it should express. The same reality is used in all that adorns it. Ornament must also express that reality which in its own case is seen in the vision and endowment of the craftsman. In that case we should no longer perpetuate the semblance but achieve the reality.

The distance of the architect from his workmen is one not to be dismissed or overcome by his own amateur craft practice. It lies much deeper in the constitution of society, which is different from mediæval times. The bourgeois architecture which dates from the Renaissance gradually detached architecture from its closer human relationships, intervening with a more scholastic and theoretic substitute for the more direct contact with materials and more communal relationship which left no such gulf between the architect and those he employed as now exists—he, the master builder, being then related by a fellowship of work that bound them all together. Far more democratic and dwelling in a mutual and equal relation there was no need for talk of a "mistress" art to palliate the loss of its reality. The emphasis of professionalism with its theoretic culture and exclusiveness, has undone with one hand what it achieved with the other. Will Lord Crawford tell us, in addition to pointing out the need for the architect having closer relationship with the "actual handling of the material on which the result of his conception must be imposed," how under present conditions this is to be obtained? Otherwise what is the use of stating things for which we have no solution to offer? And are we facing the problem for architecture in leaving them unsolved? Academies and degrees do not solve them for us, unless through them we can release the creative imagination which expresses the best aims of architecture. The "greater recognition of architecture as a profession" leaves us where we were, and when we are also told that imagination "transformed and glorified the art" do we realise that the scope for imagination depends on what it has to work upon? The shop front may inspire it, or it may not. And here the disparity between prevailing commercial ideals of using art to "sell the goods" and the scope for imagination emerges often as in direct conflict. For are not the aims of commerce seen in the new Regent Street prevailing over Norman Shaw!



St. Luke's Parochial School: Plan. Messrs. Dean & Dean, Architects. (*See p.* 2 6).

But it is not only what lies within, but what withstands architecture from without that presents so much difficulty. To unite the aims of commerce with the freedom of architecture, so that a conflict of purpose should not exist between them, is impossible unless life is united by an outlook shared more together. How are we going to reach this more single aim, to unite also the aims of architecture so that there may be restored that close inter-relation between architect and worker, one in which he is identified by a closer contact with materials freed from bourgeois prejudices?

It appears that we tend in our conferences to move amid nebulous affirmations and are in danger of forgetting the gravity of the issues that lie in front of architecture. And the same may be said of other expressions in present popular use. We hear of the "complexity" that prevails—which is indeed the case, but does that complexity so compel us that we must needs accept it and work amidst its enormous burdens and complications, or does it not suggest to us to seek a simpler way? All this needs an answer. Is it not rather a higher wisdom to ask ourselves what is the object of it all. How does our labour minister to life, towards its freedom and happiness? What is our part in it all? Architecture can bear witness to this against the destructive forces imperilling European civilisation to-day, but not by accepting only, not by phrases about "the spirit of time, or by accepting complexity, but by keeping its ideals pure; by resistance as well as agreement, guided not by the colour of the time against which all its educational schemes are so weak, unless fortified by that which transcends learning and is the answer of the individual to what he finds to be the meaning of life.

GRAVENEY CHURCH, KENT

By RICHARD BLOXAM

GRAVENEY CHURCH stands about four miles from Faversham, on the edge of the marshes that lie between that town and Whitstable. From the churchyard gate there is a charming view across the marshes, the monotony of which is relieved by sundry grassy hillocks, to the lofty, tree-covered ridge of the Blean Hills beyond. There is something attractive and imposing about the aspect of the church from this point, with the long-pitched red-tiled roof of its nave and the upper part of its strong, simple tower showing behind at the west end of the north aisle, a somewhat unusual position. And yet we are hardly prepared for the extreme beauty and interest of the interior, which is spacious and, owing to the small amount of stained glass, unusually light, while the red-tiled floor and box-pews give it a delightfully old-world appearance, as if one were looking at an old print.

The late Dr. Cox and other authorities on church architecture have laid it down that the examination of a church should always begin from the exterior. Mr. C. E. Keyser, however, that skilled and loving describer of churches, always starts from the east end of the interior; personally, I like his method, and propose to follow it in this article, after premising a few words as to the general history of the building.

There was a church on this site before the Conquest, but the earliest parts of the present building are the chancel arch and the west wall of the nave, which are both Norman. Two corbels still remaining in the south aisle, and the fact that some of the timbers of the nave roof were found during repair to have been shortened at some period, point to the church having formerly possessed narrower aisles than at present. Either these were part of the Norman church or they were added in the thirteenth century, when the present tower was built, and the chancel rebuilt, although on the same foundations. The present aisles were constructed in the following century, the north arcade dating from about 1320 and the south from some twenty years later. A few windows and the west and north doorways were inserted in the fifteenth century, but no further additions were made to the fabric with the exception of the south porch, which appears to be post-Reformation. Fortunately, the church suffered comparatively little from eighteenth-century restorers, but the quite recent restoration of the exterior was, in some respects, not too judiciously carried out. Funds are now, I believe, being collected to complete the restoration of the interior, in which it is to be hoped that the characteristic features of the church will be respected.

The interior dimensions are as follows:—Chancel, 19 ft. by 15 ft. 6 in.; nave, 53 ft. by 18 ft.; north aisle, 40 ft. 6 in. by 13 ft. 6 in.; south aisle, 54 ft. by 13 ft.; total length, 75 ft.; width across nave and aisles, 49 ft. 6 in.; tower space, 10 ft. by 10 ft.; porch, about 8 ft. 6 in. by 8 ft. 9 in. The material is chiefly flint with ashlar quoins.

THE CHANCEL.—The chancel is aisleless and of modest dimensions compared with the nave. The east window is Perpendicular of three lights; the plain hood-mould of a former larger window remains above (*cf.* description of exterior). Near the east end of the south wall is a piscina under a cinquefoil head; the projecting part of the circular bowl has been broken off, but the old movable wooden credence-shelf still remains. Immediately west are the curious late fourteenth-century sedilia, consisting of two seats of unequal width; the eastern and narrower is included under a cinquefoil arch, the western under a plain four-centred arch, both resting on shafts with moulded caps and bases; each compartment has a rectangular frame. The whole design has a plain label and battlemented cresting. Above is a square-headed, single-light window of about the same date, with good, simple tracery and a little old glass in the head; it is deeply splayed and has a segmental interior arch. Next comes a plain pointed priest's doorway, and another square-headed window with considerable fragments of old glass and a narrow pointed interior arch. In the north wall are two plain lancets, widely splayed, and farther east a small wood-lined almery with the holes by which the shutter was formerly fixed. There are two poppy-head benches in the chancel which are excellent examples of their kind; both have panelled and traceried backs, and the longer has a band of hanging tracery below the seat. The pitched roof is modern, but the wall-plates and cross-beam are old.

The round-headed Norman chancel-arch is very plain; it has grooved abaci with a hollow chamfer, but no capitals. The eastern angles of the jambs have been splayed off to a point in a curious way many centuries after the building of the arch. On the soffits are traces of painting, which consisted of intersecting lines forming rectangular compartments each containing an asterisk.

The church is fortunate in retaining its mediæval rood-screen, in which two interesting features may be noted—first, the apex of the arch in each compartment does not reach to the cornice, but remains suspended, as it were, an inch or two below it; second, that some of the bars of the tracery are battlemented, a somewhat inelegant feature also found in



windows of the same (fifteenth century) per
The cresting is a later addition. This sc
stands just west of the chancel-arch,
grooves in the soffits of the jambs seen
point to an earlier screen within the arch.
the north may be seen the wood-fra
opening that gave on to the vanished rood-l

THE NAVE.—The nave is separated from
north and south aisles by arcades of three
four bays respectively. Both have octag
columns with moulded caps and very wide b
and support pointed arches. The slig
different and inferior mouldings of the s
arcade show its later date. The east and
responds on the north are cone-shaped, t
on the south have well-carved heads.
plain pointed west doorway is Perpendic
The door itself is of some age and is secure
a wooden bar fitting into sockets in the ja
the same remarks apply to the south
The west window is of good design with
ogee lights and a quatrefoil above, an
coeval with the arcades. The pitched roo
been well restored and retains much old tim
there are tie-beams with curved braces,
king-posts and a ridge-piece. The p
which came from Faversham Parish Ch
has some pretty bands of applied carving
is certainly not by Grinling Gibbons, to v
the pamphlet appealing for funds for
restoration says that it is attributed.
two-sided lectern is modern, and was le
Ospringe Church about 1887.

THE AISLES.—The west end of the north
is occupied by the tower basement, whi
entered by a plain pointed doorway and re
in its angles the springers formerly suppo
a vaulted roof. The north wall of the
has a small doorway and four two-light
pendicular windows. The east windo
modern and ugly. There are in it two
of old glass, the ox of St. Luke and the l
St. Mark; the rest is filled with modern
which, suitably enough, includes the
symbols of the Evangelists—there is no
else to be said for it. In the north-east
is a narrow, rather lofty niche, which
recently uncovered; it had not been fill
only concealed by a little plaster. I
doubtless intended for an image, but is
crude a character that I thought at first
some connection with a stove-pipe! O
south is an ogee-headed piscina. On th
near by is the magnificent brass of Sir
Martyn (died 1436) and his wife Ann
wears his robes as Judge of Common Ple
carries a heart with the words "Jhū
His wife is in kirtle, mantle, and horned
dress; both figures are under a double c
(This brass was illustrated in *The Buil*
February 16, 1912.) Near them is th
mentary brass of Thomas Borgeys
the figure is missing. There is a piece
screen-work here which is part of the fif
century parclose screen. The slightly
panelled roof is mostly modern; the
applies to the similar roof of the south si

At each end of the south aisle may
the corbels that supported an earlier
roof. The east window has good
tracery with three main lights, but unfort
the effect is very much spoilt by the wh
having been deeply recessed at some pe
that the window has no interior arch
There is a piece of old glass in the he
arms of the See of Canterbury. The
altar-platform remains in this aisle, bu
is no altar here now or in the north aisl
piscina in the south wall is a charmin
composition; the cusped ogee arch issu
a vigorously-carved lion's head and ter
in the heads of a man and a woma
circular bowl is mainly intact. Next t
the table tomb of Richard de Fa
(died 1381) and his wife, under a cus
mental arch with rectangular frame an
mented cresting, the latter being c
along the wall and over the piscina.
of the brass remains but not the figure
of the man, however, is preserved in th
chest in the tower basement together wi
fragments. He is dressed in full armo



Graveney Church.

resting on a lion; the tomb resembles le the sedilia, the date of which e approximately the same. On the ear is another fragmentary brass and ents of two others. Over the Faversham a window of the same pattern as the indow of the nave, and another similar st of it. Then come the plain south y and a cusped ogee lancet, rather splayed. The west window is like the the south wall. Beneath it is a good th-century chest with four arches and roughly incised on the front. From ot it may be seen that the old on which the Creed and the Lord's were painted have been cut up and the construction of the batch of three y the west door—a proceeding more ical than desirable! The Perpendicular s a bowl with eight octagonal faces, which have conventional roses and one de-lis; the others have shields, one a plain cross, another some of the nts of the Passion (cross, nails, and f thorns), while the other two bear charges which have not been identified.* re some old poppy-head bench-ends to the woodwork of the pews in this

leaving the interior of the church, let der once more the quality of lightness as been noticed as one of its charms. there is no "dim religious light"—hardly desirable, when one comes to it, in a building where people are to be able to read from books! Beauty duce a religious atmosphere without of permanent twilight. The Gothic as his skill increased, built larger and ndows and, when he filled them with glass it was glass that admitted, not light, as do the majority of the modern with which pious but misguided fill our churches. As for box-pews, se few people would defend their use congregational point of view; yet interest demands that they should tact in at least a few cases. The con- at Graveney is probably not so great y persons have to sit with their backs ltar! If so happy a thing were to e ought readily to forgive the removal ews.

pleasure to remark that the church is y kept; the floor, which in nave and covered with cheerful red-brick tiles, ly clean, and the brasses on the floor brass handles of the pews are kept brightly polished. There are no coverless prayer-books or bursting hassocks lying about. A word, too, must be said in favour of the simple, nicely designed chandeliers, which have prettily painted rims. The church also gains architecturally from the fact that none of its space is blocked by an organ. There is a small, worn-out instrument in the north aisle—the "poor relation" of an organ, a "harmonicon" or something of the sort—with a pretty case and an elegant row of little gilt pipes.

THE EXTERIOR.—The exterior is, as a whole, of far less interest than the interior. The chief merits of the tower are simplicity and strength, but the design, as with many Kentish towers, is plain to the verge of poverty. The north and west walls are in a line with the corresponding nave walls, but the west wall batters slightly at the base. This face has four small plain lancets one above the other; the north face an oblong slit and three lancets; the other faces one lancet each. In each face, a little way beneath the low heavy battlements, is a small quatrefoil piercing, and below this a plain chamfered string-course. The semicircular stair-turret on the north, with conical top, appears to be a later addition.

The north windows of the north aisle have plain labels. They are separated by four good plain buttresses of two stages, and there is a similar one against the east wall. These had been well repaired in brick during the eighteenth century, but this evidence of the care sometimes bestowed on our churches even in those "dark ages" was quite needlessly removed at the recent restoration. Like the buttresses of the same pattern on the south side of the church, they are of the same date as the aisles. The east wall has low battlements; otherwise both aisles have poor shallow copings, and their roofs are invisible from the ground—a distressing feature.

The chancel is without buttresses; the lancets in the north wall have no dripstones. The dripstone of a window larger than the present one remains on the east wall; this belonged to the thirteenth-century work, as shown by the character of the head in which it terminates on the north. As it was very unusual to replace a large window by a smaller one, we must assume that this wall had shown signs of insecurity. Why the missing part of the dripstone should have been restored (the existing window below has one of its own) and a brand-new mock-archaic head furnished for its southern termination, is hard to imagine. The south windows have plain square labels.

The south aisle has diagonal buttresses at each end, but no others. The dripstones of the east window and the two-light windows on the south have been (advisedly) much restored, but only one of the original heads is missing, and no substitute has been provided for this! One of the heads to the east window is that of a bishop; the easternmost on the south is a female head of great beauty. The south porch is plain and ugly; the inner doorway has had the heads of its dripstones hacked off. The single-light window west of the porch has no dripstone; that of the west window has no heads.

The west end of the church has a buttress (the only one that has not been restored) against the termination of the south arcade, but none corresponding to it on the north, the tower making it unnecessary. From here the greater thickness of the Norman west wall as compared with that of the aisle can clearly be seen. The heads terminating the dripstone of the west window are exceptionally well carved; indeed, though none of these heads is of that delightful, quietly humourous type that is so often to be met with in the district, they are all well worthy of study. The dripstone of the west door has shields which must once have borne painted charges.

The tower contains four modern bells.

[The photograph of the interior is by Mr. W. Hargreaves, photographer, Faversham. The negative from which the other illustration is taken has kindly been lent me by my friend, Mr. C. H. Drake, of Faversham, to whom I am also indebted for much information respecting the church.]

chevron between three estoiles of four
On a pall three crosses fitchy and another



Graveney Church.

LEADING CONTENTS.

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ILLUSTRATIONS

New Business Premises, Oxford Street.

The illustration we give this week is a perspective view of a sketch design for business premises in the West End, with a frontage of approximately 240 ft. The premises will be of skeleton steelwork construction and fireproof materials throughout.

The elevations to streets will be faced with Carrara ware, the columns to top story being in Hopton Wood with bronze caps and bases. The ground floor windows will have Hopton Wood surrounds filled in with bronze window sashes, and the upper floor windows will have similar frames and bronze panels at the different sill levels. The height to top of main cornice is 90 ft. from pavement level, and the whole building will have a sub-basement. The main roof will be flat covered with asphalte, and the centre feature will be covered with red pantiles.

The architects for the work are Messrs. Gibson & Gordon, FF.R.I.B.A.

Scheme for a Repertory Theatre at Cairo.

The drawings illustrated are part of a set of sixteen working drawings submitted by an Egyptian student at the School of Architecture, Liverpool University, at the end of his five-year course leading to the degree of Bachelor of Architecture with honours in architectural construction. Every student at the Liverpool School, before he can sit for his degree or diploma, has to submit a design to an approved programme. This design he makes by himself. If he is a student aiming at honours in architectural design, he chooses some subject which allows him to show his powers of composition, detail and decoration, and submits a set of large rendered drawings, about on the scale of those submitted for the final round of the Rome Scholarship. If he is a specialist in construction and aims at a degree or diploma with honours in that subject, he submits a design of his own but carried to the stage of working drawings. These working drawings of Mr. A. L. Gabr's, which were one of the chief exhibits of the Liverpool School at the recent exhibition at Devonshire House, show the standard which must be reached for a good degree at Liverpool. The thesis which the student does by himself is considered the climax of the student's career. In it he should show the result of the teaching he has received during the previous five years.

This particular design of Mr. Gabr's was awarded the first Holland and Hannen & Cubitt's prize for the best set of working drawings made in the School during the Session just past. The second prize was divided between Mr. Turner, who obtained an honours degree in construction and submitted working drawings of a large hotel on the scale of the Adelphi Hotel, Liverpool, and Mr. Miller, who obtained a pass degree and submitted working drawings of an office building.

House at Gerrards Cross.

This house is built of local hand-made bricks roofed with dark hand-made tiles. It is set well back from the road in the centre of a cherry orchard. The plan is "L" shaped and so planned that the chief rooms get the maximum sunshine possible. The angle forms a sun-trap. Some fine old panelling, shown in the photograph of the dining room, was taken from a Hertfordshire farmhouse, where it was found behind a coating of plaster and paper. The casement and leaded lights were supplied by Messrs. George Wragge, Ltd.; the central heating and domestic hot water supply carried out by Messrs. Benham & Co.; the house was built by Mr. Frank Greer and designed by Mr. Edgar Ranger, 9, Gray's Inn-square, London.

The Henrietta Barnett School, Hampstead Garden Suburb.

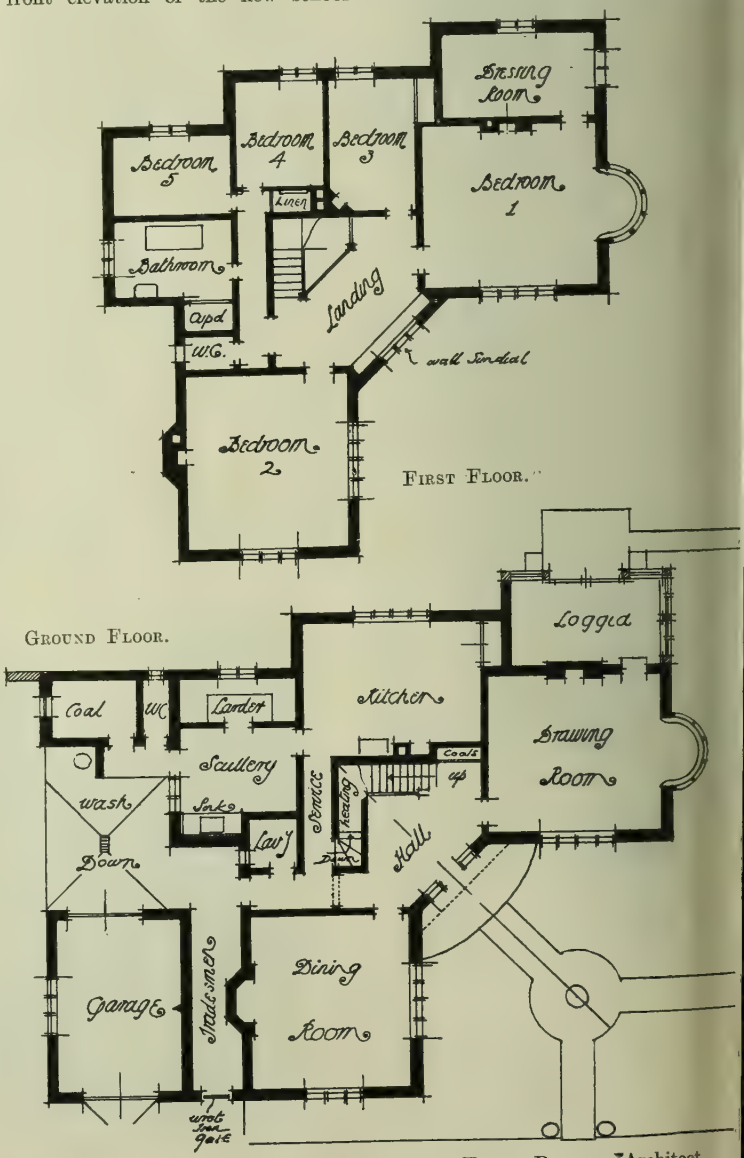
This building has been erected as a girls' high school to accommodate 220 pupils. It is, in effect, an extension of the Hampstead Garden Suburb Institute, which it adjoins and which was erected before the war from the designs of Sir Edwin Lutyens, R.A.

The Institute contains a large hall and other accommodation, which will be used in conjunction with the new school buildings. The plans of the new building were prepared by Mr. John C. S. Soutar, Lic.R.I.B.A., architect to the Hampstead Garden Suburb Trust, Ltd., and the work has been carried out under his direction.

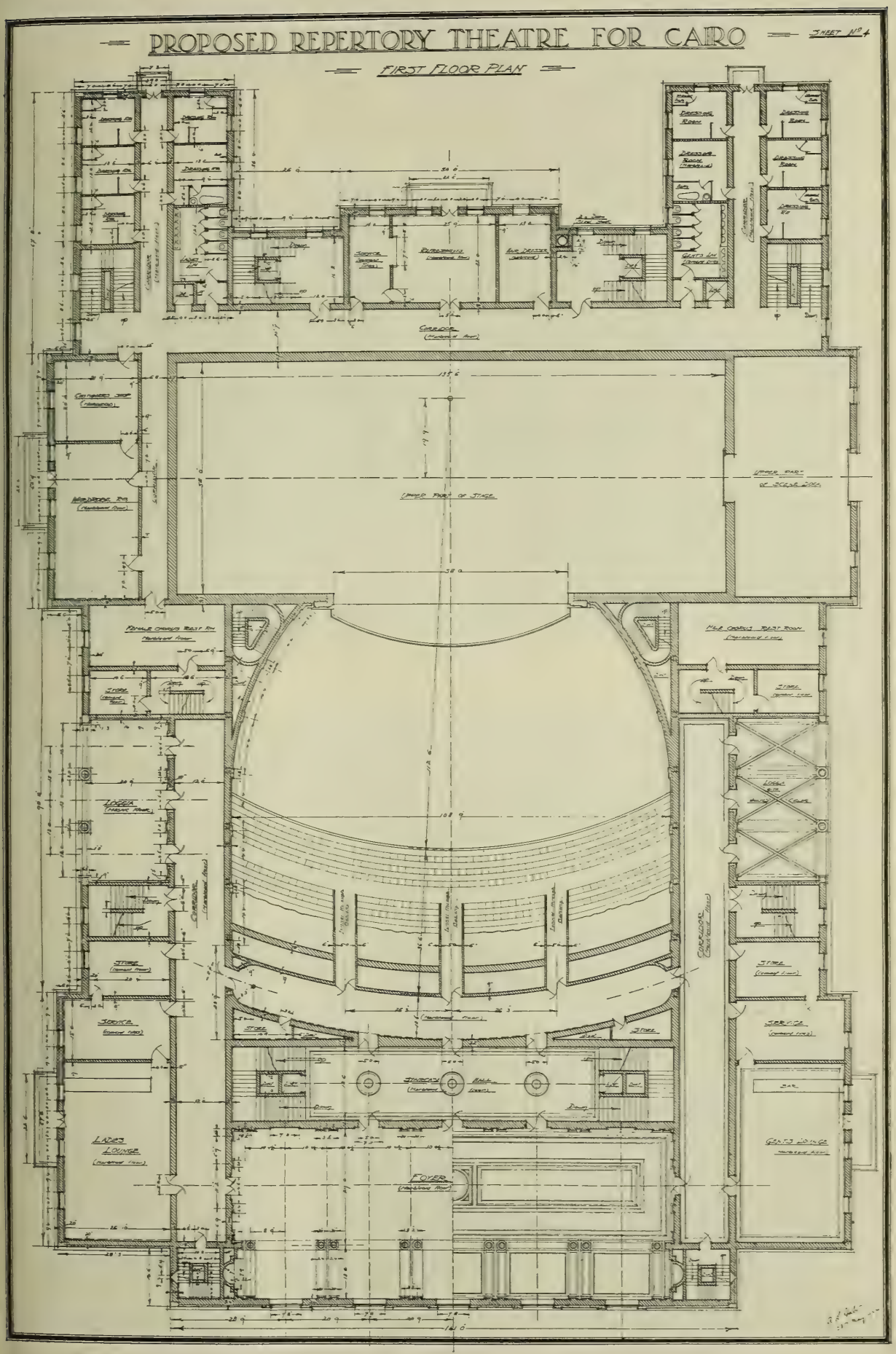
The lay-out of the central square required that the front elevation of the new school should practically repeat with that of Institute, the buildings being symmetri situated in relation to the centre pathwa the square. In planning the building, ad tage has been taken of the south and aspects for the class rooms, while rooms w do not require such a large window area been placed on the elevations where symm of design with the adjoining building had observed.

The main walls are faced externally with silver-grey bricks with Portland stone an brick dressings. The roof is constructe steel trusses and is covered with thick face, hand-made tiles. The floors and cases are in reinforced concrete throug the treads to stairs being in teak. The floo covered with 1¼ in. thick pitch pine wood b laid herring-bone fashion. The floors to tory and cloakrooms are covered with 9 in. red quarry tiles, and coved tile skirting used throughout all rooms. All classroom corridors have dados of Willesden can

The general contractors were Messrs. Roome & Co., Ltd., and the following contractors were engaged: Portland stone Perry & Co.; wood block flooring, Acme Co.; sanitary fittings, Alfred Goslett Ltd.; reinforced floors, Trussed Concrete Co., Ltd.; school furniture, Educational Association, Ltd.; carving, J. Bysouth. facing bricks and roofing tiles were su by Messrs. S. E. Colliers, Ltd., of Re moulded bricks being used in sills, cornice



"Cottered," Gerrards Cross. MR. EDGAR RANGER, Architect.



Liverpoo University School of Architecture.

Design for Proposed Repertory Theatre, Cairo.

By Mr. A. L. Gabr.



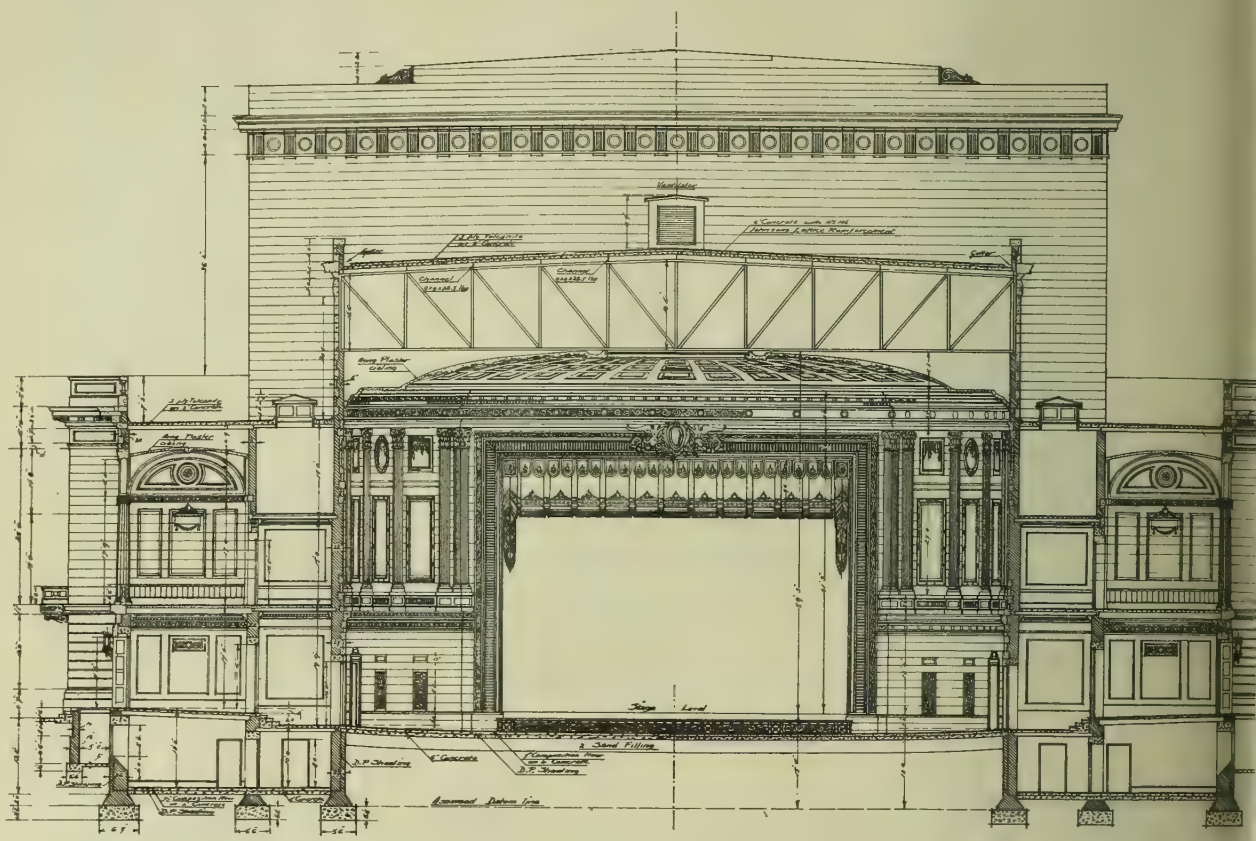


"Cottered," Gerrards Cross.

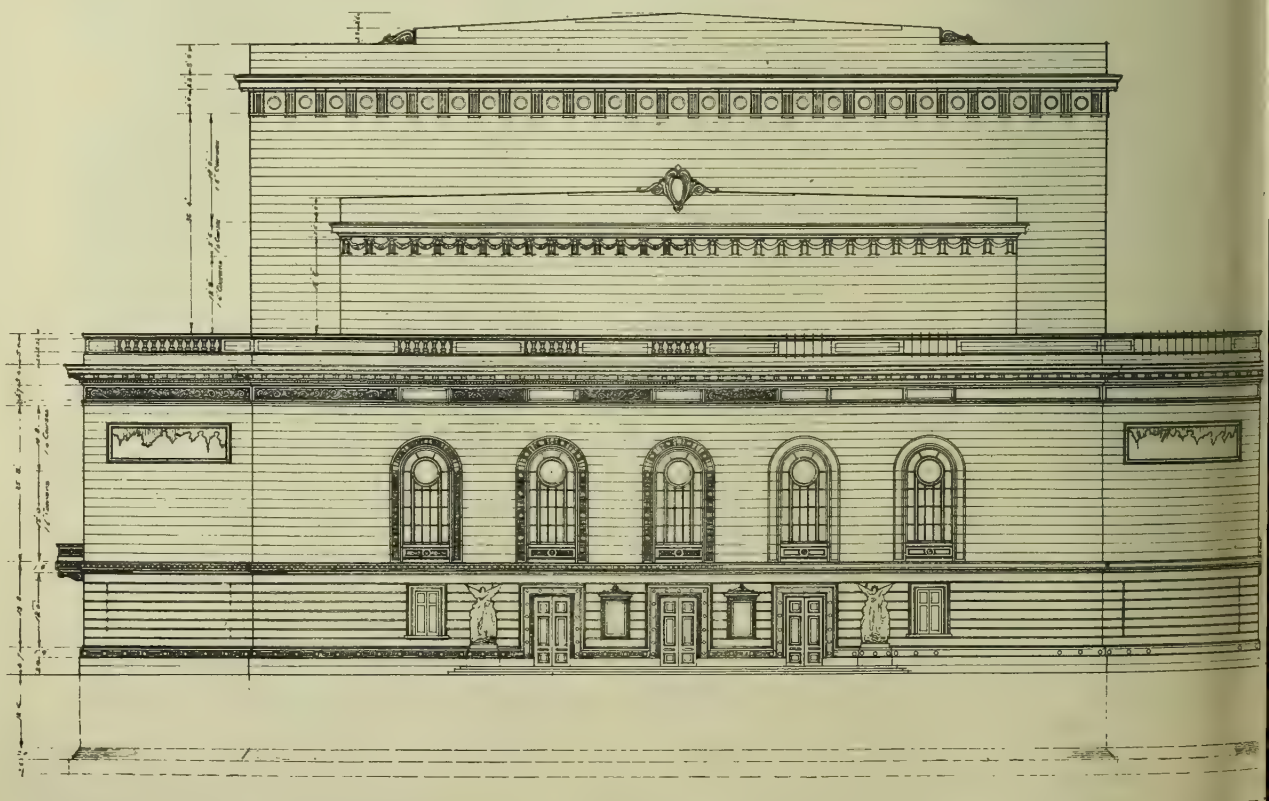
Mr. Edgar Ranger, Architect.

PROPOSED REPERTORY THEATRE FOR CAIRO

CROSS SECTION

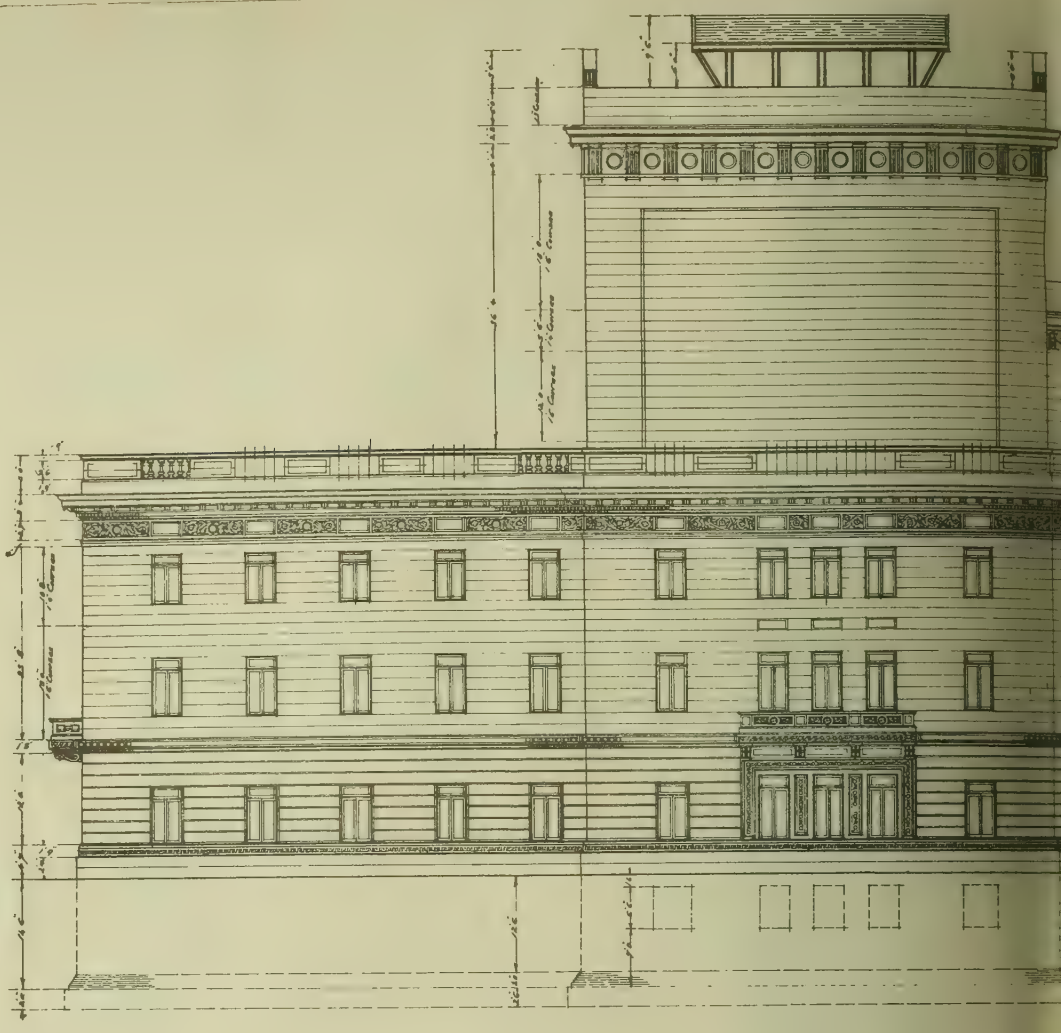


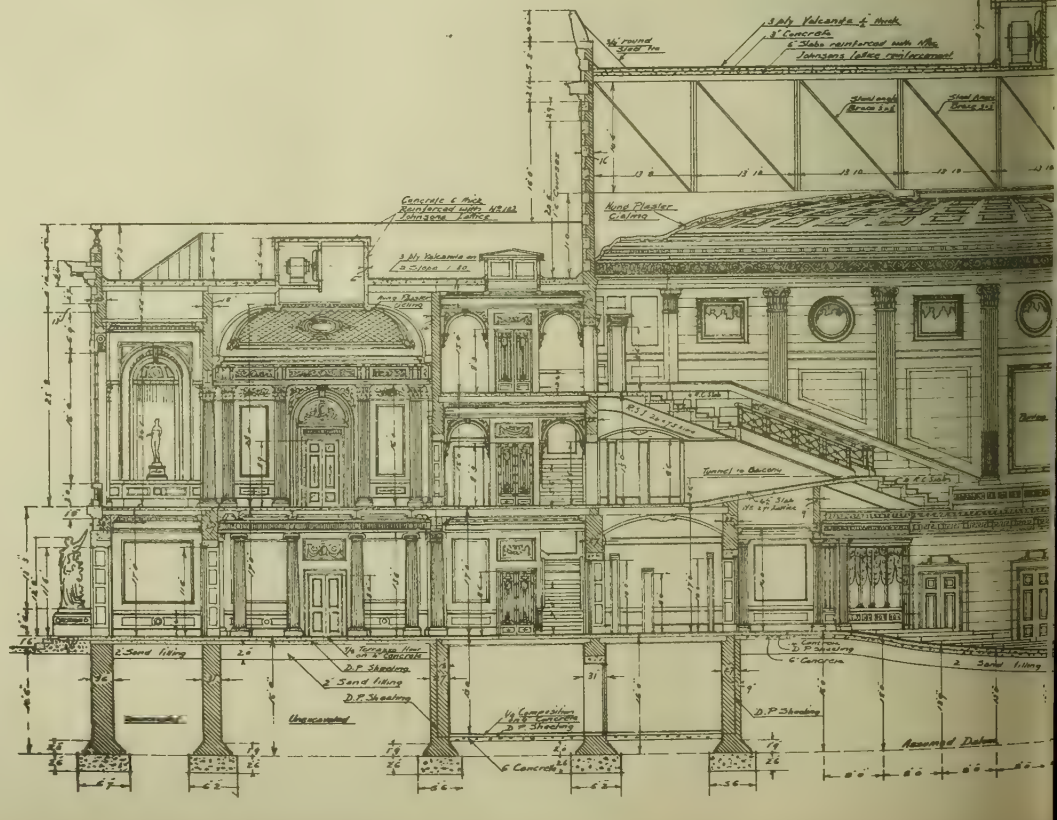
FRONT ELEVATION



SCHOOL OF ARCHITECTURE UNIVERSITY OF LIVERPOOL.

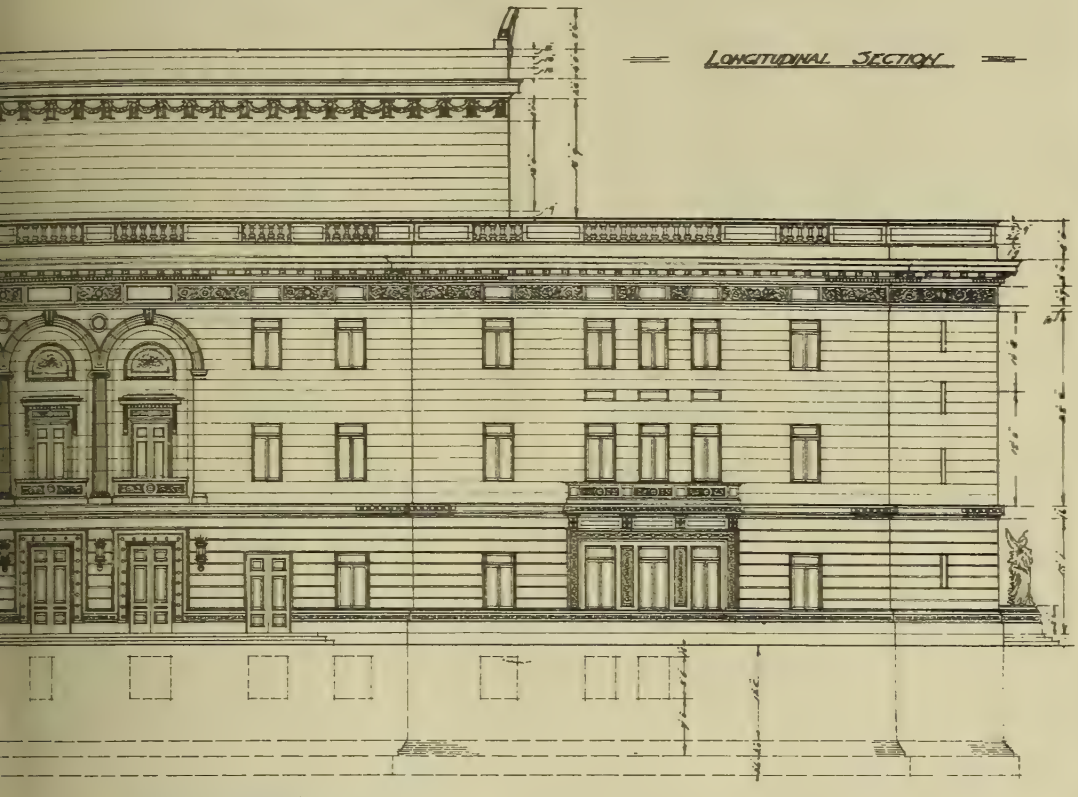
DESIGN FOR PROPOSED REPERTORY THEATRE, CAIRO, BY MR. A. L. GABR.

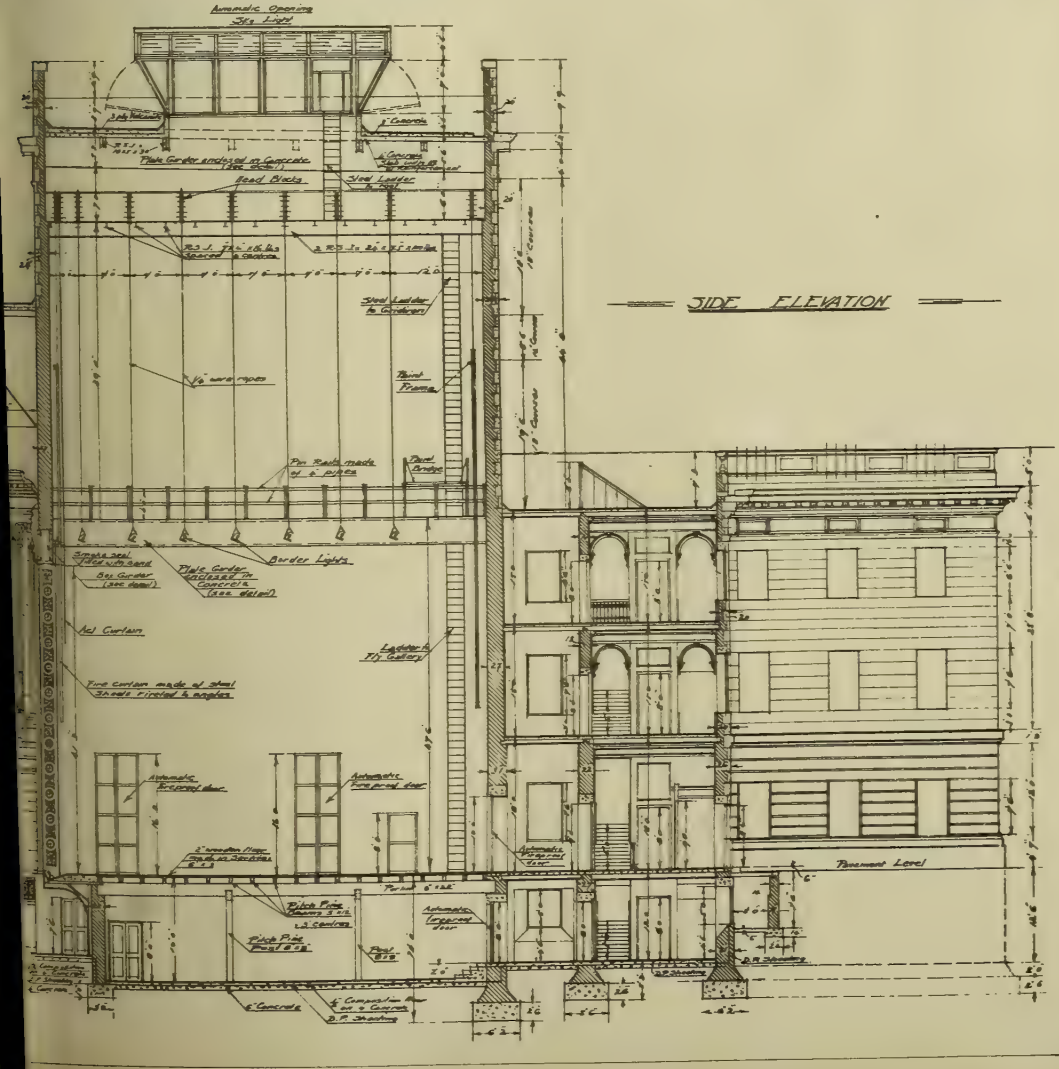



3 ply Valcanite & Mastic
3" Concrete
4" Slabs reinforced with N°28
Johnsons lattice reinforcement
Steel Angle Brace 2x2
Steel Angle Brace 2x2
Concrete & Mastic reinforced with N°28
Johnsons lattice
Keene Plaster Ceiling
3 ply Valcanite on 3" Slabs
Keene Plaster Ceiling
Tunnel to Balcony
2" Slab
2" Sand filling
D.P. Sheeting
2" Sand filling
D.P. Sheeting
Ungrouting
6" Concrete
2" Sand filling
6" Concrete
D.P. Sheeting
Assumed Datum

OSED REPERTORY THEATRE FOR CAIRO

LONGITUDINAL SECTION





SIDE ELEVATION

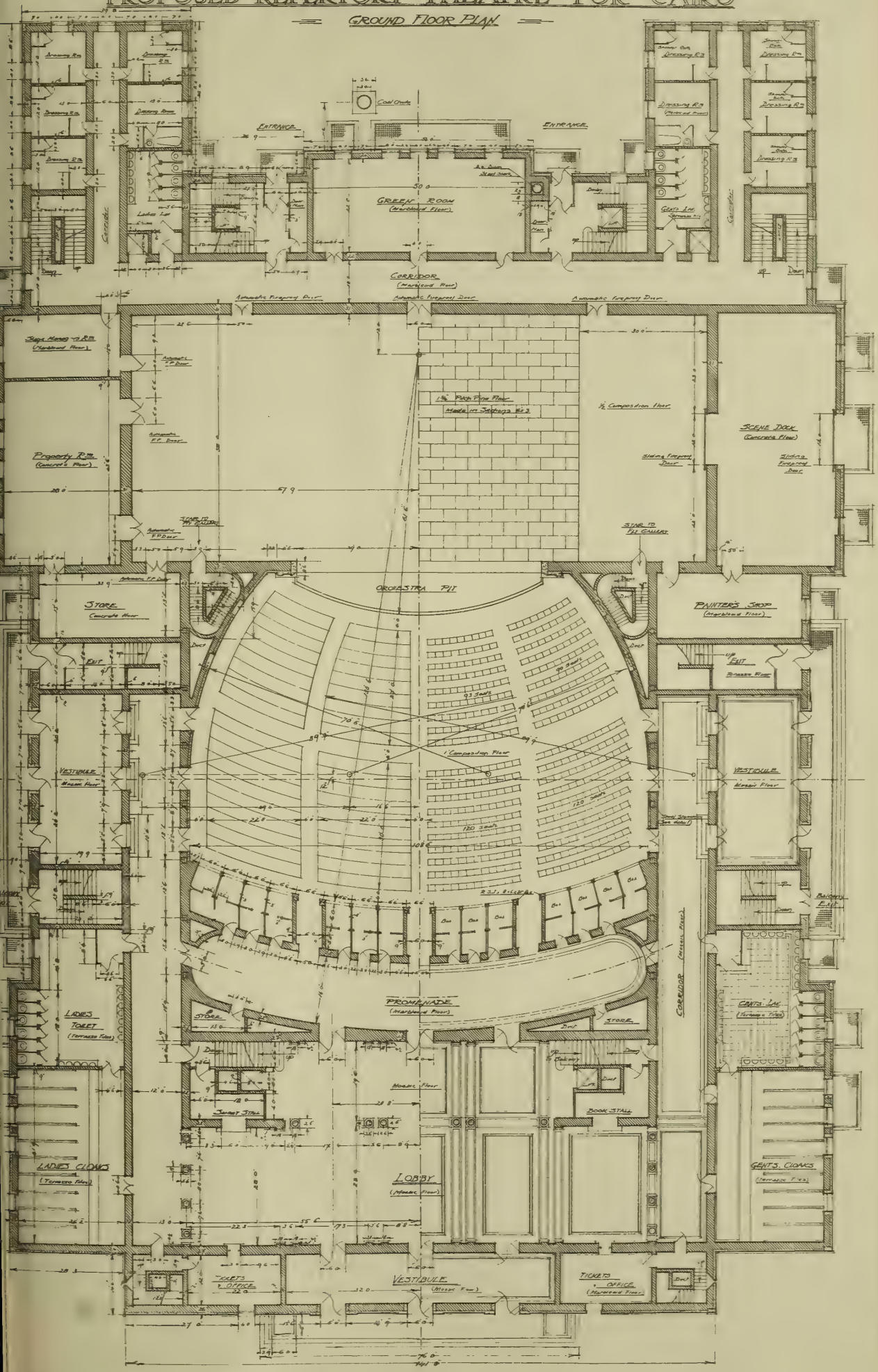


R.A. EXHIBITION, 1924.

NEW BUSINESS PREMISES, OXFORD STREET. MESSRS. J. S. GIBSON & GORDON, FF.R.I.B.A., ARCHITECTS.

PROPOSED REPERTORY THEATRE FOR CAIRO

GROUND FLOOR PLAN



OF ARCHITECTURE UNIVERSITY OF LIVERPOOL.

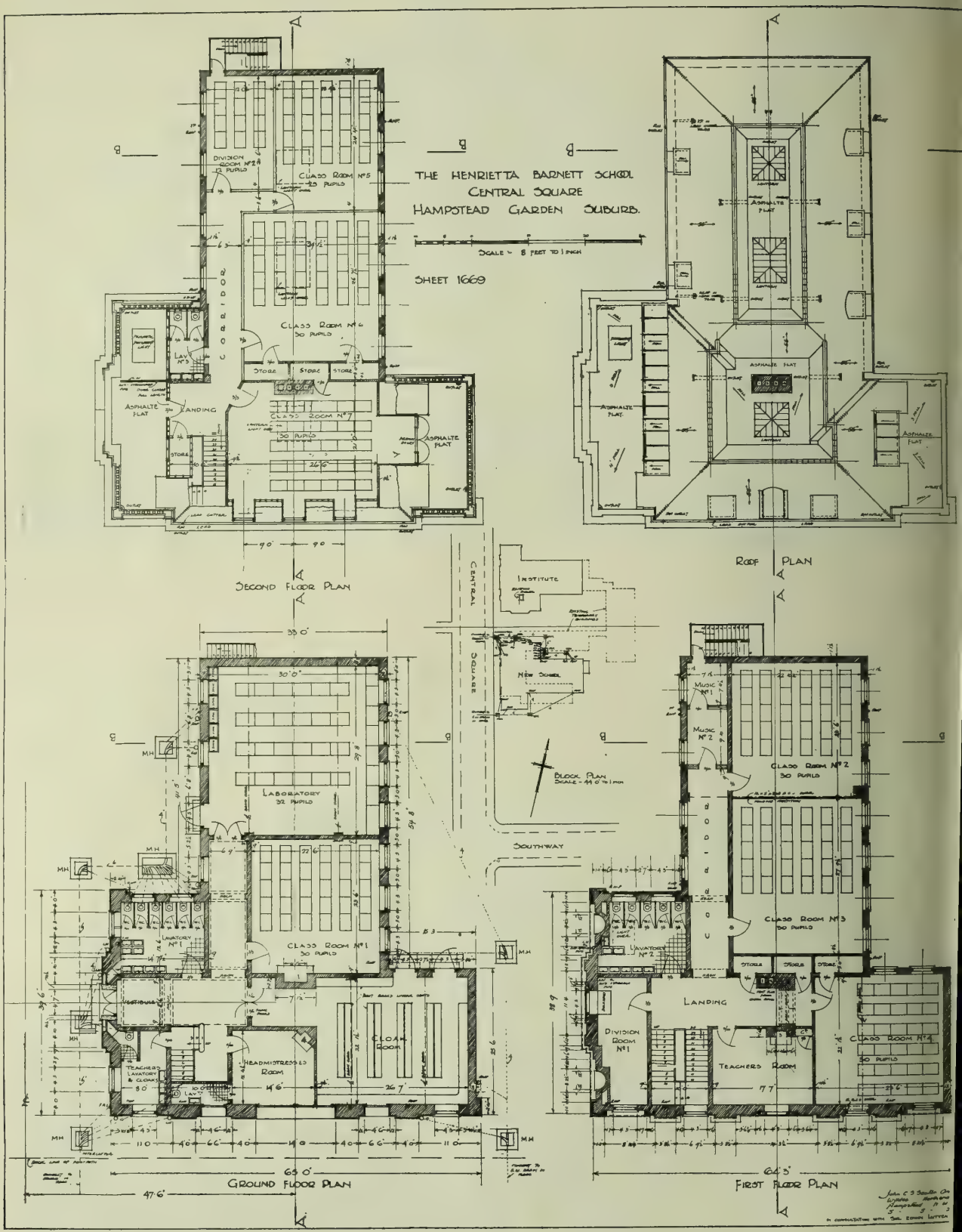
DESIGN FOR PROPOSED REPERTORY THEATRE, CAIRO, BY MR. A. L. GABR.





The Henrietta Barnett School, Hampstead Garden Suburb.

MR. JOHN C. S. SOUTAR, Lic.R.I.B.A. (in consultation with SIR EDWIN LUTYENS, R.A.), Architect.



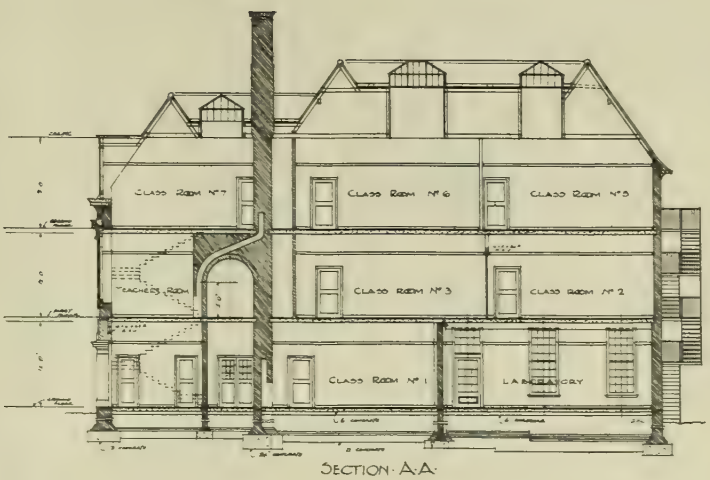
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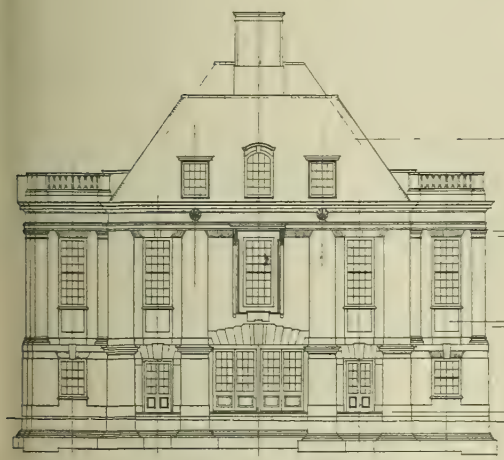
THE HENRIETTA BARNETT SCHOOL
CENTRAL SQUARE
HAMPSTEAD GARDEN SUBURB.

SCALE - 8 FEET TO 1 INCH

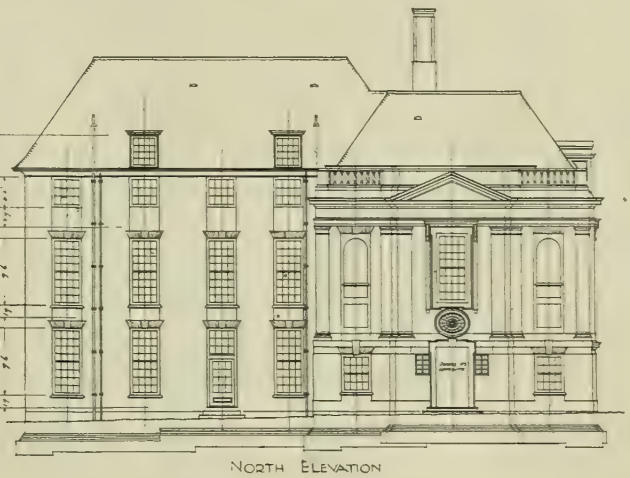
SHEET 1670.



SECTION A.A.



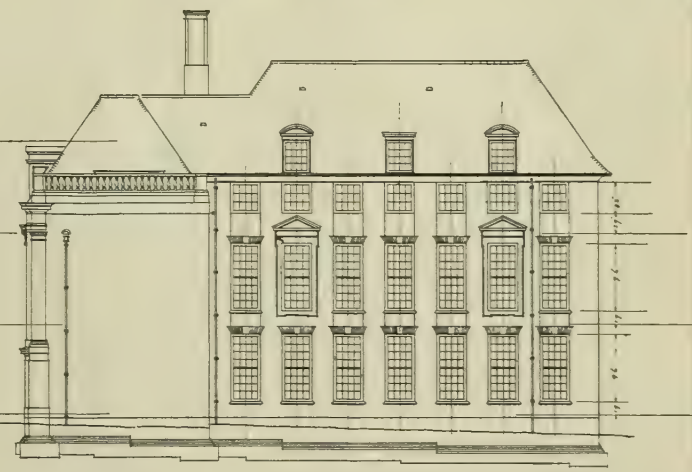
FRONT ELEVATION (WEST)



NORTH ELEVATION



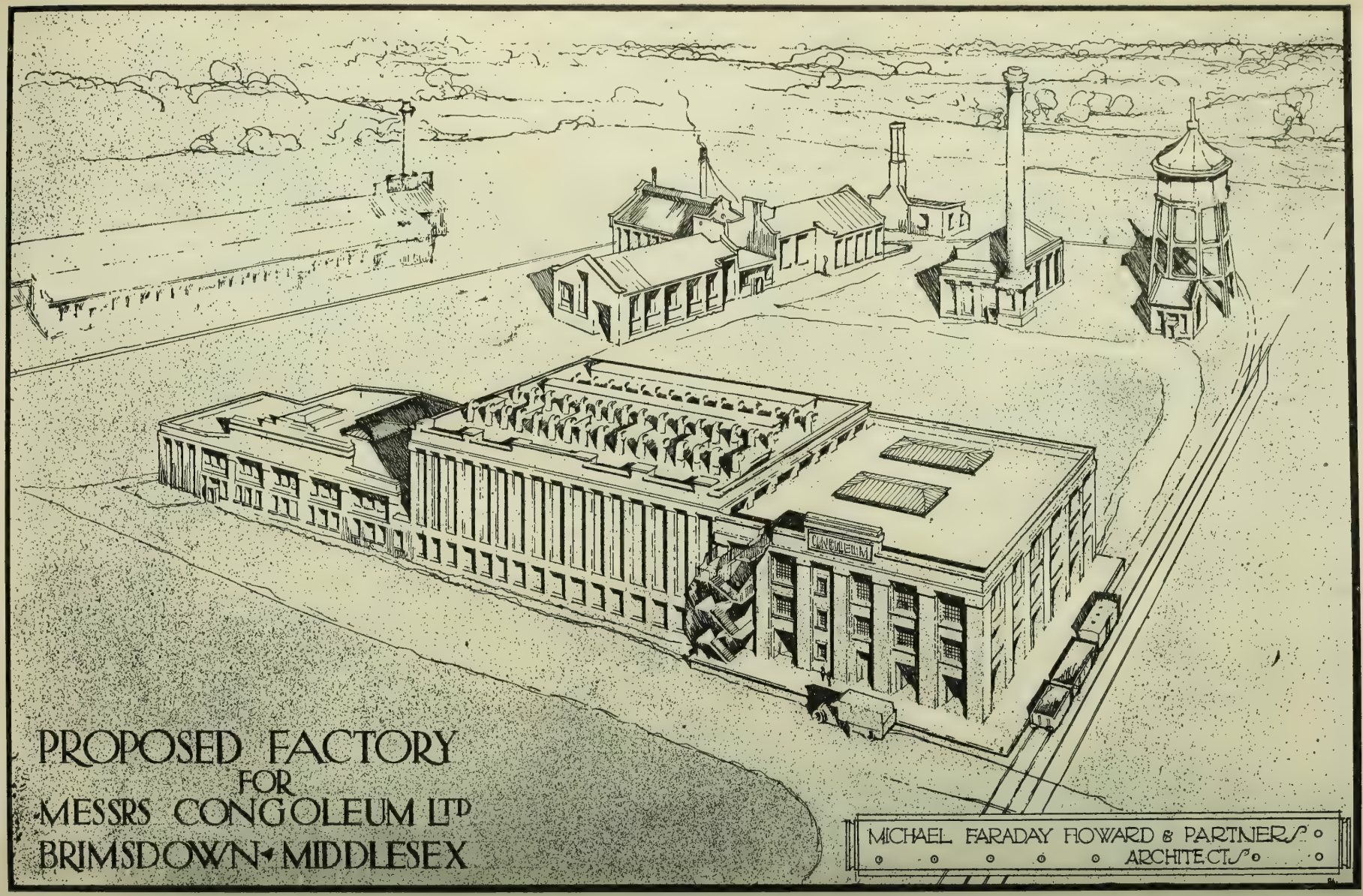
SECTION BB



SOUTH ELEVATION

IN CONSULTATION WITH SIR EDWIN LUTYENS R.A.

MR. JOHN C. S. SOUTAR, Lic.R.I.B.A. (in consultation with SIR EDWIN LUTYENS, R.A.), Architect.

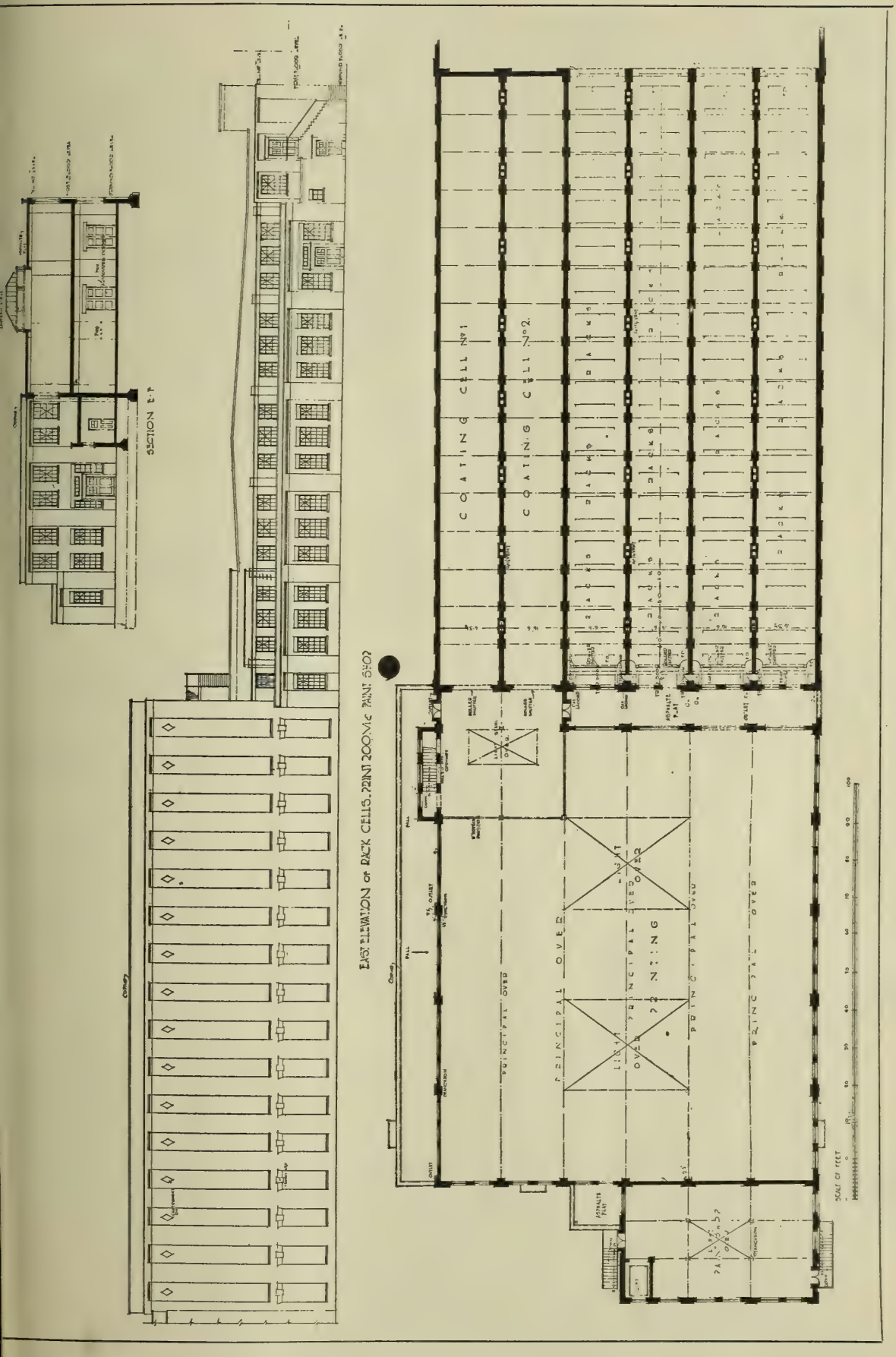


MESSRS. MICHAEL FARADAY, HOWARD & PARTNERS, Architects

This factory was designed for a large open level site at Brimsdown, Middlesex, for the Congoleum Company, Inc., U.S.A., as their European headquarters for the manufacture of the well-known Congoleum squares These buildings were designed as the nucleus of a large scheme, which would, when completed, possess a working floor area of several acres.

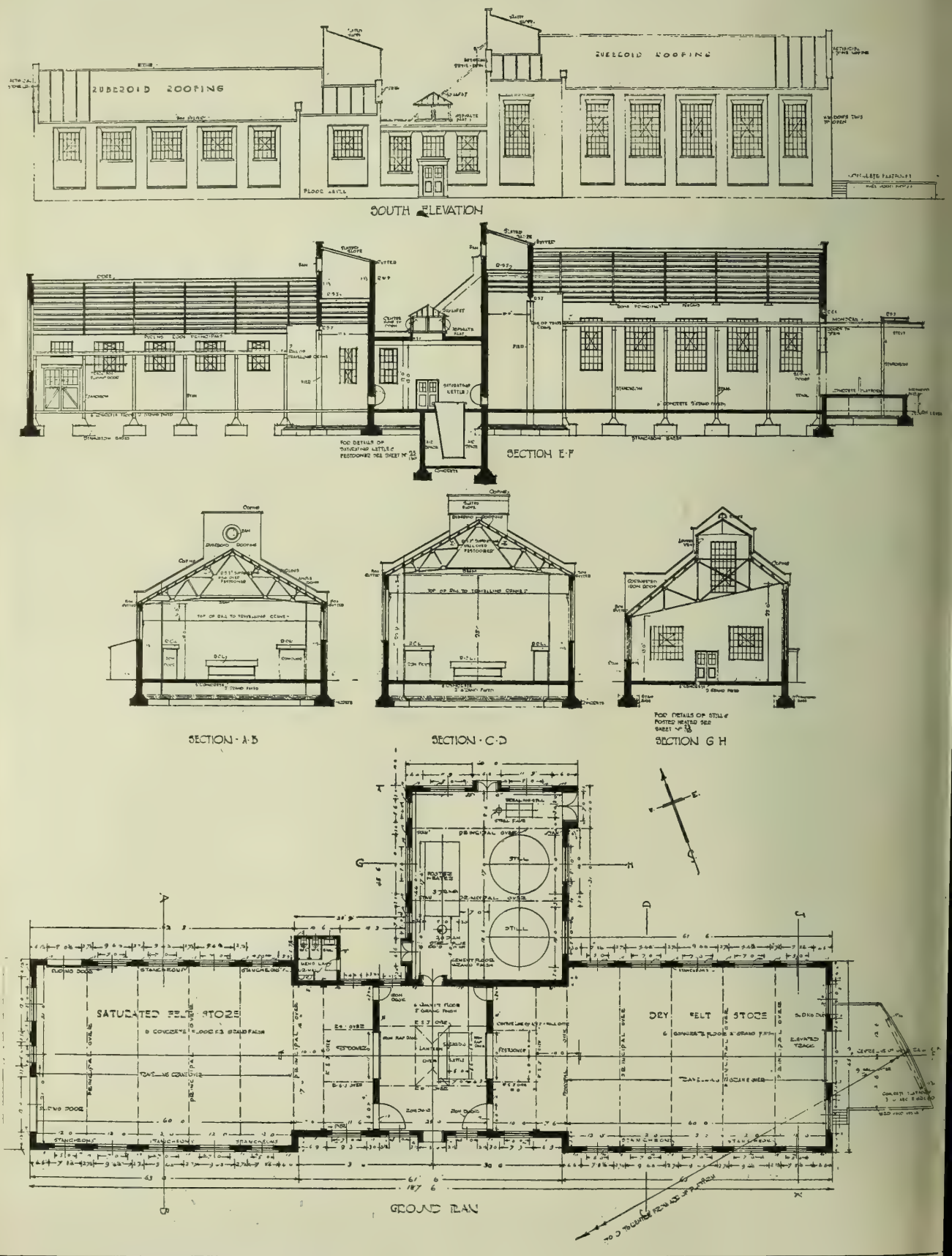
floors used throughout. The flat roofs would be covered with asphalte, and the sloping roofs with slates, galvanised iron or Ruberoid, depending on the special use of the building.

From a constructional point of view, the print room is the most interesting portion of the building, as here the necessity of a clear open floor to receive the travelling printing machine has necessitated the elimination of stanchions, and the asphalte finished slab roof is therefore



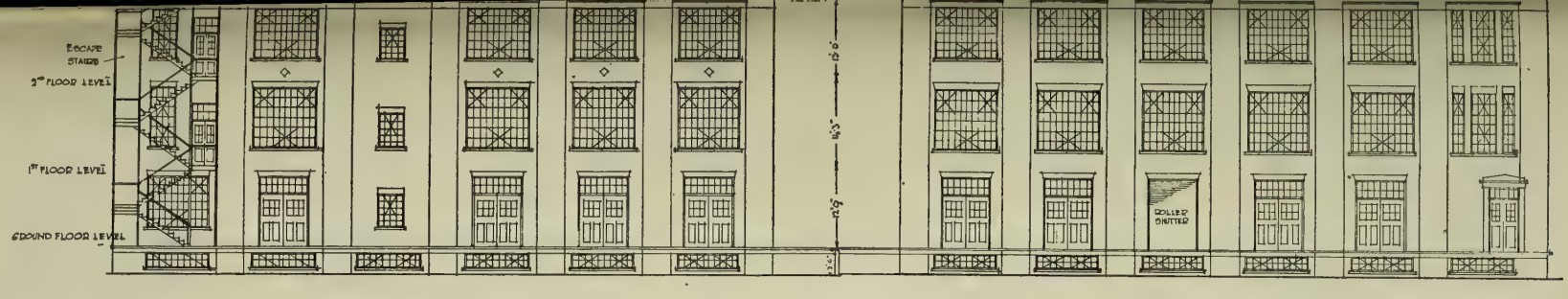
Proposed Factory for Messrs. Congoleum, Ltd., Brimsdown.

MESSRS. MICHAEL FARADAY, HOWARD & PARTNERS, Architects.



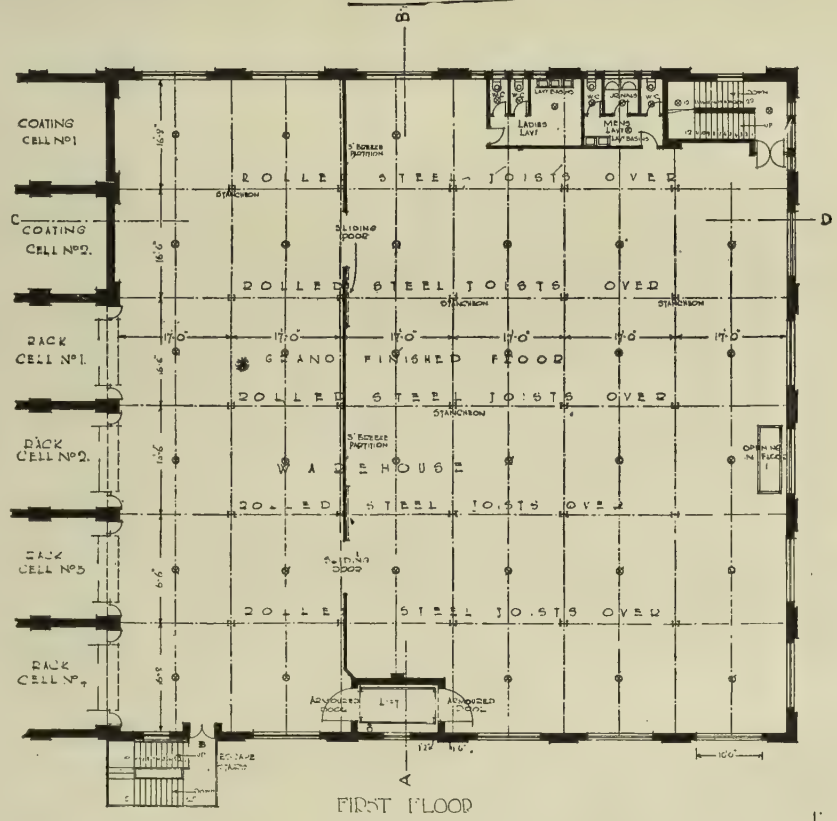
Proposed Factory for Messrs. Congoleum, Ltd., Brimsdown.

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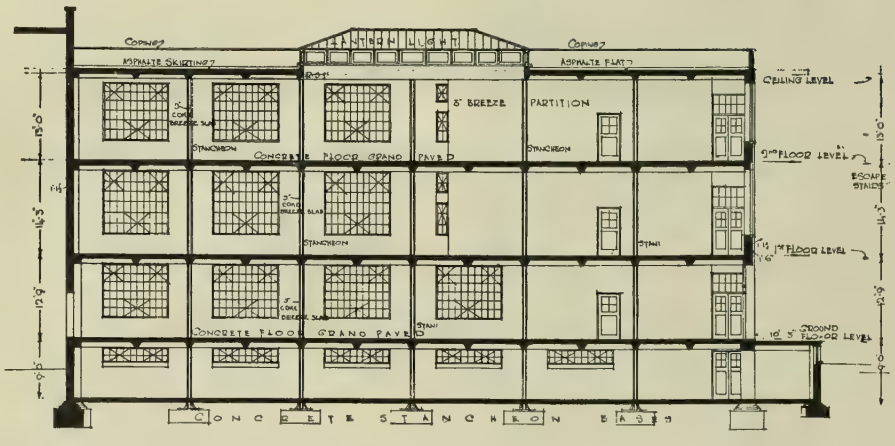


WEST ELEVATION

SOUTH ELEVATION



FIRST FLOOR



SECTION C·D

SCALE OF FEET

Proposed Factory for Messrs. Congoleum, Ltd., Brimsdown.

MESSRS. MICHAEL FARADAY, HOWARD & PARTNERS, Architects.



New Colindale Station for the Underground Railways. MR. F. A. HEATS, Architect to the Underground Railways

NEW "UNDERGROUND" STATIONS

THE new Underground line to Edgware, which was opened last Monday, includes several new features in railway station architecture. The Underground Company has evidently been actuated by a desire to impart a pleasing outline to structures planned on strictly utilitarian lines. Of the stations which we illustrate this week, Colindale is a red brick building of Georgian style, square in plan, with a clerestory and a pyramidical red tiled roof having wide projecting eaves. The front elevation has a Doric colonnade portico of Portland stone. The interior comprises a commodious booking hall and various offices, &c.; the floor paved with black and white tiles, and the lower walls faced with white glazed tiles relieved by green. Edgware station comprises a centre and wings which form three sides of a quadrangle 100 ft. wide by 69 ft. in depth. The elevations are of Portland stone, with a Doric colonnade along the centre and west wing. The main entrance, in the centre, is flanked by small pavilions, which break the roof line of this facade. The east wing will contain a row of shops, divided by Doric columns to preserve the harmony of the elevations as a whole. The roof, of somewhat high pitch, is covered with Italian tiles. The colonnades are paved with red and buff tiles; the booking hall, which is in the centre, with black and white tiles, while the lower walls of the interior are faced with white glazed tiles, formed into panels by green borders. The joinery, throughout, is of polished oak, with bronze fittings.

To facilitate the working of early and late service over the Edgware extension a new car shed has been built alongside the Edgware terminus. It is 402 ft. in length by 69 ft. wide. The outer walls are of Dorking mottled bricks; the roof of steel-truss type, covered with flat red tiles.

The opening of this extension has led to considerable activity in building operations. New roads have already been formed, and blocks of shops are being erected immediately opposite the Edgware Station. Numerous houses are also being erected.

The contractors are as follows:—Edgware Station: Sir Lindsay Parkinson; Burnt Oak sub-station: Messrs. Ford & Walton; Colindale Station: Sir Lindsay Parkinson. The Underground Co. are their own architects in each case.

EXHIBITION NOTES

International Exhibition of Modern Decorative and Industrial Arts.

WE take the following extracts from a communication which has been issued by the Department of Overseas Trade in connection with the Exhibition which will be held in Paris in April, 1925.

The British section will comprise a single-storied pavilion covering about 8,000 sq. ft., together with an annexe built on a platform measuring some 5,000 sq. ft. overlooking the Seine and containing a small restaurant and roof garden. For these buildings an excellent site at the north-west corner of the Pont Alexandre III. has been allotted to this country. Space amounting in all to 25,000 sq. ft. has also been provided for British exhibits in the Grand Palais, together with a further space in one of the buildings to be erected by the French authorities in the Esplanade des Invalides.

It is not proposed to invite exhibitors to take space within the British Pavilion, but to treat the Pavilion as a national exhibit. The building itself will constitute an example of architecture and the allied arts of the United Kingdom, and it is proposed to select, with the assistance of expert committees formed for the purpose suitable objects of the l quality and artistic distinction for within it.

As regards the space allotted t country in the Grand Palais, and in the ing in the Esplanade des Invalides, t partment will offer space to firms who take part in the Exhibition. It will be sary to make a charge of 10s. per sq. order to defray a part of the ex involved, which cannot be wholly me the grant of £30,000 made from public towards the cost of British participation. charge will cover the cost of the g scheme of decoration, lighting, the attendance and cleaning but not th special stands or fittings.

In order to ensure that exhibits may the necessary standard of artistic me comply with the conditions of the exh they would, before admission, be sub scrutiny by Committees of Experts. T hibition will afford an exceptional oppo of showing to the French and to th number of foreign buyers who visit Pari larly in order to purchase the various of goods which fall within the scope Exhibition, that the products of industry are in no way inferior in merit to those of any other nation. this opportunity is to be exploited measure, it is necessary to secure the co tion of the foremost designers, produc other experts, and also to ensure th tenance of a high standard of j selection.

Gas Fires.

At an inquest recently on a child the Fulham coroner suggested th Children's Act, which renders obligat use of a guard before an open fire, sh so constructed as to include gas fires.



Approach to Edgware Station. MR. F. A. HEATS, Architect to the Underground Railways.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers cannot accept responsibility for contributed es, especially on legal matters.

ay we appeal to our correspondents to nit their queries on paper of a size easily , and written as legibly as possible, or r still, in typescript?—ED.

Cost of Building Hollow Walls.

[REPLY TO M. D. R.]

R,—The cost of building the wall shown 14 in. brickwork with a 2 in. cavity d be about £30 per rod plus about £2 od for extra cost of wall ties and plumb- wo faces if galvanised iron ties are used; bout another further 15s. to £2 more if ware tie bricks are used. The latter are r the best, being indestructible, but they seldom used in modern practice though often wonders in what state the iron ties be in a hundred years time or less.

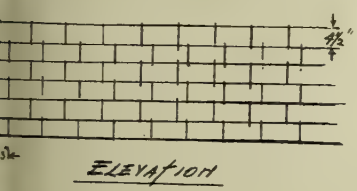
e cost of building the second wall shown 9 in. brickwork separated by 6½ in. con- presumed to be 1-2-4, would be about 10s. per rod super (not reduced) plus of concrete which would be about per rod, plus the cost of extra wall ties about £1 per rod. The s are, therefore, in favour of the ary cavity wall. It will, of course, be stood that the actual prices vary widely fferent districts, but the comparison will uch the same, except that in a district bricks are difficult to obtain at a et price, and good aggregate is handy, cale may be turned in favour of the ete-filled wall.

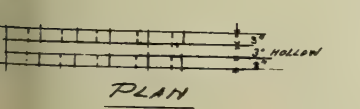
ave not before me to-day's prices for n rock but should imagine that to fill n. cavity with this material would cost £5 or £6 per rod extra, and I should ecommend the use of wall ties, in case perfect filling.

"BRICKS."

Laying of Bricks.

—Why are bricks not laid on edge for ng purposes, as shown on sketch? For





le, in a 9 in. wall 21 ft. high, we require ers when constructed in the ordinary way, inst 56 layers when bricks are laid on This would mean a saving of one-third nount on bricks, mortar joints and labour ly a point worth considering.

V. J. WENNING.

Corrugated Iron.

[REPLY TO "Z."]

—It is probable that the corrugated as not specially and properly prepared painting, in which case the paint be thoroughly removed by scraping and well brushing with a stiff wire brush and the surface treated in the following way:—

Apply the following mixture—1 part chloride of copper, 1 part nitrate of copper, 1 part sal-ammoniac, 64 parts water added to 1 part commercial hydrochloric acid. Leave on for twenty-four hours and then apply Torbay paint or coat only with bitumastic paint which may be obtained in various colours.

It might be pointed out that "Red Oxide" is a loose term that may be applied to a composition containing only 20 per cent. or less of oxide where nearer 80 per cent. is essential. Some of the preparations applied to ironwork under this heading are quite useless as a protective covering.

"TURPS."

Leaking Walls.

[REPLY TO ARCHITECT.]

SIR,—The crazing of the cement surface is probably due to the use of too rich a mixture of cement in the first place. The best cure will be to rub down and remove the distemper and coat with fairly strong cement wash to fill in the cracks and applied with a brush. The surface may then be re-distempered.

H. B.

Cement and other Foundations.

[REPLY TO CLERK OF WORKS.]

SIR,—A good blue lime mixed in the way recommended will make a very fine foundation, but there are many limes that prove inferior to cement in every way as weight-bearing concrete, and tested Portland cement shows better results under test for crushing than any lime.

The archæologist's objection to the use of cement savours a little of pedantry, if one may say so, as there is no known reason to doubt the lasting properties of this material, limited as our experience of it may be. However, there is nothing in the method proposed that can be objected to provided a good lime is used.

"UP-TO-DATE."

Floor Treatment.

[REPLY TO J. T.]

SIR,—There is no better treatment for oak floors, both for appearance and wear, than the good old-fashioned beeswax and turpentine freely applied and well worked in. It gives, of course, a slippery surface which may be objected to in club premises, but this may be obviated by the subsequent application of one of the non-slip polishes now on the market, though these are really forms of varnish. The figure of the wood may be further emphasised by first treating the wood with ammonia rubbed in with a rag, which is merely a way of hastening the mellow tone which oak will assume in time if left to itself.

"ELBOW GREASE."

Oak Timbering.

SIR,—Can any of your readers advise me the best ways and means to darken down to old weathered colour the oak adzed timbering of an old design cottage I am just building?

I have been a reader of *The Builder* many years, but cannot remember this question being asked or replied to in any of your previous issues.

THOS. M. COUZENS.

Electric Cooking.

SIR,—An institution in which I am interested desires to install electric cooking for 100 people, and the basic point is the cost of working. The makers differ so much in their estimates of consumption of current that I appeal to one of my own trade to tell me if they know of a system of about that size and its consumption of what I believe is called "juice."

"COUNTY COUNCILLOR AND BUILDER."

Architectural Data.

SIR,—Can any reader inform me from what sources I can obtain reliable information relative to the dates, architects, and past histories, of many of the lesser known buildings, town and country houses, and churches, &c., abounding in so many parts of the provinces.

Personally, my home is situated in Wiltshire, the home of innumerable objects of architectural interest, of which little appears to be known by local residents. Anxious to gain an authentic knowledge of these places of interest, I shall be obliged if any readers can kindly inform me from what sources I may gain such knowledge.

If any books are recommended which are not very well known, perhaps your readers will be good enough to give the name and address of publisher.

"RESEARCH."

HOUSING WITH STATE ASSISTANCE

THE following figures relating to the progress of house building under the Housing, &c., Act, 1923, have been issued by the Ministry of Health during the Parliamentary recess:—

(1) Houses authorised by the Minister of Health up to August 6, 1924—

To be erected by local authorities..	54,686
To be erected by private enterprise..	99,694
Total	154,380

(2) Houses included in definite arrangements on or before August 1, 1924—

Schemes of local authorities:	
Number of houses included in contracts or in approved direct labour schemes	35,921
Private enterprise:	
Number of houses included in undertakings given by the local authorities under Section 2 (3)	67,171
Number of houses approved by the Minister under Section 3, and included in contracts	5,688
Total (included in Table 1) ..	108,780

(3) Building Progress at August 1, 1924—

	Foundations.	Roofed.	Completed.
Local authorities	8,985 ..	6,565 ..	7,563
Pte. enterprise	18,850 ..	14,642 ..	14,389
Total ..	27,835 ..	21,207 ..	21,952

Note.—Tables (2) and (3). For 34 local authorities, from whom returns for August 1, 1924, have not yet been received, the numbers included above are taken from the previous month's returns.

HOUSING IN AMERICA

This quarterly journal* always includes a summary of housing all over the world, and this issue is naturally concerned with the advent of a Labour Government in England and with the Report of the Building Industry Committee set up by Mr. Wheatley. As to America: rent control is to continue in New York for at least another year, and the city is discovering what, sooner or later, we shall all recognise—that it is a great deal easier to pass rent-restricting Acts than to repeal them, even if the real necessity for them should no longer exist. In Philadelphia the tenement conditions appear to be on a par with those in Scotland, and they confirm one in the belief that tenements can only be satisfactory if built with extreme foresight and managed with minute care. Zoning is making great strides in America; in January last zoning ordinances were in effect in 221 municipalities, and during the year ordinances were adopted by 81 more municipalities with a population of about eight millions.

* *Housing Betterment*. May, 1924. (New York City: The National Housing Association.)

THE BUILDING TRADE

EDUCATION IN THE BUILDING INDUSTRY

AT the annual Conference of the Institute of Builders with the Teachers of Building in Great Britain, Mr. J. W. Riley, Head of the Building Department, Rochdale Technical School, read a paper entitled "Building Examinations."

In the course of his paper he said since examinations were a recognised means of testing the success of education work in general, he thought he might assume that they were an essential and important part of the instruction.

As the object of the meeting was to give consideration to examinations and how they might stimulate an improvement in the education of those engaged in the building trades, it seemed necessary (1) briefly to review the existing conditions; and (2) to discuss the possibilities of further developments in order to obtain greater efficiency.

It would, no doubt, be well within the memory of nearly all present that the Government Science and Art Department—later the Board of Education—held examinations annually in many science and art subjects, including building construction, geometry, mechanics, mathematics, architectural drawing, &c., while the City and Guilds of London Institute conducted examinations in such trade subjects as brickwork, masonry, carpentry and joinery, structural engineering, builders' quantities, plumbing and sanitary engineering, &c., and awarded certificates to the successful candidates. Those examinations, carried on for more than fifty years, gradually developed and proved a great stimulus in setting a national standard of scientific or technical training in many phases of industrial life, thus assisting a large number of enthusiastic young people in their studies.

In 1911, the Board of Education issued to educational authorities an important circular (Circular 776) in which they stated that it was desirable to make a change in the character of the examinations under their auspices. In this circular they gave notice of their intention to gradually discontinue the examinations, intimating at the same time that each educational authority should make arrangements for holding their own examinations in the future. In doing this the Board stated that the time had arrived when it was possible to allow greater freedom to schools both in the choice of material for instruction, and in order and method of treatment of many subjects. The examinations were, therefore, gradually discontinued, until in 1918 no examinations were held by the Board in science and art subjects except for scholarship purposes. It was necessary to point out that—(1) The Board's examinations were in single subjects; (2) the examination papers were prepared by experts who did not in any way consult teachers, or any one specially interested in the particular industry. With regard to the examinations conducted by the City and Guilds of London Institute, they, too, had been discontinued in England and Wales in all except the final stages of the various subjects.

While the training given to pupils in elementary and secondary schools was general in character, and aimed only very broadly at training them for particular groups of occupations, the training given to students in technical schools was usually specialised, and aimed definitely at giving knowledge of the scientific principles underlying their particular occupation. Formerly it was the custom to expect the employer to personally supervise the training of all the apprentices under his charge. Small workshops were the rule, most of the work done was by hand, and the employer, recognising his responsibility, took a very personal interest in the boys in his employ, saw to it that they learned their trade properly, with the result that a supply of properly trained craftsmen was not difficult to maintain.

At the present time, with much larger works, rapid developments of machinery, increased application of science to industrial occupations, greater competition, &c., it was necessary to have larger staffs of men with better trained foremen and leaders; the employer could not possibly undertake the personal supervision of all his young workmen, and the means of training—especially the educational and technical side—had devolved almost entirely upon technical institutions. If anyone had any doubts of the truth of this statement let him ask whether there existed any other large organised effort for the educational training of workers for the industry.

The objects of the examination of technical students might, therefore, be considered to be:—

(*a*) To test (1) their standard of proficiency in specified branches of knowledge; (2) their fitness for more advanced instruction.

(*b*) To provide a record of successes with due recognition of diligence and ability; to act as a stimulus for further e ort; to keep students in attendance to the end of the session.

(*c*) To guide teachers as to the standard to be expected at certain stages of instruction.

(*d*) To aid in the fixing and maintaining of suitable standards of instruction and attainment.

As examinations were considered necessary to test educational work it was, therefore, necessary to have definite curricula or syllabuses—set out in detail—arranged in an educationally progressive manner and covering each stage of the work. It might be argued that the ideal way of preparing syllabuses of instruction was to frame them without reference to an examination test, and to look upon such a test as a secondary matter only, to be considered after the courses of instruction had been thought out completely. It was, however, admitted by most teachers that the scope and method of instruction was controlled by the syllabus with an eye to examination results, and this should be fully realised in preparing schemes and in setting examination papers. That was, the examination should be so devised that they emphasised the educational value of the instruction.

It was quite natural that a student should wish to have some tangible and permanent record of his successes, and if, or when, this record was issued by a national body of high standing it had a greater value than if issued locally; it indicated that he had measured himself against a more numerous body of students, and had not fallen short of the standard laid down by an authority commanding general confidence. Again, a certificate on a suitable examination often had a considerable pecuniary value to a student who was also qualified in other ways, and might, with a sympathetic employer serve as a recognition of special ability, especially when taken in conjunction with personality and experience. From this point of view it would, therefore, seem that the proposals of the Board of Education to allow and encourage technical institutions in general to prepare their own schemes of work and examine their own students had not fully accomplished what was intended. The main weakness was shown to be a lack of general standardisation and, therefore, a difficulty in classification, owing to absence of uniformity, when transferring students from one institution to another. Recent developments, however, indicated that a satisfactory solution was in prospect as follows:—

Since technical institutions were the places where the instruction was given, with the object of improving the industrial capacity of the country, and because they were financed by public funds—partly by Government grants, and partly by local rates—there were at least three parties interested, namely, the Board of Education, as a Government Department, the local authorities, and industrial, professional and commercial organisations.

Building Advisory Committees.

Experience had shown that advisory mittees set up for each group of trade su provided a good means of arranging the cur and syllabuses of instruction. They we existence in some parts of the country, might be desirable to have the country into areas in such a way that each area tained both large and small schools. conditions would have to be considered they should be subservient to a general na scheme so that there might be a degr uniformity without too much rigidity.

The duties of the advisory committees to consider in detail each year's course of s linking up the various subjects; in su manner they provided a progressive an ordinated whole. An important point i personnel of the committees was that each mentioned parties should be represented the Representing the local education authorit was desirable that either the director of e tion or the principal of an institution shou a member, because of his responsibility t education committee for the working o institution as a harmonious whole. The l number of members should, however, cons teachers, taking care always that they truly representative of the various intere subjects taught. It might be necessary to out in justification for advocating this technical teachers were selected and appo because of their intimate acquaintance both the practical and technical or scie sides of the industry. As teachers with e ence gained in schools they not only knew was possible educationally, they were also competent to link the theory with the pra It might also be asserted that at present, e in the larger institutions where full time work was carried on, the majority of the tea held evening sessional teaching posts, as su mentary to their engagements in some se or department of the building industry.

Representatives of both employers employees were necessary because: (1) I essential to the industry that every encou ment should be extended to the young ap tices to become students of their part craft so that they might become eff workmen. (2) It was essential that should become acquainted with what was taught in technical institutions at the p time, and that they should take a sha arranging the courses of work in such in tions.

As a teacher he thought it necessa emphasise the importance of securing a co-operation than had hitherto existed the controlling forces in the industry.

The Board of Education was represent the advisory committees by His Maj inspectors. As it was part of their du visit all the institutions in the country a report upon the work carried on therein had the best opportunities of discoverin, were the "progressive" teachers; which the education committees most desiro progress, as evidenced by well-equipped rooms and laboratories, where apparatu abundant; and where the best faciliti studies were available. Possessed of this ledge they had an opportunity of seei situation from a wide and extended vie because of this could, and did, render va help to the advisory committees.

Courses of Instruction.

The course of instruction in the e classes must be either of longer durat more restricted in character than those in day classes. As the former largel dominated, he assumed courses suita them, although it was to be hoped th time was not far distant when the greate of the educational work involved in the ing of building students would be done day time.

It had already been stated that the dis examinations of the Board of Educatio

single subjects without any attempt to form
em into group course work. Experience had
own, however, that properly graded grouped
rses arranged over a period of six or seven
rs were much better than the single subject
thod.

The boys should be encouraged to take up
ning sessional study directly they left school
14 or 15 years of age. At least one—possibly
o—years should be spent in the preliminary
hnical course which should be common to all
dents of building, engineering, &c., after
ich the building student entered into his
cialised training for the industry. The
rk of the preliminary course included the
dy of English, practical mathematics,
ctical drawing and elementary science.
is gave opportunity for revision and exten-
n of their day school training, and had an
ustrial bias.

The students of 16 years and upwards might
w be classified as: (1) Those whose desire
s to receive instruction only in the subject
their own trade, and be confined to such
des as masonry, brickwork and concreting,
pentry and joinery (hand and machine work),
mbing, painting and decorating, &c. For
se a three years' course in which practical
rk was provided, and in which applied
metry and elementary calculations were also
orporated, would enable the students to
n much knowledge and give them better
nces of becoming efficient and intelligent
kmen.

t was possible, however, that many students
these trade courses might show exceptional
lity, along with ambitions, and might desire
ake (2) a more comprehensive course which
ld be described as a general building course,
which the aim was to obtain a general and
knowledge of the industry. This course
the one necessary for students who intended
become either architects, structural engineers,
ntity surveyors, master builders, supervisors
works, foremen, &c. This course occupied
ee years as senior work, followed by a further
years of advanced work. This senior
rse included:—

st year: Building construction, practical
metry, calculations. 2nd year: Building
struction, practical geometry, building
nce. 3rd year: Building construction with
least one other subject selected from the
owing: Practical geometry, building science,
lding mathematics, and, if necessary, one
er subject to be selected from the following:
lders' quantities, carpentry and joinery
oretical), brickwork and concreting,
sonry.

t would be noticed that with the third year
ior course many options were offered to the
dent according to his special inclination or
essities. Assuming that after having com-
ed satisfactorily the three years' work in
senior course, the student desired to proceed
the advanced course, he was allowed still
her scope for specialisation, as shown by
following outline of syllabus:—(1) Central
jects such as: Building construction,
ders' quantities, structural work, carpentry
joinery.

2) Allied subjects including: Building
hematics, practical geometry, surveying and
lling, building equipment including practical
tation, building supervision, architectural
building history.

here was a Practice Class to enable students
work out in greater detail and to apply to
gn the principles taught in the lecture class.
students' work in this class must be sub-
ed for inspection at the end of the session;
of the work might, therefore, be in the
re of "testimonies of study," the items
g selected from the syllabus of the central
ect. The work done need not be restricted
rawing.

rom this scheme, which was in full working
r in some districts, it would be seen that
aching syllabus covering practically the
le range of building construction might be
ved. It was desirable, in fact necessary,
ve examinations at the end of each session's
. The examination papers were not
ssarily prepared by the committee who had prepared the syllabus, but rather by examiners who were selected because they possessed special knowledge of the various subjects of the course. The school records of these successes were kept, and it would produce less confusion if certificates were granted only at the completion of (1) a trades' course; (2) a third year senior course; (3) at the end of the advanced course.

The Board of Education now endorsed certificates issued after a completed satisfactory three years' senior course.

In conclusion, Mr. Riley said he hoped that such meetings as the present one would result in a great educational advancement of the young people engaged in the building industry.

A FOREMAN'S AUTHORITY TO ESTIMATE

A question of a manager's authority to estimate for painting work was decided in the Bow County Court recently, before Judge Snagge. The plaintiffs were Messrs. J. P. Luton & Son, master painters and decorators, of 14, Forest-lane, Stratford, and they sued Mr. Thos. Holmes, of 20, Plashet-grove, East Ham, confectioner and tobacconist, to recover £44 11s. 9d. for painting work done.

Mr. Frank White appeared for the plaintiffs; and the defendant in person, and he admitted £30, declaring that there was a verbal estimate for the whole of the painting for that amount.

Mr. Joseph Thos. Luton denied that there was any agreement to do it for £30, and declared there was no estimate. No workman had authority to estimate.

The defendant said he was opening a confectionery and tobacconist business, and he asked for a foreman to come down and give a price for painting and fitting up the shop. The man duly came, and measured up, left to say he would go and work it out, and the next day called and said it would be £25–£30. The defendant told him to get on with the job. At that time the plaintiffs were not very busy, but directly after they started defendant's work they had a big rush of work, with the result that the men were kept working at overtime rates until 8 o'clock at night. That very much increased the cost of the job, but it had nothing to do with the defendant.

Replying to questions the plaintiff said that defendant was told they were too busy in the office to give an estimate, but they would go on with the work and do it as cheaply as possible. The shop was painted throughout, also the windows and the shop front.

Judge Snagge said the only question was whether there had been an estimate or not. It was true the foreman might have thought it might have been £30, but it should have been in writing. The plaintiffs say that the amount charged is fair and reasonable.

The foreman referred to denied that he gave any estimate, and said he had no authority to do so. He measured up the job, and then went back to get a price for it, but plaintiffs were so busy in the office that he was asked to go back and see if the defendant would agree to let them go straight on with the job, and do it as cheaply as possible. It was true that he was then asked what it was likely to come to, and he told the defendant "somewhere about £30," but that was only a rough guess, it was never intended as an estimate. Besides all this, the defendant increased his order by having the whole of the front of the shop painted, so that anyway it would have been more than £30. It was further stated that the plaintiffs agreed to take off £2 from their bill if the defendant would pay on the spot. The defendant's daughter gave the orders for the painting.

The defendant said that it was not always the case that the order was given to the firm direct. In this case he knew the foreman, and knew that he had worked for the firm for years, and was a trusted servant, therefore he had no hesitation in accepting his word that the cost would be £30. If the plaintiffs had made a mistake, and the work had actually cost them £35 to carry out, it had nothing to do with him; it was not by any means an unusual thing for a firm to lose on an order.

In giving judgment, Judge Snagge said that he had to find that no estimate had been given, but all the same he considered that the foreman had done a risky thing in suggesting a price without authority. He should give judgment for the plaintiffs for £44 11s. 6d., and costs.

HEATING OF HOUSES

Writing recently in the *Times*, Professor D. F. Harris said: "The opening up recently of several Roman dwellings in this country has brought vividly before some of us the lost art of heating a house.

"The Romans warmed their houses by the pleasantest and most scientific methods—namely, that of heating the floors of the rooms by means of hot air which passed continually below them. The hot air of the hypocaust, besides warming the floors of the rooms of these one-storied Roman villas, also heated the water for the bath. Mediæval Europe lost this art; it forgot how to heat houses and it neglected to provide baths. On the cold earthen floors of the gloomy castles rushes were spread presumably to keep the feet of the lords and ladies warm, for the fire in the vast chimney of the banqueting hall must have been a most inefficient heater of that great apartment. We all know that if our feet are warm we are warm, or, at least, comfortable all over, and that if the floors are warm all is well, calorifically speaking, with the house.

"The small 'open fire' of millions of small houses at the present day is an excellent ventilator, but a bad heater of the air of the room. The problem should always have been before the architect how to heat a room without neglecting to change its air—the essence of ventilation. The open grate is a wasteful and dirt-scattering source of domestic heat. When the building of houses is so much before the nation at the moment, it might be well to remember the efficient, clean, and healthy Roman methods of heating the floors first. I understand that our architects are indeed contemplating something of the kind, a return to the long-forgotten good old Roman system."

At a meeting of the R.I.B.A. on November 21, 1921, Mr. G. D. Widdows (School Architect to the Derbyshire County Council) mentioned this subject in a paper on "School Design," and said one of the things that became noticeable with the introduction of better ventilation was the inadequacy of the heating apparatus, usually low-pressure hot water, to be found in schools. They were usually put in with the guarantee by the engineer that a temperature of 60 degrees would be maintained when the outside air was freezing, but to obtain heat every door and window had to be kept shut. At North Wingfield the heating was by means of steam pipes under a concrete floor composed of slabs 2½ in. thick. By keeping the feet warm the blood circulated, and the admission of cool air striking the skin and filling the lungs acted as a tonic. No great heat was required on the floor surface. A temperature of 75 degrees was more than ample; and that, of course, was much less than the heat which reached one's feet when sitting in front of a fire. While steam had much to recommend it, he was not sure that hot water would not be better, as there was less mechanism to get out of order.

Sir G. Gilbert Scott, in the discussion that followed, said he had adopted a system of heating through concrete channels in the floor of Liverpool Cathedral. That system had the great advantage that where it was used people did not complain of cold feet, and the objection to cold stone or marble floors was removed. The hot air was circulated through channels in the floor, and the matter was really a reversion to the old Roman idea of hot-air heating.

In replying to some of the questions raised the lecturer said he was sure floor ventilation would be the system generally adopted in the future.

THE BUILDING TRADE DISPUTE

ALTHOUGH the deliberations between employers and operatives on Wednesday last week lasted for some time, they did not provide a definite decision. The joint committee, consisting of the disputes committees of the two sides, met later, and there was also a meeting of the Liverpool operatives and employers charged with the task of devising a plan by which a local complication could be lifted out of the way which was otherwise open to lead to a general settlement. The following joint statement was afterwards made by Mr. F. A. Wall, for the employers, and Mr. R. Coppock, for the men:—

"Joint negotiations were continued throughout to-day. The position of Liverpool was again discussed. The Liverpool operatives and employers met in conference to see if it was possible to provide a formula that would meet the position. Substantial progress was made and proposals were formulated for a settlement of the Liverpool dispute for the consideration of the National Joint Negotiating Committee. If an agreement on the position can be reached, the course is clear for full negotiations on the main issue, with a view to a national agreement."

As a result of a special combined meeting of the National Allied Building Employers' executives, members of regional and local disputes committees, and other members of the national allied bodies, over which Mr. W. H. Nicholls presided, the following official announcement was made:—

"A largely attended meeting of allied employers' executive councils, members of regional councils, and local disputes committees and members of the allied bodies was held to-day at King George's Hall, when the proceedings of the past week were reported on and lengthily discussed. It was announced that a formula had been arrived at with respect to the Liverpool difficulty for submission to the Liverpool operatives, who would give their decision by Thursday in next week. If that decision should be favourable it would pave the path to peace. In the meantime, the position continues to be one of delicacy."

At a meeting on Wednesday a joint meeting of the parties was held at the Ministry of Labour and adjourned until yesterday, when it was hoped that a settlement would be arrived at.

The result of this conference, held yesterday, is, of course, by now known, although too late for us to make any comment in this issue.

Builder's Estate.

Mr. Charles Edwin Banks (85), of Belmont Hill, Lee, S.E., retired builder (net personalty £7,508), £13,784.

Housing Scheme for Leicester.

A deputation from the Leicester Housing Committee recently visited the Ministry of Housing with a view to obtaining sanction to erect 1,000 houses on the Saffron-lane Estate, which will ultimately accommodate 2,500 houses. While in London the deputation also introduced the matter of developing a large estate on the west side of the city, where there is room for 5,000 dwellings.

A new kind of concrete building is being experimented with at Loughborough, Leicestershire. The concrete blocks are triangular and are laid so that the outer face of the wall is composed of impervious concrete, and the inner face of porous blocks, this being claimed to eliminate the evil of condensation from which ordinary concrete buildings suffer.

Unauthorised Subscriptions.

Architects are warned that subscriptions are being solicited in London by an unauthorised person for an American architectural publication, and they are advised to make careful enquiries before giving any orders in this way.

RATES OF WAGES IN THE BUILDING TRADE

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
E. Glam. (Mon. Vall)	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/8½	1/6½	1/2
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Merthyr Tydfil	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Pontypridd	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 303.

POSED THAMES-SIDE FACTORY

ncheon given by the Ford Motor Co. t the Hotel Metropole, Mr. H. S. anaging director of the Ford Motor and), Ltd., said this year marked e acquisition by the company of a te on the north bank of the Thames nam, Essex. At the time of the f the site it was the intention of the o proceed with building operations east possible delay, as it was anticithe present anomalous position with Ford cars created by the horse-power be made the subject of a proper . It was, of course, possible, he the development plan would be. to extent, dependent upon the trend of in this matter, but there was every that justice would be done and a s of taxation created.

enham site would probably be occuorks capable of employing 10,000 d of producing 500 cars per day. which was of a riverside character, on agricultural and partly on rend, and was ideal for its purpose. was well adapted to the construction ssary docks and wharfage, and the of the situation on the navigable Thames, in facilitating the intake as well as the export of the finished ere obvious. The railway ran e property, and there were excellent ll sides. Proximity to the great urces of the East End of London her considerable advantage.

ition of the McKenna duties, how- it an uncommercial proposition, so l cars were concerned, to manufacs country, but that did not neces- the company from continuing their to manufacture in Great Britain arge their manufactures here for r and for the Continent of Europe. of the development largely de- whether the payment for the le car was assisted by the altera- tax question. It was openly ad- the horse-power tax, as at present he Ford car, was unjust and in-

ins further stated that there were employees in the plant at Man- were not British, and that the ate paid was 3s. per hour, no matter ntary the duties. There was also rship or investment scheme whereby received a minimum interest of of deposits in the business up to their earnings. So far the actual d had averaged 14 per cent., and y employee had availed himself of Ford factories they found useful ind, deaf, crippled and deformed

of Public Lighting Engineers and Superintendents.

l Institute of British Architects has Ir. James Lochhead, F.R.I.B.A., of N.B., and Mr. G. A. Paterson, of Glasgow, to represent them at ning annual meeting of this Instiilasgow and Edinburgh, on Sep- 17 and 18 next.

New Hall for Hastings.

ster of Health has notified the wn Council that, as a result of the ry recently held into the proposal, ioned the erection of the proposed between White Rock Gardens and The cost will be approximately e pavilion, the construction of e at once commenced, will, when available for music, dancing, and oses.

TRADE NEWS

In connection with the developments and extensions of the London underground electric railways, Messrs. Waygood-Otis, Ltd., have fitted some new type escalators at the Bank station of the Central London Railway, and Moorgate-street station of the City and South London Railway. These escalators are designed to carry 8,000 passengers per hour in a continuous stream, and the advantage of this method of conveying a large number of people over the previous arrangement of lifts is shown in the rapidity with which the crowds leaving the trains are conveyed to the upper level. These machines are built with a width of about 4 ft. between the handrails, which move simultaneously with the steps. Messrs. Waygood-Otis have in hand sixteen similar escalators for the Underground Railway Company and eight for the Italian Railway, and have recently completed three for the Sydney Harbour Board.

We have received from Messrs. J. Wright & Co., a pamphlet describing their "Utility" blocks. The concrete block is composed of crushed ballast, sand and British Standard Portland cement, the mixture being thoroughly mixed and wetted before it is placed in the moulds. The blocks are made under pressure, which ensures a dense, non-porous block with clean, sharp arrises, and of great strength and durability; the proportions being made in accordance with the Ministry of Health's specification. In wall construction for dwellings the outside is constructed of ballast concrete blocks and the inside of breeze blocks, with an air cavity in between. By this method the wall is made absolutely weather proof, and condensation on the inner walls is eliminated owing to the porous breeze inner block and air cavity. It is claimed there is a great saving in the cost of constructing the walling with these blocks owing to the low cost of the blocks and the great saving in labour and materials.

The name of Doulton is so intimately associated with the architectural world that our readers will be interested in the admirably produced quarto which has just appeared, summarising the rise and expansion of the Royal Doulton Potteries during six reigns. Over a hundred years ago (in 1815) was modestly begun a small pottery by John Watts and John Doulton, in Vauxhall Walk, Lambeth, which has now developed into an important limited company, which, in 1901, received the authorisation to use the word "Royal." Lambeth, Burslem, Rowley Regis, and Paisley are now the homes of various branches of this great pottery industry. Of the large field covered by Doulton activities, the volume before us gives a good idea, and we may note that the making of ornamental pottery has been equalled in importance by the making of electrical and medical porcelain, as well as the well-known Carrara and other facing materials for buildings which Messrs. Doulton have so successfully developed.

The subject of ancient and modern building is graphically dealt with in a well-produced folio just published by Messrs. Holloway Bros. (London). The work is prefaced by some interesting illustrations of the earliest forms of building, and when one looks over the list of new buildings which Messrs. Holloway Bros. have carried out under many of our most distinguished architects, we may certainly be ready to accord the firm a prominent and noteworthy place in modern building activities. Such buildings as the new General Post Office, the new Government buildings in Great George-street and Whitehall, Messrs. Whiteley's great stores, the United Universities Club, Caxton House, and Magnet House, Kingsway, give some idea of this firm's extensive operations, to say nothing of town and country houses, restorations of old buildings, and more recently large engineering works. The capacity, energy and enterprise which have made possible the creation of such a sound business are amongst the really valuable assets of this country, and no reasonable person should begrudge an ample reward to those who unite business capacity and rectitude to such results as this volume before us indicates.

PATENTS

APPLICATIONS PUBLISHED.*

212,152.—M. R. Hutchison: Construction of insect-proof door and window openings.
212,156.—R. Partridge and J. Westwood & Co., Ltd.: Metal shelves.
212,165.—J. McArthur: Door locks.
212,188.—Building Accessories & Flooring Co., Ltd., H. Goodwin and H. Smith: Manufacture of asphalt.
211,516.—D. Gardner: Paints, enamels, and japans.
211,517.—H. Andrews: Manufacture of Portland cement.
211,628.—J. M. Lander: Domestic fire-places and ranges.
211,647.—G. H. Martin: Gate and door fasteners.
211,650.—Chatwood Safe Co., Ltd., and H. S. Bruckshaw: Strong-rooms.
211,715.—A. Illidge, A. E. Illidge and C. A. Illidge: Sash fasteners.
197,933.—Chemische Werke Vorm. Auerges. Kommanditges: Method of rendering enamel opaque.
211,765.—G. Bennet: School desks.
211,774.—L. R. C. Ching: Heating and ventilating systems.
211,782.—C. E. Page, J. F. Page and C. N. Page: Flushing-cisterns.
209,715.—G. H. Larsson: Crushing-machines for stone.
210,793.—C. V. Hansen: Roofing plate.
212,986.—S. Vivian: Drying of china clay.
213,017.—W. F. Moody: Combination double frame to hold clothing, hats and umbrellas, for attachment to chairs and pews.
213,024.—K. L. and C. Weber: Process of making flexible non-breakable transparent and waterproof window panes.
213,062.—J. Lance: Window.
213,066.—Jackson Boilers, Ltd., and H. Hargreaves: Electrically-heated water-boiler.
213,067.—J. E. Noirit: Collapsible seat.
213,081.—A. B. Anderson: Domestic grate, range, &c.
213,090.—W. C. Strudwick: Chimney and ventilating-shaft top.
213,094.—A., A. E., and C. A. Illidge: Casement stays.
213,096.—Pontnewydd Tin Stamping Co., Ltd., and W. T. Horton: Metal hearth-plate.
213,103.—D. Cunningham: Painting and whitewashing machine.
213,106.—H. Spencer: Ventilator.
213,120.—H. Crowther: Fastening-device suitable for casement windows.
213,160.—F. A. Davey: Casement hinge.
213,176.—A. E. Tutty: fire-grate.
213,177.—G. Boshell, A. E. Clifford and A. J. Maker: Apparatus for polishing floors.
213,189.—G. E. Shoemaker: Water-heating apparatus.
213,200.—J. Lovell: Roofing-tiles.
210,074.—R. Oerley: Feet for articles of furniture.
214,013.—T. H. Youngs: Ball-valve tap.
214,339.—A. Wells and J. Stone & Co., Ltd.: Means for connecting service pipes to water and gas mains.
214,347.—H. Cuerden: Latch for doors.
214,365.—Showell & Sons, Ltd., and A. E. Johnson: Combined casement stays and fasteners.
214,369.—B. Bakewell: Manufacture of magnesite cement.
214,371.—W. J. Drain: Stone crushing or breaking machines.
214,392.—J. E. Beckett and Beckett, Laycock & Watkinson, Ltd.: Doors, and locks therefor.
214,394.—M. Hatton: Manufacture of coloured tiles, slabs or bricks.
214,403.—J. Winfield: Catches or fasteners for doors.
214,416.—J. Fowler & Co. (Leeds), Ltd., and D. Wood: Scarifiers for roads.
214,420.—F. H. Hall: Windows.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

AUGUST 22.—**Pembrokeshire.**—VARIOUS.—For carrying out for the County Small Holdings Committee (1) alterations, repairs to house at Milton Farm, Berton; (2) alterations and repairs to existing house and outbuildings and erection of a house at Chapel Farm, Castlemartin: (3) alterations and repairs to outbuildings and erection of house at Cox Hill holding; (4) erection of new outbuildings at Bungalow Holding and Rose Cottage Holding, Trefwynt. Mr. O. T. Thomas, County Offices, Haverfordwest. Deposit £1 1s.

AUGUST 23.—**Bromley.**—BUILDINGS.—For the erection of a bowling pavilion, women's convenience, dressing-rooms, &c., on the Whitehall Recreation Ground, Bromley Common, for the T.C. Borough Engineer, Municipal Offices, Bromley. Deposit £1 1s.

AUGUST 23.—**Hove.**—PAINTING.—For painting the external wood and ironwork, and painting, distempering, &c., the interior of the Ward Blocks "A" and "C.D.," the Lodge, and Laundry Block, at the Hove Sanatorium, for the T.C. Borough Surveyor (Mr. H. H. Scott), Town Hall, Hove.

AUGUST 23.—**Londonderry.**—ADDITIONS.—For additional buildings at Hospital. Messrs. Robinson & Elliott, 7, Market Buildings, Londonderry. Deposit £2 2s.

AUGUST 23.—**Poole.**—HOUSES.—For the erection of 10 houses, with drains, fences, &c., at Granville-road, Upper Parkstone, for the T.C. Borough Surveyor, Municipal Offices, Poole.

AUGUST 23.—**Ystrad (Rhondda).**—PAINTING.—For painting and decorating the interior of Ystrad Library. Evan Edwards, Library, Ystrad (Rhondda).

AUGUST 25.—**Aylesbury.**—COTTAGES.—For erection of 36 cottages in four contracts, for the T.C. Mr. Wm. H. Taylor, Borough Engineer, Town Hall, Aylesbury.

AUGUST 25.—**Bradford.**—SANITARY.—For the conversion of six privies into water-closets at 83 to 93, Grantham-road, for the T.C. Chief Inspector, Sanitary Department, Town Hall, Bradford.

AUGUST 25.—**Dublin.**—PAINTING.—For painting work at Crooksling Sanatorium, Brittas, co. Dublin. Mr. John J. Murphy, Town Clerk, Dublin.

AUGUST 25.—**Dunfermline.**—FENCING.—For the supply and erection of about 1,200 lineal yards of stob and wire fencing in connection with the widening at Halbeath-road, for the T.C. Burgh Engineer, City Chambers, Dunfermline.

★AUGUST 25.—**Guildford.**—WAR DEPARTMENT CONTRACT.—Artificers' Works Contract, from September 17, 1924. Tenders are required for the undermentioned station and division in the Woolwich Royal Engineer District. Contract 3, Guildford.—Commanding Royal Engineer, or in person, between the hours of 10 a.m. and 3 p.m. o'clock, Royal Engineer Office, New-road, Woolwich, S.E. 18.

AUGUST 25.—**Hemsworth.**—EXTENSION.—For extensions to secondary school, for the West Riding E.C. Education Dept., County Hall, Wakefield.

AUGUST 25.—**Hertfordshire.** — COUNTY SCHOOL.—Erection and completion of a new County Council School, to accommodate 120 scholars, at Hunsdon, near Stanstead Abbots, for the Hertfordshire C.C. County Surveyor's Office, Hatfield, between the hours of 10 a.m. and 4 p.m., except on Saturdays. Deposit £1 1s.

AUGUST 25.—**Kingston-on-Thames.**—BUNKER.—For construction of coal bunker at the Hospital, for the Board of Guardians. Mr. W. Taylor, Clerk, Kingston-on-Thames.

AUGUST 25.—**Leeds.**—PAINTING.—For painting at Corn Exchange and polishing of Market Hall shops, and painting of exteriors of houses on the Harehills, Barkley, Middleton, Wyther, and Hawksworth Wood housing estates. Mr. W. T. Lancashire, City Engineer, Leeds.

AUGUST 25.—**Lisburn.**—HOUSES.—For the erection of 10 houses on Hillsborough Old-road, for the U.D.C. Surveyor, Town Hall, Lisburn.

AUGUST 25.—**Liverpool.**—PAINTING.—For painting and general repairs at Westminster-road Police and Fire Stations, for the T.C. Land Steward and Surveyor, Municipal-buildings, Liverpool.

AUGUST 25.—**Manchester.**—OFFICE.—For the erection of a tramway office, Stockport-road, Levenshulme, for the T.C. City Architect, Town Hall. Deposit £1 1s.

AUGUST 25.—**Morley.**—HOUSES.—For the erection of 48 houses and for the several other works in connection therewith on the Middleton-road Housing Estate, for the T.C. Mr. F. Turner, Borough Engineer, Town Hall, Morley. Deposit £1 1s.

AUGUST 25.—**Ogmore Valley.**—PAINTING, &C.—For the painting, decorating, and repairs to the Workmen's Hall, Institute, and Caretakers' Apartments at Ogmore Vale. Mr. W. T. Springall, Lic.R.I.B.A., Architect's Department, Co-operative Wholesale Society, Ltd., St. Mary-street, Cardiff.

AUGUST 25.—**Pontypridd.**—BUILDINGS.—For the erection of (a) battery room, (b) blacksmith's shop, at Treforest Depot, for the U.D.C. Surveyor, Municipal Buildings, Pontypridd. Deposit £1 1s.

AUGUST 25.—**South Shields.**—ALTERATIONS, &C.—(1) Supply of steel and iron work; (2) erection of steel and iron work, and alterations to existing building, in connection with the construction of balconies and stairways at Cleadon Park Sanatorium, for the T.C. Mr. S. G. Stanton, Borough Engineer, Town Hall, South Shields. Deposit £1 1s.

AUGUST 25.—**Stoke-on-Trent.**—WALL.—For the building of a retaining wall for coal stores at the Etruria Gasworks, for the T.C. Chief Engineer, Gasworks, Etruria, Stoke-on-Trent.

AUGUST 26.—**Antrim.**—ALTERATIONS.—For alterations and additions to Antrim R.U.C. Barracks, for the Government of Northern Ireland. Ministry of Finance, 15, Donegall-square West, Belfast. Deposit £1.

AUGUST 26.—**Bathgate.**—FLOORING.—Laying hall with maple flooring for the Bathgate Co-operative Society, Ltd. Managing Secretary, Co-operative Society, Jarvey-street, Bathgate.

AUGUST 26.—**Bradford.**—PAINTING.—For (1) internal and external painting, Rawson-place Market and James-street Market; (2) vacuum cleaning work, Rawson-place Market and James-street Market; (3) external painting to shops and warehouses, Nos. 71 to 83, Diamond-street. City Architect, Town Hall, Bradford.

AUGUST 26.—**Braintree.**—HOUSES.—For the erection of six Type "A" houses in the Parish of Cressing, for the R.D.C. Mr. E. O. Wheeler, surveyor, 71, Rayne-road, Braintree.

AUGUST 26.—**Cardiff.**—POST OFFICE.—For the erection of a head Post Office for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s.

AUGUST 26.—**Leeds.**—PAINTING.—For painting at various parks and recreation grounds, for the T.C. Mr. W. T. Lancashire, City Engineer, Leeds.

★AUGUST 26.—**Portsmouth.**—BUILDING.—Erection of Oddfellows' Hall, shops and offices, for the Building Committee of the Portsmouth District of Oddfellows Friendly Society. Mr. Henry J Dyer, architect and surveyor, 44, Victoria-road North, Southsea.

★AUGUST 26.—**Strood.**—MARKET HALL.—New Market Hall, High-street, Strood, Kent. Mr. George E. Bond, architect and surveyor, 384, High-street, Rochester, Kent.

AUGUST 26.—**Wallasey.**—HOUSES.—For the erection of 56 houses on the Poulton-road and Surrey-street housing site, for the C.B. Mr. L. St. G. Wilkinson, M.Sc., A.M.I.C.E., Borough Engineer and Surveyor, Town Hall, Wallasey. Deposit £1 1s.

AUGUST 26.—**Witham.**—HOUSES.—For the erection of 20 houses, for the U.D.C. Mr. W. P. Perkins, surveyor, Witham.

AUGUST 27.—**Aldershot.**—GARAGE, &C.—For the erection of a garage and workshops in Foden-road, Aldershot, for the Aldershot and District Traction Co., Ltd. Messrs. Friend & Lloyd, architects, Grosvenor-road, Aldershot.

AUGUST 27.—**Chester.**—BUILDING WORKS.—Erection and completion of new dairy and hostel buildings at the Reaseheath School of Agriculture, near Nantwich, for the County of Chester. Mr. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £2 2s.

AUGUST 27.—For cleaning, painting and repairs at T.S. *Exmouth* Infirmary, Grays, Essex, Queen Mary's Hospital, Carshalton, Surrey, Princess Mary's Hospital, Margate, Leavesden Mental Hospital, King's Langley, Herts., Fountain Mental Hospital, Tooting, S.W.17, South Eastern Ambulance Station, New Cross-road, S.E.14, Paddington Casual Ward, Woodfield-road, Harrow-road, W., St. Luke's Hospital, Lowestoft, for Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 for each work.

AUGUST 27.—**Hove.**—PAINTING.—For painting the external wood and ironwork, &c., at the Public Baths, Livingstone-road, for the T.C. Borough Surveyor (Mr. H. H. Scott), Town Hall, Hove.

AUGUST 27.—**London and Margate.**—VARIOUS WORKS.—For erection of new offices at South Western Ambulance Station, Landor-road, Stockwell, S.W.9; repairs to concrete paving at North-western Ambulance Station, Lawn-road, Hampstead, N.W. Erection of new concrete sun platforms at Princess Mary's Hospital, Margate; erection of new concrete boundary wall at Mead Works, Carnwath-road, Fulham, S.W.6; building repairs at Hackney Casual Ward, Gainsborough-road, Hackney Wick, N.E.; and minor alterations in laundry at Brook Hospital, Shooter's Hill, S.E.18, for Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1 each work.

AUGUST 27.—**Prestonpans.**—HOUSES.—For the erection of six houses (three apartment cottages) at East Loan, for the T.C. Messrs. R. & A. K. Smith, surveyors, 44, Queen-street, Edinburgh.

AUGUST 27.—**Tooting, S.W.17.**—SLATING WORKS.—For slating works at Tooting Bec Mental Hospital Extension, Church-lane, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

AUGUST 27.—**Merthyr Tydfil.**—HALL.—For the erection of a recreation hall at Llwydcoed, near Aberdare, for the Board of Guardians. Messrs. Thomas Roderick & Sons, architects, Clifton-street, Aberdare.

AUGUST 27.—**Wallasey.**—CONVERSION.—For conversion of premises No. 177, Borough-road to Branch Library, for the T.C. Mr. L. St. G. Wilkinson, Borough Engineer, Town Hall, Wallasey. Deposit £1 1s.

AUGUST 27.—**Whitley and Monkseaton.**—For the completion of the erection of 25 ho S.E. side of Hotspur-avenue, for the U.D.C Rousell, Surveyor, Council Offices, Wh Deposit, £1 1s.

AUGUST 28.—**Glasgow.**—HOUSES.—Erect workmen's houses at Robroyston Hospital, Office of Public Works, 64, Cochrane-street.

AUGUST 28.—**Leeds.**—PAINTING.—For Armley and Holbech Libraries, for the T.C. Lancashire, City Engineer, Leeds.

AUGUST 28.—**Carlisle.**—DEMOLITION.—lition of property in Castle-street and Fi for the T.C. Mr. Henry C. Marks, City 18, Fisher-street, Carlisle.

AUGUST 28.—**Salford.**—PAINTING, &C.—tions at Maternity and Babies' Hospita terrace, Pendleton, and for tar macad construction of bowling green, and croqu Nab Top Sanatorium, Marple, for the T.C Engineer, Town Hall, Salford. Deposit, £

AUGUST 29.—**Abersychan.**—HOUSES.—erection of 24 additional houses on the G site, for the U.D.C. The Co-operative Society, Ltd., architects, St. Mary-street,

AUGUST 29.—**Cardiff.**—PAINTING.—For 62, Charles-street, for the Board of Guardia Stephenson, Clerk, 11, Park-place, Cardiff.

AUGUST 29.—**Kesh.**—COURT HOUSE.—Fo tion of a petty sessions house, for the C.C. West, Court House, Enniskillen.

AUGUST 29.—**Liverpool.**—HOUSES.—For tion on the Larkhill or Springwood Estates, blocks, comprising a total of 24 self-cont to Design "A"; and (*b*) four blocks, c total of 24 self-contained flats to Design the T.C. Housing Officer, Municipal-build street, Liverpool. Deposit, £2 2s.

AUGUST 28.—**Sunderland.**—ADDITION.—F of bathroom in Richardson pavilion, for t Sanatorium, for the T.C. Borough Engine land.

AUGUST 29.—**Pewsey, Wilts.**—HOUSES. erection of 24 houses for the R.D.C. Mr. Hall, Architect, Borough Buildings, Abingdo £1 1s.

AUGUST 30.—**Annfield Plain.**—WAR M Prices and designs for erection of war mem Annfield Plain Park between £250 and Secretaries, Council Offices, Annfield Plain

AUGUST 30.—**Bakewell.**—CONVENIENCES erection of public conveniences, for the U T. W. Newbold, architect, 70, Surrey-stree

AUGUST 30.—**Barry.**—CLUB.—For the a new club and institute at Harbour-road the Wyndham Conservative Club and Barry, Ltd. Mr. E. F. Richards, architect road, Barry Island. Deposit, £2 2s.

AUGUST 30.—**Brentford.**—ROOFING.—For and erection of constructional steelwork, contingent works necessary for the cover stands in Brentford Market. Mr. W. J. W Surveyor, Clifden House, Boston-road, Bre

AUGUST 30.—**Buckhaven.**—INSTITUTE.— a Miners' Welfare Institute at Victoria-haven, for the Miners' Welfare Fund. Sinclair, 311, Wellesley-road, Methil.

AUGUST 30.—**Exeter.**—HOUSE.—For of a clerk's house at the Devon Ment Messrs. E. H. Harbottle & Sons, archite Chambers, Exeter. Deposit, £3.

AUGUST 30.—**Frome.**—REPAIRS.—For r chimneys at the Infirmary, for the Board o Mr. W. R. Kent, Clerk, Frome.

AUGUST 30.—**Hatherleigh.**—MANSE.—Fo new United Methodist minister's manse at Mr. S. T. Follands, Hatherleigh.

AUGUST 30.—**Littleborough.**—PAINTING. ing premises of the Reform Club. Secr Club.

AUGUST 30.—**Newcastle-under-Lyme.**— —For structural alterations at St. John Keele-road, for the Board of Guardians. Hollins, architect, Lloyd's Bank Chambers Deposit, £1.

AUGUST 30.—**Rhydfelin (Card.).**—PAI painting and decorating of Gosen Chapel Mr. J. Lewis Evans, architect, 21, Grea street, Aberystwyth.

AUGUST 30.—**Stafford.**—CONVENIENCES the erection of two public conveniences, Martson-road and Gaol-road, and exte waterworks fitting shop, Borough Hall. Mr. W. Plant, Borough Engineer, Bo Stafford. Deposit, £1 1s.

AUGUST 30.—**Talgarreg (Card.).**—V building at vestry to Bwlch-y-fadfa ch Mr. E. O. Jenkins, Llandyssul.

SEPTEMBER 1.—**Belfast.**—ADDITIONS.— and alterations at Infectious Diseases Hosp burn, for the T.C. Mr. A. Ferguson, Q veyor, Scottish Provident Buildings, Belfa £3 3s.

SEPTEMBER 1.—**Broadstairs.**—GREEN erection of a greenhouse in Pierremont U.D.C. Surveyor, Broadstairs.

SEPTEMBER 1.—**Broadstairs.**—WALL.— down and re-building churchyard wall street, for the U.D.C. Surveyor, Bro

SEPTEMBER 1.—**Chelmsford.**—INFIRM For the erection of an Infirmary and Nur the Institution, Wood-street, for the Chelmsford Union. Messrs. Tooley FF.R.I.B.A., Council Offices, Buckhurst Deposit £2 2s.

SEPTEMBER 1.—**Dublin.**—PAINTING.—I ing of 302 sheep pens in the Cattle M street, for the T.C. Engineer, 28, Castle- Deposit £1 1s.

.—**Fishguard.**—MASONIC TEMPLE.—For new masonic temple at Fishguard, for nd Goodwick Joint Lodges. Sir Hugh eton, M.S.A., architects, 11, Victoria- dwest. Deposit £2 2s.

1.—**France and Belgium.**—HEAD- supply of 20,000 headstones packed .O.R., to be divided into a number of of which shall be for less than 100 head- Imperial War Graves Commission. Works Department, Imperial War sion, 82, Baker-street, London, W. 1, stone, Contract 5079-V."

1.—**Lewisham, S.E.13.**—PAINTING.— inting at Lewisham Hospital, for the on. Guardians' Offices, 394, High- n, S.E. Deposit £1 1s.

—**Preston.**—HOUSES.—For the erection ouses for the T.C. Borough Surveyor, ston.

—**Swanage.**—ROOFING.—For the roof- er reservoir at Langton, for the U.D.C. Surveyor, Swanage.

1.—**Swindon.**—SCHOOL.—Erection of ouncil School for the Corporation. Mr. retary, Education Offices, 22, Regent-

1. — **Willesden.** — EMPLOYMENT tion of a juvenile employment bureau l-lane Schools, for the Willesden D.C. n, Engineer to the Council, Town Hall, ourn, N.W. 6.

—**Bethnal Green.**—PAINTING.—For the g and repair of their hospital in Cam- , for the Board of Guardians. Mr. C. 79A, Bishop's-road, Bethnal Green, E.2.

2.—**Bethnal Green, E.2.**—WOOD BLOCK epairs to the wood block floorings in the c., in the Hospital in Cambridge-road, E.2., for the Bethnal Green Board of . C. Faulkner Jones, Clerk to the rdians' Offices, Bishop's-road, Bethnal

.—**Birmingham.**—REPAIRS. &C.—For inary works and repairs at The Beacon otels, for the Commissioners of His s, &c. Contracts Branch, H.M.O.W., eet, London, S.W.1. Deposit 10s. 6d.

2.—**Cardiff.**—PAINTING.—For externa t of 62, Charles-street, for the Board of . R. Stephenson, Clerk, Union Offices, Cardiff.

2.—**Cupar.**—EXTENSIONS.—For the e County Buildings and Sheriff Court or the Fife C.C. Mr. C. R. Douglas, ential Chambers, 15, East Port, Dun- sit, £2.

.—**London, E.2.**—PAINTING, &C.—For inting and repair of hospital in Cam- Bethnal Green Board of Guardians. Jones, Clerk to the Guardians, Adminis- 9A, Bishop's-road, Bethnal Green, E.2.

2.—**London, S.E.**—TELEPHONE Ex- he erection of a telephone exchange at he Commissioners of H.M. Works, &c. h, H.M. Office of Works, King Charles- S.W.1. Deposit £1 1s.

2.—**Mitcham.**—STORES DEPOT, PAV- WALLS, AND ALTERATIONS.—Erection , pavings, boundary walls, and altera- e at Church-road, Mitcham, for the District Council. Messrs. Chart, Son chitects and Surveyors, Union Bank ion. Deposit £1.

2.—**Orpington.**—REPAIRS, &C.—For ordinary works and repairs at build- ngton district, for the Commissioners 's Works, &c. Contracts Branch, ng Charles-street, London, S.W.1.

.—**Teddington.**—LABORATORY, &C.— of a laboratory, &c., at the National tory, for the Commissioners of H.M. ntracts Branch, H.M. Office of Works, eet, London, S.W.1. Deposit £1 1s.

—**Blackpool.**—SHELTER, &C.—For the amway shelter and conveniences at the T.C. Mr. Francis Wood, Borough cipal Buildings, Town Hall-street, osit £1.

3.—**London, E.C.**—INTERNAL PAINT- of internal painting, &c., at the ffice, London, E.C., for the Com- Majesty's Office of Works. Contracts .W., King Charles-street, London, £1 1s. (Cheques payable to the

.—**Lowestoft.**—REPEATER STATION.— of a repeater station for the Commis- Works, &c. Contracts Branch, H.M. King Charles-street, London, S.W.1.

.—**St. Ewe.**—FARMHOUSE.—For the ouse at Levalse Farm, for the Cornwall nd Agent, Truro. Deposit £1 1s.

4.—**York.**—CONCRETE HOUSES.—For completion of 300 concrete houses for Mr. F. W. Spurr, City Engineer,

5.—**Lowestoft.**—COTTAGES.—Erection f two cottages, non-parlour type, on using Site, Lowestoft, for the B.C. or, Town Hall, Lowestoft. Deposit

6.—**Chorley.**—BRIDGE.—For the n connection with the reconstruction for the Lancashire C.C. Mr. W. H. y Surveyor, County Offices, Preston.

.—**Congleton.**—SCHOOL.—For the lementary school for 600 scholars at he T.C. Mr. J. H. Walters, architect, ngleton. Deposit £2.

SEPTEMBER 7.—**Sunbury-on-Thames.**—HOUSES.—For the erection of 12 houses in Charlton-lane, Upper Halliford, for the U.D.C. Mr. Harold F. Coales, Council Offices, Green-street, Sunbury.

SEPTEMBER 9.—**Bradfield Oughtibridge and Greasborough.**—ALTERATIONS.—For (1) Alterations and improvements to Bradfield Oughtibridge Council School; (2) alterations and additions to Greasborough Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

★SEPTEMBER 10.— **Slough.**— EXTENSION.— Extension of the Post Office, Slough, for the Commissioners of His Majesty's Office of Works, Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

SEPTEMBER 12.—**Clay Cross.**—COTTAGES.—For the erection of a pair of cottages on the Council's site adjoining the Derby main road at Clay Cross, for the Derbyshire C.C. Mr. J. W. Horton, County Surveyor, St. Mary's Gate, Derby.

★SEPTEMBER 18.—**Worthing.**—PIER PAVILION, RECONSTRUCTION OF THE PARADE BANDSTAND.—A, New pier pavilion, consisting of light steel-frame and reinforced concrete building on screw piling, with small extension of entrance to pier to provide seating accommodation for about 1,200 people (Contract No. 1); and B, The reconstruction of the parade bandstand enclosure, consisting of a light steel and reinforced concrete structure and screw pile foundation to provide seating accommodation for about 2,200 people (Contract No. 2), for the Corporation of Worthing. Borough Surveyor's Office, Municipal Offices, Tudor Lodge, Chapel-road, Worthing. Deposit £3 3s.

NO DATE.—**Dumbarton.**—TENEMENTS, &C.—For the erection of four tenements of shops and houses at West Bridgend, for the T.C. Mr. Wm. A. Macartney, Burgh Engineer, Dumbarton.

NO DATE.—**Halifax.**—REBUILDING.—For rebuilding 18, Old Market, Halifax. Mr. H. Wilson, 12, Victoria Park-avenue, Kirkstall, Leeds.

NO DATE.—**Killingbeck.**—SHOP, &C.—Erection of house and shop at Killingbeck. Mr. S. Hodgson Doyle architect, 14, Park-row, Leeds.

NO DATE.—**Loughborough.**—ADDITIONS.—For the erection of new classrooms and changing rooms at the Grammar School, for the Governors of the Endowed Schools. Mr. Edward T. Allcock, Architect, Baxter Gate, Loughborough.

NO DATE.—**Oughtibridge.**—PARTITION.—For the erection of a folding partition in the Oughtibridge Council School, for the West Riding C.C. Mr. William Wood, Divisional Clerk, Penistone.

FURNITURE, MATERIALS, etc.

AUGUST 25.—**Andover.**—GRAVEL.—For the supply of gravel to the T.C. Mr. R. W. Knapp, Borough Surveyor, Andover.

AUGUST 25.—**Manchester.**—BRICKS.—For bricks required by the Corporation for the period ending June 30, 1925. Housing Director, Town Hall, Manchester.

AUGUST 25.—**Manchester.**—SLATES.—Supply of roofing slates to the various departments of the Corporation. Mr. Robert Williamson, Superintendent of Cleansing Department, Town Hall, Manchester.

AUGUST 26.—**London.**— CEMENT.—For supply of Portland cement to the India Store Department. Branch No. 12, Belvedere-road, S.E.

AUGUST 28.—**Lambeth.**—MATERIALS.—For highway materials for six months, for the B.C. Mr. T. Cattlin, Borough Engineer, Town Hall, Brixton Hill, S.W.

AUGUST 28.—**Manchester.**—TILES.—For the supply of wall tiles to the Tame-street Institution, for the B.G. Mr. E. Hargreaves, Superintendent of Works, Union Offices, All Saints', Manchester.

AUGUST 30.—**Ilford.**—MATERIALS.—For supply of highway materials to the U.D.C. Surveyor, Town Hall, Ilford. Charge 1s. for each of 12 schedules.

AUGUST 30.—**Stockton-on-Tees.**—MATERIALS.—For stores for six months, for the T.C. Borough Engineer Victoria Buildings, Stockton-on-Tees.

AUGUST 30.—**Yorkshire.**—MATERIALS.—For supply of road materials to the East Riding of Yorkshire C.C. County Surveyor, County Hall, Beverley.

SEPTEMBER 1.—**Rhondda.**—LAMP COLUMNS.—Supply of 50 cast iron lamp columns for street lighting to the U.D.C. Mr. E. Taylor, Surveyor, Pentre, Rhondda.

SEPTEMBER 3.—**Sutton.**—MATERIALS.—Supply of road and other materials to the U.D.C. Mr. H. Bolton, Clerk, Municipal Offices, Sutton, Surrey.

★NO DATE.—**Carlisle.**—FIREPLACES.—Supplying solid fireclay built-up fireplaces which will be strong and economical in first cost and fuel consumption. Mr. H. E. Ayris, Architect to the Committee, 68, Lowther-street, Carlisle.

ENGINEERING IRON AND STEEL.

AUGUST 23.—**Girvan.**—QUAY WALL.—For the reconstruction of the old quay wall, comprising reinforced concrete sheet piling with concrete superstructure, for the T.C. Messrs. Henderson & Nicol, chartered civil engineers, 21, Bridge-street, Aberdeen.

AUGUST 25.—**Bridlington.**—ROOFING.—For covering-in of the reservoir at the Higher Waterworks, Bridlington, with reinforced concrete, for the T.C. Borough Engineer, 1, The Crescent, Bridlington. Deposit £3 3s.

AUGUST 25.—**Bristol.**—PILES.—For the construction at the Avonmouth Docks of 200 ferro-concrete piles. Mr. Thomas A. Peace, Chief Engineer, Avonmouth Docks. Deposit £5.

AUGUST 25.—**Stalybridge.**—STEELWORK.—Supply and erection of structural steelwork for power station, for the Stalybridge, Hyde, Mossley, and Dukinfield Tramways and Electricity Board. Messrs. W. H. George & Son, architects, Ashton-under-Lyne. Deposit £1 1s.

AUGUST 26.—**Dublin.**—GRAB.—Supply of one "Priestman" improved double chain whole tine grab, raised centre shaft tyre, heaped capacity about 40 cub. ft., for the Port and Docks Board. Secretary, Port and Docks Office, Westmoreland-street, Dublin.

AUGUST 27.—**Leyland.**—BRIDGE.—For erection of steel girder bridge, for the U.D.C. Mr. M. H. Wilkinson, surveyor, Public Buildings, Leyland. Deposit £1.

AUGUST 27.—**Tooting, S.W.17.**—GUTTER, &C.—For supply and delivering cast-iron rainwater gutter and down pipes at Tooting Bec Mental Hospital Extension, Church-lane, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

AUGUST 28.—**Castleford.**—HEATING.—For providing and fixing two hot water boilers and alterations to heating pipes, at secondary school. Mr. Chas. T. Lightley, Clerk to the Governors, 77, Carlton-street, Castleford.

AUGUST 30.—**Babbacombe.**—HEATING.—For heating All Saints' Church, Babbacombe. Particulars at 12, Fore-street, St. Marychurch, Babbacombe.

SEPTEMBER 1.—**Blackburn.**—BRIDGE.—For erection of steel and iron bridge for the T.C. Mr. A. T. Gooseman, Borough Engineer, Blackburn. Deposit £3 3s.

SEPTEMBER 1.—**Dublin.**—STEELWORK.—Steelwork for bridges, for the Midland Great Western Railway of Ireland Company. Chief Engineer, Broadstone Terminus, Dublin. Charge 4s.

SEPTEMBER 1.—**Lochaber.**—AQUEDUCT.—For the construction of an aqueduct between Loch Treig and Fort William, Inverness-shire, including fifteen miles of pressure tunnel with intake shafts and other works, for the North British Aluminium Co. Messrs. C. S. Meik & Buchanan, 16, Victoria-street, Westminster, S.W. 1. Deposit £5.

SEPTEMBER 1.—**Swanage.**—ROOFING.—For roofing-in water reservoir at Langton, for the U.D.C. Mr. C. Ratcliff, Surveyor, Swanage.

SEPTEMBER 2.—**London.**—FENCING MATERIALS.—For supply of steel posts, standards and other fencing materials, to the Madras & Southern Mahratta Railway Co. Offices, 25, Buckingham Palace-road, S.W. Charge £1 1s.

SEPTEMBER 4.—**Canvey Island**—SLUICE.—For the construction of a new sluice of concrete tubes, with head and wing walls, iron penstock and tidal flap, through Smallgrains river wall, for the Canvey Island Commission. Richard B. Grantham & Son, 5, Little College-street, Westminster, S.W.1.

SEPTEMBER 5.—**Haslingden.**—SEWAGE PLANT.—Contract No. 3: Alterations and additions to machinery at Outfall Works, for the Haslingden, Rawtenstall, and Bacup Outfall Sewerage Board. Mr. G. Midgley Taylor, 36, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER 6.—**Chorley.**—STEEL WORK.—For the steel work in connection with the reconstruction of Skew Bridge, for the Lancashire C.C. Mr. W. H. Scholefield, County Surveyor, County Offices, Preston.

SEPTEMBER 7.—**Frinton-on-Sea.**—SEA DEFENCE WORKS.—For extension of sea wall and slipway at Frinton-on-Sea, for the U.D.C. Surveyor, Council House, Frinton.

SEPTEMBER 8.—**Middleton.**—FENCING.—For supply of 500 yds. of wrought-iron railings and gates. Borough Engineer, Town Hall, Middleton.

SEPTEMBER 10.—**Liverpool.**—ENGINEERING WORK.—For the engineering work required at proposed public baths and washhouse, Minshull-street, Low-hill, for the T.C. Chief Superintendent, Baths Department, 75, Dale-street, Liverpool. Deposit £1 1s.

SEPTEMBER 16.—**Walsall.**—RETORT HOUSE.—For reconstruction of horizontal retort house, &c., for the Gas Committee. Mr. E. Davies, Manager, Gasworks, Walsall. Deposit £5 5s.

SEPTEMBER 19.—**London.**—STEELWORK.—For supply of structural steelwork for underframe shop, for the South Indian Railway Co. Secretary, 91, Petty France, S.W. Charge £1.

SEPTEMBER 22.—**Plymouth.**—BRIDGE.—For the taking down and removal of a bridge to be placed across the Burrator Reservoir, situated about 12 miles from Plymouth, for the T.C. Mr. Frank Howarth, Water Engineer, Stonehouse, Town Hall, Plymouth. Deposit £2 2s.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

ROAD, SANITARY, AND WATER WORKS.

AUGUST 23.—**Bromley.**—ROADS.—For the construction of 9,700 yards of resurfaced concrete roads, for the T.C. Borough Engineer, Town Hall, Bromley. Deposit £2 2s.

AUGUST 25.—**Cannock.**—ROADS.—For the widening of Market-street, Hednesford, for the U.D.C. Mr. R. Blanchard, Surveyor, Council Offices, Cannock.

AUGUST 25.—**Dunfermline.**—ROADS.—For the widening and reconstruction of Halbeath-road to a width of 60 ft. for a length of 800 yards, for the T.C. Burgh Engineer, City Chambers, Dunfermline. Deposit £2 2s.

AUGUST 25.—**Duns.**—WATER MAINS.—For providing and laying about 429 yards 4 in. and 24 yards 3 in. cast-iron main water pipes, &c., for the T.C. Mr. James Millar, Town Clerk, Duns.

AUGUST 25.—**Manchester.**—ROADS.—For paving Lloyd-street South, Withington, for the T.C. Paving, &c., Department (District Surveyor's Office), Town Hall, Manchester. Deposit £1 1s.

AUGUST 25.—**Renfrew.**—FILTERS, &C.—For the construction of additional filters and tank at South Moorhouse, for the Renfrew C.C. Messrs. W. R. Copland & Sons, C.E., 146, West Regent-street, Glasgow. Deposit £1 1s.

AUGUST 25.—**Renfrew.**—WATER MAIN.—For the providing and laying of 3,500 lineal yards of 7 in. diameter cast-iron water pipes from Red Lion Inn to Housecraig Farm, &c., for the Renfrew C.C. Messrs. W. R. Copland & Sons, C.E., 146, West Regent-street, Glasgow. Deposit £1 1s.

AUGUST 25.—**Rhymney.**—SEWER.—For the laying of 300 yds. 12 in. sewer, 16 yds. 9 in. and 14 yds. 6 in., &c., at the Council's Sewerage Farm, Abertysswg. Mr. W. Lloyd Marks, surveyor, 61, High-street, Rhymney.

AUGUST 25.—**Woodford.**—ROADS.—For road construction, Chigwell-road, Woodford Bridge, for the U.D.C. Mr. W. Farrington, Surveyor, Woodford Green. Deposit £2 2s.

AUGUST 26.—**Bridgwater.**—ROADS.—For reconstruction of roads, for the T.C. Borough surveyor, Municipal Buildings, Bridgwater.

AUGUST 26.—**Glasgow.**—ROADS.—For the completion of the construction of roads and footpaths at Newbank, Parkhead, for the T.C. Director of Housing, Govan Town Hall, Glasgow.

AUGUST 27.—**Hemsworth.**—SEWAGE SCHEME.—For erection of engine house and pump wells, &c., and laying mains at Havercroft, for the R.D.C. Mr. W. T. Lynam, surveyor, Hemsworth.

AUGUST 27.—**Lambeth.**—ROADS.—For (*a*) laying creosoted deal paving in Dulwich-road, Water-lane, and Westminster Bridge-road; (*b*) laying granited natural mastic asphalte paving in Stockwell-avenue, for the B.C. Borough Engineer, Town Hall, Lambeth, S.E.

AUGUST 27.—**London and Sutton.**—ROAD REPAIRS.—For repairs to tar paving at Fountain Mental Hospital, and repairs to roads at The Downs Hospital for Children, Sutton, Surrey, for Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4 Deposit £1 in respect of each work.

AUGUST 27.—**Southborough.**—WATER MAIN.—For the laying of 1,500 yards of 6 in. cast-iron water main, &c., for the U.D.C. Messrs. G. & F. W. Hodson, Bank Chambers, Loughborough. Deposit £5 5s.

AUGUST 27.—**Watford.**—ROADS.—For the reconstruction of Station-road and Woodford-road and part of Queen's-road and Cassio-road, for the T.C. Mr. D. Waterhouse, Borough Engineer, Municipal Offices, Watford. Deposit £2 2s.

AUGUST 28.—**Carlisle.**—ROADS.—For making-up Thornton-road, Stanwix, for the T.C. Mr. Henry C. Marks, City Engineer, 18, Fisher-street, Carlisle. Deposit 10s.

AUGUST 28.—**Cheadle and Gatley.**—ROADS.—For making up Beech-avenue, Gatley, for the U.D.C. Mr. P. Hewson Molyneux, Council Offices, Cheadle, Cheshire. Deposit £1 1s.

AUGUST 28.—**Hemsworth.**—SEWAGE WORKS.—For the erection of engine house and pump well, sewer, &c., at Havercroft, for the R.D.C. Mr. W. T. Lynam, Engineer, Hemsworth.

AUGUST 28.—**Nitshill.**—SEWERS, &C.—For the construction of 1,820 yds. of main sewer at Nitshill, and construction of sewage purification works, for the Renfrew C.C. Mr. J. Gilchrist Bennett, C.E., Waterloo-street, Glasgow. Deposit £1 1s.

AUGUST 29.—**Thurnscoe.**—SEWERAGE WORKS.—For the construction of 2,640 yards of stoneware pipe sewers, &c., for the U.D.C. Messrs. W. H. Radford & Son, Albion Chambers, King-street, Nottingham. Deposit £5 5s.

AUGUST 30.—**Bakewell.**—SEWER.—For construction of sewer in Baslow-road, for the U.D.C. Mr. W. H. Davis, surveyor, Bakewell.

AUGUST 30.—**Birmingham.**—PAVING.—Supply and laying of 4,400 super yards of creosoted deal wood block paving in Hagley-road, for the T.C. Mr. H. H. Humphries, City Engineer, The Council House, Birmingham. Deposit £2.

AUGUST 30.—**Buxton.**—ROADS.—For the making-up of Windsor Park and Windsor Park-road, Fairfield, for the T.C. Mr. F. Langley, Borough Engineer, Town Hall, Buxton.

AUGUST 30.—**Erith.**—ROADS.—For widening of corner at Albert- and Bedonwell-roads, for the U.D.C. Surveyor, Bexley-road, Erith. Deposit £1.

AUGUST 30.—**Featherstone.**—ROADS, &C.—For the making of roads and laying of sewers in connection with the erection of 50 houses at Streethouse, near Pontefract, for the U.D.C. Mr. Samuel Chesney, A.R.I.B.A., Council Offices, Featherstone. Deposit £2 2s.

AUGUST 30.—**Mansfield Woodhouse.**—SANITARY.—For conversion of 320 pail closets at Forest Town into water closets, and construction of the sewers and drains, for the U.D.C. Mr. L. Walker, Surveyor, Council Offices, Mansfield Woodhouse. Deposit £2 2s.

AUGUST 30.—**Spenborough. &c.**—ROADS.—For road works at Spenborough, Hipperholme and Sowerby, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1 for each of the three contracts.

AUGUST 31.—**Dorchester.**—ROADS.—For resurfacing 1,800 sq. yds. on main Dorchester to Poole road, at Lytchett Minster, for the C.C. Mr. W. T. Fletcher, County Surveyor, Dorchester.

SEPTEMBER 1.—**Castleford.**—CRICKET PITCH.—For laying cricket pitch. Mr. S. Brayshaw, hon. secretary Townville Sports Club, Castleford.

SEPTEMBER 1.—**Coseley.**—SEWAGE WORKS.—For the construction of storm water and liquefying tanks, &c., for the U.D.C. Messrs. Berrington, Son & Watney, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

SEPTEMBER 1.—**Hertford.**—ROADS.—For the construction of the new road from Bayford to Brickendon, for the R.D.C. Mr. J. W. Riggs, Surveyor, 21, Trinity-grove, Bengeo, Hertford.

SEPTEMBER 1.—**Kirkcaldy.**—WATER MAINS.—For laying 2 miles of 14 in. and about 2 miles of 8 in. cast-iron pipes, with relative works, for the Water Commissioners. Messrs. J. & A. Leslie & Reid, C.E., 72A, George-street, Edinburgh. Deposit £1.

SEPTEMBER 1.—**Peterborough.**—ROADS.—(1) Reconstruction with concrete foundation of London-road, Oundle-road, and Thorpe-road, Peterborough; (2) resurfacing with a bituminous carpet the same, for the C.C. Mr. W. J. Deacon, Clerk, Cross-street, Peterborough. Deposit £2 2s.

SEPTEMBER 1. **Sunbury-on Thames.**—ROADS.—For making-up Burgoyne-road and Cross-road, for the U.D.C. Mr. Harold F. Coales, Surveyor, Council Offices, Sunbury-on-Thames.

SEPTEMBER 1.—**Woodford.**—SEWER.—For laying sewer, &c., in Snakes-lane, for the U.D.C. Mr. W. Farrington, Surveyor, Council Offices, Woodford Green. Deposit £2 2s.

SEPTEMBER 1.—**Woodford.**—SEWAGE WORKS.—For extension to eastern sewage works, for the U.D.C. Mr. W. Farrington, Surveyor, Woodford Green, Essex. Deposit £2 2s.

SEPTEMBER 2.—**Dublin.**—SANITARY WORKS, &C.—For sanitary works and the adaptation of the basement at the Irish Land Commission, Upper Merrion-street, Dublin, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin.

SEPTEMBER 2.—**Godstone.**—SEWERS.—For sewer extensions, for the R.D.C. Mr. S. F. Evershed, surveyor, Oxted.

SEPTEMBER 3.—**Tutbury.**—ROADS.—For reconstruction of road from Tutbury to Rolleston, for the R.D.C. Mr. F. Rist, surveyor, Brentone-road, Burton-on-Trent.

SEPTEMBER 5.—**Portsmouth.**—MAIN DRAINAGE.—For the construction of reinforced concrete duct, suction chamber, laying of cast-iron pipes, &c., at their Eastney Sewage Pumping Station of the T.C. Mr. G. Midgley Taylor, 36, Victoria-street, S.W. 1. Deposit £5.

SEPTEMBER 5.—**Rowley Regis.**—ROADS—For a third section of work on Dudley-road, Tividale, for the U.D.C. Mr. D. Wright, Clerk, Rowley Regis.

SEPTEMBER 6.—**Haddington.**—ROADS.—For laying whinstone causeway in Court-street, for the T.C. Mr. Wm. Lee Hogg, Burgh Surveyor, Haddington. Deposit £1 1s.

SEPTEMBER 8.—**Hong Kong.**—WATERWORKS.—Driving and lining of two tunnels, approximately 2,160 ft. and 4,680 ft. in length, through the Smugglers' Ridge and Golden Hill respectively; the construction of an open conduit, approximately 2,000 ft. in length, and contingent works. Crown Agents for the Colonies, 4, Millbank, London, S.W.1.

SEPTEMBER 8.—**Southampton.**—ROADS.—For the reconstruction of roads in part of High-street, Hanover Buildings, Onslow-road, and Grove-street, for the T.C. Borough Engineer, Southampton. Deposit £1 1s. each work.

SEPTEMBER 8.—**Twickenham.**—PAVING.—For repaving with creosoted deal blocks 21,500 yds. of carriageways, for the U.D.C. Mr. F. W. Pearce, surveyor, Town Hall, Twickenham.

SEPTEMBER 13.—**Wolstanton.**—ROAD.—Construction of new road from Wolstanton to Chesterton, for the U.D.C. Mr. Arthur Cotton, Surveyor, Council House, Wolstanton. Deposit £2 2s.

SEPTEMBER 15.—**Bognor.**—ROADS.—For construction of 7,100 sq. yds. of reinforced concrete carriageway, &c., for the U.D.C. Mr. J. Draper, surveyor, Bognor. Deposit £1.

★NO DATE.—**Hereford.**—PATHS, &C.—For the erection and completion of (1) paths, fences, and gates, (2) quick and privet hedges to 38 houses on Portfields Estate, for the Corporation. Messrs. the Hereford Associated Architects, Ltd. (H. E. Bettington), secretary, Palace Chambers, Hereford. Deposit £1 1s.

NO DATE.—**Slaithwaite.**—ROADS.—For making-up north side of Manchester-road, for the U.D.C. Mr. Edgar Freeman, clerk, Town Hall, Slaithwaite.

Competitions.

(*See Competition News, page* 274.)

Auction Sales, Tenders, etc.

AUGUST 26 AND 27.—**Cirencester.**—Messrs. Henry Butcher & Co., in conjunction with Messrs. Moore, Allen & Innocent, will sell, by order of the Receiver, *re* Messrs. Saunders & Sons, Ltd. (in Liquidation), builders' and contractors' material, plant, and office furniture, &c. Mr. W. E. Midwinter, Chartered Accountant, Council Chambers, Cirencester.

AUGUST 27, 28 AND 29.—**Near Evesham.**—Messrs. Perry & Phillips will offer for sale by auction interior and exterior fixtures and fittings, The Mansion, Wood Norton, with whole estate of 683 acres (or with 95 acres, or in lots), and after sale of fixtures the fabric of the mansion for demolition. Auctioneers, 59, High-street, Bridgnorth.

AUGUST 28.—**London, E.**—Messrs. Weatherall & Green will sell, at 68, Cambridge-road, Mile End, E. (owners retiring from business), builders' material, plant, machinery, and office furniture. Auctioneers, 22, Chancery-lane, W.C.2.

★AUGUST 28.—**London, W.C.1.**—Messrs. Henry Butcher & Co. will sell, without reserve, at the Sale Rooms, 13, High Holborn, W.C.1, large quantities of miscellaneous stores, builders' ironmongery, tools, electrical accessories, &c. Auctioneers, 43 and 64, Chancery-lane, London, W.C.2.

★SEPTEMBER 2.—**Denmark Hill.**—Mr. Henry V. Chew will sell, at Denmark Hill, Champion Park, useful building materials of various assortments. Auctioneers, 44, Bedford-row, Holborn, W.C.

★SEPTEMBER 2.—**Steyning, Sussex.**—Mr. F. H. Clark will sell, without reserve, building material, &c., from demolition of Steyning Brewery. Auctioneer, Railway Wharf, York-road, Wandsworth, S.W.18.

★SEPTEMBER 10.—**Colchester.**—Messrs. Fenn, Wright & Co. will sell a freehold property, builder's yard, and goodwill of business as carried on by Exors. of late Mr. T. J. Ward. Auctioneers, 146, High-street, Colchester.

★SEPTEMBER 11.—**Edgware.**—Mr. Leslie Raymond will sell (unless previously disposed of) two freehold building sites of about 5 acres and 2½ acres respectively, at Edgware, within about 700 yds. of the New Tube Station (now open). Auctioneer, The Estate Offices, Church-lane, Edgware.

PRELIMINARY ANNOUNCEMENT. — **London, W.**—Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

Public Appointments.

AUGUST 23.—**Southend-on-Sea.**—Clerk of Works required by the C.B. for the new Secondary School. Mr. H. Farrands, M.A., Director of Education, Education Offices, 20, Warrior-square, Southend-on-Sea.

AUGUST 26. — **Neath.** — Architectu required by Glamorgan C.C. Mr. F.R.I.B.A., County Architect, Midland I Neath, Glam.

AUGUST 28.—**Liverpool.**—Chief Assistant required by the Finance Co City of Liverpool. The Land Steward Municipal Buildings, Liverpool.

AUGUST 30.—**Dorchester.**—Architec required for education work. Mr. E. A to the County Council, County Offices,

SEPTEMBER 1.—**Greenwich.**—Archi tant, Commercial Clerk, and Grade "A by the Metropolitan Borough of G Frederick J. Simpson, Town Clerk, Tow wich-road, S.E.10.

★SEPTEMBER 1.—**Plymouth.**— Temp tural Assistant required by the C.B. M Borough Engineer, Municipal Offices, P

SEPTEMBER 1.—**Portsmouth.**—Addi Clerk required in the Borough Engineer Mr. A. W. Ward, A.M.I.C.E., Bor Town Hall, Portsmouth.

SEPTEMBER 8.—**St. Marylebone.**—E Architectural Assistant required by th Borough. Mr. J. Paget Waddingto Borough Engineer and Surveyor, T Marylebone-road, N.W.1.

SEPTEMBER 9.—**London, S.E. 1.**—TE TANT.—Technical (engineering) assista manent staff in the Architect's Depa by the L.C.C. Clerk of the Council, T Westminster Bridge, S.E. 1., with star foolscap envelope.

SEPTEMBER. — **London, S.E.1.** —(*a*) architecture and Building; (*b*) Instr work, required by the Governors of the technic Institute, for two evenings a w Bispham, Principal, Borough-road, 1

SEPTEMBER.—**Wimbledon, S.W. 19.**— turer in (a) Surveying, (b) Brickwork a the Standard of Grade 1 City and Guilds Principal, Technical Institute, Wimble

★NO DATE.—**Hong Kong.**— ASSISTANTS.—Assistants (three) require ment of Hong Kong, for service in th Office of the Public Works Departmen of three years, with possible permane once, stating age, qualifications and the Crown Agents for the Colonies, 4, minster, S.W.1, quoting M-12919.

THE SLOUGH HO SCHEME

THE Slough housing scheme has completed. The area of the lan been built upon is a square plot of between Stoke-road and Stoke Pog total number of houses built is 242 89 pairs and 16 blocks of fours. and ninety-four houses have parlo rooms, and 48 have living-rooms houses have three bedrooms, a s bathroom, and eight have an extr stairs. The living-rooms have ea west aspects, and the larders, wh north, have windows in shelteree porches. The bathroom in the houses adjoins the scullery, and in to permit of its use as a washhouse are supplied with gas for lighting with water from the Council's ma have been used in some of the pa cost of chimney-stacks, and in so rooms without fireplaces flues h structed so that gas stoves can desired.

All living-rooms have been "Servall" or "Foresight" coml with open grate, and a good dr provided. In addition to the usu boards have been fixed, and in all a draining rack also in the scull number of cupboards have bee bedrooms and on landings. It w instal the usual hot-water syst houses, but to reduce the cost fitted in this way, the remaind heaters for hot-water supply to ups

The architect is Mr. Alan Brom F.S.I., and the general contracto Henry Boot & Sons (London), L Grosvenor-place. Other contrac ecuted portions of the work E. Parkinson, Tottenham, and C. (roofing); Messrs. John Deverill, D. Bowyer, Mr. H. Street (ten Messrs. Langley & Johnson (d Victoria Fencing Company (ches Merton Abbey Joinery Works Messrs. Wm. Wood & Son (Tapl and privet); and Johnson Bros.

POSED NEW BUILDINGS & OTHER WORKS *

ese lists care is taken to ensure the accuracy of the information given, but it may occa- appen that, owing to building owners taking the responsibility of commencing work ns are finally approved by the local authorities, "proposed" works at the time of n have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. District Council; R.D.C. for Rural District Council; E.C. for Education Committee; Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for f Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

WYTH.—The T.C. is to spend £300 in he slaughterhouse.

IAM.—The D.C. are proposing to construct on the housing estate as an unemployment d the Surveyor is to meet the Engineers of & A. Railway with a view to securing the Lloyd-street Bridge and Moss-lane Bridge.

—Plans are to be prepared for the U.D.C. baths.

—The R.D.C. has resolved to borrow advance to the Chapwood Safe Company, enable them to carry out a scheme for the 100 houses for workmen who will be em- e new works which the firm propose putting scott, near Shrewsbury.

AW.—The D.C. has received sanction from o borrow £2,331 in connection with the eme.

The Corporation are contemplating im- in St. James-street, and the widening of lane and Cowfoot-lane.

—The M.T. has agreed to contribute one- total cost of £10,595 for the construction ass road, and the Surrey C.C. is taking teps to get possession of the land, and the e commenced without delay.

—The B.E. has approved plans for the of the Westfield junior boys' school as a ol for 372 children.

.—The Surveyor to the R.D.C. has sub- iminary plans of the proposed extension rage works at Woolley Colliery, in order vision for the building of houses by Messrs. Burnley, Ltd. He was instructed to h the matter and to obtain plans and s for carrying out the work.—Plans T.C.: Barnsley Main Colliery Co., 94 ndy Cross; W. Avill, two houses, Locke- tewart's, Ltd., alterations to shop, 12, —The B.S. has scheduled sites suitable al housing schemes. An electricity sub- be erected on a site at the new highway ction has been given to a loan of £850 for n of two sectional huts at the Technical

—The Bedwas and Wachen U.D.C. has roceed with a sewer scheme, at an estimated 67, and has applied for necessary loan The Council has now approved plans sub- 48 houses to be erected in terraces by the igation Colliery Co. The company pro- the work in hand at once.

H.—The Foleshill U.D.C. has commenced of thirty houses on the site in Bulkington- ventually there would be 127 on this par- of the land. It was decided to extend the to the site.

ON.—The U.D.C. has prepared a scheme for d reconstructing Grimshaw-lane in view of elopments.

.—The T.C. has passed plans for a house re-lane, for Messrs. Calvert & Spence; all Bridge-road, for Mr. T. Cockerill.

CASTLE.—Plans passed: House for Mr.

N.—Plans passed by T.C.: Addition to t, for Mr. H. Butterworth; house, Preston Mr. H. Walmsley; house, Preston Old- H. Southworth; four houses, Beresford- H. Higson; surgery, 45, Whalley New- E. Morrison; house, Fecitt Brow, by Mr. nson; bank, Exchange-street, by the k.—The Lancashire C.C. are to be asked he scheme submitted by the Blackburn for the construction of a new arterial road oint near Preston New-road to Whitebirk, ength of 730 yds. within the Rishton U.D. construction of a bridge under the L.M.S. mated to cost £18,200.—The Corporation, to providing work for the unemployed, oad improvements, involving an estimated of £16,300.—The open access system is to in the Public Library and work is to September 1.

.—The Corporation have acquired for ement purposes land adjoining Norbreck Estate. It is expected that 500 houses d and provision has been made for a ping centre.—At a meeting of the Building ttee 66 plans were submitted, of which 57 d. Those passed included over 100 new fferent parts of the town.—A land sale sum in the region of £70,000 has taken Fylde.—Mr. Halstead Best, F.S.I., archi- veyor. Blackpool, is now engaged on the estate and the formation of roads, drain- it is proposed to develop a considerable land for building purposes on garden

The Housing and Town-Planning Com- cided to enter into negotiations for the acres of land off Union-road and 19 acres or-road, adjoining the Firwood Housing decided to obtain tenders for the erection

of six houses on vacant land belonging to the Corporation in Cartmel-crescent, on the Firwood Estate. The Corporation have agreed that steps be taken to obtain powers for the compulsory acquisition of several plots Blackhorse-street and Moor-lane, including the land and premises known as the Bolton Steel Works, formerly occupied by Messrs. Bessemer.

BOSTON.—The T.C. proposes to invite tenders for the erection of 48 houses off Woodville-road, and four houses in Castle-street.

BOURNEMOUTH.—Plans passed by T.C.: Alterations, 95, Holdenhurst-road, The Malmesbury and Parsons' Dairies, Ltd.; additions, 52, Heathwood-road, Miss Tappendon; alterations and additions to premises, The Arcade, Messrs. Offers; stores, rear of Manor-parade, Christchurch-road, Mr. W. Pulsford Browne; garage and workshop, rear of 68, Palmerston-road, Mr. B. F. Rogers; alterations, The Square, Messrs. Hugh King; alterations and additions, "Easton Glen," St. Peter's-road, Messrs. Plummers, Ltd.; additions, 231, Wimborne-road, Mr. E. J. Mitchell; additions, "Whiteholme," corner of Belle Vue and Marine-roads, Mr. D. C. Stuart; club, Harcourt-road, The Southbourne Conservative Club, Ltd.; house, St. Alban's-road, Mrs. Dudley; bungalow, Lascelles-road, Mr. R. Bott; two houses, Watcombe-road, Mr. T. Millson; additions to house, St. Ledger's-road, Mr. F. Ellen; house, Bethia-road, Mr. W. Hayward; alterations and additions to house, Iddesleigh-road, Capt. Keays, O.B.E.; two houses, Roberts-road, Mr. E. C. Langdon; house, Queen's Park North-drive, Mr. Webber; house and garage, Christchurch-road, Dr. H. Granger; house and garage, Harewood-avenue, Mr. J. A. Edeson; house, St. Ledger's-road, Mr. J. Stacey; house, Watcombe-road, Mr. F. Harrington; house, Eldon-road, Mr. Bishop; transformer sub-station, Charminster-road, The Bournemouth and Poole Electricity Supply Co., Ltd.; house, Beechwood-avenue, Mrs. MacGovan; house, Irving-road, Mr. C. White; house, Cranleigh-road, Mrs. C. Clarke; house, Boscombe Cliff-avenue, Mr. H. Hoare; house, Evelyn-road, Mr. B. Blunt; two houses, Glenmoor-road, Mr. A. Barnes; two houses, Boscombe Overcliffe-drive, Mr. Watson; two flats, Firbank-road, Miss N. E. Robertson; pair houses, St. Luke's-road, Messrs. Hoare & Donaldson; alterations and additions, "The Priory," Priory-road, Mrs. McDermott; house, Queen's Park West-drive, Mr. A. Wright; three houses, Court-road, Mr. C. Newton; bungalow, "Withycroft," Tuckton-road, Miss E. Moser; house, King George-avenue, Mr. E. Stacey; house and garage, Boscombe Overcliffe-drive, Mr. R. J. M. Nabney; house and garage, Dingle-road, Mr. A. E. Tanner; two pairs houses, Pickford-road, Mr. H. Brown; house, Danesbury-avenue, Mr. E. T. Foyle; bungalow, Strouden-road W., Mr. A. A. J. Walker; alterations and additions, "Evergreen Court," Branksome Wood-road, Mr. F. S. A. Maude; bungalow, Lascelles-road, Messrs. Midgeley & Hardy, Ltd.; bungalow, Lascelles-road, Messrs. Midgeley & Hardy, Ltd.; house, Morden-road, Mr. C. Coul; house, corner of Lonsdale and De Lisle-roads, Mr. G. F. Jordan; bungalow, King Edward-avenue, Mr. J. K. Coffin; house, Tennyson-road, Messrs. Way & Marshall; alterations and additions, "St. Sunniva," Spa-road, Miss M. R. Maddox; house and garage, corner of Charminster-avenue and Pine-road, Mr. J. Traves; four houses, Arnewood-road, Mr. M. Urquhart; two houses, Wayside-road, Mr. W. Hoare; twelve houses, Cranleigh-road, Mr. C. B. Philpot; motor house, 52, Lansdowne-road, Dr. S. Watson Smith; house, Albemarle-road, Mr. A. J. Cole; house, Limited-road, Mr. W. Morgan; house and shop, corner of Kimberley and Stamford-roads, Messrs. H. Small & Sons; house, Seafield-road, Mr. A. H. Jackson; house and shop, Kimberley-road, Messrs. H. Small & Sons; house, Dingle-road, Mr. H. Ebben; additions, "Staffield House," corner of St. Michael's and West Cliff-roads, Mr. Ferrario; conversion into shop, 14, Pine-road, Mr. E. J. Helyar; three houses, Court-road, Mr. W. Moore; house, King George-avenue, Mr. T. H. Difall; six houses, Southbourne, Overcliffe-drive, Messrs. Midgeley & Hardy, Ltd.; house and garage, Boscombe Overcliffe-drive, Mr. A. L. W. Whittaker, J.P.; additions, 46, Grand-avenue, Gen. King King; additions, 36, Cecil-avenue, Mr. H. J. Bicker; additions, 45, Washington-avenue, Mr. H. Gould; additions, rear of 102, Haviland-road, Mr. W. Burgess; house, Dingle-road, Mr. H. Solomon; house, Prince of Wales'-road, Mr. J. Medley; bungalow, garage and flat, Western-road, Mrs. C. Hunter; bungalow, corner of Mavis and Malvern-roads, Mr. Grimshaw; two houses and garages, St. Ledger's-road, Mr. J. J. Elkins; house, De Lisle-road, Mr. A. D. Lambert.

BRECONSHIRE.—The Council is to consider a comprehensive footpath and pavement improvement scheme for the area.—Plans have been passed by the T.C. for a house for Mr. Thomas Evans, Llangorse, at Ffrwdgrech-road, and has granted a building site to Mr. A. Parry, Brecon.

BRIDGWATER.—Plans passed by R.D.C.: Bungalow at Bawdip, for J. Bennett; two cottages, Stowell, for Mrs. Graham.

BROMLEY.—Plans passed by R.D.C.: Mrs. S. J. Blomfield, house, Ninnams-road, Farnborough; the Trustees of the Independent Order of Oddfellows, concert hall, Main-road, Foots Cray; Mr. F. R. Languth, house, Chelsfield Park Estate; Mr. J. Kent, four detached dwelling-houses, Lallywood Estate, Chislehurst-road, Orpington; Mr. A. O. Edwards, laying-out of new street, Broxbourne-road, Orpington; Mr. J. Kent, 13 detached dwelling-houses, Chislehurst-road, 12 in Grosvenor-road, Ladywood Estate, Orpington; Mr. E. L. Crowhurst, bungalow, Chelsfield-lane, Orpington; Mr. C. George, bungalow, Chelsfield-lane, Orpington; Messrs. T. Sawyer & Son, pair semi-detached houses with shops, High-street, Orpington; Mr. T. J. Yeo, bungalow, Irene-road, Orpington; Mr. R. Studman, house, Hayes-lane, Hayes, Messrs. Belfrage, Saville & Hooper, pair semi-detached houses, Hawes-lane, West Wickham; Mr. E. H. Smith, cowshed, &c., The Alders, High-street, West Wickham; Mr. H. F. J. Hall, bungalow, No. 1, Field Cottage, South-street, Main-road, Cudham; Mrs. Quinton, bungalow, next The Cottage, Sunningvale-avenue, Cudham; Mr. W. T. Sykes, new street, Viewlands-avenue, off Grays-road, Cudham; Mrs. H. E. Harrison, house, Crofton-road, Orpington; Mr. George William Collins, additions, Blakeney, corner of Stanley and Keswick-roads, Orpington; Mr. T. C. Gorham, new street, Westview-road, Prattsbottom, Chelsfield; Mrs. H. H. Garland, house, West View-road, Chelsfield: Mr. F. W. Culver, house, West View-road, Chelsfield; Mr. W. Stace, bungalow, Honeyden-road, Prattsbottom.

BURNLEY.—Revised plans are to be submitted to the Board of Education for the erection of a new school in Lionel-street, to accommodate 800 children. A new ambulance hall has been purchased in Colne-road, at a cost of £2,000. The General Purposes Committee approved a scheme for the laying out of new gasworks at Old Hall, at an estimated cost of over £200,000.

BURY.—The Town Clerk was authorised to apply to the M.H. for sanction to borrow £450 in connection with the concreting of the market ground; and also for sanction to borrow £750 in respect to the purchase of a plot of land at the junction of Paradise-street and Walmersley-road.

CARMARTHENSHIRE.—Plans passed by the Lampeter Council: Two houses, for Mr. Eben Davies.

CHEADLE.—The old black and white building known as Brookside Farm is now practically demolished and a start is to be made with the erection of modern dwellings on the site.

CHINGFORD.—School building, The Green, for Messrs. Hunt & Nix.

CONISBOROUGH.—The U.D.C. has received sanction from the M.H. to erect 20 houses.

CROSTON.—Sanction has been received by the U.D.C. for the erection of six houses to be erected by private enterprise.

CUNDY CROSS.—The Barnsley Main Colliery Co. has lodged plans with the local authority for the erection of 94 houses.

DARLINGTON.—The T.C are to spend £20,233 on permanent repairs to back and front streets.

DELVES LANE.—The Durham County E.C. is to prepare a scheme for a school for 400 juniors, at an estimated cost of £6,000.

DONCASTER.—The R.D.C. has applied to the M.H. for sanction to borrow a further sum of £12,825 for the completion of the Barnby Dun sewerage scheme.

DORCHESTER.—Plans passed by T.C.: Furniture store and garage at Trinity-street, for Messrs. Hy. Duke & Son; additions and alterations to the Dorset County Hospital; alterations and additions to 28, High West-street, for Mr. A. E. D. Prideaux; additions to Bush Corner House, for Mr. W. A. Buller.

DUNDEE.—Plans and sections of proposed new buildings, &c., in Dundee, have been lodged at the office of the City Engineer: Blackness-road, outhouse, for David McCall; Jedburgh-road, house, for George Greig; new streets between Dalkeith-road, Pitkerro-road and Old Craigie-road, for the Trustees of the late D. C. Guthrie.

EASINGTON.—Durham County E.C. shortly proposes to submit a scheme for the erection of a school for 1,152 scholars, at an estimated cost of £17,000.

EDINBURGH.—The Dean of Guild Court has granted the following warrants: Bertrams, Ltd., wall and sheds at Westfield Foundry, Westfield-avenue; Edinburgh Corporation, cloakrooms and lavatories at Bath-street, Portobello; Convent of the Sacred Heart, extension to convent at Craiglockhart; Edinburgh Chemical Co., Loanhead, store; Thomas Gleave, bungalow at Dovecourt-road, Corstorphine; Sir Robert Greig, dwelling-house at Barnton-avenue; Heggie & Aitchison, addition to workshops, &c., Duff-street; Holiday Real Estate Co., four semi-detached houses at Laverockbank-avenue; St. Bernards F.C., foundations and steel work of stand, Gymnasium, Royal-crescent; Wm. M'Ewan & Co., reconstruct stores, &c., Fountain Brewery, Fountainbridge; J. & A. M. Twaddle, bungalow at Craig's-road, Corstorphine; John Watherston, convert offices into showrooms at 10 & 11, Randolph-place and 11, Randolph-lane; Mrs. Weippert, convert house into two houses, at 30, Eglinton-crescent; F. W. Woolworth, Ltd., convert 170-174, Constitution-street into shop.

EGHAM.—The Hythe School is to be improved at an estimated cost of £2,200.

EPSOM.—Plans have been approved by the B.E. for a new infants' school, at a cost of about £4,610. The U.D.C. has prepared a scheme estimated to involve an expenditure of between £5,000 and £6,000, for widening the London–Epsom–Farnham main road on the north side, between the Clock House and the White Horse pond.

ETON.—Messrs. Dorking, extension to the picture gallery and drawing school, Eton College.

FARNHAM.—The U.D.C. has decided on a scheme for the widening of the main road at Bournemill, at a cost of £1,958.

FLEETWOOD.—Lancashire E.C. is seeking loan sanction for an expenditure of £700 to improve the sanitary accommodation at the Fleetwood Blackiston school.

GAWSWORTH.—The Cheshire County Small Holdings Committee is to erect housing accommodation at the holding at an estimated cost of £718.

GLAMORGAN.—The Council, in conjunction with the Glyncorrwg U.D.C., proposes to construct a new road

* List of Contracts, Competitions, etc.

from Caerau to Duffryn Rhondda.—The M.H. has held a public inquiry into the application of the Port Talbot B.C. to borrow £1,489 for the drainage of the Aberaven Moors. The total cost of the scheme is £4,390, Ministry and landowners' grants making up the cost above the sum to be borrowed by the Council. The Council will, upon completion of the scheme, erect houses on the moors.—The Aberdare U.D.C. is considering alternative sites available for the erection of a maternity home.—The Merthyr Tydfil B.C. architect has reported the suitability of the Troedyrhiw Halt site for the erection of 72 houses by the Council. A sewer will be necessitated along the Cwmdu-Glantaff-road and a roadway will probably be constructed in the old canal bed.— The Merthyr Tydfil B.C. has now decided to erect a single-story building as a public library, at an estimated cost of £5,000, and has called for plans to be prepared.

GLASGOW.—The Housing Committee of the T.C. are considering a scheme for the acquisition of 50 acres of land on the Govanhill Estate, suitable for a housing scheme.

GOSPORT.—Plans passed by T.C.: Pavilion, Anglesea-road, for Gosport and Alverstoke Tennis Club; house, Testcombe-road, for Mr. J. W. Mabbs; house, Privett-road, for Mr. A. D. Bradford; two villas, Angleseyroad, for Messrs. Northcott & Pile; house, Crescent-road, for Lieut.-Col. Lewin.—The T.C. has considered alternate plans prepared by the B.E. showing the lay-out of the esplanade adjoining the landing stage and approved that showing the approach to the landing stage laid out as a boulevard with public conveniences. The B.E. has been asked to prepare a lay-out for the esplanade at Gosport Hard.

GRAVESEND.—The Town Clerk has prepared a report emphasising the need for the provision of isolation hospital accommodation, and has been authorised to communicate with neighbouring authorities with a view to a joint arrangement.—In connection with the proposed development of the Wrotham-road estate, the roadway is to be widened.—The Surveyor has prepared a lay-out of land at Clarence-place and been asked to submit an estimate of the cost.—The Housing Committee has interviewed Mr. Clements and arranged terms for the construction of 24 houses—Plans passed: House, Cross-lane East, for Mr. W. J. Holland; four houses, Northcote-road, for Mr. W. Andrews; four houses, Portland-avenue, for Mr. W. H. Black; house, King's-drive, for Mr. A. S. Gates; two houses, Singlewell-road, for Mr. W. J. Holland; bungalow, Whitehall-road, for Mrs. Kent.

HALE.—At a meeting of the U.D.C. the conveyance was sealed of a house, 82, Cecil-road, with land and premises, for the purpose of a fire and ambulance station.

HALSTEAD.—Plans passed by R.D.C.: Bungalow, Sible Hedingham, P. Parr, for F. Mead; pair of cottages, Earl's Colne, P. J. Westwood, for Miss Stange.

HARWICH.—The T.C. has decided to borrow £1,030 for widening Oakley-road and the pathway near Parkeston-road.—School playgrounds are to be tar-paved at a cost of £902.

HASTINGS.—The M.H. has notified the T.C. that, as a result of the official inquiry recently held into the proposal, he has sanctioned the erection of the proposed new pavilion between White Rock Gardens and the parade. The cost will be £12,000.——The M.H. has held an inquiry into the application of the Corporation for sanction to borrow the sum of £1,500 for purposes of water supply.

HEBBURN.—The M.H. has sanctioned the borrowing of £4,060 for the purpose of erecting an additional 11 houses.

HEMSWORTH.—Plans passed by R.D.C.: 166 houses at South Elmsall, for the R.D.C.; bungalow at Common End, South Elmsall, for Mr. C. Taylor; house at South Elmsall, for the United Services Club of the Carlton Main Colliery Co.; estate at Back-lane, South Elmsall, for Messrs. J. Hinchliffe & Son.

HEREFORD.—The C.C. has acquired a site at Portfields upon which they propose to erect 18 parlour type houses and 38 non-parlour type houses.—The Butter Market, recently damaged by fire, is to be reconstructed at an estimated cost of £3,000.

HOLYWOOD HALL.—The M.H. has sanctioned the proposal of the Durham C.C. to provide additional water storage at the sanatorium, at a cost of about £1,400.

HORBURY.—Plans passed: Two shops in High-street, for Mr. G. Chappell.

ILFRACOMBE.—Plans have been approved for the lay-out of the recently-acquired land in Church-street by the U.D.C. This is to be the site of the local war memorial.

IRLAM.—Lancashire E.C. proposes the purchase of Longfield Lodge for use as a school clinic, at a cost of £1,800.

KIRKHAM.—Plans for the erection of four houses in Swarbrick-street, two in Ribby-street, one in Station-road, and one in Freckleton-street, were passed.

LEATHERHEAD.—The Surrey C.C. has decided to proceed with the widening of the London–Epsom main road in Leatherhead, at a cost of £10,030.

LEICESTER.—As a result of the visit of a deputation of the Leicester Housing Committee to the Ministry of Health, sanction was obtained for the building of an additional 500 houses.

LEIGH.—The T.C. approved a recommendation of the Housing Committee to acquire for £775 five acres of land belonging to the Leigh Football Club, between the canal and football ground, for the erection of 60 houses, at a cost of £30,375.

LINTHWAITE.—The M.H. has sanctioned a loan of £8,650, for the purpose of erecting 16 houses at Cowlersley.

LITTLE HOLLAND, NEAR CLACTON-ON-SEA.—The construction of a hard tennis court is proposed. It is not necessary that this should be one of the patent varieties, but any suggestions would be considered. Firms wishing to entertain the matter should communicate by letter to the Secretary, c/o The Post Office, Little Holland, near Clacton-on-Sea.

LITTLE HULTON.—Sanction is being sought for a loan of £18,600, for the erection and equipment of a Council school.

LONGTON.—A loan of £1,500 is being sought by the Lancashire E.C. for additional cost in respect of the erection of a Council school. Sanction to a loan of £7,700 has been granted, but the lowest tender exceeds this amount by £1,364.

MALLING.—Plans passed by R.D.C.: Addition to house at Ightham, for Mr. F. A. Nisbett; cowshed at Ryarsh, Mr. F. Brooks; bungalow at Pilgrim-road, Trottiscliffe, Mr. W. J. Green; at Thrift Wood, Stansted, Mr. S. Parrette; bungalow at Hale-street, East Peckham, Mr. J. W Horsley.

MARKET HARBOROUGH.—The M.H. has sanctioned a loan of £200 for a new sewer on the Kettering-road.—Plans passed by U.D.C.: House, Great Bowden-road, for Mr. J. Wilkins; bungalow, Knoll-street, for Miss Ginns.

MARPLE.—Cheshire E.C. is purchasing a site at a cost of £600 for a new school.

MERTON.—The U.D.C. has decided to widen Mostyn-road at a cost of £1,983, and Long Lodge at a cost of £2,264.

MITCHAM.—The U.D.C. has prepared a scheme for the reconstruction of the railway bridge at Streatham-road, estimated to cost £9,000.

MIDSOMER NORTON.—Plans passed by U.D.C. include a new Primitive Methodist chapel at Welton; and a pair of houses in North-road.

MORETON.—Cheshire E.C. is seeking sanction for a loan of £14,000 for the erection of a school.

MORPETH.—The T.C. has decided to erect seven houses at West Green, at an estimated cost of £3,000.

NELSON.—At the T.C. it was decided to proceed with the erection of 50 additional houses on the Marsden Park site and a sub-committee was appointed to consider the lay-out and type of houses most suitable. The following plans were recommended for approval: For Bankfield Mill Co., extensions to warehouse, Vulcan-street; for Messrs. Haworth, Ltd., workshop, back Edward-street; for Mrs. Adams, dairy and garage, Thomas-street. It was resolved that the Borough Surveyor and Cleansing Superintendent make inquiries and submit estimates of the cost of erecting conveniences in the following positions:—Carr-road Recreation Ground; Carr-road and Arundell-street; Brunswick-street Recreation Ground; Brunswick-street and Napier-street; corner of Netherfield-road and Roberts-road; junction of Hildrop-road with Bradley Hall-road; also the provision of conveniences in the section of Walverden Ward, and that the Surveyor report on suggested alterations to the conveniences in Manchester-road. The Marsden Building Society have secured premises adjoining their head office in Scotland-road, which they propose to adapt as an extension for their office requirements.

NEWPORT (MON.).—The Watch Committee is considering a scheme for the erection of six houses now and six later on land at the rear of Maindee station, for the accommodation of members of the Force.—The Works Committee has decided that henceforth every house erected must have separate drainage.—The English Homesteads, Ltd., have taken the frontage of the widened Barrack-road between the hospital and the barracks for building purposes.—A new road is suggested from Chepstow-road to Liswerry-road.—The M.H. has sanctioned a loan of £5,000 for the reconstruction of Dock-street.—The T.C. has accepted the offer of Lord Tredegar to present the town with the castle buildings and land on condition that the Corporation spends £5,000 under proper archæological direction in putting the old castle in some sort of decent repair.—Negotiations are to be continued with the G.W.R. for the acquisition of a portion of the Monmouthshire Canal from Barrack-hill to the Town Dock with a view to its closure and conversion into a road.—The M.T. has promised a grant of 65 per cent. of the cost of the reconstruction of Newport Bridge, for which the Corporation has accepted the tender of Sir William Arrol & Co. of £140,275. The Corporation has now definitely decided to have the facing work of the bridge carried out in stone.—The Town Clerk, Borough Treasurer and Borough Engineer are preparing a report as to sites suggested for the proposed new town hall.—Messrs. J. W. Holmes & Co. have prepared plans for the development of the Ladyhill Estate.—Part of the housing site at Maindee Park is to be laid out as a recreation ground.—The E.C. proposes to establish a central school at Hatherleigh and a temporary school with accommodation for 200 at Somerton.—Extension to stores, Chepstow-road, for Messrs. Swallwell & Havard.——Plans passed by T.C.: Edward VII-crescent, three houses, J. Mathias & Sons; St. Julian-road, two houses, Jones & Lewis, for Meaker Bros.; Summerhill-avenue, house, Graham Hitchcox & Co., for R. G. B. Stokes; Keynsham-avenue, two houses, A. E. Sheppard, for T. J. Hill, Rutland-place; Keynsham-avenue, four houses, A. E. Sheppard, for T. J. Hill; Hawarden-road, two houses, Henry Budgen & Co., for J. Thomas & Co.; Rodney-road, offices and garage, W. J. Davies, for Henry Richards & Co., Ltd.; Barrack-lane, house, English Homesteads, for Mrs. S. Williams; Barrack-lane, house, English Homesteads Co., for A. E. Hannah; Allt-yr-yn-avenue, six houses, C. E. Tebbs, for H. J. Herbert & Co.; Commercial-street, six shops and 12 flats, Page & Lawrence, for Jacobs & Phillips.

NOTTINGHAM.—The contract for the new Midland Palais de Dance, to be erected at the junction of King Edward-street and Parliament-street, Nottingham, has been secured by Messrs. W. & J. Simons, Nottingham, and excavation work is to be put in hand at once. The architects are Messrs. Alfred J. Thraves, M.A., and H. Hardwick Dawson, L.S.A., High-street, Nottingham.

OKEHAMPTON.—The town will benefit greatly by the will of Mr. Sidney Simmons. Some years ago Mr. Simmons purchased Okehampton Castle, which he restored and endowed, and this, by his will, he leaves to the town, in addition to £10,000 for a town reading room, and literary institution; and £5,000 for almshouses.

OUGHTIBRIDGE.—The Wortley Rural Council have decided to erect 20 houses for Oughtibridge, but this number is much below the requirements—200 houses are to be pressed for.

OXENDON.—The R.D.C. has approved of a scheme for a joint hospital scheme for infectious cases for Kettering.—Plans passed for houses in East Farndon.

PAIGNTON.—The Surveyor has been instructed to prepare a scheme for a garage for the Council's vehicles. Mr. A. H. Eggins has been appointed architect for the purpose of advising on a suitable site. Preston for housing and the lay-out of sites.—Plans passed: New roads at back of Torquay-road, for the Paignton and District Development Co.; house, Barcombe Heights, for Mr. P. Maltby; house, Goodrington-lane, for Messrs. C. & R. E. Pile; house, Dartmouth-road, for Mr. A. Rowe; house, Goodrington-lane, for Miss Pile.

RADCLIFFE.—Agreement has been reached between the D.C. and the Clifton and Kearsley Coal Co. for the erection of houses on land off Outwood. The whole area for the land proposed to be developed contains about 26 acres, of which about 10½ acres will be developed by the Clifton and Kearsley Coal Co., and the remaining 15½ acres by the Council. On the latter provision is made for 182 houses.

RAWDON.—The U.D.C. has received sanction from the M.H. for permission to erect 25 houses. The proposed houses are estimated to cost about £6

REASEHEATH.—Cheshire C.C. has obtained leave to borrow £7,000 for equipping and furnishing the Institute.

RHONDDA.—Plans have been prepared for a new hospital to be erected at Llethrddu Farm site.—The Porth and District General Hospital Committee. The plans have been approved and embody a hospital with 176 beds, a fully-equipped school for nurses, &c., and staff living accommodation at an estimated total cost, with equipment, of £

RICHMOND.—The T.C. have passed plans for the erection of two semi-detached villas and two houses.

RUGELEY.—Alterations to Station Hotel.

SANDBACH.—The Improvements Committee recommend the Council to apply for assistance from the Unemployment Grants Committee towards the cost of extending the sewer on Coal Moss Heath, Back Smithfield-lane, and Middlewich-road to the boundary of East Elworth; the estimated cost of the scheme is £3,800.

SANDWICH.—Plans passed by T.C.: Hallett, eight houses in St. George's-road; World's End, for alterations to premises in King-street; Mr. Cloke, addition to offices, Strand-street.

SHEFFIELD.—Sanction has been given to the lay-out of street and road widening which will involve a cost of £375,000. Twenty-four roads or streets will be dealt with, which number constitutes the largest street scheme in Sheffield for some years. One of the roads to be widened is the main road out of the city to Worksop, Retford, and Lincoln.

SHELF (YORKS).—The Economic Stores, Halifax, propose to erect a model abattoir at Giles Farm, Shelf.

SHIPLEY.—The U.D.C. propose to adopt a scheme whereby they will erect over 100 houses of the working-class type, at an estimated cost of £300 and £400 each, in the Hurst Wood locality.

SILSDEN.—The M.H. has sanctioned loans of £1,000 and £1,050 for housing purposes.

SLEAFORD.—The U.D.C. has purchased land for housing scheme.—Plans have been prepared for alterations and additions at the cemetery.—Plans passed: Bungalow, Alexandra-road, for Messrs. Banks & Son; house, Drone-lane, for Mr. H.

SOWERBY BRIDGE.—Bolton Brow Wesleyan Chapel is to be renovated and a new minister's vestry built; also the choir vestry is to be extended at an estimated cost of over £500.

STANLEY.—Plans passed by the U.D.C.: four houses, Windermere-terrace, South Moor Colliery Co., Ltd.; house at Old South Moor, for G. Lee.—The Council have agreed to purchase 126½ acres of land at South Stanley for housing purposes, at a cost of £7,590, subject to approval of the M.H.

SOUTHEND-ON-SEA.—Plans passed: Two houses, Inverness-avenue, W. Carrington; conversion of house into flats, 28, Satanita-road, M. E. Pledge; conversion of house into flats, 47, King's-road, Cooper; house, Cricketfield-grove, H. Soulsby; bungalow and two houses, Bailey-road, J. Brush; bungalow and garage, Colbert-avenue, J. Mordecai; house, Surbiton-avenue, A. E. Whistler; three houses, Shorefield-gardens, H. W. Lake; nine houses, Bourne-grove, Burrill Bros.; two houses, Leigh-avenue, J. Wood; four houses, Leigh-gardens, Morris; three houses and shops, London-road, Martin; three bungalows, Pavilion-drive, Bros.; chapel, East-street, Prittlewell. W. conversion of house into flats, West-road; house and garage, Drake-road, Mrs. R. Hart; houses, King's-road, Tomkins & Smith; Great Eastern-avenue, W. J. Tibbles; house, avenue, E. D. James; conversion of house, 57, Warrior-square, F. C. Robinson; alterations, London-road, J. Outing; conversion of flats, 15, Grosvenor-road, Mrs. Hope; addition, Chalkwell Park-drive, R. Roach; house, Pall Mall, F. Hosking; house and garage, road, W. J. Robinson; alterations, Londo

o houses, Woodcote-road, H. Smith
tions and additions, Leighcliff-road,
Ltd.; alterations, Victoria-avenue, E.
ons and garage, "Sandleigh Lodge,"
Dr. W. Sarra; five shops, warehouse,
London-road and Station-road, Leigh,
n; house, Walton-road, A. Hedges;
en Ann's-drive, J. Cole; two houses,
d, H. Ellwood; bungalow, Woodleigh-
Noakes; house, Station-road, Leigh,
se and two garages, Burlescombe-road,
houses, Fairfax-drive, P. & D. Barham;
s, Hamstel-road, Miss M. Badcock;
ald-drive, W. K. Gregory; two bun-
drive, H. E. Johnson; three houses,
Mrs. A. A. Dowsett; alterations, 20,
Irs. Hoare; bungalow, Station-road,
od; four houses, Westminster-drive,
Sons; house, Burlescombe-road, H.
sion of house and shop into shop and
ad, F. C. Higgins; conversion of house
West-road, J. Mead; additions to two
orth-gardens, F. J. Gregory; 16 houses
and shop, Oban-road, D. J. Standen;
hall, Warrior-square, Warrior-square
re Co., Ltd.; alterations, 32 and 34,
Heddle; shop and flats, Station-road,
Ramuz; two houses, Merilies-gardens,

RE.—To give effect to the scheme
ed for new advanced divisions at various
county, the Stirlingshire Education
agreed to provide additional accom-
vonbridge (at a cost of £750), Buchlyvie
(£700), Longcroft (£600), and Balder-
it was decided that, after the erection of
l at Falkirk, the old High School would
ining centre for the county, and the
instructed to submit plans showing its
for that purpose. Plans have been also
nnection with the proposed addition of
ns, an art room, a general room, and
t Lennoxtown School; and the addition
ms at St. Machan's School, Lennoxtown.
—Buildings, St. Petersgate, for G. & W.
tects, Messrs. Swann & Scaite.
—The U.D.C. has had sanction to
one-half of the cost of the scheme for
ction of Stretford-road.—The U.D.C.
plans for a proposed central school at
l is seeking sanction to a loan of £15,390,
cost of the work.—A loan of £24,297 is
for the erection of the third instalment
n the Seymour site.—Tenders are to be
novating 180 cottages and 40 tenements.
House, Chester-road, for Dr. E. M.
kshop, Westinghouse-road, for Southern
shop front, 143, Barton-road, for Mr.
an.
he C.C. has allocated a sum of £2,000
various county bridges. The work is to
by the County Surveyor.
he Surrey C.C. has approved proposals
for the widening of railway bridges.
.—Plans have been lodged with the
D.C., by Messrs. Adams, for the erection
n land on the Gateshead–Hexham main
well.
—Plans passed by the T.C.: Bungalow
hornaby Village, for Mrs. W. A. Conroy;
in Thornaby-road, for North Riding
il.
he City Council has now adopted the
ridging over the river between Lemon
abernacle-street. Plan passed: Bunga-
ad, for Mr. W A. Back.
Durham County E.C. has approved plans
the managers for the erection of a new
rtment at the Roman Catholic schools,
delling of the existing school for older

.—The R.D.C. has decided to erect a
t Wilsthorpe, estimated to cost £600.
RFREWSHIRE.—Plans passed: Bungalow
avenue, Clarkston, for John M'Callum;
nstone-road, Whitecraigs, for Robert H.
0, Pollokshaws-road, Glasgow; villa at
oad, Elderslie, for R. Snodgrass; bunga-
s-avenue, Giffnock, for John K. M'Millan,
et, Newton Mearns; four bungalows, at
ve. Giffnock, for John Taylor, builder, 23,
enue, Giffnock; bungalow at Southfield-
rhill, for W. S. Reid, Linndale, Potterhill,
church hall and retiring-rooms at United
Newton Mearns, for the Building Com-
rns United Free Church; villa at Wood-
Potterhill, for J. S. Hamilton, Corsehill,
nue, Paisley; shop and five houses at
Cardonald, for Paisley Provident Co-
iety, Ltd.
.—Plans passed: Bungalow, for Mr.

.—Plans passed: House in Woodthorpe-
P. A. Moulton; 14 garages in Tavora-
acob's Well-lane, for Mr. T. Armstrong;
in Peterson-road, for Mr. W. H. King;
op in Horbury-road and Thornes-road,
ild; house in Horbury-road, for Mr. F.
se in Horbury-road, for Mr. F. White;
rnes-road, for Mr. C. Guiseley; house in
for Mr. N. H. Charlesworth; bungalow
ue, for Miss Hodgson; four bungalows
oad, for The Yorkshire (W.R.) Electric
., Ltd.
ON.—Plans for the county school for
en amended as a result of certain sug-
he governors and the estimated cost is
commodation is to be provided for 400.—
to the Beddington and Wallington
prepare drawings for the enlargement of
ridge at Wallington Station.

WALLSEND.—A Miners' Welfare Scheme, to comprise an institute, is to be erected in Station-road. Plans have been prepared by Messrs. Caws, Street & Caws, of Sunderland. The building will comprise a large hall, library, reading room, a recreation room, and a caretaker's house. The plans have been approved by the T.C.

WARWICKSHIRE.—A further sum of £6,500 has been allocated for land drainage schemes.

WESHAM.—At a meeting of the Fylde D.C. it was reported that arrangements had been made for the carrying out of the work in connection with Bank-road, Marton. Plans for the erection of 33 new houses in the Fylde rural area were passed.

WEST BRIDGFORD.—Plans have been prepared by the Surveyor for a convenience at Lady Bay bridge.—Plans passed: House, Davies-road, for Mr. H. F. Smart; two houses, Loughborough-road, for Mr. A. W. King; house, Holme-road, for Mr. A. Reynolds.

WHITLEY BAY AND MONKSEATON.—In connection with its housing scheme at Hotspur-avenue, the U.D.C. is to invite tenders for the erection of twenty-five houses on the south-east side of the Avenue.

WOKING.—The Council proposes to drain the Horsell-rise Estate, as building development is being retarded owing to the want of main drainage.—Plans passed: Four houses, Wilfred-street, for Messrs. Childs & Shee; house, College-lane, for Messrs. Childs & Shee; house, Triggs-lane, for Mr. C. Mutter; house, Loop-road, for Major Fletcher; three houses, Blanchard's Hall, for the Duke of Sutherland; house, Viggory-lane, for Mr. K. Brumfitt; house, Church-road, for Mr. C. E. Robson; bungalow, Mayford-road, for Mrs. Scudamore; house, Smart's Heath-road, for Miss Tuck; cottage, Smart's Heath-road, for Mr. J. Mersh; two houses, Bagshot-road, for Mr. B. B. Barnes; bungalow, Smart's Heath, for Mr. W. Mersh; two cottages, Russell-road, for Messrs. Ryder.

WOODMANSTERNE.—The Parish Council is purchasing three acres of land, at £547, for a recreation ground.

Fires.

CLECKHEATON.—A fire has occurred at the engineering works of Geo. Crossley, Ltd.

LIVERPOOL.—A serious fire has occurred at premises belonging to Messrs. John Mathews & Co., varnish, paint and colour manufacturers, in the Vauxhall-road area of the city.

LLANIDLOES.—The Caenycoed (Llanidloes) blanket-making factory was destroyed by fire last week.

READING.—A fire took place recently at the factory of Messrs. S. & E. Collier, brick and tile merchants, at Reading. Damage to the extent of £12,000 was caused.

RENT RESTRICTION

NOTICES OF INCREASE AS NOTICE TO QUIT

A DECISION has been given by a Divisional Court in the case Aston *v.* Smith which is of importance under the Rent Acts. The plaintiff was the landlord of premises let to the defendant on a weekly tenancy and which had been so let to the defendant for some years. On August 21, 1923, the plaintiff gave the defendant notice to quit and issued a summons claiming possession of the premises. This notice to quit was held bad by the County Court Judge for reasons not stated in the report, but it had been contended before him that even if the notice was bad this was immaterial in this case as a notice of increase of rent had been given the defendant on May 3, 1920, and under section 1 subsection (1) of the Notices of Increase Act, 1923, this notice of increase operated also as a notice to quit and rendered the defendant a "statutory tenant," and a statutory tenant by the proviso to section 15 subsection (1) of the principal Act, 1920, was not entitled to a notice to quit.

The proviso in question to section 15, which relates to "Conditions of statutory tenancy," reads: "Provided that notwithstanding anything in the contract of tenancy, a landlord who obtains an order or judgment for the recovery of possession of the dwelling house or for the ejectment of a tenant retaining possession as aforesaid shall not be required to give any notice to quit to the tenant." The County Court Judge had given judgment for the defendant, but the Divisional Court reversed this judgment, holding that under the Notices of Increase Act, 1923, the notice of increase given in 1920 was also a notice to quit and rendered the tenant a statutory tenant, and under the proviso set out above the statutory tenant was not entitled to a notice to quit.

The Notices of Increase Act, 1923, provides in section 1 subsection (1), "Where notice of intention to increase rent has, whether before or after the passing of this Act, been served on a tenant in conformity with subsection (2) of section 3 of the principal Act, and a notice to terminate the tenancy was necessary in order to make such increase effective, the notice of intention to increase the rent shall have effect, and shall be deemed always to have had effect, as if it were or had been also a notice to terminate the existing tenancy on the day immediately preceding the day as from which the increase is, or was first to take effect, or on the earliest day thereafter on which, if it had been a notice to terminate the tenancy, it would have been effective for that purpose, and in the latter case a notice of increase served before the passing of this Act shall be deemed to have had effect as if such earliest date had been specified in the notice as the date from which the increase was to take effect."

From the above decision it appears that every tenant who at any time has had a notice of increase served upon him is, since the passing of the Notices of Increase Act, a statutory tenant, and as such not entitled to a fresh notice to quit, and this appears a somewhat serious proposition, and creates a position which may not have been contemplated by the Legislature.

At one time it was held, in the case Hartell *v.* Blackler (1920 2 K.B. 161; *The Builder*, July 30, 1920), that the receipt of rent would operate as a waiver of a notice to quit, but in Davies *v.* Bristowe, 1920 (3 K.B. 428; *The Builder*, August 26, 1921), and in Shuter *v.* Hersch (1922, 1 K.B. 438, *The Builder*, July 28, 1922), this case was not followed, and it was held that it was not necessary to give a statutory tenant a fresh notice to quit with every notice of increase unless a fresh tenancy had been created.

In none of these cases was a satisfactory interpretation able to be given by the Courts of section 16 subsection (3) of the Act of 1920, which is as follows, "Where the landlord of any dwelling house to which this Act applies has served a notice to quit on a tenant, the acceptance of rent by the landlord for a period of not exceeding three months from the expiration of the notice to quit shall not be deemed to prejudice any right to the possession of such premises."

In Shuter *v.* Hersch this subsection was considered, and the Court held that the receipt of rent for more than three months did not necessarily create a new tenancy, and it was suggested that this subsection had only been inserted in the Act because at the time when the Act was passed Hartell *v.* Blackler was still law, and the Legislature intended therefore to prevent waiver from operating for three months.

The cases decided after Hartell *v.* Blackler proceeded on the ground that since a landlord could not get rid of a statutory tenant it was unreasonable to hold that the receipt of rent in such circumstances by a person who was not a free agent could operate as waiver, but with the passing of the Notices of Increase Act, as illustrated by the case we are considering, new circumstances appear to have arisen if notices of increase in rent given at any time and acted upon for long periods are to have the effect of notices to quit.

Tenants who have complied with notices of increase and have paid such increase possibly for many years are hardly in the position of the ordinary statutory tenant under notice to quit, and we think should be entitled to a notice to quit before proceedings are taken.

In the case we are considering this subsection does not appear to have been brought to the notice of the Court, and we venture to submit that in the new conditions imported by the Notices of Increase Act it appears to meet the case, especially in connection with weekly or short period tenancies, and that the receipt of rent for a period exceeding three months should be taken as creating a new tenancy, and before proceedings for possession can be taken a fresh notice to quit should be given.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—E

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fjettons, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose ..	9 15 0
Do. Bullnose ..	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick:—			
2½ in.	8 11 0	3 in.....	10 3 0
GLAZED BRICKS—			
Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends ..	32 10 0
		Two Sides and one End	33 10 0
Headers.....	22 10 0	Splays and Squints	31 0 0
Quoins. Bullnose and 4½in. Flats	29 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. „	2 6	4 in. „	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	„ „
Thames Sand	15 6	„ „
Best Washed Sand.....	15 6	„ „
½ in. Shingle for Ferro-Concrete	14 0	„ „
¼ in. „	15 0	„ „
¾ in. Broken Brick.....	10 6	„ „
Pan Breeze	7 6	„

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification	£2 18 0 to £3 3 6
Test 51/- alongside at Vauxhall in 80-ton lots.	
Ferrocrete per ton extra on above.....	0 10 0
Super Cement.....	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White.....	5 15 0
„ „ Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
„ „ White	3 12 6
„ Fine	5 12 0
Sirapite, Coarse	3 9 0
„ Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime.....	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.....	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.....	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.....	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.....	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ¼d. beyond 30 ft.	
HOPTON-WOOD STONE.	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over „	17/-
Sawn two sides „	27/-
Sawn three or four sides „	32/-

	s. d.
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super.)..... Per Ft. Super	5 6
6 in. rubbed two sides, ditto..... „	6 0
3 in. sawn two sides slabs (random sizes) „	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... „	1 6½
1½ in. to 2 in. ditto, ditto ..... „	1 4
HARD YORK—	
Delivered at any Goods Station London.	
Scappled random blocks..... Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.)..... Per Ft. Super	5 1½
	6 1½
6 in. rubbed two sides ditto ..... „	2 10
4 in. sawn two sides slabs (random sizes) „	2 1½
3 in. ditto. ditto „	9 0
2 in. self-faced random flags.. Per Yard Super	

ARTIFICIAL STONE.

	s. d.
Delivered in London Area in full van loads. per ft. cube	6 6
Plain ..... „ „	7 9
Moulded ..... „ „	8 3
Cills..... „ „	

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 6	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
4½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/-	1¼	33/6
¾	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
⅝	17/6
¾	21/-
1	26/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

	s. d.
Per bundle	0 2 8

Dry Wainscot Oak, per ft. super, as inch	0	2	0	to 0	2 6
¾ in. do. do.	0	1	6	to 0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9	to 0	2 6
Cuba Mahogany	0	3	0	to 0	3 6
Teak (Rangoon, Moulmein or Java), per load	45	0	0	to 50	0 0
American Whitewood planks, per ft. cube ..	0	14	0	to 0	16 0
Best Scotch Glue, per cwt.	4	10	0	to —	
Liquid Glue, per cwt. ..	4	7	0	to 5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12.....	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9.....	18 12 6
22 by 11.....	31 5 0	16 by 10	17 12 6
20 by 12.....	29 15 0	16 by 8	13 15 0
20 by 10.....	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
„ Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ½ in...	13 10 0
⅜ in.	14 10 0	¾ in. to 2½ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28½ %	35 %	45 %
Steam	22½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.....	1/1¾	11d.	3½d.
3½ in.	1/2⅛	1/0⅛	3½d.
4 in.....	1/4	1/1⅛	3½d.
4½ in.	1/5⅛	1/4	4d.
5 in.....	1/7⅛	1/5⅛	5d.

O.G. GUTTERS.

3 in.....	1/6⅛	1/2⅛	3½d.
3½ in.	1/6⅛	1/2⅛	3½d.
4 in.....	1/7⅛	1/4	3½d.
4½ in.	1/9⅛	1/6⅛	4d.
5 in.....	2/1⅛	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7⅛	1/1⅛	1/8
2½ in. „	1/9⅛	1/4	2/0⅛
3 in. „	2/1⅛	1/8	2/5⅛
3½ in. „	2/6⅛	1/11⅛	2/10⅛
4 in. „	2/11⅛	2/4⅛	3/5⅛

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. „	3 6½	2 5½	3 3½
3 in. „	4 2½	2 8	4 0½
3½ in. „	4 7	3 3½	4 8½
4 in. „	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. „ „	6 3	6 8	11 4
5 in. „ „	7 6	11 6	18 2
6 in. „ „	8 10	14 4	23 5

IRON—	Per ton in London. £ s. d.		£ s. d.
Common Bars.....	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	..	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 10 0	..	13 10 0

METALS (*Continued*).

	£ s. d.		£
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..	14
Hoop iron, basis price	16 10 0	..	17
„ Galvanised	31 0 0	..	32
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g...	15 0 0	..	16
„ „ „ 24 g...	16 0 0	..	17
„ „ „ 26 g...	18 0 0	..	19
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 10 0	..	22
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0	..	23
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0	..	26
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..	22
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..	22
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..	24
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0	..	24
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0	..	26
Best Soft Steel Sheets, 26 g.	26 0 0	..	27
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22

METAL WINDOWS—Standard sizes suitable fo plete houses, including all fittings, paintir coats, and delivery to job, average price abo to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£
LEAD—Sheet, English, 4 lb. and up	43
Pipe in coils	43
Soil Pipe	46
Compo pipe.....	43
NOTE—Country delivery, 30s. per ton extra: lots 3 cwt., 2s. per cwt. extra and over 3cwt. and cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt	
Old lead, ex London area, at Mills ..... per ton	30 0 0 ..
Do., ex country, carriage forward ..... per ton	31 0 0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COC

IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- p

NEW RIVER PATTERN SCREW DOWN STOP CO

UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- p

NEW RIVER PATTERN SCREW DOWN MAIN FE

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per d

NEW RIVER PATTERN CROYDON BALL VALVES

¼ in.	½ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/-

DRAWN LEAD P. & S. TRAPS WITH BRASS C SCREW.

	1¼ in.	1½ in.	2 in.	3
8 lbs. P. traps ..	33/-	41/-	56/-	101/-
8 lbs. S. traps ..	35/-	45/-	66/-	126/-

COPPER—	£ s. d.
Strong Sheet ....per lb.	0 2 3 ..
Thin „ .... „	0 2 4 ..
Copper nails .... „	0 2 3 ..
Copper wire .... „	0 2 4 ..
TIN—English Ingots „	0 2 4 ..
SOLDER—Plumbers' „	0 1 2 ..
Tinmen's ..... „	0 1 4 ..
Blowpipe ..... „	0 1 5 ..

PAINTS, &c.

Raw Linseed Oil, in pipes .....per gallon	
„ „ „ in barrels .... „	
„ „ „ in drums .... „	
Boiled „ „ in barrels .... „	
„ „ „ in drums .... „	
Turpentine in barrels ..... „	
„ in drums (10 gall.) .. „	
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered	
Red Lead, Dry (packages extra)....per ton	
Best Linseed Oil Putty.....per cwt.	
Filocol .....per cwt.	
Size. XD Quality.....fkn.	

[*Concluded on next page.*]

* The information given on this page has be compiled for THE BUILDER and is copyright. this list is to give, as far as possible, the av of materials, not necessarily the highest or low and quantity obviously affect prices—a fact w be remembered by those who make use of this

CURRENT OF MATERIALS (*contd.*)

GLASS.

SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
hs ..	3½d.	32 oz. fourths	8½d.
s	4½d.	32 „ thirds	10½d.
hs ..	5d.	Obscured Sheet, 15 oz.	4d.
s	6½d.	„ 21 „	5½d.
hs ..	6d.	Fluted 15oz. 6½d.,21oz.	9½d.
s	7½d.	En'lled 15oz. 5½d.,21 oz	7½d.

according to size and substance for squares stock.

ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
late	4½d.
olled	5½d.
olled	5½d.
Rolled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large	
white	6½d.
, tinted	9d.
eet	6d.
olled Cathedral	5½d.
do.	7½d.

Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon. £ s. d.	
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
arriage	ditto	1 4 0
.....	ditto	1 12 0
n	Inside	0 18 0
per	ditto	0 18 0
abinet	ditto	1 2 6
latting	ditto	1 0 6
Oak.....	ditto	0 18 0
rying Oak	ditto	0 19 0
arnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
Gold Size		0 10 0
apan		0 10 6
ogany Stain (water).....		0 12 0
ack.....		0 7 6
.....		0 14 6
ent)		1 5 0
Brush Polish		0 17 0
in Terebine.....		0 9 0
Enamel.....		0 7 0

RICKET MATCH

tribute to the reputation of the orts Club (the Cement Marketing that when Mr. P. G. H. Fender to play them on their own ground ook on August 14 he took prac- whole of the Surrey County first it is not surprising, therefore, ortland eleven were beaten by a 220 runs. However, an excellent was enjoyed, and the match showed ortland team has some very pro- bers. It was no mean feat, for capture six of the best Surrey ten runs apiece, as did Mr. S. K. take the wickets of Sandham and having only 36 runs scored off during the match, a feat achieved rcroft.

ing are the scores :—

PORTLAND XIII.

orter, b Hitch, 2; A. R. Cronin, b Fenley, 15; G. S. Baker, c Peach, 0; J. B. Wheatley, c Bald- n, 3; H. C. B. Sessions, c Hitch, A. R. Wakeham, c Baldwin, b T. Wheeler, b Fenley, 2; M. G. ender, 0; H. W. Shearcroft, b W. Dean, c Peach, b Fenley, 0; ot out, 15; H. Wagstaff, b Abel, t, b Abel, 0; extras, 10; total, 65.

Peach, 2 for 0; Sadler, 2 for 0; r 12; Fender, 3 for 12; Abel,

P. G. H. FENDER'S XI.

Shearcroft, b Cronin, 38; Sand- rcroft, 37; Peach, b Shearcroft, lbw, b Dutt, 36; Abel, c Shear- tt, 29; Hitch, c Wheatley, b P. G. H. Fender, b Dutt, 7; b Dutt, 14; Baldwin, c Dean, Fenley, b Dutt, 2; Strudwick, tras, 11; total, 285.

ronin, 1 for 29; Shearcroft, 2 6 for 60; Roffey, 1 for 31.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND.

Greenock.—HOUSES.—The Corporation Housing Committee has recommended that an additional 250 houses be erected under the slum clearance scheme. It had been decided already to construct 400 houses.—The Renfrewshire E.A. has agreed to the recommendation by the Property Committee in connection with the proposed new school, that consideration be given to the matter of providing swimming for pupils. It was agreed that the matter be kept in view by architects when submitting designs.—The question of providing additional accommodation at Greenock Academy has been remitted to a special sub-committee.

Oban.—VILLA.—The Dean of Guild Court has passed plans for a villa on land adjoining the applicant's house. The application was lodged by Mr. J. D. McTaggart, Portlea.

Stevenston.—HOUSES.—At a meeting of the Northern District Committee of Ayrshire C.C., plans were passed for a housing scheme, comprising 10 blocks of four-flatted houses.

Falkirk.—VILLA.—The Dean of Guild Court has passed plans for a villa at Camelon-road, for Mr. J. Wright, at an estimated cost of £1,500.

Dundee.—EXTENSION.—At the enquiry of the Dundee Gas and Water Provisional Order, which was resumed, consideration was given to a proposal by the Corporation to obtain authority to exchange four acres of the public bleaching green for a like portion of the grounds of Dudhope Gouse, the object being to make possible the extension of the Royal Infirmary. The Corporation states that the Board of Health has approved of the site of Loons-road scheme, under which 216 houses are to be erected.

Glasgow.—HOUSING.—The Finance Committee has recommended the Corporation to apply to the Scottish Board of Health for authority to borrow an additional £3,000,000 for housing purposes. The Housing Committee has recommended that tenders be obtained for the erection of club-houses at the bowling greens at Mosspark, Drumoyne and Riddrie.

Kirkintilloch.—HOUSES.—Plans for the erection of the first portion of the slum clearing housing scheme have been approved by the T.C. The Council proposes to build 100 houses.

Hamilton.—HALL.—The Dean of Guild Court has passed plans for a town hall, which is to adjoin the Municipal Offices in Cadzow-street. The building will have a hall to accommodate 1,750 people, and a lesser hall underneath to seat between 500 and 600.

Kilmarnock.—The T.C. has agreed to purchase the property known as Galahill, for the purpose of establishing a girls' hostel.

Aberdeen.—The Corporation passed plans for five houses and alterations to buildings, at a total cost of £6,410.

London Housing Schemes.

London Housing accounts for 1923–24, presented at a recent meeting of the County Council, showed a total expenditure on revenue account of £1,669,513, and an aggregate income of £966,697, giving a net deficiency of £702,816.

In the case of non-assisted schemes (estates developed before 1919) there was a surplus on dwellings of £52,390. The aggregate capital expenditure on dwellings to March 31, 1924, was £3,031,138, including £37,079 added during the year to March 31. The debt outstanding was £2,516,151. In respect of clearance schemes there was a deficiency of £46,687, mainly attributable to debt charges, which is met by a transfer from the Special County Account. The aggregate capital expenditure on clearance schemes to March 31 last was £2,734,734, and the debt outstanding at that date £916,084.

As regards assisted schemes under the Housing Act of 1919, the loss on dwellings and estates in the course of development was £408,058, compared with £402,355 in 1922–23, while the loss on clearance schemes amounted to £4,359, against £2,758. In addition, £254,546 was refunded to borough councils in respect of deficiences on their schemes. The financial result for 1923–24 was a deficiency of £701,412. The capital expenditure of the Council to March 31, 1924, amounted to £9,543,433 in respect of dwellings, and £12,464 in respect of clearance schemes, or £9,555,897 in all.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur :—

	Masons.	Brick layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Plasterers' Labourers.
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½	
Airdrie	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Alexandria	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½	
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½	
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½	
Blairgowrie	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—	
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Coatbridge	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dumbarton	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Dumfries	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½	
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½	
Falkirk	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½	
Hamilton	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Hawick	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2	
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½	
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2	
Kilmarnock	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Kirkcaldy	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
Leith	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Motherwell	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 294.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	1	1
Setting ordinary register grates and stoves	each	1	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"	1¼"
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/8	1/9
Deal shelves and bearers	"	1/5	1/7
Add if cross tongued	"	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8

		s.	d.
Housings for steps and risers	each		
Deal balusters, 1 in. × 1¼ in.	per ft. run.		
Mahogany handrail; average 3 in. × 3 in.	" "		
Add if ramped	" "		
Add if wreathed	"		

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.		
Plain compound girders	"		
Do. stanchions	"		
In roof work	"		

RAIN-WATER GOODS.

		3"	4"	5"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7
Ogee Do. Do.	"	2/4½	3/1	3/10
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/7
Do. nozzles for inlets	"	2/2	2/7	3/10

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.		
Do. Do. in flats	"		
Extra labour and solder in coated cesspools	each		
Welt joint	per ft. run.		
Soldered seam	" "		
Copper nailing	" "		

		½"	¾"	1"	1½"	2"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					3/3
Bends in lead pipe	each	1/2	1/8	2/1	2/10	3/6
Soldered stop ends	"	11d.	1/-	1/3	1/11	2/4
Red lead joints	"	2/10	3/6	4/-	4/11	6/6
Wiped soldered joints	"				14/7	19/6
Lead traps and cleaning screws	"	6/4	9/7	15/4	41/-	
Bib cocks and joints	"	15/4	17/2	25/8	64/-	
Stop cocks and joints	"					

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.		
Do. Do. Sirapite	" "		
Do. Do. Keen's	" "		
Add sawn lathing	" "		
Add metal lathing	" "		
Portland cement screed	" "		
Do. plain face	" "		
Mouldings in plaster	per 1 girth		
One-and-a-half granolithic pavings	per yard sup.		

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.		
26 oz. Do.	" "		
Obscured sheet	" "		
⅛ in. rolled plate	" "		
¼ in. rough rolled or cast plate	" "		
¼ in. wired cast plate	" "		

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.		
Knotting and priming	" "		
Plain painting 1 coat	" "		
Do. 2 coats	" "		
Do. 3 coats	" "		
Do. 4 coats	" "		
Graining	" "		
Varnishing twice	" "		
Sizing	"		
Flatting	"		
Enamel	"		
Wax polishing	per foot sup.		
French polishing	"		
Preparing for and hanging paper	per piece 2		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole

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COMPANIES.

...s quoted below have been ...ssrs. Jordan & Sons, Ltd.. ...ration Agents, of 116 & 117. ...W.C.2, from the documents ...Companies' Registry.

...SELL, LTD. (197,181). Regis... Richmond Works, Lake-road, ...thampton. Builder, joinery, ...d timber merchant. Nominal

...S, LTD. (197,566). Regis... Clamp Kiln Farm, Newtown, ... Brickmakers and burners, ... contractors, &c. Nominal

...UILDERS), LTD. (197,557). ...29. 2, Foster-lane, Cheapside, ... and contractors. Nominal

...E AND MACADAM CO., LTD. ...tered April 28. 24, Oxford-... York. Quarry masters and ... road and pavement makers ...anufacturers of tar, macadam ...d-making materials. Nominal

...LOR & Co. (SWANSEA), LTD. ...tered April 28. 512, Neath-... Swansea. General builders' ...al and furnishing ironmongers, ...pital, £1,000.

...HER (1924), LTD. (197,541). ... 28. 19A, Pittville-street, ...rdware factors, builders' mer... ...minal capital, £21,000.

...E & SONS, LTD. (197,683). ...3. 45, Deptford-terrace, Sun... ...r and contractor. Nominal

...SON, LTD. (197,605). Regis... ...2, Calder Vale-road, Wakefield. ..., hot water engineer, slater, ...y engineer. Nominal capital,

...WARE, LTD. (197,667). Regis... ...lough Clay Works, Cawthorne, ...ork). Brick, tile and earthen... ...stoneware pipe manufacturers. ... £6,000.

...SONS, LTD. (197 680). Regis... ..., Rhodes-street, Hyde, Chester. ...ts, builders' merchants, build... ... plasterers, decorators, &c. ... £5,000.

...HULL), LTD. (197,578). Regis... ...58, Sunny-bank, Hull. Builder ...Nominal capital, £2,000.

...NEWCASTLE), LTD. (197,903). ...14. 39, Liverpool-road, New... ...e, Stafford. Builder and con... ...l capital, £3,000.

... (197,909). Registered May ...tile manufacturers, engineers, ... and housing contractors. ...£10,000.

...ERN BUILDING CO., LTD. ...ered May 15. 10–12, Bowker's... ...minal capital, £5,000.

... LTD. (197,892). Registered ...on-street, Radcliffe, Lancaster. ...ors, plasterers, &c. Nominal

...ARD, LTD. (197,893). Regis... ...ranville Chambers, Yelverton... ...th. Builders and contractors. ...£20,000.

...PLIES (BOURNEMOUTH), LTD. ...tered May 15. Builders' mer... ... capital, £3,000.

...T MANSIONS, LTD. (197,764). ... Chandos-court, Buckingham ...d on or construct buildings. ...30,000.

... LTD. (197,796). Registered ...th Hall-street, Huddersfield. ... varnish merchant. Nominal

...OD & Co., LTD. (197,790). ... Abbey House, 2, Victoria... ...uilders, architects and sur... ... capital, £2,000.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ADELAIDE.—Construction of sheet-piling at Torrens Lake, for T.C. :—

Edward B. Surmon	£2,134 12
*Townsend & Traeger	1,271 16

ADELAIDE.—Alterations and additions to Town Hall, Eagle and Gladstone Chambers, for T.C. :—

Webber & Williams		£7,616 15
H. Emmett & Sons		7,393 0
		555 extras
C. H. Martin	(*a*)	7,245 0
	(*b*)	7,720 0
T. A. Cock & Co.	(*a*)	6,856 18
	(*b*)	7,611 18
*Murray Richardson		6,657 0

BARNSLEY.—For making-up streets for the T.C :—

Vaal-street—	
*H. Hibbert & Son	£718 19 6
Cawley-place—	
*S. Taylor	310 10 0

BOSTON.—For erection of houses at Amber Hill, for the R.D.C. :—

*E. W. Dawson	£810 per pair

BRIGHOUSE.—For paving in Bonegate-road, for the T.C. :—

*H. Wilson	8s. 6d. per sq. yd.

BURTON-ON-TRENT.—For erection of 45 houses, for the Corporation :—

Kershaw & Son.	
T. Lowe & Son.	
Chadwick & Son.	
*W. H. Walker	£530 to £546 each

All of Burton-on-Trent.

CARDIGAN.—Repairs to Morfa and Nebo bridges, for Cardiganshire C.C. :—

*F. Powell	£340

CASTLEFORD.—For making up private street works in Stanley-street, for the U.D.C. :—

*J. L. Rodgers & Son, Castleford	£1,300 9 6

DITCHFIELD.—Reconstruction of canal bridge, for Cheshire C.C. :—

*R. & T. Howarth, Rochdale	£8,230

DOVER.—For painting at the Isolation Hospital and at the Town Hall, for the T.C. Mr. W. Boulton Smith, Borough Engineer, Maison Dieu House :—

Town Hall—	
*Hayward & Paramor, Dover	£1,524 14
Isolation Hospital—	
R. H. Morris	205 14
*G. Lewis & Sons (Dover), Ltd., Dover	194 10

DUKINFIELD.—For the erection of 28 houses on the Birch-lane Estate, for the T.C. :—

*J. S. Randell & Co., Sheffield	£11,000

DUTTON.—Subdivision of Union Farm, for Cheshire C.C. :—

*W. Moores, Higher Whitley	£1,406

FERMOY.—For the erection of 10 houses and other works, for the U.D.C. :—

*J. J. Coffey	£6,089 14

GAWSWORTH.—Adaptation at Little Tidnock Farm, for Cheshire C.C. :—

*Gorton & Wilson, Macclesfield	£1,493

GAWSWORTH.—Subdivision of farms, for the Cheshire C.C. :—

Pastures Farm—	
*E. Curzon, Winsford	£1,645
Foden's Farm—	
*E. Curzon	1,712

GLASGOW.—Erection of buildings in Stockwell-street, for the T.C. :—

Steelwork—	
‡Fleming Brothers	£3,731
Plaster Work—	
‡G. & R. Wemyss	1,382

GOOLE.—For construction of a concrete water tower with a capacity of 750,000 gallons, for the U.D.C. :—

*H. Arnold & Sons, Ltd., Doncaster	£23,162

GOSPORT.—Conveniences at 'The Crossway," for T.C. :—

*C. M. Dash, Ltd.	£436

HETHERSETT.—For the erection of Hall at Hethersett, for the Village Hall Committee. Mr. W. H. Flood, Architect, Hethersett, Norwich :—

R. Curson	£1,178
R. Thrower	1,003
T. Hipperson	975
R. G. Carter	879
F. Buckingham	864
H. Bidewell	795

HEMSWORTH.—For construction of new emergency exits at the Hemsworth and District Hospitals new extension :—

*W. Hanley & Son, Hemsworth.	

KINGSWOOD.—For the erection of 11 houses, for the U.D.C. :—

*Wilmott Bros.	£4,400

LEEDS.—For painting the interior of Cockridge-street Baths, for the T.C. Mr. W. T. Lancashire, City Engineer :—

*J. Cushworth, Leeds	£123 18

MINSTER.—For painting and redecorating the Poor Law Institution, for the Guardians of the Isle of Thanet, Mr. C. Taylor, Town Clerk, Board Room, Minster, near Ramsgate :—

Grammant Bros., Ramsgate	£803 0 0
J. B. Sharman, Ltd., Ramsgate	760 0 0
Wood & Scott, Minster	750 0 0
Trustees of Wm. Houghton, Ramsgate	686 18 9
*Edmund Dunn, Ramsgate	645 0 0

MOLLINGTON.—Reconstruction of canal bridge for Cheshire C.C. :—

*J. J. Blackburn, Manchester	£3,292

NEWPORT (MON.).—Repairs to house at the Hartridge Small Holdings, for the T.C. :—

*J. H. Williams	£147

ORKNEY.—For construction of a new lighthouse on the Brough of Bursay, for the Northern Lighthouse Commissioners :—

*J. Anderson, Stromness.	

PEMBROKESHIRE.—For carrying out, for the C.E.C., the erection of new w.c.s and cycle sheds, with repairs to boundary walls and construction of a new wall, at Narberth County School :—

W. Waters, Begelly	£1,400
Morris Young, Narberth	1,300
*Thomas Bros., Templeton	1,130

PORTSMOUTH.—For alterations to 101, Surrey-street, for Mr. E. H. Chambers. Mr. S. E. White, architect, 73, Waveney-road, Southsea :—

McCormack & Son	£550 0 0
John Lay & Co.	543 0 0
Curran & Son	486 11 9
*West & Son	350 0 0

PORTSMOUTH.—For rebuilding of 348 Commercial-road. Messrs. Thomas & Wilkins, architects, 30, Landport-terrace, Portsmouth :—

F. H. Jordan, Ltd.	£4,206
G. J. Davis & Sons	4,149
Jno. Croad	3,660
Frank Corke & Co.	3,659
John Harding	3,590
E. & A. Sprigings	3,555
John Lay & Co.	3,494
†F. Bevis, Ltd.	3,407

READING.—For the erection of 50 houses, for the T.C. :—

*Creed & Co.	£27,212

RICHMOND (SURREY).—For painting at houses, for T.C. :—

Manor-grove—	
*G. Tibbals & Son, Richmond	£505 8 6
North Sheen—	
*W. J. Chaplin, Richmond	179 16 6
Victoria-place—	
*G. Tibbals & Son,	58 0 6
Selwyn Estate—	
*G. Tibbals & Son	190 18 0

ROMFORD.—For laying 1,000 yards of 12 in. stoneware pipe sewer, for the U.D.C. Mr. F. G. Beaumont, Surveyor, Romford :—

*James Russell, Ilford	£1,476 19 11

SADDLEWORTH.—For erection of eight houses at Heathfields, Uppermill, for the Housing Committee, to work out at £541 per house :—

**Building*—E. Whitehead, Uppermill.	
**Joinery*—Swallow & Taylor, Ashton-under-Lyne.	
**Plumbing*—R. Lawton, Uppermill.	
**Painting*—R. Whitehead, Greenfield.	
**Tiling*—Pickles, Leeds.	
**Plastering*—W. Whitehead, Marsden.	

SALTBURN.—For the erection of 19 houses, for the U.D.C. :—

*McCreton & Sons, Middlesbrough	£9,270

SHEFFIELD.—Supply of 500 four-inch cast-iron pipes, for Water Department, T.C. :—

*Staveley Coal and Iron Co., Ltd.	£544 14

SOUTHEND-ON-SEA.—For painting of buildings at Sanatorium, for the T.C. :—

*Johns Bros., Woolwich	£231 11 6

SOUTHEND-ON-SEA.—For painting at Hamstet School, for the T.C. :—

*J. C. Hennis	£370 12 6

STOCKPORT.—For erection of a block of offices, in Heaton-lane, for the T.C. Mr. H. Hamer, Borough Surveyor :—

D. Eadie & Co., Ltd., Stockport	£12,180

STOCKTON.—For the extension of Thornaby Hospital :—

*H. M. Nowell, of Stockton	£53,103

STRETFORD.—Erection of a further 50 houses, for the U.D.C. :—

*Grimshaw & Thomas, Ltd. :—

30 houses Type "A" at £433 each		£12,990
12 " " "Bn" at £445 each		5,340
8 " " "Bs" at £450 "		3,600

TABLEY.—Reconstruction of bridge, for Cheshire C.C. :—

*Reinforced Concrete Construction Co., Manchester..... £1,629

WELLINGTON.—For erection of 24 pairs of houses, for the U.D.C. Mr. G. H. Connor, Surveyor, Council Offices :—

*Eadie, Tower & Co., Wolverhampton £6,360

WOOLSTANWOOD.—Provision of housing accommodation on small holding, for Cheshire C.C. :—

*John Harding, Nantwich £270

Tenders.

The accepted tender (Messrs. Jones & Seward) for the foundations of the new Bournemouth pavilion, of which Messrs. Home and Knight are the architects, should have been given as £47,175 in our issue of August 15.

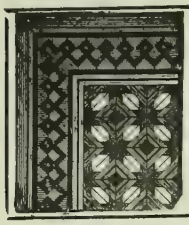
Messrs. The Yorkshire Hennebique Contracting Co., Ltd., inform us that the clerk to the East Riding County Council has informed them that it is their tenders for Fraisthorpe and Lissett bridges, at £1,225 and £2,879 respectively, that have been accepted, and not as given in our issue of August 8.

The Old Arch of Lincoln.

The Office of Works has decided to schedule the Roman Arch at Lincoln. The Newport Arch, as it is known in Lincoln, is a relic of the earliest period of the Roman occupation of Britain. Formed of 26 huge blocks of oolite, or granular limestone, it was the northern gate of the Roman city that was laid out on the summit of the steep hill which, centuries later, was crowned by the Cathedral. It is said to be the only Roman gate that exists, apart from the Balkerne at Colchester.

New School Buildings.

In a circular to Education Authorities the Board of Education draws attention to the fact that if progress is to be made in the supply and development of advanced instruction under the Education Act of 1921, the size of the classes in which it must be given must be limited; and in a previous circular the Board intimated that it could not accept plans of new buildings or extensions the classrooms of which are designed to accommodate more than 50 scholars. The Board now states that in future new buildings and extensions must be so designed that the classrooms shall provide 10 sq. ft. for every scholar under 11 years of age, the maximum number of scholars in a room being 50, and for scholars over 11 the space per scholar must be 12 sq. ft., and the majority of these rooms must not contain more than 40 places.



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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

—No. 4256. AUGUST 29, 1924.

LOST TIME

HE resumption of work by the building industry must bring to every thoughtful person some reflections upon the position of building in this country, and it should be remembered that those interested are far more numerous than the parties to the dispute. There has great tendency in recent years on the part of various o regard their internal differences as private matters disregard the interests of the public and those pro- classes who are concerned. An essential trade can, of adopt this attitude to a limited extent with impunity; erience shows that even in technical matters, in which ic might appear helpless, human ingenuity will even- nd a means of dispensing, if only in part, with any which it employs, if such machine proves to be fre- breaking down and to be demanding increasingly conditions in order to work satisfactorily. Our interests er specially those of the employers nor the operatives, he building industry as the servant of the public; e may be allowed to review this dispute from a dis- e standpoint. And it is worth reviewing, for only by nsideration of the outcome of these disputes can means ed for preventing them in the future.

Initial difficulty was the independent action of the l section of the trade in agreeing upon a wage which roportionate. At the time this was arranged, the em- ere quite within their right in making any terms they fit with operatives in the Liverpool area, which was time when the public, still in a state of what may be tificial wealth as the result of the war, were pre- have increased costs passed on. The present settle- uld at least teach us all one lesson, demonstrated ten enough in the last few years, but not yet learned, hat there is a limit dependent upon the national state beyond which the public cannot and will not shoulder costs of any commodity. The employers' federation have adopted a perfectly logical course in its attitude Liverpool, and one cannot help feeling that this area a great dis-service to the trade by not making a more attempt to settle its own differences before involving e country in this disastrous stoppage. The non- e by the operatives as to working hours as required Fraser" award is regarded as striking at the roots nourable settlements. There is only one way, short y, of composing differences, and that is by arbitration, ards are dishonoured by either side sooner or later lt will come home to the erring party. We find that outes there is a growing tendency for what we may terclaims to become more and more extravagant. waste of time and money to demand something which ly beyond reach, and we would point out to disputants ympathy of the public, which, after all, is a fair indica- e nature of the award of an independent arbitrator, nore likely to be obtained by moderation than by nce.

emand for increased wages we have never been able as the main factor of this dispute. Wages in the rade have for some time compared very favourably e in other industries, and the settlement reached pear to confirm our views. There is, of course, a ndency on the part of any body of persons whose re very much in demand due to great arrears of work vantage of the situation in order to exploit their own though we have always wished to see building opera- ciently paid, we would again remind them that dis- locations do not help an industry. Those of us who are old enough to remember the great masons' strike years ago will probably agree that since that strike the masons' trade has never recovered the position it previously occupied, and though at present certain house-building trades are vital, if these trades are to prove increasingly difficult we have no doubt that they will suffer in years to come by the substitution of other materials designed to dispense with their particular form of service. Speaking generally, however, we do not believe that the main body of the operatives wish to exploit the situation, but signs are not wanting that an element exists among them which by methods, the constitutional nature of which is at least debat- able, is making a business of stirring up trouble and discontent. The genuine workman is at least as shrewd as the platform orator, and it is "up to him" to see that the organisations which he has assisted in building up to safeguard his own interests remain his servants and do not become his masters. That he has already begun to wonder how far his interests are really being served seems to be proved by certain movements among the operatives, especially in the provinces, during the strike. We have nothing to say against trade unionism properly and fairly applied, but it can get on very well without Com- munism. We have passed the days of sweated labour, and trade combinations can see to it that a fair wage is obtainable by every worker, but it is not in the interest of any workman that his initiative should be destroyed or that his labour should be used to carry the dead weight of inefficiency or idleness on his trade. Moreover, no organisation on earth will ever result in maintaining a dead level of attainment. Any man worthy of the name wishes for a chance to rise to a better position, higher earnings, and more responsibility. A free education, for which labour has long clamoured, is now open along this path. Does labour intend to deny to adults what it demands for its children? Progress is based on the free scope of indi- viduality, and we imagine that even Communist leaders would hesitate to assent to a suggestion that they were only on an equality with their disciples.

But we must look farther than a mere resumption of work, and leave retrospect. The most that can be said for the loss of seven weeks at the very best period of the building season, and with an unexampled programme of building waiting execu- tion, is that in the result (the terms of settlement are given in full on p. 331) the operatives have another halfpenny and have agreed to carry out an award as to hours made some time ago. Liverpool maintains its privileged position and defers settlement for eighteen months. London has to be separately considered. Time lost through bad weather is a matter for a joint committee. Though thankful for a resumption, we cannot really congratu- late the disputants upon taking seven weeks to reach such very incomplete conclusions, nor, we think, will they feel much inclined to clamour for praise. Every disaster has its lesson, and it is to be hoped that the interval before February, 1926, may be utilised by both sides in inculcating a better spirit which will enable this essential industry to perform its duties to the community in a manner which shall assist the prosperity of the country and produce the small houses and other buildings so urgently needed. We imagine that both the employers' federa- tion and the unions have been somewhat shaken by this upheaval; certainly both have lost heavily from a financial standpoint, while architects, surveyors and others—the building owner, of course, most of all—have suffered very much through the delay and uncertainty of these past weeks. A prospect now appears of reaching a real understanding and peace; let us all try to see that it is a lasting peace and "get on with our job."

NOTES

The Building Settlement.

WRITING as a building owner, a correspondent says: "The building dispute has been settled by the employers and employed in that industry. But are there not others to whom the business of building is quite as vital, and yet who have no say in the matter? The discussions have been held behind closed doors, and an inordinate time has been taken to achieve so little. That section of the public who are engaged in building enterprises and, therefore, keep the building trade, both master and man, in employment, and who, further, are the sole arbiters of what the cost of building shall be, have no say in it at all. The architect, who knows better than anyone else how much work is being held up on account of high prices, is ignored. There are four parties to any building contract—the client, the architect, the builder and the operatives, either of whom is impotent without the others. Surely a dispute so vitally affecting all four should not be settled by two of the parties without the other two having some voice in the matter. The building owner and the architect lose money and are held up whilst the builders and operatives settle their affairs for them. Would it not be better in all ways, and likely to lead to a settlement in less than seven weeks, if such discussions were held in open court, and building owners and architects invited to assist?"



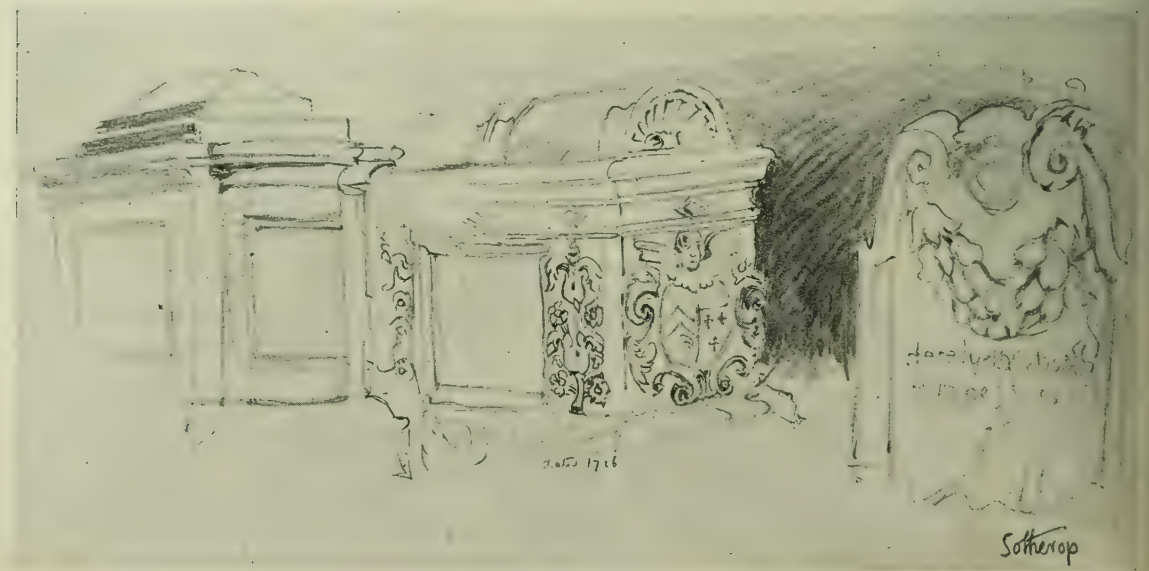
Maison Carrée, Vienne.
From a Sketch by MR. F. W. KNIGHT, A.R.I.B.A.

Manchester Art Gallery Competition.

APPARENTLY the conditions of the Manchester Art Gallery and Museum Competition are not giving complete satisfaction to all would-be competitors. A well-known architect writes: "I have obtained the conditions of the Manchester Art Gallery and Museum Competition, and doubt whether a better fate will attend this competition than the former one, for a fundamental error is being made in endeavouring to combine so essentially different requirements as an art gallery and a museum in one building. The amount of work required is colossal. If competitors are to be allowed free scope in their schemes it is doubtful whether double elephant sheets will be sufficiently large. The scale of the site plan required is to twice the scale of the Ordnance scale of 41.66 ft., otherwise to the scale of 20.83 ft. Surely this plan might have been 20 ft. to the inch, which bears some proportion to the eighth or sixteenth scale. Then, again, the plans are required to be one-sixteenth scale and the elevations one-eighth, which renders it exceedingly difficult to compare plans with elevations in composition. elevational and sectional drawings be rendered in monochrome. No beautiful drawings will result, b appears that it is wished to judg competition on the lines of the submitted by students in archite schools. Finally, the requirement such as to rule out all competitor cannot afford to run a large office for the design must be the compe own work, and the drawings prepa his office."

Londoners and Their London.

THE indifference of th age Londoner to the t which he lives has be by-word, which the l survey of the casual and haphaza in which it has been allowed t shows to be not without justifi



[The study of tombstone design offers especial attraction in the Cotswold District; the variety and interest in many of the groups of memorials in the old churchyards is suggested in our sketch.]



Church of the Jacobins, Toulouse.
From a Sketch by Mr. F. W. Knight, A.R.I.B.A.

formed for the purpose and the
rt undertakings are doing much
the Londoner to "re-discover"
ces of interest in his city and the
spots on its outskirts, but it is
rticular pleasure that we note the
County Council is now realising
onsibility in this direction and
something to promote a better
dge of that vast area and organisa-
thin its keeping by issuing a series
klets at a popular price on its
es. The latest of the series deals
Housing (University of London
price 6d.), and shows in a graphic
the vast improvements in
g-class dwellings during the past
d years. "Houses which had to
red of vermin by fire engines" and
built over sewers are contrasted,
y description and illustration, with
y and comfortable cottages recently
n the Council's housing estates;
row courts where the occupants of
e houses could shake hands across
eet from their windows are illus-
side by side with the open spaces
le roads on the Roehampton estate.
gh much remains to be done, the
has carried out an enormous
of slum clearance work; it
s now to instil into the occupants
new houses such a sense of civic
hat slum areas will be prevented in
ure. It is interesting to note that
ndon County Council already owns
gs in which 120,000 people live,
h a rent-roll of £670,000 from this
f property alone is undoubtedly
's biggest landlord.

---

ress. Although the majority of Londoners may pay but little heed to what is going and them except it immediately them, we are fortunate in having tees and writers who take a keen in the development of the city.

A writer in an American journal says: "One of the most noticeable features in the English press during the past two years is the attitude in regard to blatant modern developments; the proposed destruction of many of Wren's London churches to make way for commercial buildings; the cheap-john-building; the electric signs; the disfigurement of the country lanes and roads following the advent of the char-a-banc; the dismemberment of beautiful estates and the building upon the ground thus obtained the smug and depressing housing developments; the high building propaganda; and the thousand and one things by which beauty is destroyed in the name of efficiency, but in reality for a pittance, and often only for a promise of profit." Apparently in what we look upon as the home of commercialism they are not too satisfied with some of the results of "blatant modern development."

The Art of the Silversmith.

How far we are from understanding the nature of art is particularly noticeable in an account which appears in a contemporary of the art of the gold and silversmith. The writer speaks of the disappearance of the art, and gives various reasons to account for it at the same time. What is so particularly noticeable in the account is the absence of any understanding of the real causes for decline. Referring to what still exists of the art, the writer tells us "much of it consisted of reproductions of pieces of plate dating from earlier periods," and elsewhere, "For instance, there is one elderly worker who has reproduced Elizabethan silverware with such artistic skill that it is quite possible in years to come his reproductions will be sought for above all others." The statement speaks for itself. There is a statement, "at the moment it is certainly the styles of the period corresponding to the reign of Queen Anne that are in the ascendant," from which we have no great difficulty in accounting for the decline of the art; for an art which is not reinforced by first-hand vision and experience is but a lifeless survival.

Reproduction and Art.

How eloquent is what we have quoted of the misdirection of our thoughts as to what is needed to recover the art of the gold and silversmith! Was the value we set on Queen Anne silver due to its lifeless imitation of an earlier period of the art, or from its power to be itself, to express what was best in the vision and craftsmanship of its own time? Only when the art of the gold and silversmith takes on this first-hand and personal character can it hold much value for us. If we are to have again a vital craftsmanship, it will be because it is free to feel and express its own vision in design and treatment.



Pont du Gard, Nîmes.
From a Sketch by Mr. F. W. Knight, A.R.I.B.A.

GENERAL NEWS

Architect's Estate.

Mr. F. H. Moore, J.P., A.R.I.B.A., of Northgate-street, Warwick (net personalty of £3,700), £6,868.

Northampton Polytechnic Institute.

The syllabus of the Northampton Polytechnic Institute, St. John-street, E.C., for the session 1924–5, has just been issued. Particulars are given of courses in civil and mechanical engineering, optics, chemistry, horology, and women's trades and domestic economy.

Obituary.

We very much regret to announce that Mr. J. A. Gotch, President of the Royal Institute of British Architects, has been bereaved by the death of his wife, who passed away at their residence at Weekley Rise, near Kettering, on August 20.

The death took place recently of Mr. W. S. Frith, a Fellow of the Royal Society of British Sculptors. Mr. Frith was possibly best known as modelling master at the City and Guilds South London Technical Art School, and among his distinguished pupils was Sir George Frampton. Mr. Frith executed a large amount of detail and ornamental work for many eminent architects.

Auctioneers' and Estate Agents' Institute.

The London Meeting of the Members of the Auctioneers' and Estate Agents' Institute of the United Kingdom will take place from September 2-6. The joint headquarters during the meeting will be the Hotel Cecil, Strand; and the Hotel Russell, Russell-square. On September 4, a paper will be read at the Kingsway Hall, at 10 a.m., by Mr. G. G. Head, on "Housing: The Common Task."

New Housing Act.

A circular to housing authorities and county councils in England and Wales was issued recently by the Ministry of Health, dealing with the Housing (Financial Provisions) Act, 1924, and explaining the general scope and objects of the Act. It can be obtained direct from H.M. Stationery Office, Imperial House, Kingsway, London, W.C.2. Price 2d. net.

Municipal Buildings, Bristol.

A new scheme has been prepared for Municipal Buildings at Bristol by Mr. C. F. W. Dening who proposes to utilise a site in Queen-square with a thoroughfare opening from Baldwin-street. The building would cover about two acres on an island site, and would house the whole of the administrative departments, besides the Lord Mayor's state apartments and the council chamber. Mr. Dening estimates the cost at about three-quarters of a million pounds, which is considerably below the estimate for the last scheme of municipal buildings in College-green.

A Thirteenth-Century Glasspainting.

With the assistance of Sir Otto Beit, K.C.M.G., and the National Art Collections Fund, the Victoria and Albert Museum has recently acquired a panel of thirteenth-century stained glass. The panel, about twenty inches square, is in good condition, very little decayed and practically free from restoration. It shows a saint disputing before an audience, and is a typical example of the style of the thirteenth century. Its place of origin is unknown, and it belongs to a period of stained glass design in which it is very difficult to make a distinction between the schools in France and in England, but the history of this particular panel makes it probable that it is English, and in any case it is an example of the art of stained glass at the height of its achievement. It is exhibited among the thirteenth-century stained glass in Room 110.

New "Underground" Stations.

The architect to the Underground Railways Company is Mr. S. A. Heaps, and not as stated in our last issue.

COMPETITION NE

Manchester Art Gallery.

The conditions of the competition fo tectural designs for the new art gall museum of art to be built on the Pi site have now been issued by the Corp and a copy may be seen at *The* office. The building is not t more than £300,000 and is to be of P stone. It must be approached by a f steps and must include a Hall of Mer commemorate Manchester men of a and services who fell in the war. Th of assessors consists of Mr. Paul Wate Professor C. H. Reilly, of Liverpool, a P. S. Worthington, who will awar prizes, the first of £500, the second o the third of £200, and the fourth of The building is to occupy an area n ceeding 5,500 sq. yds., and the total flo required for the central sculptural 6,000 sq. ft. (See our issue for Aug. 22.

Club Premises.

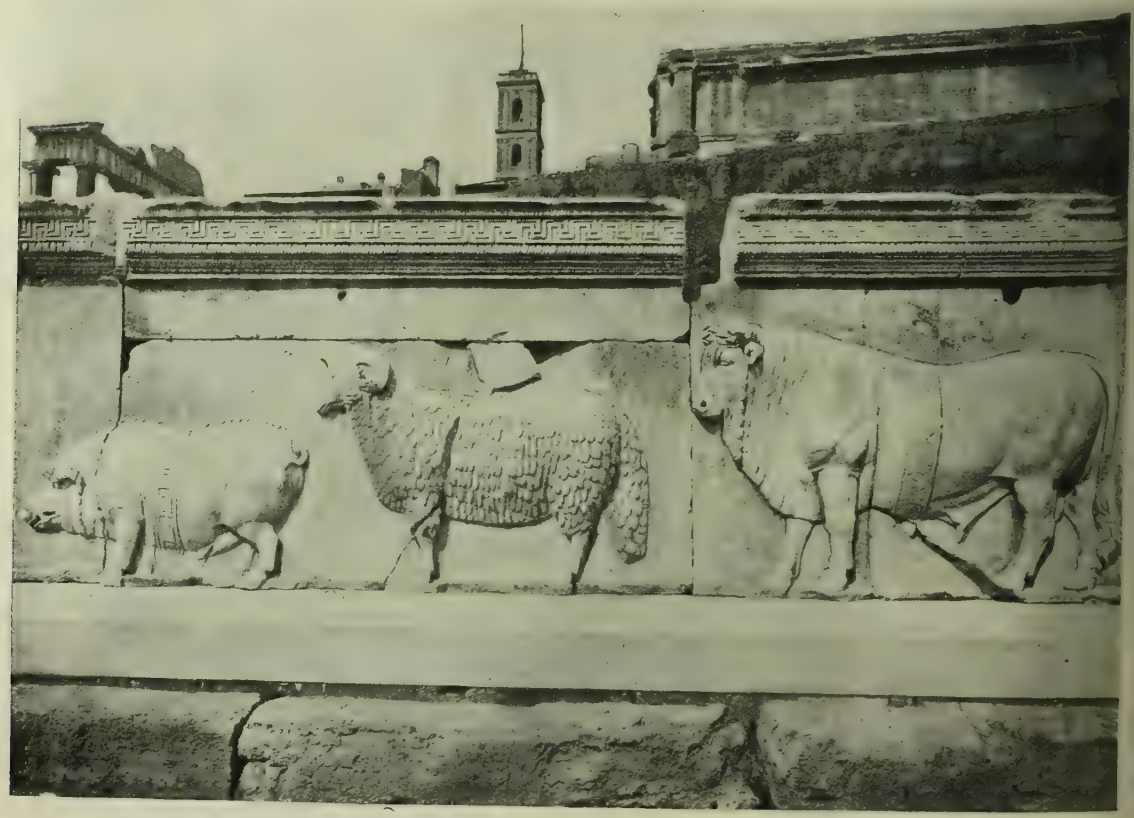
The committee of the Rhyl Conservati invite schemes for adding a second story Club premises. Particulars from the Sec Market-st. Rhyl.

The Harrogate Infirmary.

The committee of Harrogate Infirmary designs for the extension of this Inf Mr. Sydney D. Kitson, F.R.I.B.A., ha appointed assessor. Premiums of 150, 10 50 guineas will be awarded respec Sending-in day September 30.

Other Competitions.

Other competitions still open includ following (the dates given are, first the a in date, and second the issue of *The Bu* which full particulars were given):—Ross Memorial (Sept. 30; Feb. 22). Hamilto Memorial (Sept. 1; May 30). Gl sgow School Memorial (Sept. 30; June 13). Baths, Newton-in-Makerfield (Sept July 11). Bexhill Hall, banned b R.I.B.A. (Sept. 1; May 30). London banned by R.I.B.A. (Sept. 24; Augu



Reliefs on the Rostra. Forum Romanum, Rome.

IMAL SPIRALS FROM ASIA TO CENTRAL AMERICA AND NORTH BRITAIN*

By W. R. LETHABY.

is an interesting and attractive book World influences in ancient American ubject with which I attempted to deal inexpert way a few months since, rticle under the title, "Hellenistic Art tral America." The author of this is an expert, and although the argus made to turn on the question of Indian elephants are represented in sculptures, the wider implications are his mind. The illustrations are all ts of a bold type, several of which seem xcellent in themselves and the whole of ive a certain brightness and energy to pearance of the book which is most t. Plates 8, 11, 21, etc., engraved in *ouches* on a black ground, in a manner calls mezzotint, and others, as for ex-Plate 3, in a white *line* method, are ad-. Some are almost as rough as chil-linoleum-cuts, but even these are e rather than affected. It is delightful direct craftsmanship in book illustration ore. The author says of his main thesis, stigation convinced me that the pre-ian civilisation of America was not due to independent invention, but was l mainly by immigrants who, during t twelve centuries of the Christian era ssibly earlier, crossed the Pacific and in Honduras and elsewhere the germs World culture with traits suggestive of dia. . . But we were met by a solid of opposition. . . It seemed desirable s the discussion on one issue. . . Hence e calling attention to the fact that at in Honduras a sculptor, several cen-before Columbus, had carved an unmis-Indian elephant ridden by a turbaned ." In its wider aspect the subject involves the late Dr. Tylor's theory of ndent origins, against which there is considerable reaction—"It is the ental problem of man's inventive that has to be solved."

ately as 1920 Dr. S. G. Morley, the an authority, spoke of "the extra-y hypothesis" thus: "Any attempt seeks to establish direct cultural con-between the Maya and any Old-World tion is quite at variance with the re-f modern research. And yet the super-imilarities are such as to win for this d hypothesis new adherents." It was ese "superficial" similarities that in-ently convinced me that not only and Chinese but Hellenistic art also ced the development of ancient Ameri-lture; and I am of one mind with Pro-Elliot Smith on the question of ele-, and in regard to the relation of can pyramid structures to those of

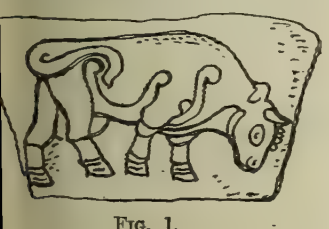


FIG. 1.

n Asia, the islands, Southern India, ssyria.

rn here to discuss two minor points specially interest me at this moment—spirals and the sea monster known in as the Makara. One of the details of ison between sculptured elephants' in India and America is a formal spiral covers their cheeks. Professor Elliot

*phants and Ethnologists." By G. Elliot Woodcuts by A. Horace Gerrard and K. emberton. (London: Kegan Paul.) Price

Smith shows that such spirals occur not only on Indian sculptures, but spirals appear on the bodies of some elephant-like creatures illustrated in Stuart's important volumes, "The Sculptured Stones of Scotland." He quotes that author as saying, "the ornamental scrolls found on the elephant were not found on any other beast," and he adds, "in my opinion these scrolls were derived from the Indian sea-elephant type of Makara. Again, in another passage he writes, "It is known that the spiral was a frequent addition to a variety of animal designs in Eastern Asia as early as the Han Dynasty in China." Is it really possible that animal spirals found from Scotland to China and then beyond the Pacific, in America, had a common origin? I think so. My special attention to these spirals was attracted some thirty years ago when drawing a remarkable incised figure of a bull on a small slab from Burghead, near Inverness, now in the British Museum (Fig. 1). This stone is one of several found on the same site, and Dr. Joseph Anderson thought that the bull might date from the seventh or eighth century and have been a local Pictish symbol. Now the creature is very remarkable as a work of British art for, notwithstanding the formal spirals of the delineation, a grazing ox has never been more clearly seen. Some deer on a grave slab

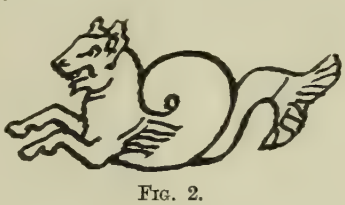


FIG. 2.

figured by Anderson have much the same character, also, I think, similar spirals. Strongly marked spirals occur on some deer which occur on the bronze mountings of a well-known early Saxon (?) bowl found, I believe, in the south of England. These animal spirals had impressed themselves on my mind, and when in turning the pages of Reinach's *Repertoire* of Reliefs I found a row of animals (on a metal plate, I believe) with similar spirals described as Scythian, it raised the question: What can have been the relation between this remote art and the bulls of Burghead? In recent years the general question has been very fully answered, although there remains some mystery about the special beauty of the bull stones. In the recently issued Guide to Anglo-Saxon Antiquities in the British Museum, 1923, is written this: "Southern Russia is now recognised as the original home of two elements in Teutonic art—the animal motive and the application of coloured stones to metal, and it is agreed that the Goths and their associates owed their efficiency in the arts to the civilisation which they found on the northern shore of the Black Sea. . . The Scythians were an Iranian people and their art was Oriental, including above all animal motives distinct from those of their Greek neighbours, but connected with Persia and Assyria. . . . Most of the elements of [old] Gothic culture had been long in existence when the Germanic horde arrived. Their part was to disseminate it in the West. . . . . Iranian influence has been detected in Chinese culture of the Han Dynasty [*cf.*, Prof. Elliot Smith above]. It was from the Scythian culture of South Russia that the Goths acquired the taste for animal ornament of which a specimen is illustrated." This illustration is of a very heraldic lion, and on the neck against the shoulder is a large strongly marked spiral. Other animal spirals also occur on some bronze brooches figured in the same guide. There is thus agreement among experts that animal spirals from Scotland to China followed one tradition. Its origin is, I think, likely to be found in the strongly marked forms of Assyrian sculptures. The Burghead bulls are more masterly and less mannered than any other British works of this class, and I wonder whether they are not evidence for some early "Gothic" expedition across the North Sea when the original



FIG. 3.

Scythian impulse was strong. There must have been some not too remote connection between them and the great art of the nearer Asia. Notice the feeling for spiral arrangement in the tail overlapping the body spiral.

Little room remains for discussing the which the dragon is the best-known variety." Makhara—"the composite wonder beast of Here again Babylonia seems to have been the prime source. "The Babylonian Capricorn was the prototype of the Indian Makara." Capricorn was made up of the forequarters of a goat with a strong fish body and tail. In the Indian form the monster has various animal heads, ox, lion, ram, elephant, and the body part is violently twisted in a spiral. Examples of the earliest forms are given in Plate 17, and one of these is copied in my Fig. 2. I give this because it is so exactly like the mythical sea monsters of Hellenistic art such as those which appear on the great pedestals of the Temple of Artemis at Ephesus, which may be dated about 350 B.C. Fig. 3 is a restoration of one of these made up from two fragments, but there were at least four, and probably all had different heads. These grotesque creatures came into Greek art from the Near East, but it may not be doubted that it was the Hellenistic form which was passed on to India. The Makara seems to have been a man-swallowing and ejecting monster, and it may be observed that in early Christian art Jonah's "whale" is represented in the form of these composite creatures. They appear also on Roman mosaic floors in Britain.

THE SEVEN AGES OF THE ARCHITECT

First: The bright cherub whom wood bricks enable
To build cathedrals on the nursery table.
Second: The school-boy sketching ingle-nooks
Upon the margins of his lesson books.
Third: See him cursing at an art school when
He meets the malice of the ruling pen.

Fourth is the full-blown student proud with
Able with any mysteries to cope; [hope,
Nothing dismays his pencil, brush or pen,
Nothing's beyond his reach, beneath his ken.
The *Fifth* age is a plunge into the dark—
Obscure employment as a junior clerk—
Followed by number *Six*, a glorious age
Of senior service at a senior's wage.
"I run the office and, of this I'm sure,
Know more about it than the governor."

Last comes the Governor himself, a man
Full versed in section, elevation, plan;
Also full versed in making himself pliant
To the eccentric wishes of his client;
Able to turn the said eccentric views
Into a building he will not refuse.

Thrice happy he who, having done his part,
And wrought these whims into a work of art,
Hears his good client say to friends select,
"Of this I was myself the architect."

PAUL WATERHOUSE.

CORRESPONDENCE

Hopes for Architecture.

SIR,—Glancing through the *Observer* this week-end there was a headline which very much attracted my attention, though I found little to interest me in the matter to which it referred. The words were: "Fears may be Liars," and the mind returned naturally to the article headed "Hopes and Fears for Architecture," which our old friend "Isis" wrote in the last issue of *The Builder*.

This article was a little confusing and upsetting, as it was no doubt intended to be, but the entire absence of "hopes" therein showed a lack of that balance which the title suggested. The headline referred to did indeed seem to suggest the answer to all that remained, but it cannot be left at that. I dare to head a reply thereto as above, in the hope that a better balance may be achieved, for surely hope must spring dominant from one justly struck, and, without hope, what have we left?

In the same number of *The Builder* there was illustrated a new "Underground" station at Colindale, which must have given a deal of pleasure to many who are interested in the times in which we live. Without appearing a work of genius, it seems a crisp, clean, and refined piece of design, full of the spirit of the twentieth century, and well worthy to stand in good company. The mind naturally reverts to the style of railway architecture with which we are most familiar, and to wonder what it is that has prompted this new spirit. One might imagine that the chief concern of a large railway company would be to attract the maximum number of passengers, and yet reason would scout the idea that a single man, woman, or child would be added to the daily toll as a result of a Doric portico. The old zig-zag edged canopies, the stop-chamfered posts, the deadly brickwork, and the gaping plate-glass sashes may have made an artist or two shudder, but the public approached them without trembling. Is it too far-fetched to claim that this is an instance where a commercial concern displays a desire to do a little more than its carriers' job? Is it a sign of a higher æsthetic sense that can breathe in the world of trade? Let us be generous and call this a gift, not only to the public, but to art.

We are spending a deal of thought upon one little wayside station, but we must remember that this is a typical instance of the enterprise of the Underground Railways, that the latter is a typical modern commercial concern, and that commerce is very typical of modern life; then this little example may, perhaps, be recognised as an architectural expression of the modern spirit, which "Isis" appears to dislike so much—both the spirit and the expression.

I am not sure what "bourgeois architecture" is, nor even what the term "bourgeois" is intended to convey to the mind. I suspect it to be used with the contempt that the haughty aristocrat and the Communist alike have expressed for the middle-class man. The contempt shall be forgotten, and as an aid to this we will rather use the term "commercial architecture" if this can be accepted as nearly implying the meaning which "Isis" has in his mind. I suppose "tradesmen's" or "merchants'" would be closer, but we will let it go at that, at the risk of correction.

The greater part of modern architectural effort might be justly termed "commercial architecture." If we admit that this is a commercial age, and that its architecture faithfully reflects it, then if we dislike it it must be the age with which we would quarrel rather than with its architecture, and this does indeed seem to be the state in which "Isis" now finds himself. If it may be said without offence, this is a very unhealthy state to be in, and the danger in this particular form of unhealthiness is that it is infectious and must be met with an antidote.

What does commerce really mean? Is it something essentially degrading and sordid? I think such a view would be the essence of snobbery. If we were to say that the main purpose of commerce was to feed us it would perhaps sound a little brutal and worldly, and yet one must live to be happy and free, and one must be fed and clothed to live, and the millions that now live on the land that once supported its thousands only, must be organised before they can be fed. Surely this organisation is the wonder of the age, and a wonder worthy of architectural expression? It is true that other systems have been tried to supplant that existing. Russia has tried one, Italy dabbled in one or two, and the German system was not ours; but I think the majority of Englishmen are thankful for the world as they find it at home.

Is it not gross ingratitude to sneer, with the second-hand label of "salesman's architecture," at the honest efforts of men to express in building the true spirit of a wonderful age? "The spirit of the times," says "Isis," "is only the shadow of ourselves." Only the shadow! Why, is not the shadow the proof positive of the substance of our very existence, or are we to play antics to distort its honest shape?

Now, let it be urged that we accept one or two realities (though it may be difficult to maintain them to one who has no compunction about doubting the reality of realities):—

(1) Modern life is indeed complexity itself.

(2) The only way to unravel the complexity is by organised effort.

(3) This organised effort implies individual control (the poverty of the single mind, if one likes the sound of it).

(4) That the architect stands for this individual control in the production of buildings.

(5) That this function of the architect cannot fail to produce an entirely different spirit in architectural expression from that that existed in simpler times.

(6) That this new spirit in the building art can be just as pure and vital as the old because the purity and vitality of both is only measurable by the faithfulness it shows towards the age in which it lives.

Let us recognise the signs of the higher vision of commerce and rid ourselves of the delusion that trade is all a scramble for money. The facts are all there for us to see, and we have only to remove the bandage from our eyes to gain heart to build.

Finally, may I ask "Isis" his own question: "What is the use of stating things for which we have no solution to offer?"

G. MAXWELL AYLWIN.

"London on the Thames."

SIR,—In the review of my book, "London on the Thames," which you did me the honour to publish in *The Builder* for June 27, your reviewer states that he fails to understand my statement that the streams of London influenced the line of the Wall. It is true that the main stream of the Walbrook flowed through the City in Roman times and did not form a boundary to it (though it seems not impossible that it did form a boundary to the original oppidum). The contours of the City indicate, however, that *tributaries* of the Walbrook, flowing from east and west, gave the line of the northern and north-eastern sections of the wall (see maps, pp. 42, 60, and 65).

With regard to the problem: What caused the rectangular bend in the Wall at Aldersgate? I have suggested a solution in my maps, although it is true I have not discussed the matter in detail.

The contoured map shows a depression in the angle of the Wall west of Aldersgate. There is evidence that the ground in this was swampy before the construction o Roman wall. Richard Kelsey, in his veyor's Report as to the Main Lin Sewer within the City of London, 1842," "From Aldersgate, it (the land) rose to and beyond Aldersgate Bars to Old-stre thereabout, and thence fell northward; y lateral watershed of the land lay thence, ward, into the hollow occupied by the Sh alley sewer on the edge of Smithfield." hollow was probably drained more or le a stream (? the Faggeswell Brook "London on the Thames," p. 51) whic ceived a tributary from the south-east, from the angle of the Wall in question. dence of the marshy nature of the ground may be gathered from the fact that ther no records of Roman dwellings north of gate-street except for a pavement on th of Christ's Hospital (vide *Archæo* Vol. LXIII, p. 297). A trial boring 84 ft. east of Giltspur-street and 66 ft. of the backs of the buildings in New street showed that the angle bastion at gate rested at 12 ft. on a substructure was not laid on the original surface, as i case of all other parts of the Wall exam but on an accumulation of made earth uneven, hollow spot, very wet. The R Gate at Newgate was constructed conside later than the wall; there was no poi providing an outlet from the City in direction until the level of the district been raised by accumulations and the g to some extent drained. At a later dat site was used as a burying-ground for v of the plague, 1349, because the City ch yards could not hold the dead. Part of it built upon by the monks of the Charterh who no doubt helped to drain the land, became a playing-ground of the citizens. revelries and jousts were held, and finally turned into Smithfield Market. This I dealt with in my book on page 136.

Of course, at any time during excava discoveries may be made which upset theories. Nevertheless, the evidence swamp in the neighbourhood of Smithfiel the Charterhouse, draining to the Holbo fairly strong and appears to me to give a factory explanation of the bend in the W the City which has puzzled your reviewe many others.

I shall be glad if you can find space fo letter in spite of its inordinate length. a subject appears to be one of general int I personally should be glad to learn o other theories regarding this problem.

HILDA ORMS

Our reviewer replies as follows:—"I been suggested that the existence of a st at the north-west of the town caused the angular bend, but the evidence for this—fact, for any theory—is, we believe slight. The fact that the bastions, t probably built at a later date, were as n ous on the north-west as on the east, while there were very few or north, suggests that the marshy c ter of the ground, being a n defence, was confined to the north, as the Romans were able to build a there, it may be assumed that they could completed the semi-circle had they wish do so, in spite of marshes. However, probability it was simply the hap growth of the town in this direction tha tated the outline of the wall."

Building Wages.

SIR,—It would be nice of the buildin ployers, now that the men have return business on the agreed terms, were voluntarily to give an additional halfpen hour. Such an act would go far in pro the much-desired good relationship, and the nature of an investment yielding its r that is, if my conception of human nat not hopelessly wrong, and I do not think

STREET ARCHITECTURE—VIII.

By V. M. CHRISTY

BAKER-STREET.

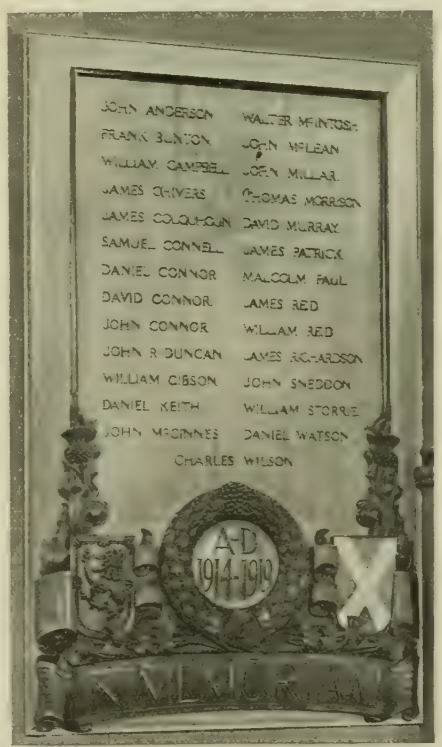
STREET is a thoroughfare which pos- strongly marked a character in its ays that it maintains its individuality w, through all the vicissitudes of noving times. In 1741 open fields to Portman Square, southwards " New Road from Paddington," occasions these fields must have short cut for pedestrians from the of Hampstead and Highgate into Until about ten years ago there house in Orchard-street which was block in the days of Tyburn execu- his house had a specially strong iron- oor, made to withstand the crush o ing mobs swarming in from the to witness the hangings. In 1784 utions at Tyburn, with all their ageantry, came to an end, and by soon after then, Baker-street was in Many of the streets and squares here- ok their names from titles or country s of the ground landlords. Thus square and Orchard-Street are named rchard Portman, Lord Portman's shire seat; and Baker-street was so m Sir Edward Baker, a Dorsetshire of the Portmans, who helped to heir London estate.

tury ago Baker-street was mainly l; now it is almost entirely given business. A board announcing o be erected on this valuable building ts the position tersely and unmis- But the transition has, up till now, gentle and mannerly that there is ething unique in the status of this There is a remarkable dignity and iteur about it. To a large extent s remain as of old, with their brick- lconies, steps and broad doorways, in line, tidily, rather sternly. There in impersonal independent air about They lack any obtrusive interest in ghbours, but at the same time they idably linked with them in the com- se of presenting an harmonious and face to other sections of society. ines of similar houses elsewhere, of e date, suggest a degree of infor- n almost merry air of taking an in- terest in each other's business. But the verge of Portman-square, have air. They would never nod good to each other as Kensington houses In places some of the heavy studded ain, but beside them there are now five bell-pushes, betokening the n the type of occupants. But even shops and offices have taken pos- f the former dwelling-houses that rmality remains. Perhaps it is be- shops and even the offices are con- ith commodities and services of a kind: hairdressing, photographic por- catering, the selling of flowers, bric- d antiques, and the carrying on of fessions as Court dressmaker and ent. Baker-street, no longer residen- ame the perfectly trained " Butler uares," as a lady who knew it well cribed it. The " butler " is losing y not a little now that larger plate- p fronts are succeeding the more lisplays, and a sprinkling of small ts and teashops has appeared. Of eet in the later half of the nineteenth former Orchard-street resident re- The cattle show used to be held at Baker-street Bazaar, under Mme. . and of course the waxworks were years. These facts, and being the ing route to Lord's for the great made it a very gay thoroughfare at mes. At others it was quiet, with two old 'buses, ' Atlas ' and ' City Atlas ' at intervals, and the stately carriages with smart horses and servants from the Portman-square houses, with the different coloured liveries and hammer-cloths over the coachman's seat." It is also significant that it was essentially a " hansom," not a " four-wheeler " street. The Baker-street Bazaar, referred to, was first opened for the sale of horses; later it was only for " carriages, harness, furniture and other household goods." The motor carriage showrooms have now installed themselves in one or two positions, but in the quiet decorous manner which the street demands.

Among the few new buildings in Baker-street, one or two are a trifle too gaunt and soulless for the street. They are not actively objectionable, but they seem out of place. Some others have absorbed the atmosphere of the street so well that although quite different in character from the original buildings they harmonise perfectly; they move in the same social circle, and that is a great point if Baker-street is to remain harmonious. The prevailing material in the older buildings is brick; subsidiary to this are stone or stucco, and ironwork, which each contribute their due quota to the dignified and simple whole. Some of the newer buildings fail to respond to the demands of the street because they contravene the canons governing the satisfactory mingling of these elements. Where the older brick fronts form unbroken lines for some distance their continuity is emphasised by a thin line of stucco decoration, and the individuality of each unit is marked by the varied designs of the ironwork on balcony or railing. More recent imitations of this type are unsatisfying because smooth continuity is lost beneath fussiness of detail, and the individual ironwork is poorly impersonated by paltry and purposeless little borders to window sills, almost all of one stamp. In some cases modern red brick and stone dressings are happily combined; in others the essential brick character is obliterated by an excessive application of the stone element, leaving a restless and uncertain impression. Such an impression is avoided where the building is stone-faced entirely, or where the brick is made clearly to predominate. No attempt is made in these cases to introduce the third element, decorative ironwork, at all. In the most modern type, however, the idea of iron for decorative purposes is entirely superseded by its constructional use in the form of girders and stanchions. So much is this so, that in certain cases the other materials employed with it seem to have assumed a curiously cold and metallic nature. This effect leaves one doubting whether " truthfulness " of structure is really a point on the highway to architectural beauty or not. After all, it must be admitted that the human skeleton is clothed with flesh in a manner which does not follow out to its logical conclusion the theory of structural truthfulness. Why, therefore, should not the gaunt skeleton of structural steelwork be clothed externally with as vivid contours as the human frame, provided that, as in the body, the articulation and function of the bones is unimpeded?

Victorian London of this neighbourhood expected to find in Baker-street the means to live beautifully according to its station; to have its hair dressed well and suitably; to purchase beautiful and antique objects to adorn its drawing-rooms; to have suitable catering for its balls, its parties, and its wedding-breakfasts; to be photographed appropriately on special occasions in life; and finally to be buried with appropriate but unostentatious ceremony, with a suitable supply of black silk and black gloves. The survival of the name Portman Rooms seems still to suggest the scene of gay but appropriately dignified " assemblies "; it almost takes us back to the days when Mr. Pitt resided in Baker-street.

There is still a certain *caché* about the street, which is not yet obliterated by the motor omnibuses which thunder by, no longer " at intervals," like the old " Atlas," nor by the shrill ghostly wail of the underground trains. The arrangement of the " circus " at the crossing of Marylebone-road some few years ago still maintained the old dignity. The prelude notes of the new red-brick overture, though strangely unlike the old harmonies, have no unforgivable discords. But it might well prove the beginning of the end of the real Baker-street when " the largest cinema in England " rears its head upon that yawning site near the station. And yet it need not be so. Baker-street has long been the route to popular shows: Tyburn, Mme. Tussaud's waxworks, the Cattle Show, Lord's, why not therefore a cinema? But for the sake of our self-respect let us hope it will be able to justify its existence by nobler means than by catering merely for the instincts that urged the mob to seek their entertainment at Tyburn in days gone by.



Memorial in Wallneuk Church, Paisley.
MESSRS. ABERCROMBIE & MAITLAND, Architects.

Memorial in Wallneuk Church, Paisley.

This memorial consists of a tablet of walnut on which the names of the fallen are recorded in letters of solid bronze. The tablet is edged with a fimbriation of ebony and surrounded by a frame of bleached oak; supporting it is a device in carved and stained oak emblematic of the Scottish race—a broad riband with the words " In Memoriam " stretching across the bottom of the memorial and intertwining with a thistle ornament and enfolding on each side a shield emblazoned in their proper heraldic colours and metals, the one on the dexter side representing the Lion Rampant, and the one on the sinister side the St. Andrew's Cross. In the centre between the shields is a carved wreath of laurel encircling the dates 1914–1919. The memorial was designed by Messrs. Abercrombie & Maitland, architects, of Paisley, and the work was executed by Messrs. Guthrie & Wells, Glasgow.

PAINTED WINDOWS AT BARNARD'S INN

By F. SYDNEY EDEN.

THE origins and early history of the Inns of Court and Chancery in their relation to legal education and organisation are obscure.

When they are first met with in history they were all, with one exception, totally unconnected with law or lawyers. The Temple was a Commandery of the Knights Templars, and Lincoln's Inn and Gray's Inn were town houses of the Earl of Lincoln and Lord Grey of Wilton respectively. As to the Inns of Chancery, to mention a few only as typical of the rest: Staple Inn was the warehouse where the Wool Staplers' stock of wool was housed; Barnard's Inn, under its earlier name of Mackworth's Inn, was the town house of John Mackworth, Dean of Lincoln; Clifford's Inn belonged to the Lords Clifford and Furnival's Inn to the Furnivals, Barons of Sheffield.

One of the Inns of Chancery—Lyons' Inn, in Newcastle-street, Strand—had a different, and later, origin, certain lawyers having bought the Lyon Hostelry and converted it into an Inn of Chancery in the time of Henry VIII.

It was not until the fifteenth century that most of these Inns became connected with lawyers. In several instances they were leased to various small bodies of lawyers, each independent of the others. The leases were usually renewable from time to time on payment of a fine. Gradually the Inns of Court and Chancery grew into strictly organised and administered Colleges of Law, the arrangements and discipline being along much the same lines as at Colleges in Universities.

The main distinction, originally, according to some writers, between the Inns of Court and Chancery was that the former were resorted to principally by students of noble birth, while the students in the Inns of Chancery were for the most part sons of the lesser gentry and traders. Others say that the Inns of Chancery were from the beginning places for preliminary studies by law students prior to their into the Inns of Court.

After a time the Inns of Chancery b subordinate to the Inn of Court which ha to be in their neighbourhood, and each Court appointed in every term one of i members as a reader to give lectures, or, hold moots in the halls of the Inns of Ch attached to it, for the benefit of the student

The loose connection between the Inns until the end of the last century, al readers to the Inns of Chancery ceased appointed in the seventeenth century no moots or other legal exercises were h them later than about the middle of the eenth century, if we except the meetings Law Students' Debating Society, which to be held, in the 'eighties of the last ce in Clement's Inn Hall.

The end came to all the Inns of Ch before the close of the nineteenth century Inns and the other property of the Societi sold and the proceeds of sale were d between the governing bodies and the me of the Inn. The very situation of some o are forgotten and the sites of all—except Inn in Holborn and Clifford's Inn in street—have been cleared of their a houses and modern buildings run up in place. As to the exceptions, all know abodes of ancient peace, Staple Inn and Cli Inn, but Staple Inn's smaller neighbour nard's Inn, is not so well known, the perhaps, because the Mercers' Company, school the old Inn has become, has d its ancient title and called it Mercers' Sch

Barnard's Inn is on the south side of Ho a little to the east of Staple Inn, and is re by a narrow court which opens out into a courtyard shut in by blocks of modern bu forming Mercers' School, which have tak place of the old brick houses divided int of chambers which we see in old prints Inn. On the north side is the ancien only 36 ft. long, with a louvre on its roof c

In common with all similar societies, the custom at Barnard's Inn for the a the principal, for the time being, to be in the hall windows in painted glass. too, as in the halls of the Inns of Court, of arms of the reigning sovereign and of men—judges and statesmen—of the day be placed in the windows. At Barnard the arms of several long-dead princip shown; there is no royal or noble h except a roundel with a fleur-de-lis, a badge, and shields of Nevill and De Ve

The shields of principals, counting fr east on the south side of the hall, consis of a series of small ovals within plain-c borders bearing shields surrounded by of leafage and berries, and with inscript foot with the name of the principal com ated and his year of office. Some are in enamel colours, the enamel being perished; others are made of pot-met alone and yet others are a mixture of and pot-metal work.

This series begins with the arms— three saddles sable—of William Harvy, palis hujus hospitij Anno Dmi 1545 commemorating four principals in the i ends with the arms—argent on a bend between three choughs sable, as many ga of John Wicksted, principal in 1621. ovals were painted early in the seve century, and it is probable that, bein one style, the earlier of them were pai correspond with the later—nunc pro as lawyers put it.

In the second light of the second bay hall is a full achievement—a fine piece —of the arms of George Dodson, Assize of the Midland Circuit and I of the Inn in 1683. The arms are a fesse nebulee gules between six fleu sable, and the crest is two lion's legs e saltire or, armed gules.

A large composition, containing the Sir John Holt, Chief Justice of the Bench in the reigns of William and M Anne, occupies the third light of the sa







ms are argent on a bend engrailed sable, leurs-de-lis silver and the crest is a cubit ect, vested per pale argent and sable, nd grasping a pheon sable. According Latin inscription below the shield this vas given in 1705 by Silvester Petyt, an t and former Principal of the Inn and f the Writs of Error. This panel occupies ce of honour in the hall, and, no doubt, s to the high esteem in which the members nard's Inn held Sir John Holt, who has been looked upon as a model of all judge should be, both for character and g in the laws.

arms of principals are continued in the ght of the second bay and through the rs on the south side of the hall by a second series of ovals with scroll-bordered shields set within chaplets or white and yellow scroll-work. Those commemorated are Robert Clarke (1698), Edward Story (1670), Silvester Petyt (1701), the donor of Sir John Holt's arms, William Betts (1704), William Manlove (1710), and Matthew Lancaster (1716).

On the north side of the hall, in the first light of the second bay from the west, is a small Tudor-shaped shield, shorn of its accessories, bearing the arms of Nevill, argent, a saltire gules; in the second light is an oval with the arms of Dingley Askham, principal in 1722; in the third light is the royal badge already mentioned, a fleur-de-lis set in ruby (sixteenth century); in the fourth light is an oval with the arms of Wiseman Claget, principal in 1728; and in the fifth light is a sixteenth-century shield without accessories of the arms of De Vere, quarterly gules and or, a mullet silver in the first quarter.

The old glass in Barnard's Inn is completed by a beautiful little oval panel, painted in enamel colours, with the arms of a seventeenth-century Dutch merchant, probably resident in London, one Pieter Van de Putte. The arms are or on a chevron, gules between three cocks sable, three trefoils slipped or and a pair of human legs proper in sinister base. The crest is a gold trefoil slipped. Unfortunately, the sinister side of the oval is missing and a piece of white and yellow scroll-work of a similar character from a lost panel substituted for it.





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ILLUSTRATIONS

Royal Naval Barracks Church, Southsea.

There are seats for 1,000 in this church, and advantage was taken of the fall of the ground to arrange a church-room under the chancel. The exterior is of stone, and the estimate was £13,350. The actual cost was £12,700.

The foundations were put in by departmental labour, and the contractors for the superstructure were Messrs. Carkeek & Sons, of Redruth; electric lighting, Messrs. Carse & Co.; heating, Messrs. Wood & Co.; wood-block flooring, Messrs. Geary Walker & Co.; tiles and mosaic, Messrs. Craven, Dunhill & Co. Mr. P. J. Marvin is the architect.

Design for a House and Grounds.

This scheme was sketched out during a summer holiday in 1919. It is an adaptation of the Sala of Italy, for the united use of one or more branches of a family. It will be seen that the distribution of the first floor in four suites carries out the same idea. The central area is adequate for dancing, &c., the floor shown being parquet. The English standard of height of rooms is followed. The inevitable motor is provided for, and the offices are cut down to the one or no servant standard of the day. Two floors only are adopted for the same reason. The idea that concrete or light steel stanchions and framework would be economically necessary has been kept in view, both in design and construction. The eight columns of the interior form the main skeleton. It was also thought possible that asbestos sheeting would form the roofing, or, alternatively, tiles of the type that can be used with a pitch of 30 degs. It was assumed that the site would be not far from the sea, but in any case sufficiently rural to make three acres obtainable. The subject has been entirely worked out and drawn by Mr. J. H. Bolton out of school hours, and the method of representation is an application of the instruction received in the first year's course of the A.A. School.

New Colliery Offices, Thorncliffe, Sheffield.

This block of administrative offices is being built on rising ground, overlooking the works, which occupy the whole of the valley, provision being made at each end for future extensions. The board room and headquarters' offices are located on the first floor, opposite the main staircase, opening off a tall architectural hall, lit by a continuous lantern.

The external dressing will be of Portland stone, the main wall surfaces being rendered in white cement, so that these may be cleaned down periodically. Owing to the situation, all building materials in the neighbourhood tend to turn black in a very short time, and it is desired to keep this office block standing out from its surroundings as much as possible, so as to be the obvious focal point to anyone entering the works. The roof will be covered in special Italian tiles, and steel windows (but to a different design than shown in the perspective) are being used throughout. The construction throughout is in reinforced concrete, with brick panel filling between the external stanchions. Ventilation ducts in reinforced concrete are provided to all the corridors and around the staircase halls, leading by vertical ducts to fan-chambers in the roof.

The heating is by low-pressure hot-water radiators, all pipes being concealed but accessible throughout; exhaust steam is brought from the works to calorifiers in the basement, so that nuisance of fuel delivery and ashes disposal is eliminated. A complete system of vacuum cleaning is also being installed.

The Trussed Concrete Steel Co., Ltd., are responsible for the reinforced concrete scheme throughout. Messrs. James Gibbons, Ltd., will supply the steel windows. Messrs. John Tann, Ltd., are supplying the strong-room doors. The Bath & Portland Stone Firms, Ltd., will provide the Portland stone.

Mr. Adrian Gilbert Scott, of 7, Gray's Inn-square, W.C.1, is the architect.

"The Times" Pavilion.

This illustration is of the pavilion built for the *Times* at the British Empire Exhibition at Wembley. It stands on the axis from the main entrance to the Stadium between the Australian and Canadian buildings.

The building, standing as it does in a central position in the Exhibition, forms a suitable rendezvous; thus it was arranged with open porticoes and a terraced garden which would make a pleasant place for waiting and resting. One of the earliest types of printing press used for printing the *Times* is placed in one wing of the building, and the other forms a library.

The pavilion is of a temporary nature, being constructed of timber and fibrous plaster. The general contractors were Messrs. Gaze & Son, Ltd. The fibrous plaster work was carried out by Messrs. G. Jackson & Sons. Messrs. Oswald P. Milne and Paul Phipps, FF.R.I.B.A., 64, Wigmore-street, London, were the architects, and the garden work was carried out under their direction.

Doctor's House at Swanage.

This house is in the main street and faces south while the back looks over the bay, the upper windows having a view over the coal sheds on the sea front. "The View Balcony," which opens off the staircase, has been provided to make the most of this aspect. The house is finished with red hand-made sand-faced facings and purple quoins of a similar texture from the north of the county. The roof is done with Fontley tiles. The arrangement of the plan provides separate entrances for patients and private visitors. The settled price, including all fittings, was £2,841. Mr. Wilfrid Travers, F.R.I.B.A., is the architect.

Shivalayah Temple.

This temple is situated on the banks of Vishwamitri River at Baroda, a native state in India. It is a square in plan, having steps to the front leading to the shrine, and is dedicated to the god Shiva, one of the chief gods in Hindu religion. It stands on a platform with an opening at the front, and leaves a margin all round the temple for pradakshina. Walls are b slabs. Columns are beautifully carved. windows have been provided in side wa light, and through ventilation. The arch Hindu symbolism of Indian temples. Th rests on an octagon which is a special fea character of Indian domes. The structur is in marble and expresses the material Mouldings and carvings demonstrate th and workmanship of Indian art and cra

L. M. Chit

Lord Kitchener Memorial Homes, Chath

This memorial (illustrated on p. 329) c of a block of four cottages for disabled and soldiers, erected on land at Fort Pit Chatham. The site is pleasantly situated, the Victoria-gardens and overlooking the with an extensive view of Fort Pitt Fi the rear, and has a frontage of 120 ft. depth of 150 ft.

The cottages are faced with old l antique red bricks up to the first-floor lev upper portion of the walls is hung with a red tiles in alternate plain and orna courses, and the roofs are covered wi English sand-face tiles.

The two centre cottages are set para the frontage, whilst the end houses make angles forming wings to the block; th position of the buildings permits a simp out of the grounds and gardens.

The elevation to the street front is com with a fence designed in keeping with the style, consisting of a series of ramped l wood fencing on a dwarf wall of red similar to those on the buildings.

The accommodation in each cottage i entrance hall, living room (16 ft. by combined kitchen and scullery (12 ft. 9 10 ft.), bedroom (16 ft. by 10 ft. 3 in smaller bedrooms, larder, and the usual The interior decoration includes tiled fl hall and kitchen and distempered walls. cupboard room is provided.

The buildings have been designed by M Honey, F.S.I., M.S.A., Borough Engin Surveyor, who is acting as Honorary A to the Trustees. The contractor was Mr Leech, of Rochester.

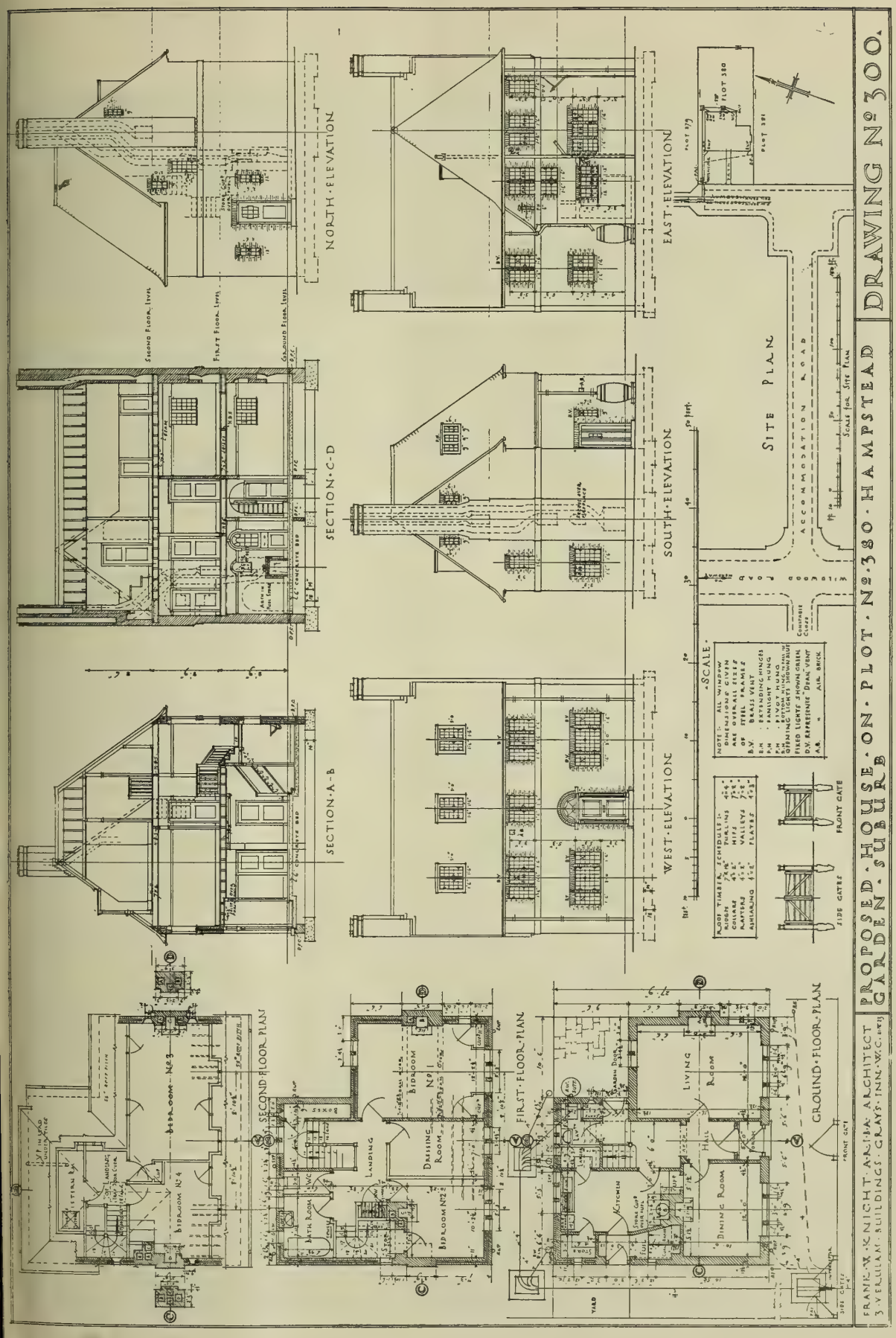
EXHIBITION NOTE

POCHADES.

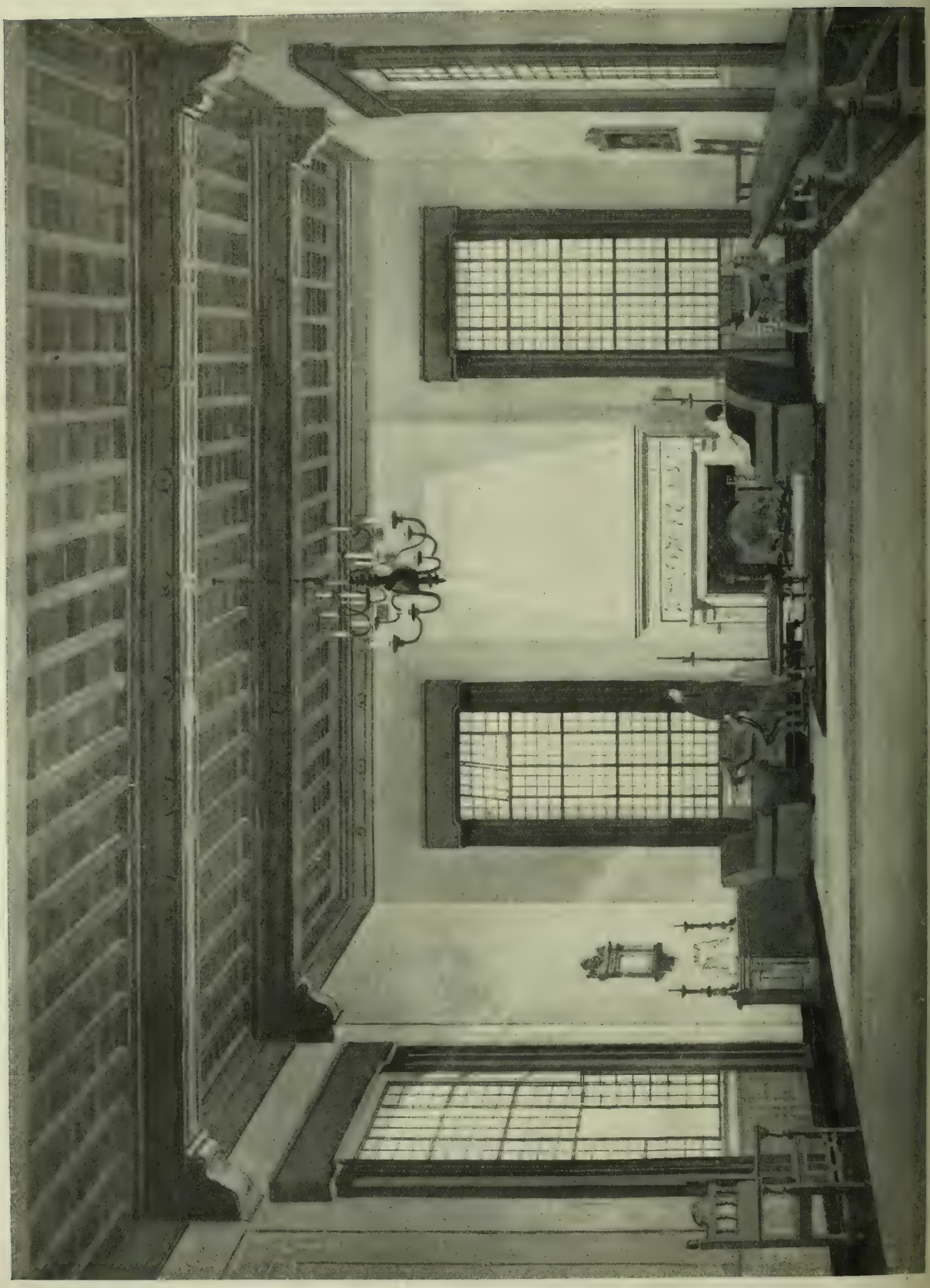
We should say the definition exhibition now open at the little gallery of the Beaux Art in place is rather a misnomer. It i Pochades, but if that name signifies vivid impression of a subject by the can hardly include many of the exhibi that head. The graphic sketches by W. are true to the name and we readily sh the artist his pleasure in the summarise tion of his subjects; but careful, sou painting and well-studied tone values ar composition rule out other good subj the generic title.

ETCHINGS.

We may find in the fine collection o by Brangwyn at the Fine Art Society show of this artist's wonderful power a activities. Some of them, like the seem to afford the utmost of fine po but for our own part we find the fervour of the artist less to our liking fine, peaceful breadth of the Toled The dramatic etching of the Monun our Admirable Crichton seriously at rendering the proportion and decorati of this splended example of Wren's ge know and love the Monument too well such a version as adequate representa



Proposed House at Hampstead Garden Suburb. Mr. Frank W. Knight, A.R.I.B.A., Architect.



British School at Rome: Students' Common Room.
R.A. Exhibition, 1924.



R.A. Exhibition, 1924.

"The Times" Building at the British Empire Exhibition.



R.A. EXHIBITION.

ROYAL NAVAL BARRAC



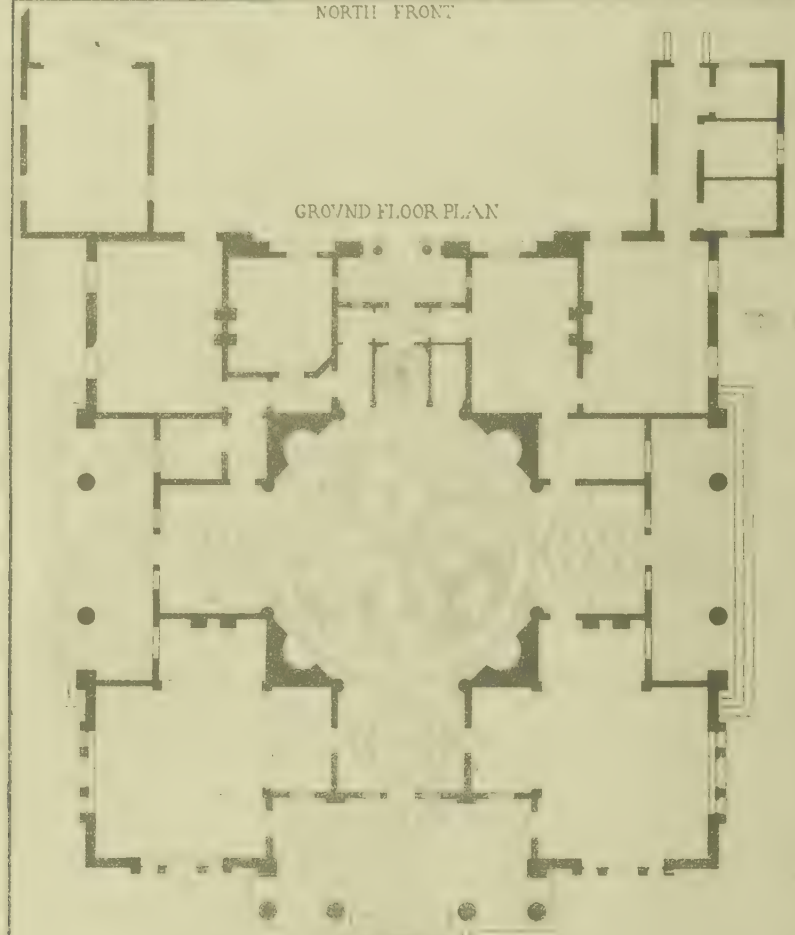
PHILIP J. MARVIN, ARCHITECT.

DESI

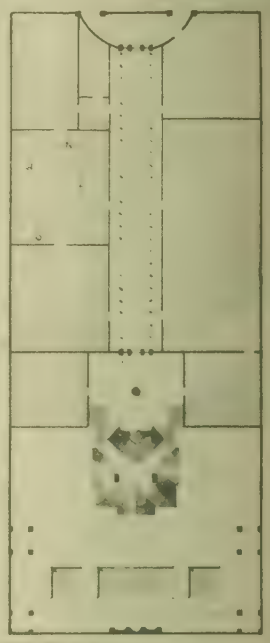
SCALES



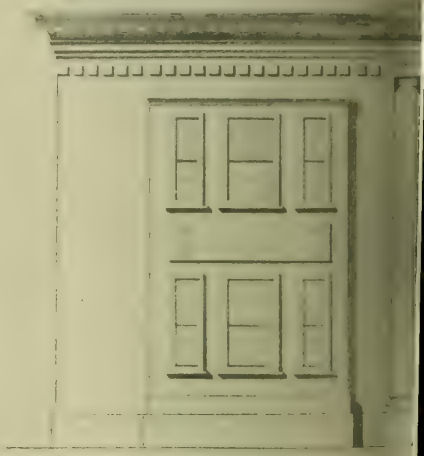
NORTH FRONT



GROUND FLOOR PLAN



SITE PLAN



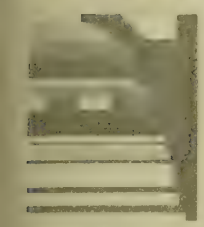


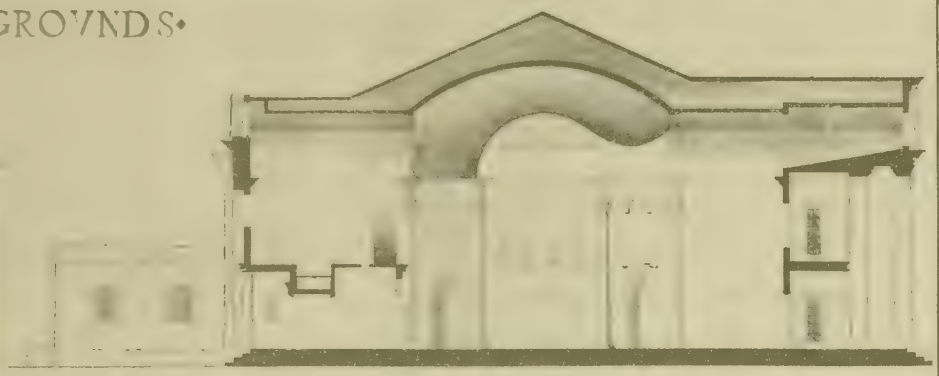
SOUTH FRONT



·VSE·AND·GROVNDS·

T THREE ACRES.

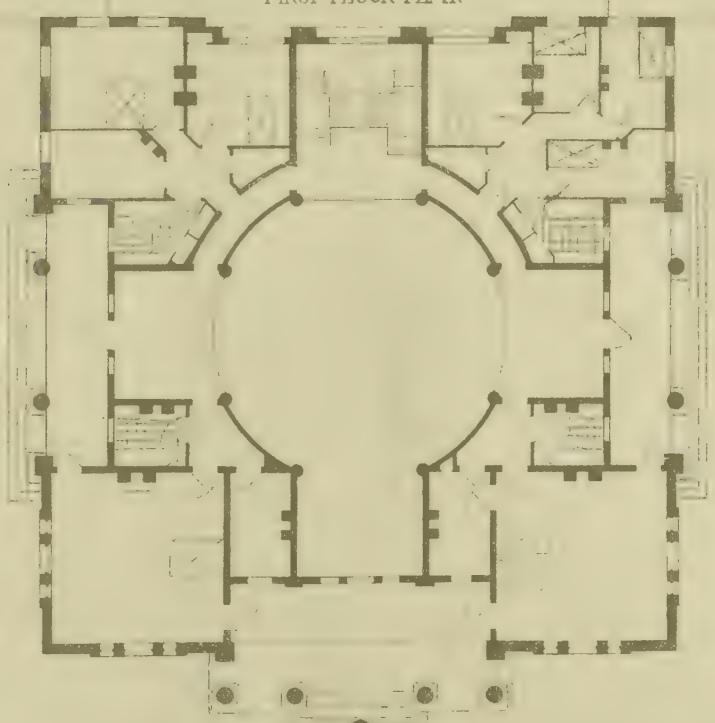


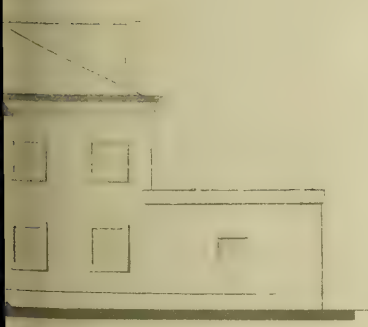


SECTION NORTH – SOVTH



FIRST FLOOR PLAN







SECTION WEST – EAST



R.A. Exhibition, 1924.

Mr. A. Gilbert Scott, Architect.

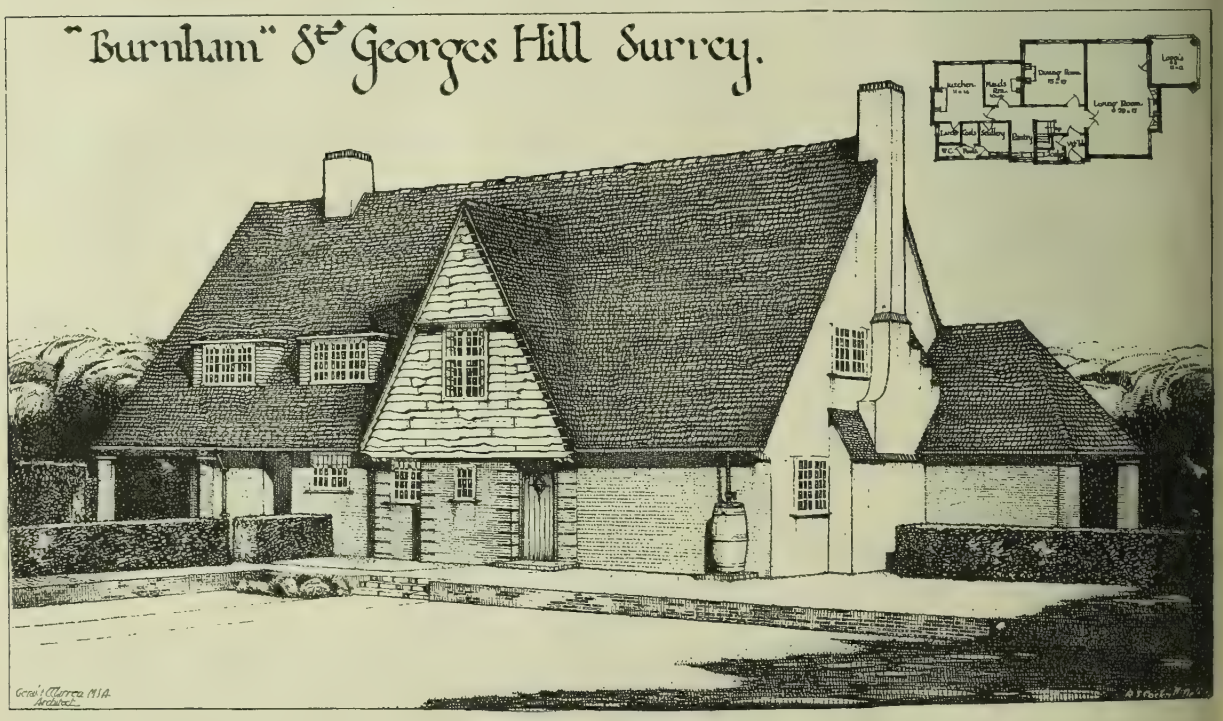


R.A. Exhibition, 1924.

Competition Design for Offices at Liverpool for Messrs. Alfred Holt & Co.: Elevation to Water Street.

By Mr. Curtis Green, A.R.A.

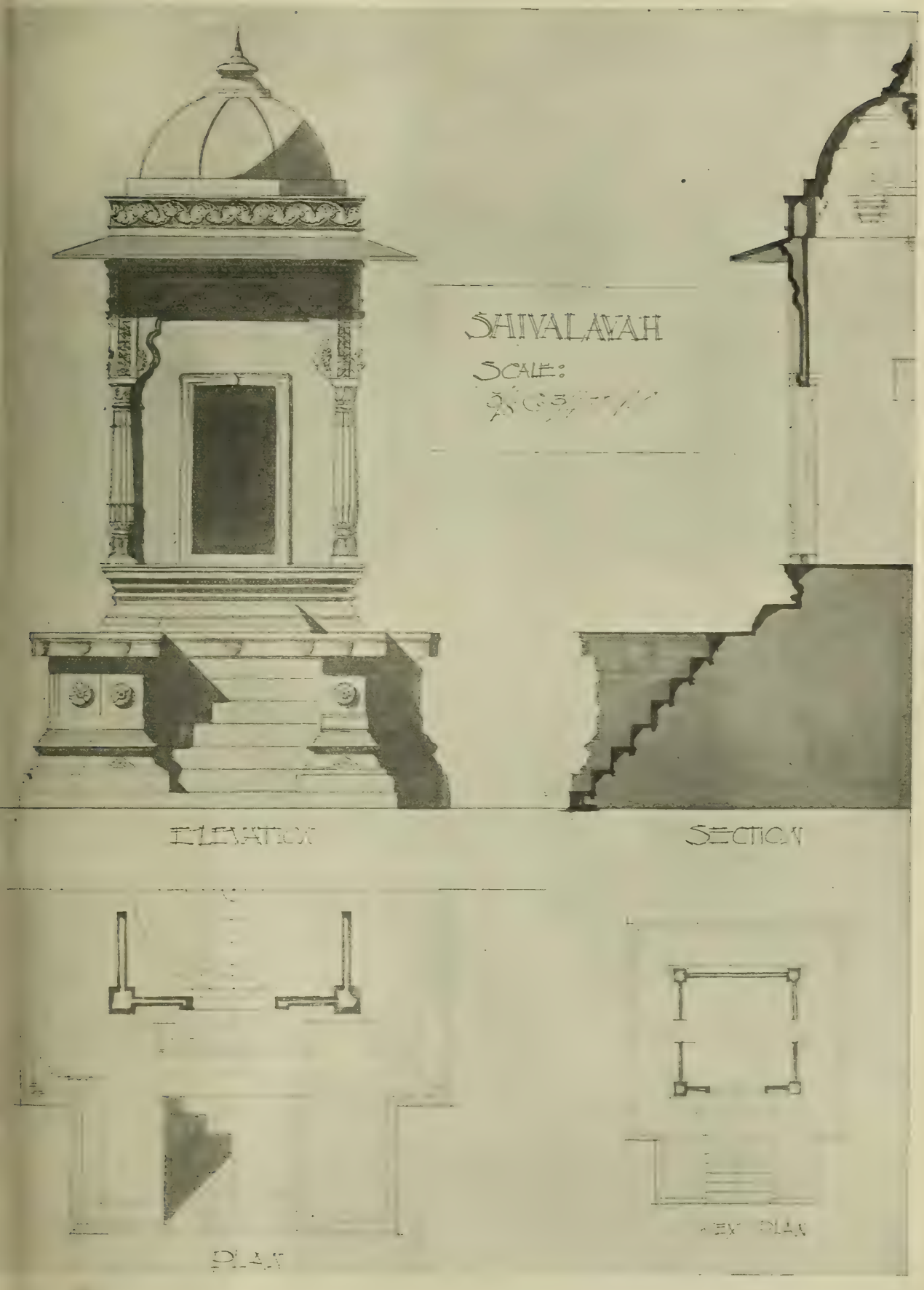




MR. GERALD WARREN, F.S.Arc., Architect.

[The site of this house dictated that advantage should be taken of the southern aspect, which faces the garden, and with this object in view the plan is so arranged that a minimum number of windows, all of an unimportant character, face north, which is to the road. Externally, the house is faced with selected grey stocks with white joints, and the roof covered with hand-made sand-faced tiles. Internally, the treatment is of a very simple nature, the main effect being obtained by built-up brick fireplaces and beamed ceilings with all internal walls finished white.

As will be seen by the elevation, the addition of a garage and bedroom ove been made to the original plan. Mr. G Warren, F.S.Arc., of 12, Norfolk-street, St W.C., is the architect. Messrs. W. G. Ta Ltd., of Byfleet, were the contractors, were also responsible for the lay-out o grounds.]



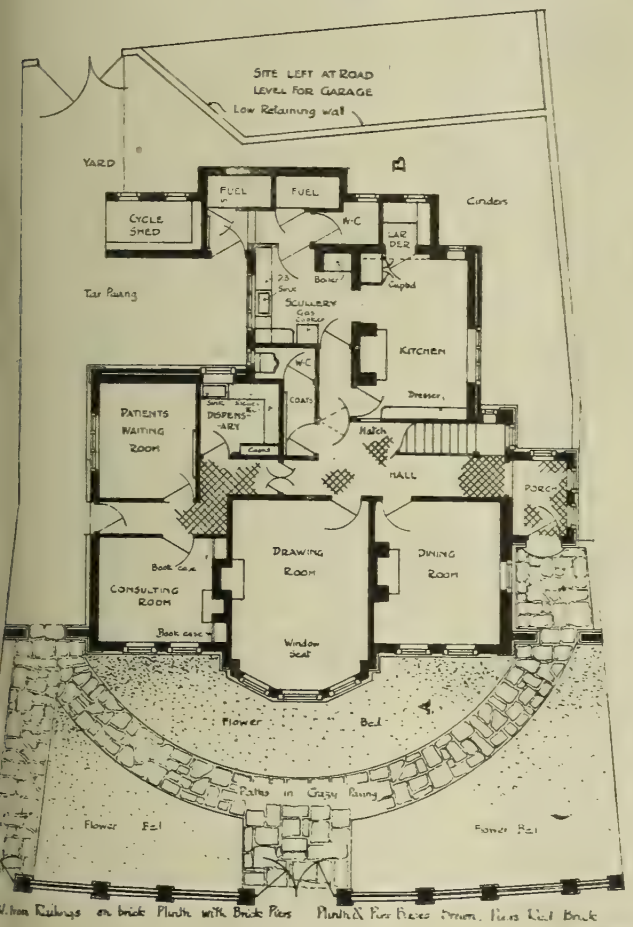
Measured and Drawn by Mr. L. M. Chitale. (*See p.* 316.)





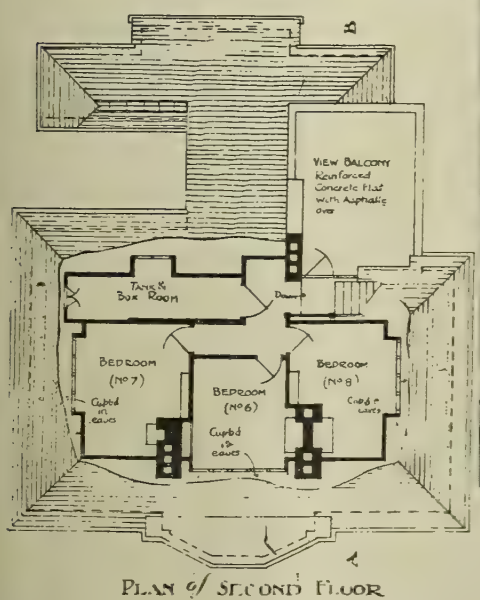
House at Swanage.

MR. WILFRID TRAVERS, F.R.I.B.A., Architect. (*See p.* 316.)



PLAN of GROUND FLOOR.

PLAN of FIRST FLOOR



PLAN of SECOND FLOOR



Contractors
MESSRS BIRD & Co
SWANAGE

WILFRID TRAVERS, O.B.E., F.R.I.B.A.
Architect.
1. FEATHERSTONE BUILDINGS,
HOLBORN, W.C.1

House at Swanage.

MR. WILFRID TRAVERS, F.R.I.B.A., Architect. (*See p.* 316.)

THE NAVE OF HEXHAM PRIORY

BY E. BENSON, B.A.

[IN the following article the author maintains that the nave of Wilfrid's Church was not as large as some authorities claim; that there is no adequate reason to believe that the Saxon church at Hexham was of such startling proportions as have been attributed to it.]

In 670 Ecgfrith succeeded to the kingship of Northumbria, of which York was the civil and ecclesiastical capital. Wilfrid was then Bishop of York. At the time of his marriage King Ecgfrith had given to his queen, Etheldreda, Hexhamshire, a piece of land about 12 miles by six miles, with Hexham near its northern limit. The queen, who is best known as the first Abbess of Ely, was very religious, and in 673, on Bishop Wilfrid's persuasion, she became a nun. It was about this time that she presented Hexhamshire to Wilfrid. He chose Hexham as the site of the monastery he was to build there, the founding of which may have been prompted by the victory of Heavenfield (about 40 years earlier) for that victory had ensured the success in Northumbria of Christianity over paganism. Bede, in his "Ecclesiastical History of England" (*c.* 731), says that "the brothers of the church of Hagulstad (Hexham), which is not far thence, repair yearly on the day before that on which King Oswald was afterwards slain, to watch there for the health of his soul, and having sung many psalms, to offer for him in the morning the sacrifice of the holy oblation."

Wilfrid, who was a Northumbrian and a very active churchman, had already built a church at Ripon. At Hexham he set out to build a monastery which was also to contain the seat of a bishop. In 678, Hexham became the head of the new province of Bernicia, and the Bishop of Hexham was consequently the spiritual ruler of this part of the country.

Wilfrid's church was built between *c.* 674-678. It has been described as a building of great splendour, not only through its size and beauty and the skilful design, but also through the wall-paintings that adorned it and the treasures it contained. The church was of stone. Roman stones were used: the site of the ruined Corstopitum (Corbridge) was the nearest and best source of this very suitable and well-prepared material. Like other Saxon churches in England it consisted of a central part with an apse at the east end, the apsidal sanctuary being divided from the central part by an arch; at the west end there was a narthex, or porch. Beneath, there was a crypt, which was a special feature of this building. Ways and stairs led to and from the crypt. From the sides of the body of the church, it is reported, there stood out a number of porches or lateral chambers opening into the central part. The windows were doubtless few and high up in the walls. Conventual buildings also were erected. At the east end of the church, according to the records, there was a graveyard and round t end of the monastery a strong wall of sto There can be no doubt that the church it was built with a view to defence, as a place which people could retire in case of p expecting protection from the sanctity of building as well as from the stoutness of walls.

The monastery itself did not contain a l number of religious. In its shelter there only a small community.

The Eleventh-Century Church.

In *c.* 821 the diocese of Bernicia was joi to that of Lindisfarne. As a result the Hexh bishopric came to an end, and the Bishop Lindisfarne took possession of the lordship Hexham. The monastery there continued, the church ceased to be a cathedral.

For many years in succession after 787, w in the days of King Brehtric, "there first c three ships of Northmen, out of Heretha-l (Denmark)," the north of England especi was a prey to the ravages of the Norsemen. 875, for instance, there was a serious invas in which Hexham was destroyed and the mo killed or scattered. Afterwards probably a set of monks came, but the Benedictine mon tery there, was, it is believed, finally ended in troublous times early in the tenth centu when the Anglo-Saxons were trying to dr back the invading and marauding Danes. 923 there was such a battle at Corbridge. was during these years, when history is eit red with combats or black with obscurity, t such places as Hexham monastery were d troyed. At Hexham the loss was aggrava by the destruction of its library.

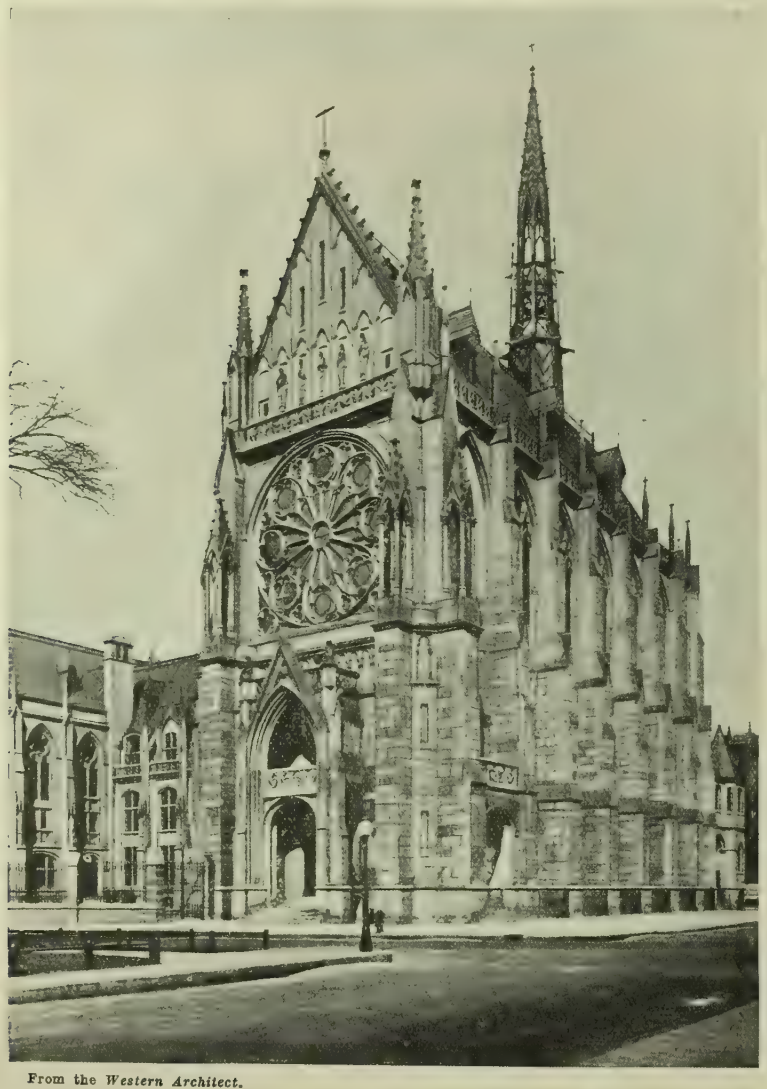
For some time Hexham had to look to Chest le-Street and Durham for support. The w at Hexham church was, it is known, carried for a time by a succession of priests fr Durham. During part of the ninth and te centuries, therefore, the see of York, most lik influenced by the troubled state of the count was content to let the control of Hexham p into other hands. It was after William I h subdued the north by a devastation, that w an ugly pattern of thoroughness, that the pri who was then provost appealed not to Durh but to York, which then resumed its sovereign

In 1083 Bishop Carileph of Durham mad reform in the monastery of Durham; he decid to put an end to the system that permit priests to marry. At this time the priest Ei in charge of Hexham, was allowed to end connection with Durham and was given church of Hexham on condition that he restc the buildings. The old church had, as a re of ravages, become thoroughly ruined.

A new church, more parochial than monas was begun at Hexham. It was considera larger than Wilfrid's church, which was t ruined and deserted.

The apse at the east end of the Norm church was built some 20 feet farther than that of its predecessor. The sch included, it is believed, provision for an ap choir, small transepts, and a nave of good The nave was begun, but it is not certain was completed. It is highly probable that nave was not finished. At any rate, it can maintained that a fine new church was be in the then prevailing architectural st Border unrest and frequent inroads by Scots made the work very difficult from t to time. The funds of the church were, m over, in not too satisfactory a condition.

In 1112 Hexham was made, with Holm Yorkshire, the body of a prebend of Y Cathedral. In 1113 Archbishop Thomas lifted Hexham church a good way out o unhappy position by sending to it two canon a reformed type, and by endowing it certain lands, This was the beginning of a community at Hexham, and of a new and hopeful period of its history. The next A bishop (the great Thurstan) further endowe church and placed at the head of the commu one Asketill, an Augustinian canon. Hex now became a house of Austin canons, whi remained till its suppression in 1537. revenues were increased when Archbi



From the *Western Architect.*

Quigley Memorial Chapel, Chicago.
MR. Z. T. DAVIS, Architect.

n made the Prior of Hexham *ex officio* lary of Salton.

ugh the frequent incursions of the Scots, n was again in a decayed and ruined n early in the twelfth century. Accord- s chronicler, Ælred of Rievaulx (who 1167), the church was at this time roofless orless. The town also was destroyed. rch had to be repaired and the conven- ldings made serviceable again. During tury the rights and possessions of the ere increased. A period of comparative ty was beginning.

arch 3, 1154, a great event in the religious of Hexham took place. The relics of ted bishops of Hexham were moved and n a more suitable part of the church. urrence of miracles was noted at the new and doubtless the funds of the priory d. We cannot doubt that the canons ermined to build a still more worthy and to make the conventual buildings ited to their needs. The translation of s marked but a stage in the preparations.

The Third Church.

ew work was done towards the end of the century and early in the thirteenth The place was again essentially a ry, so that the choir of the church and ster and such important conventual s naturally received the best attention anons, and, as time proved, these parts only ones that were successfully com- The new choir and transepts were ly built in the then latest architectural We can see the work to-day, so that er words are needed to emphasise its After this, the third great building Hexham Church consisted of a new d transepts, but only the ruined frag- a nave. The canons did not succeed in a nave, most possibly through lack of d through the recurrent raids of the nd because the transepts provided accommodation for the parishioners. deal of money and effort had been spent ng the magnificent choir and transepts, ork done in other parts. A nave was spensable.

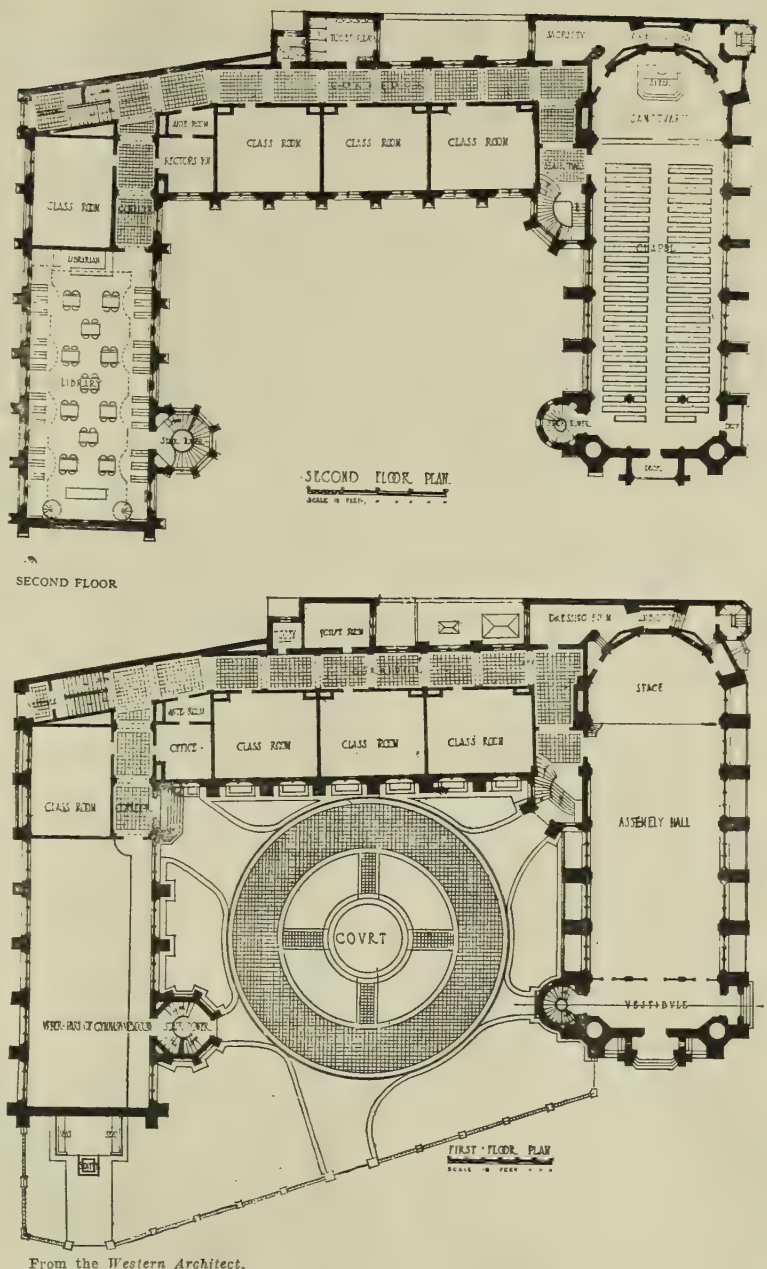
The Nave of 1908.

s in 1908, when the apses of Wilfrid's Norman churches were discovered, that authenticated nave of Hexham Church t, and—if our thesis is correct—the first nave at all.

briefly, is an account of the history of the urch of Hexham with special reference of its nave, based on a study of the affecting it, and also of the building Facts of cardinal importance in establish- history from these sources seem to be :— e effusiveness of Wilfrid's biographer, doubtless induced him to exaggerate. the time when Prior Richard wrote, ut 1150–1175, the church had been fter Wilfrid's buildings had been in or Ælred of Rievaulx, who died in eaks of it as having been in ruins, and floorless early in the twelfth Prior Richard was, therefore, not d with Wilfrid's church immediately. , moreover, in the spirit of a mediæval about a building which he wished to d concerning which he wanted to put he largest possible claims. He ampli- escription given by Eddius, and con- 'Among all others (*i.e.*, monasteries) hole of England, this one excelled in sign and in unparalleled beauty. In this side of the Alps, none such at could be discovered."*

e of the worthy prior's account is one ation. He cannot adequately express d splendour and intricacy of the build- rything concerning it and its author less than marvellous. Much, however, o Prior Richard's valuable information history of the priory church and its nctuary, we must not blind ourselves ure of his composition.

lius: "Neque enim ullam domum aliam montes talem ædificatam audivimus."



From the *Western Architect.*

Quigley Preparatory Seminary, Chicago.
Mr. Z. T. Davis, Architect.

(3) When the Chronicle of Lanercost was written, 1346, the choir and transepts, much as we have them to-day, had been standing for nearly a century and a half. In other words, when this chronicle was composed, the church had already been rebuilt twice.

(4) Whatever view we take of the chronicles, it would seem that one of the determining factors was the use of the church at each time of building. Wilfrid's church was built, so far as can be ascertained, as part of a monastery. The church at once became of cathedral rank. It also served the local population as a parish church. There is no reason to believe that this population was of any great size, cultured and artistic as the people were before the coming of the Danes. No sufficient reason has been brought forward for the comparatively huge nave that has been claimed for Wilfrid's church, a nave that is that of the Norman church.

The second church was built at a time when it was wanted primarily as a parish church, *i.e.*, when a nave would be needed to accommodate the laity as was usual.

When, however, the third church was built, the needs were for a church that was mainly monastic. In this building it was only natural that the canons would spend the best of their energies on their part of the buildings, especially as the transepts proved adequate for the people of this little town, whose population can never have been very great throughout these centuries. The canons, moreover, no doubt regarded the nave as a matter affecting very directly the people, for such was the tradition. They might, for instance, have quoted in this respect an order dated 1286 made by the Archbishop of York to the parishioners, telling them that it was their duty to keep the church, except the chancel, in repair. When we remember, in addition, that the funds of vigour and money of the canons were very limited, we can well appreciate the fact that they failed to build a nave, a failure acknowledged finally by the walling-up of the west tower arch.

(5) The reading of the architectural remains must be allowed its due importance. A certain diversity of opinions is only natural on a subject like this. The reading as done by Mr. C. C. Hodges supports the literal reading of the written authorities mentioned above, but it is here claimed that such an opinion is not supported by everyone; nor, it is claimed, will the ultimate decision of expert opinion fully endorse it. It is believed that the information to be derived from examination of the architectural remains is not only not inconsistent, but actually consonant, with the account given above of the history of Hexham Priory Church and its nave.

LEGAL SECTION

NOTES ON CURRENT CASES

Landlord's Liability in Relation to Flats.

THE recent decision of the Court of Appeal in the case Cockburn *v.* Smith (1924, 2 K.B. 119) is an important one to both landlords and tenants of flats. The plaintiff was the tenant of a flat on the top floor of a block of flats and the defendants were the landlords. Under the tenancy agreement certain obligations were imposed upon the tenant, and there was a clause relating to the landlord's obligation: " Subject to the tenant duly and punctually paying the said rent, and fulfilling all the agreements on her part herein contained, the landlords will keep the entrance hall, staircase, passages, and landings sufficiently lighted and in good repair . . ." There was also a further clause that the landlords should not be responsible for any losses or injuries arising from . . . the negligence or misfeasance of any of the landlord's servants.

In June, 1921, considerable signs of damp appeared in a bedroom, and when paying the rent the plaintiff drew the landlord's attention to this, but they took no steps to ascertain the cause. In the following October there was an escape of water from a gutter in the angle between the plaintiff's flat and the next block, which caused very serious damage to the wall of the dining-room. This was caused by the stop end of the gutter having become corroded and falling out, so that the water fell upon the wall of the dining-room. There was also a fresh outbreak of damp in the bedroom through a gutter having become stopped up. Attention was called to this by the plaintiff over the telephone and also by letter: the letter was not produced at the trial, but verbal evidence was given as to its contents.

The plaintiff remained in occupation, but towards the end of the year developed rheumatism, and in the following March her daughter also developed rheumatism. In January work was commenced on the roof and the gutter was replaced, but the gutter which caused the damp in the bedroom was not cleaned out until the end of the month.

The action was for damages, and the younger plaintiff, the daughter, " an infant," had been made a party.

The Judge in the Court below held that apart from contract it had never been held there was an absolute duty on the landlord to keep in repair, and in this case an obligation could not be implied, for, by the clause we have quoted above the landlord's duty was defined, and therefore the maxim " expressum facit cessare tacitum " applied. In case he was wrong in this finding, and the defendants were under an obligation to the elder plaintiff, the Judge held that the defendants had not taken reasonable care and assessed the damages at £205, but held that in no case could the daughter recover anything because of the decision in Cavalier *v.* Pope, 1906, A.C. 428 (*The Builder*, July 7, 1902). The appeal was only that of the elder plaintiff.

The Court of Appeal reversed the judgment of the Court below, and this question is of such importance we propose to consider the judgments delivered by the three Lords Justices separately.

Lord Justice Bankes was careful to point out that this was not the case of letting of a whole house where, without an express covenant or a statutory obligation to repair, the landlords would clearly be under no liability to repair any part of the premises, but that where a landlord retains part of the premises there is a line of authorities to show that he is under an obligation to take reasonable care that the parts of the premises in his occupation are not in such a condition as to cause damage to other parts demised. The Lord Justice cited three cases where this was implied, though not held, as in those cases no negligence was proved—Carstairs *v.* Taylor, L.R. 6, Ex. 217; Gill *v.* Edouin, 71 and 72 L.T.R. 762, 579; and Ross *v.* Fedden, L.R. 7, Q.B. 661), and then said that the point was definitely decided in Hargroves *v.* Hartopp (1905, 1 K.B. 472, *The Builder*, February 4, 1903), a case the authority of which had been recognised in Cavalier *v.* Pope (*ubi sup*) and in Fairman *v.* Perpetual Investment Building Society (1923 A.C. 428, *The Builder*, March 30, 1923).

Whether this obligation arises out of contract, or whether it is an instance of a duty imposed by law, the Lord Justice did not decide, treating it as immaterial, for there was the finding of negligence which it was impossible to question, for in October the respondents or their agents had notice of the state of the walls calling for immediate attention, and yet nothing was done until February. The Lord Justice said that counsel for the respondent had relied on the fact that the respondents had communicated with a builder, but mere communication is not sufficient; if the builder had taken the work in hand the employer may be excused on the principle of Blake *v.* Woolf (1898 2 Q.B 426), but that case has no application where the builder does nothing. But if the question arose out of contract the Lord Justice held that the finding of the Judge below, that the agreement excluded anything except the matters specially mentioned, on the principle of " expressum facit cessare tacitum," was wrong, for express agreements concerning matters demised or granted do not exclude tacit agreements concerning matters neither demised nor granted, and the roof in this case was neither demised nor granted.

Lord Justice Scrutton held that there was a liability on the landlord at common law. If from an artificial system for collecting water an escape had happened between two adjoining houses, the owner of the house on which the escape of water took place would have been liable under the principle laid down in Rylands *v.* Fletcher (L.R. 3 H.L. 330) for any damage caused. The Lord Justice then pointed out that there are exceptions which modify the rule in Rylands *v.* Fletcher, one of which is where the premises on which an artificial construction is erected, and the premises damaged by the escape of water are in one house, and the construction is erected for the use of both premises, in which case the occupier of the latter premises takes the ordinary risks of damage from escaping water (Gill *v.* Edouin *ubi sup* and Ross *v.* Fedden *ubi sup*), but in this class of case the person who maintains the artificial construction is liable for the consequences of escaping water if, after notice of a defect, he omits to use reasonable care to repair it (Ross *v.* Fedden and Hargroves *v.* Hartopp *ubi sup*).

It is important to note that the Lord Justice in the course of his judgment then pointed out, as we did in our note to Fairman *v.* Perpetual Investment Building Society (March 30, 1923), that since Miller *v.* Handcock (1893 2 Q.B. 177) had been overruled the decision in Hart *v.* Rogers (1916 1 K.B. 646, *The Builder*, March 3, 1916) that there is an absolute duty on the landlord in such cases, and not merely a duty to take reasonable care, is no longer law.

Lord Justice Scrutton reserved the question whether there was a contractual liability arising out of the relation of landlord and tenant.

Lord Justice Sargant also did not decide whether the landlord's duty is founded on some implied covenant or obligation in the contract of tenancy, or from the circumstances of the landlord retaining physical possession of the roof, in law, but adopting the view that was an implied contract he held, as had Justice Bankes, that the Judge in the Court was wrong in holding that expressed st tions as to the part demised displaced th plied contract relating to the portion re by the landlord, and he held Hargro Hartopp to be a direct authority in fav the plaintiff in this case.

The decision is of extreme importance has disposed of the difficulty we have referred to in these pages of recor Higgins *v.* Miller and Hart *v.* Rogers other decided cases.

In Fairman's case the plaintiff wa sister-in-law of the tenant and, therefore an invitee to whom the landlord would different degree of care, being a stranger contract, but in our note on that case w sidered the effect of the decision of the of Lords as it would bear upon a tenan we pointed out that the law seemed co defined in Dunster *v.* Hollis (1918 2 1143, *The Builder*, February 21, 1919), be that where a landlord lets portion building to a tenant, but retains cont material portions himself, he must take r able care to keep the portions remaining control in repair, an obligation whi implied.

That seems to be the exact effect judgments we have been considering, all such cases provided that notice of the is given to the landlord.

Rent Restriction: Landlord Liable for Repair.

The case Bourne *v.* Litton, which we noted April 18, is now fully reported Law Reports (1924 2 K.B. 10), and raises points of considerable importan landlords we revert to it. There were complicated features in the case, and notices to increase the rent had been but from the report of the case available in the Court of Appeal, it a that the case may simply be treated as the point: What is the right procedure landlord to adopt when he is liable fo only and not the whole of the repairs?

By section 2 subsection (1) (*d*) of th Act, 1920, it is provided (in addition t amounts allowed as increases by the s that (i) where the landlord is resp for the whole of the repairs an amount ceeding 25 per cent. of the net rent r claimed or (ii) where the landlord is sible for part, and not the whole, of the such lesser amount as may be agreed may, on the application of the landlord tenant be determined by the County C be fair and reasonable, having regard liability.

The plaintiff, the landlord, was cl possession of the house on the ground t rent was in arrear by £33 5s., and profits at the rate of £133 per annum defendant, the tenant, had originally tenant on June 8, 1917, for one year at of £120, with an option to contin tenancy for three years from Septem 1918 at a rental of £105. This option h exercised and the tenancy extended tember 29, 1922. The plaintiff had pu the house by contract dated July 27, 19 the property had been duly conveyed on August 8, 1922. After the plaintiff tract had purchased the house he ha certain notices to increase the rent. only notice material to the point we sidering was a notice of August 24 claiming 15 per cent. increase under s subsection (1) (*c*), which was not in q and a further increase of 15 per cen subsection (1) (*d*) as to which the pc raised that, as the landlord was not res for the whole of the repairs, this increa

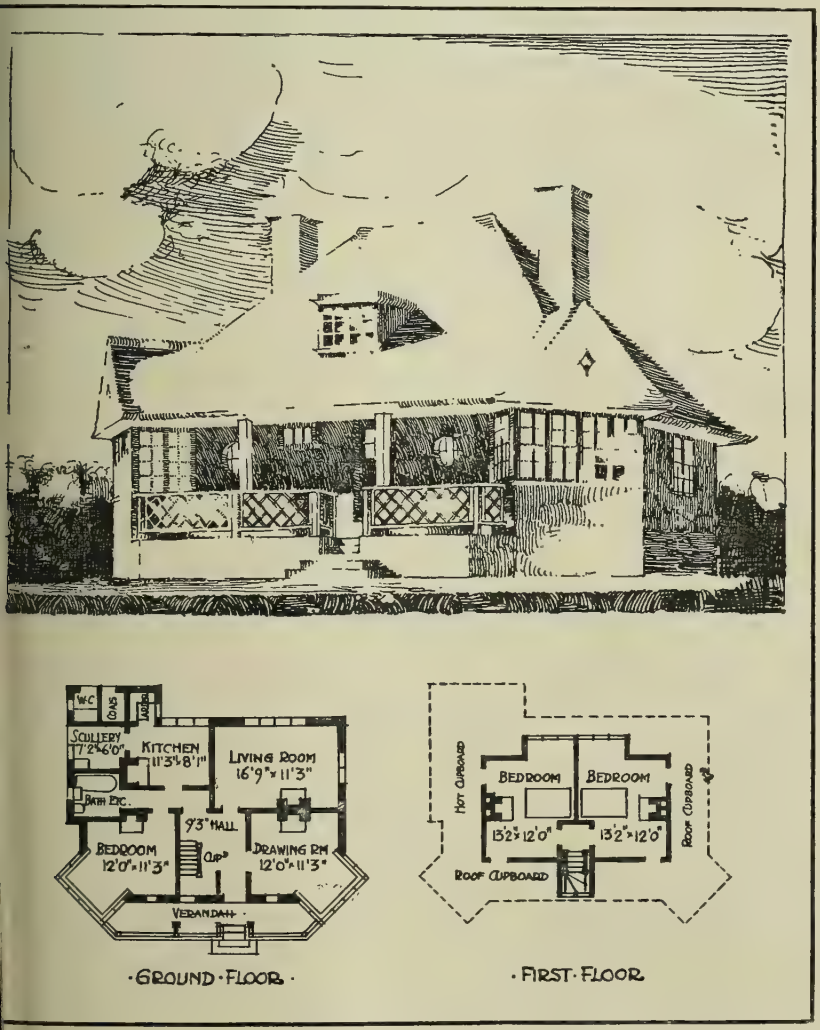
r be agreed or submitted to the County t for assessment. In the case it attempted to make out that certain corredence amounted to agreement, but the rity of the Court of Appeal did not take view, and it must also be noted that the t of Appeal treated the case as one where tenant undertook certain repairs and the ord the rest, but that the extent and proon of the repairs was not entered into, the case only indicates the proper pro-re to be adopted where under subsection (*d*) the landlord is responsible for only of the repairs.

e majority of the Court of Appeal held the action failed because the notice of ine in question was bad because, under on 3 subsection (2) no increase is due or erable until the expiry of a valid notice e form given in the Act, and that form r heading (*d*) in the schedule requires sum claimed to be set out with particu- and, therefore, the amount cannot be in unless either a sum has been agreed, ttled by the County Court in accordance subsection (1) (*d*), and the note contained e form in the schedule.

rd Justice Sargant is reported as having red the decision arrived at by the majority e Court because, in his opinion, it places ddditional and illogical obstacle in the way landlord seeking to make a perfectly just ion to rent in respect of the increased cost of repairs. The decision places landlords in a difficult position in several ways. If it stands good since the Act of 1923, then, however small may be the repair undertaken by the tenant, the procedure indicated would have to be followed before an increase of rent could be claimed, either the amount be agreed or determined by the County Court. If the question is determined by the County Court, probably the decision is final under section 2 subsection (6).

Lord Justice Bankes reserved the question whether having regard to this latter subsection the High Court had any jurisdiction to entertain the question at all. But it is still more important to observe that Lord Justice Scrutton pointed out that this case was being decided under the Act of 1920, but the powers given under the Rent Act, 1923, in section 6 to amend notices of increase, and in section 11 to determine the increase of rent, permitted under the Rent Act, 1920, or the Act of 1923, might lead to a different result.

Therefore it appears that in such cases where the landlord is only liable for part of the repairs he must either take the course indicated in this case, agree the amount, or have it settled by the County Court before giving the statutory notice of increase, or under section 11 of the Act of 1923 apply to the County Court summarily to have the permitted increase determined.



House at Brentwood.

MR. HUBERT V. C. CURTIS, Architect.

esigning this house the "bungalow" type dopted in preference to a loftier building g regard to its elevated site and the ne of the adjoining houses. Built of work, most of the external walls have a cavity, and are plastered and colourd outside above the plinth, which is tarred. The roof is covered with boards, felt and large red clayburnt tiles. Window frames and sashes are of wood; verandah posts and balustrading are of local oak. The site is on the Brook-street Hill Estate at Brentwood. Mr. Hubert V. C. Curtis, of 27, Essex-street, W.C., is the architect.]

THE LAW AND PRACTICE OF TOWN PLANNING*

THE authors of this work, in the preface, point out that town planning is not only from a legislative view a new subject, but that so far as the making of schemes is concerned it is still an adolescent one. All the schemes made up to now and every scheme about to be made contain special provisions, but experience has enabled the central authority to frame model clauses which were issued last February, which, in future, will no doubt be consulted in the framing of future schemes, and to a large extent be incorporated in them, although they need not be slavishly followed, and these model clauses, together with the model forms and other matter, will be found in the appendices to this volume. The authors also point out in their preface that town planning is a subject which is of national importance in the eyes of the Legislature, as it will be practically compulsory within six years of January 1, 1923, for the councils of all boroughs, and of all other urban districts with populations exceeding 20,000, to submit schemes in respect of all land within their areas to which town-planning schemes may be made.

This volume, besides the tables of statutes, table of cases, and an index occupying some 40 pages, consists with the appendices of 267 very clearly printed pages of text, and there is a chapter dealing with the compulsory acquisition of land, which the authors state they have treated at some length because, although this is applicable to other objects than town planning, there are many new provisions respecting the procedure to be followed in the acquisition of land by local authorities which appear not to have been exhaustively dealt with in cognate works.

Authors treating upon the subjects of housing and town planning are severely handicapped by the complexity of the legislation, which it will be remembered Sir Kingsley Wood characterised as "voluminous and almost chaotic," and although so far as town planning is concerned the statutes, as the authors observe, do not occupy a great space, the subject is one of considerable magnitude, because the Minister of Health and the local authorities have been left to formulate the schemes. In judging of works dealing with this subject, it has to be borne in mind that the method of legislation renders a great number of cross references unavoidable, and a straightforward narrative cannot be expected, but so far as we have examined the text the authors appear to have dealt with a complex subject as lucidly as possible, and the table of cases will show that wherever it has been possible authority is given for the propositions put forward, but as is pointed out in the preface the subject matter being to a large extent "virgin soil," on some points they have had to express their own opinions.

We notice it is stated in Chapter XI, on the "Compulsory Submission of Schemes before 1929," that the regulations to be made by the Minister of Health under section 46 of the Town-Planning Act, 1919, have not yet been made, and it is suggested that, in order to enable the councils affected to perform their duty within the prescribed period, their issue should not long be delayed, since the Ministry of Health (Town Planning) Regulations, 1921, which deal with voluntary resolutions seem hardly applicable to these compulsory schemes.

The work appears to us to have been carefully done, and this volume should prove an extremely serviceable handbook.

* "The Law and Practice of Town Planning." By Sydney Davey, M.A., LL.B. (Barrister-at-Law), and Francis C. Minshull, L.L.M. (Chief Assistant Solicitor to the Corporation of Birmingham). (London: Butterworth & Co., 1923). 25s. net.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

**** *We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

The Possible House.

SIR,—One hears a great deal at different times about the practicability of erecting smaller houses to suit the artisan, or bungalows adaptable for rural districts, without the utilisation of bricks, except perhaps for the chimneys or floors.

It is said that houses of a "standard type" are supplied by some London and Liverpool firm, and, if so, does the Ministry of Health give their support to them, or does the Ministry allow the local authority full powers as to the construction?

Would not it be practicable, by the use of some waterproofed lining material, to do away with the ordinary lathing and plastering?

The material might be light, but there might be a necessity for adopting a substance that is proof from decay, such as wet or dry-rot, and it seems desirable that the material should be vermin-proof.

The floors, too, if made of concrete, would require some durable covering, and for sake of appearance should have a little warmth or mellowness about them. Can this be obtained?

It may be that some firm undertaking this kind of work would furnish one with particulars, and indicate if floors were of brick or tiles, and if there exists some effective material for laying thereon, to overcome any unevenness of surface. The expense of old "pre-war" ways seems beyond many people's purses.

One wishes to get the walls to be warm, at least to the touch, and not subject to the nuisance of "sweating"—something antiseptic and hygienic.

One, by having data before building, may save a client much disappointment, and I should appreciate news from those who have such experience at their finger-ends and special knowledge.

I think the subject is one that concerns a rather large class who require a healthy but a moderately inexpensive home to-day.

EDWARD A. JOLLYE, A.R.I.B.A

Artificial Daylight.

[REPLY TO DESIGNER.]

SIR,—Artificial daylight may be produced by means of the Dufton-Gardiner lamp, in which the light from the arc lamp is filtered through special tinted glass, or by the Sheringham daylight system in which the light is either reflected from a specially coloured surface or transmitted through tinted glass.

Either system has been found very satisfactory.

"K. W."

Drainage.

[REPLY TO MR. J. E. TUKE.]

SIR,—It would be foolish indeed to cross swords with such an authority as Mr. Tuke upon his own subject of sewage disposal, and I do not propose to do so, particularly as the statements in his letter in your columns were so patently correct.

I should, however, be glad of an opportunity of making myself a little clearer, and at the same time expressing my gratitude to Mr. Tuke for exposing the ambiguity of my statements, as I can now see they might very well be read.

In referring to a septic tank system I intended to refer to the whole system of septic tank, filter bed and disposal of effluent; the disposal of effluent will be practically pure from a properly designed system, though not the effluent from the septic tank itself. I am well aware that the latter effluent is merely brought to a state in which aerobic bacterial action may take place in the filter beds, and is not by any means pure.

Finally, I laid stress upon the construction of the septic tank because I have found from experience that the average builder fails here, more than anywhere else, when he professes to construct such a system. He generally makes this chamber far too big, and rarely provides the dip pipes, so that the sewage is continually flopping on the surface, preventing the formation of the scum, which means that bacterial action is not set up, and an effluent is discharged that is quite unready for the filter beds. I think that when the proper construction of this chamber is assured more than half the battle is won, whatever the scientific relative importance of the parts of the system may be.

"SANITARY."

Scaling of Roof Tiles.

SIR,—I have recently been called in to inspect a roof in which the tiles, of a hard machine-made type, are scaling off at the surface in an alarming manner. At present, however, I can find no signs of the weather coming through, though I was there during a very wet spell.

Would any of your readers advise me whether such a roof is likely to remain weather-tight, or, if not, whether there is an inexpensive treatment by which the trouble may be arrested in time?

"ARCHITECT."

Old Oak Timbers.

[REPLY TO MR. T. M. COUZENS.]

SIR,—In answer to this inquiry in your issue of August 22, the best method in my experience is to give the oak a thick coat of fresh lime put on in a paste form with a trowel. This is to obtain an old silvery tone. If to obtain a dark brown tone give the oak a thick coat of fresh Portland cement in paste form. Whichever is done, leave for forty-eight hours, and then carefully scrape off and brush down with a stiff brush. You can also obtain a very nice rich brown by giving the oak two coats of double strength ammonia. If, however, you have any sappy places you can generally touch them up with a little of Mander's dark oak Matsine and turpentine, after applying the ammonia.

H. A. CUMMINS.

SIR,—A solution of sulphate of iron $\frac{1}{8}$ to $\frac{1}{4}$ oz. to 1 gallon of water, applied with a clean brush, will darken the oak, the action being on the tannin contained in the oak. It is advisable to try the strength on a spare piece of oak and regulate to the required depth. The blue tint will darken down in a few days as ink dries black. A coating of raw linseed oil fourteen days after staining will bring out the brown of the oak if desired. A limewash coating instead of the oil (the lime to be subsequently brushed off) will make for an antique finish.

"W. C. R."

Distemper and Asphalte.

SIR,—We have recently covered a flat roof with mastic asphalte and during the hot weather the lantern lights were coated with a distemper as used for greenhouses.

Since the rains of August the distemper has washed off and the drippings have caused small blisters in the asphalte. Where some was spilt when being applied there is a similar blister.

Can you say, please, if this should have happened, and how it can be prevented in the future?

"CITY."

Claim for Subsidy.

SIR,—We undertook a direct contract for a firm of land agents to erect a dwelling house at £550, and have reason to believe that they claim the Government subsidy on same. however, are led to believe that the subsid due to us as the builders and contract We wrote the Ministry of Health some e days back, but have received no reply to d and should now greatly value your estee opinion as to our position.

"F. G. C."

[The Housing Act stipulates that claims subsidy must be made before building c mences, and that subject to certain condit having been complied with the claimant be paid on completion.

They should be "the builders" of the ho but the term does not necessarily signify contractors, but the person, firm or body causes the house to be built and finances operation. In this case the employers u an ordinary building contract would be q justified in making application for the subs and receiving the preliminary certifica which entitle them to the subsidy on the completion of the buildings (and this sub will only be paid to the holder of this certific which cannot be transferred, except by pri arrangement, for which provision may h been made.

If, however, as appears to be the case h a contract has been entered into under a understanding, it would be well to appro the employers with a view to rectification withdrawal from the contract. If this is granted it would be well to seek legal advic to whether the terms of the contract can read to imply the receipt of the subsidy amo by the contractors.

In any case it must be understood that mere fact of being the contractors does carry with it the right to the subsidy as fa the local authorities are concerned.]

Laying of Bricks.

[REPLY TO MR. V. J. WENNING.]

SIR,—Does your correspondent, Mr. V. Wenning, appreciate the fact that bricks nominally 9 in. × 4½ × 3 in., and when laid require two rows (disregarding bond), laid on edge would require THREE ROWS? A example, a wall 9 ft. long, 9 in. thick, 21 ft. high, would require the following num of bricks: Laid flat—12 (in 9 ft. length) (thickness of wall) ×84 (number of course 2,016 bricks. Laid on edge—12 × 3 × 5 2,016 bricks. Therefore there would be saving of either material or labour, if laid edge, as against laid flat.

There might be a small saving on poin externally. Doubtless a contractor or bi maker would give your correspondent scientific reason for laying bricks, as they h been laid for centuries.

A. E. FLOWE

SIR,—The inquiry appearing in your issu August 22, page 291, under the heading, "I ing of Bricks," reminds me that, whilst t my holidays at Beer, Devon, last July, I a precisely similar query put to me by a l builder, who was putting up six-roomed cott in pairs, which had been passed by the l authority (the Axminster Rural District Cou as qualifying for the subsidy. Upon going the matter, as a kind of busman's holi on my part, we came to the same conclu as stated by your inquirer, with regard to saving which could be effected by laying bricks on edge and with a 3 in. cavity.

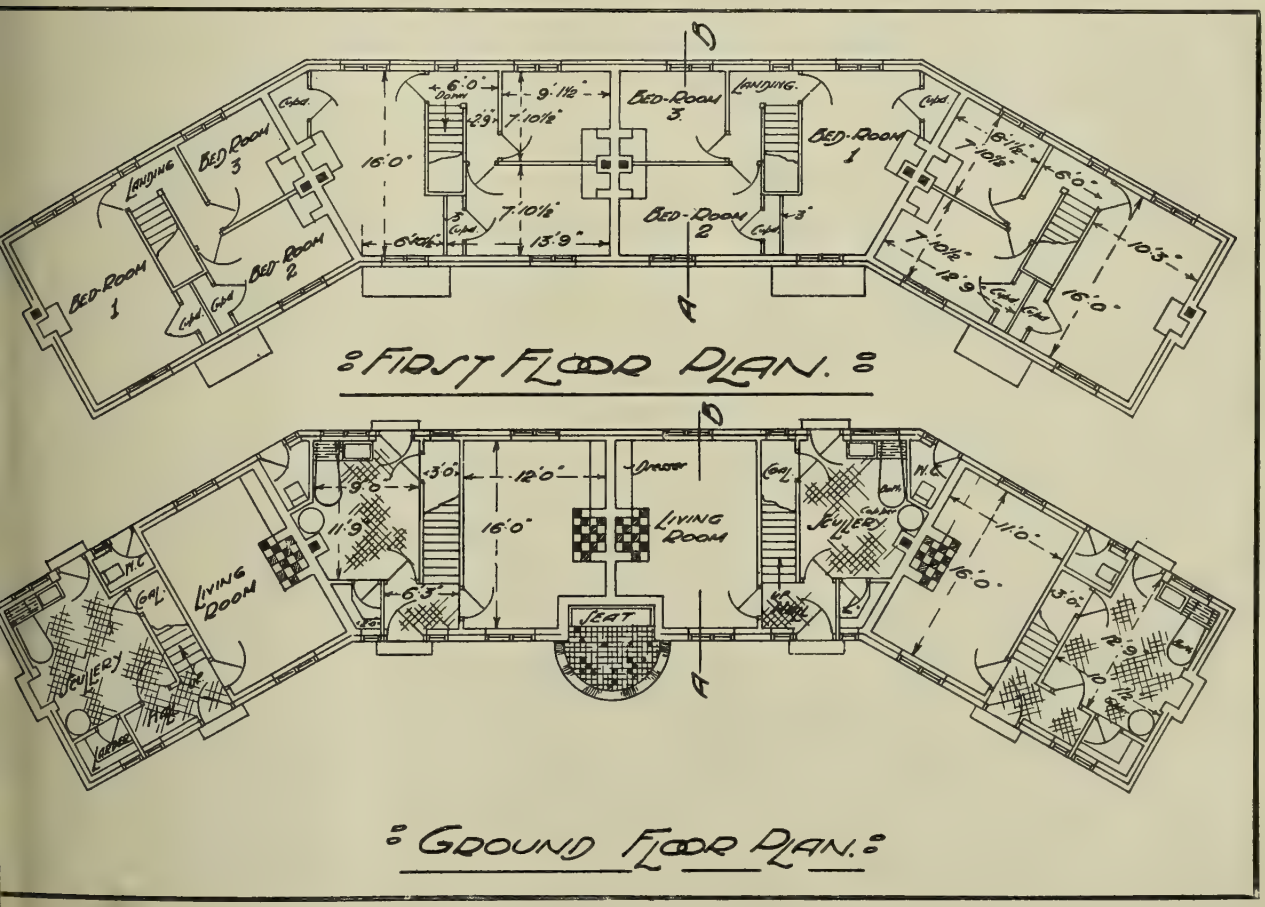
But the Surveyor to the Council decline accept outer or even party walls constru in that way, on the grounds that it was n recognised method of construction, and unknown to him. Doubtless the official acting within his rights and powers.

Nevertheless, the method was mentione evidence before the Departmental Comm appointed by the President of the then L Government Board, and was referred to in Report, as a method of cheapening the co erection.

Therefore, I echo your inquirer's "(not?"

G. E. KNIGHT, R.E., F.S





Kitchener Memorial Homes, Chatham.

Mr. R. L. Honey, F.S.I., M.S.A.. Borough Engineer and Surveyor (Honorary Architect to the Trustees.). (*See p.* 316.)

THE BUILDING TRADE

ESTIMATING FOR SMALL BUILDERS

By J. H. BARNS, F.I.O.B.

PAINTING.

The cost of painting materials per yard super will depend in a measure upon the density of the paint, as a very thin paint containing very little body or white lead would cover a very much larger area than a thicker paint with greater properties of opacity or obliteration. Thin paint would not sufficiently blot out the colour of the undercoats.

It is sometimes stated that each coat of paint should be of a different and distinctive colour, so that the number of coats may be checked. This may give a very diverse effect.

The cost of labour to painting will very largely depend upon the quality of the work to be done, and may vary from 3d. to 9d. per yard super for brush work.

The difference in the cost is largely caused by greater time which may be spent in rubbing down and preparing the surfaces for the succeeding coats.

Paint spraying by air pressure is hardly suitable for general builders' work.

The price of painting materials fluctuates.

OILS AND COLOURS, &c.

The price of turpentine is now high and would be very much higher were it not for the large quantity of turpentine substitutes used. As can be seen from the list of prices appended there are several grades of American spirits of turpentine. There is no point in paying a high price for American spirits of turpentine unless you can get a certificate of distillation with your purchase. The spirit should comply with the Government specification.

The value of turpentine is as a solvent and a thinner of paint. The spirits usually contain a small percentage of resinous substance. When used in paint the spirit evaporates and the resinous substance forms a film, and this may not dry quickly, so that the surface may be dry and the undercoat wet, thus creating a condition likely to cause blisters. Turpentine substitutes have now been on the market for about thirty years, and they can fairly claim to have established their position, and were largely used by the Government and others during the war. Turpentine substitute is usually a white spirit with a petroleum base. The odour seems to depend in a measure upon where the petroleum comes from. It is said that a Roumanian oil gives off the least smell, but some of the American product gives off a strong smell.

Substitutes can be prepared to suit any specification or similar specification to genuine turpentine, as to flash point, distillation and percentages of residue of hydro carbon. There is still a prejudice in some quarters against the use of substitutes, but the small builder would be well advised to try some of the substitutes advertised in *The Builder* upon unimportant work, carefully watch the result, and form his opinion therefrom. The prices for the best substitutes are about half the cost of genuine American spirits of turpentine. Linseed oil substitute has usually a soapy base, and being a purely chemical product can hardly be recommended.

GENUINE STACK MADE WHITE LEAD GROUND IN GENUINE REFINED LINSEED OIL.

	Per cwt.
1 Cwt. Iron Kegs (Kegs free) ..	58/3
56 lb. „ „ ..	58/9
28 lb. „ „ ..	59/9
14 lb. „ „ ..	62/–
7 lb. „ „ ..	65/6

Larger quantities at slightly lower rates.

For quantities less than 5 cwt. and over 1 cwt., 2/– cwt. extra. 1 cwt. and under, 5s. cwt. extra over above prices.

WHITE LEAD PAINT MANUFACTURED FROM GENUINE WHITE LEAD, GENUINE PALE LINSEED OIL, AND GENUINE AMERICAN TURPENTINE, AND BEST PATENT DRYERS.

	Per cwt.
In 1 cwt. drums	75/6
28 lb. tins	80/–
14 lb. „	81/6
7 lb. „	83/–
4 lb. „	84/–
2 lb. „	87/6
1 lb. „	93/–

For quantities less than 5 cwt. and over 1 cwt., 2s. cwt. extra. One cwt. and under. 5s. cwt. extra over above prices.

Cheap white paint can be bought at prices ranging from 45s. to 70s. per cwt.

	Gallon.
Genuine American Turpentine ..	7/–
No. 1 Spirits Guaranteed 75 per cent. genuine American Turpentine	6/2
No. 2 Spirits, guaranteed 50 per cent genuine American Turpentine	5/2
Turpentine Substitute (White Spirit)	2/– to 2/3
"Decco" Turps	3/6 to 4/–
Genuine Linseed Oil	3/9
Boiled Linseed Oil	4/–
	Cwt.
Genuine Linseed Oil Putty ..	16/6
Dryers	28/– to 42/–
Zinc White Ground in Oil ..	38/– to 64/–

PAINTS, STAINERS, &c., GROUND IN OIL AND READY FOR USE.

BLACKS.

	Per Cwt.
Painter's Black	30/– to 56/–
Drop Black	64/– to 90/–

BLUES.

Celestial Blue	36/– to 84/–
Navy	80/–
	Per lb.
Prussian Blue	9d. to 2/9

BROWNS.

	Per Cwt.
Sienna Raw	62/– to 82/–
Sienna, Burnt	64/– to 85/–
Spanish Brown	34/– to 44/–
Umber, English	38/– to 60/–
Umber, Turkey Raw	39/– to 72/–
Umber, Turkey Burnt	39/– to 74/–

GREENS.

Brunswick	40/– to 70/–
Emerald Tinted	60/– to 78/–
	Per lb.
Emerald	2/–

REDS.

	Per Cwt.
Indian	48/– to 120/–
Oxide Metallic	35/– to 60/–
Venetian	35/– to 80/–
Turkey	70/–

YELLOWS.

Chrome	55/– to 130/–
Golden Ochre	75/–
Oxford Ochre	52/6 to 64/–
Yellow Ochre	38/– to 54/–

If packed in 7 lb. tins, about 10s. per cwt. extra.

The cost of these materials will depend on the power of the stainers, &c.

VARNISH.

Varnish is manufactured from turpentine or turpentine substitute, say, 35 per cent.; and the remainder in equal parts of linseed oil and shellac or copal gum. This will give you some idea of the cost.

The dirt or dross in the gum takes a long t to settle, so it is usual to let varnish ma some time before use.

	Gal
Pale Oak Varnish, for inside or outside use ..	from 1
Church Oak Varnish ..	„ 1
Fine Pale Copal Varnish ..	„ 1
Special Pale Elastic French Oil Varnish ..	„ 2
Fine Elastic Body Varnish ..	„ 1
Super do. ..	„ 2
Flat Eggshell Gloss ..	„ 1
Crystal Paper Varnish ..	„ 1
Terebine .. from 10/– to	1
Gold Size .. „ 12/– „	1
Brunswick Black .. from	1
do., to stand heat .. „	1
Berlin Black .. „	1
do., Eggshell Gloss .. „	1
Knotting .. „	1
Pale do. .. „	2
Special White do. .. „	2
Enamels, either White or Coloured from 20/– to	3
Gold Leaf, English, 3¼ in. .. per 1,000,	7
do., do., transferred „ „	7
do., Foreign, 3¼ in. .. „ „	5
do., do., transferred „ „	6

The kegs or cans containing the materi mentioned above are usually charged for a credited on their return.

—Yards super. knotting, stopping, primi and painting three oils, in addition to pl surfaces.

Knotting is the first operation, and usua applied in the form of shellac varnish, a the quantity required will of course depend the number of knots to be covered.

Priming is the first coat of paint and, togetl with the three oils mentioned, would ma four coats in all.

The stopping is done after the priming co as otherwise the oil in the putty would absorbed in the wood and the stopping beco loose.

The quantity of materials required will depe upon the density or otherwise of the paint u as mentioned above.

The following is a fair average of the paint materials required :—

To cover 100 yds. super, one coat—

16 lbs. Ground White Lead, 70/– cwt. ..	10 0
½ Gallon Linseed Oil, 3/9 ..	1 11
¼ Gallon Turpentine, 7/– ..	1 9
¼ lb. Dryers, say ..	0 2
Glass Paper ..	0 6
	14 4

The cost of stainers which may be required not separately included, as they would proba take the place of White Lead at a cost depend upon the colour chosen.

Common colours are about the same price white lead, except the dark colours, which usually cheaper.

The quantity of white lead used may v from 11 lbs. to 17 lbs. per 100 yds. su of surface covered, thus priming may take 15 first coat, 19 lbs. second coat, 14 lbs., and so with a probable average of 16 lbs. weigh

Very few persons will be found to agree these quantities, and it is as well for the s builder to keep a record of the material u on each job, and work out for himself the aver quantity of material required per 100 yds.

Example.

Per 100 yds. super. painting as described ab

Knotting.

½ pt. Knotting ..	£0 1
5 hrs. Painter, 1/7 ..	0 7

Stopping.

5 lbs. Putty ..	0 0
Labour, 7 hrs. Painter, 1/7 ..	0 11

Priming.

als (see above)	0	14	6
r, 17 hrs., 1/7 (see above)	1	6	11
oat materials	0	14	6
r, 18 hrs.	1	8	6
coat materials	0	14	6
r, 17 hrs.	1	6	11
coat materials	0	14	6
r, 19 hrs.	1	9	3
ushes, cost, say, 1d. to 2d.			
hr (71 hrs. at 1½d.).....	0	8	10
eing total mentioned above)			
ordinary plant, say, 1d. yd.	0	8	4
	£10	8	5

= 2s. 1d. yd.

harge and Profi ,
er cent ..... 4d. yd.

Total per yd. 2s. 5d.

ost will be about the same for either
or exterior painting.
k has to be done off ladders, it would
n 15 per cent. to 40 per cent. extra for
nd in addition the cost of scaffolding
e added
gs, say, 9 in. to 11 in. girt, would cost
per cent. extra for labour.
rave mouldings, pipes, &c., would cost
0 per cent. extra for labour.
h cases, the percentage stated is over
es given for broad surfaces.
ames or door frames.—These could pro-
supered, taking the length and girt,
d on the lines given above for narrow
or they could be numbered and priced
somewhat as follows :—

Labour and Materials.

8 ft. super. .....5d. per coat.
6 ft. and under 25 ft. .. 9d. per coat.
25 ft. ..... 11d. per coat.
nes have mullion or transomes, add
o the above.

Sash-squares.

1 ft. super. ..... 9d. per coat, per doz.
1 ft. and under
super. ..... 11d. per coat, per doz.

ATER SUPPLIES

L.C.C. School of Building, Brixton,
Sir Alexander Houston, K.B.E.,
etropolitan Water Board, delivered a
n "Water Supplies." The lecturer
roduced by the Chairman of the
s of the School, Mr. H. D. Searles-
.R.I.B.A.

course of his remarks the lecturer
er was constantly evaporating from
n to form clouds from which came
, and without rain or snow there
e no rivers, lakes, or wells. The
infall in London was only about 25
ut at Seathwaite in Cumberland it
to about 130 inches. Glasgow was
from Loch Katrine, a wonderfully
pure water supply, and in point of
ne of the gems of the whole world.
s rivers, the most wonderful source of
pply in the world was the Thames.
elded 150 million gallons a day to
ondon.

eepest well was in Queensland; it
ly a mile in depth, say, 36 times as
Nelson's Monument was high.

ssential need for pure water was
the most terrible diseases were
by impure water. Cholera was
em, and in India from 1896-1909 five
lf million deaths were due to this
In England the last cholera epidemic
1865, and it caused 14,000 deaths.
ever was another water-borne disease
significance. If they had pure water,
food supplies, they need have no
ntracting these or kindred diseases.
rd to the antiquity of waterworks,
e ruins of hydraulic works in Egypt
d at least 2,000 years before Christ.
the great Roman aqueducts dated
126 to 312 years before Christ, and
11 to 61 miles in length. Those great works of antiquity were constructed without the aid of steam, electricity, or explosives—truly a wonderful example of human ingenuity and perseverance. In regard to more recent times, all Londoners owed a tribute to the memory of that great citizen, Sir Hugh Myddleton, who brought the New River to London over 300 years ago.

Speaking of the London water supply, the lecturer said, if they started to walk at the rate of three miles an hour along their miles of water-pipes, it would take them three months of continuous walking to complete their journey. There was enough water in their gigantic storage reservoirs to give the whole world a drink of a gallon of water per person for seven days. Further, their daily supply was sufficient to give every man, woman, and child in Great Britain a daily supply of six gallons per head.

Dealing with the question of purifying water, he thought pride of place ought to be given to the slow filtration method practised by the old London water companies. By this process water was purified by filtering it through about three feet of fine sand at the exceedingly slow rate of less than two gallons per square foot per hour. Literally, the water crept through the sand so slowly that all the impurities were satisfactorily removed. Chlorination as a means of purifying water was first used in 1905 in fighting a serious typhoid epidemic. In the Great War chlorine was used most successfully by Horrocks and his colleagues in purifying the water for the troops. In the United States the great majority of water supplies were chlorinated, and the death-rate from typhoid fever has been reduced to a remarkable extent.

In regard to the romance of water supply, concluded Sir Alexander, if they turned on a tap, the water flowed, but they could not see the little army of men working in their interests; they could not hear the hum of the mighty engines contributing to their comfort. Perhaps the water came from a deep well; it might be sweating through the pores of rock of bygone ages. Possibly it came from the moorlands; was it a frolic of the imagination that it carried with it some of the sweetness of their beloved uplands and mountains? The eagle, the ptarmigan, the grouse, the curlew, and the plover, the speckled trout, and the glory of purple heather—those were some of the things that leaped to the imagination. Their water-supply came from rivers—but what rivers? The New River of immortal fame; the Lee, carrying with it the undying memory of Izaak Walton, the most beloved of all anglers; the Thames, linking them with the commerce of the wide world, wending its tortuous way to the sea through scenes of unsurpassable beauty and speaking of historical associations of amazing interest and importance.

On the motion of Miss P. Fawcett, Assistant Education Officer of the London County Council, seconded by Mr. A. R. Sage, M.B.E., the Principal of the School, a vote of thanks was accorded to Sir Alexander Houston.

Building Contracts and Councillors.

Members of Bath firms which have been converted into companies, whose members are also members of the City Council, have decided that no further orders are to be executed for the Town Clerk's Department. This decision was arrived at in consequence of the recent case at Hull, when it was decided that directors of companies contracting for Corporations were disqualified from office on their local councils.

New Dock at Bromborough.

Tenders have been invited by Messrs. Lever Bros., Ltd., for the construction of the company's new dock at Bromborough Pool, for which they obtained Parliamentary sanction some time ago. According to the estimate given during the Parliamentary proceedings, the constructional work will cost about £700,000 but to this must be added the cost of buildings and machinery, bringing the total amount up to approximately £1,000,000. It is estimated the work will take three years to complete.

SETTLEMENT OF THE BUILDING DISPUTE

After a combined strike and lock-out of seven weeks' duration, the employers and operatives' representatives agreed on Friday last week to the following terms of settlement :—

Wages.—That the wages of all craftsmen and labourers be advanced one-halfpenny per hour under clause 14 (*c*) of Agreement II of the Constitution, such increased rate to be stabilised until February 1, 1926. The said rate to come into operation immediately on resumption of work, except as hereinafter provided :—Towns which have received one penny and upwards by upgrading since September 26, 1923, to receive the above advance of one-halfpenny as and from October 1, 1924.

Regrading Applications.—Applications for regrading which are ordinarily due for October, 1924, shall be suspended until October, 1925, Applications due to be heard for July statutory meeting, 1924, to be dealt with.

Hours of Labour.—That the working hours shall be dealt with forthwith as outlined in circular issued on June 16, 1924 (attached hereto)* But in any event (other than in those localities that have agreed to vary the hours by mutual consent under the terms of the constitution) the summer working hours shall be 46½ per week as and from the commencement of official summer time, 1925.

Time Lost.—A joint committee of 12 members to be appointed by the employers and a similar number by the operatives be set up to consider same. The following to be the terms of reference :—

"To inquire into the causes and circumstances of the incidence of time lost through inclement weather in the building industry and to report on the facts in connection therewith, together with such recommendations as the committee deem desirable in regard to same. Such inquiry to be held at an early date and endeavour to report within six months from date of this agreement."

London Position.—That the position of London in regard to the operatives' demand be made the subject of local inquiry and negotiation on its merits, with a view of reaching an agreed solution, subject to the approval of the National Wages and Conditions Council.

Liverpool.—The Liverpool, &c., operatives to agree that they will accept agreed national machinery for fixing wages and conditions if and when accepted by both national bodies after it has been submitted to a national vote of both sides, subject to the following :—

(1) A local agreement to be binding until December 1, 1925.

(2) Wages and Conditions (except Rules 14 and 15, which are to be eliminated) to be the same as prior to the dispute until December 1, 1925, but no alteration to take place in wages and tool money until February 1, 1926, in the event of national machinery not being in existence on December 1, 1925, a local agreement to continue until such machinery is set up.

(3) All wages in Liverpool, &c., to be the same as other Grade A towns as and from February 1, 1926.

(4) All national rules and conditions (other than wages) to be operative in Liverpool, &c., as and from December 1, 1925.

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* [The circular of June 16, referred to in the paragraph above, "Hours of Labour," contains the following clause :—

It is necessary that the disagreements with regard to the summer working hours should be settled without further delay. The joint negotiating committee therefore requests that where there are differences still outstanding the local employers and operatives meet within seven days to consider same. Failing agreement, Clause 1 of the National Working Rule Agreement as to summer hours shall become operative.]

Consequential Alterations to National Wages and Conditions Machinery.—Pursuant to the terms of Article 6 of this Agreement, and dealing with the consequential amendments, it shall be an instruction that such alterations or modifications shall aim at giving greater power to the joint regional wages committees to deal with such matters as are capable of regional settlement, subject to the approval of the National Wages and Conditions Council. Any amendment to be completed at the latest by the statutory meeting in July, 1925.

Resumption of Work.—It is agreed that work shall be resumed on August 25, 1924; that, as far as practicable, the employers will reinstate their former employees and workmen will return to their former employers; that there shall be no victimisation on the part of either side in consequence of anything arising out of, or in connection with, the dispute, and that no influence will be exerted by either side which may prevent a mutual renewal of former relationships between employers and workmen.

NEW BUILDINGS IN LONDON

Edgware Parade.—Immediately adjoining the Tube Station in Hale-lane. It is of Georgian character, with pilasters of stone running up to the second floor. The two centre shops have a Georgian pediment of stone, and the shops, which are placed three from each end, have a similar treatment. The stone is being supplied by Messrs. the Empire Stone Co., Stroud. The outer walls are of multi-coloured facing bricks supplied by Messrs. Thos. Lawrence & Sons, of Bracknell, and the roofs are tiled with tiles supplied by the same firm. The two shops with the pediments have a frontage of 24 ft. each, and the remainder 20 ft. The architect is Mr. James A. Webb, of Stanmore. The first section of the Terrace is now practically completed, and when this has been accomplished a further terrace will be erected, and already the corner site has been acquired by the National Provincial and Union Bank, who are under contract to build premises to harmonise with Premier Parade.

London Bridge.

Mr. C. M. Topping, who is described as a tugmaster, recently stated in a letter to the Press:—"Now that Westminster Bridge is to be tested, I feel that the authorities should know that the east side of the south pier of London Bridge's middle arch has dropped 3 to 4 in. below the level of the west side. This is similar to what occurred before Waterloo Bridge broke its back, and seems to show that a survey is needed. I noticed the difference in levels when passing under London Bridge at high water. I may add that I have been passing under the bridges of London in the course of my work for the past 24 years." Inquiries at the Guildhall, however, showed the officials to be somewhat sceptical, although Mr. Sydney Perks, the City Surveyor, later paid a personal visit to the bridge, and his investigation will be published in an official report.

Builders' Estates.

Mr. George Garton, of Lloyds Bank House, Albert-road, Saltaire, Yorkshire, builder, gross £14,042.

Mr. William Jones, of Breckside Park, Liverpool, builder (net personalty, £3,386), £24,564.

Mr. John Laing, of the Scaur, Carlisle, retired builder and contractor (net personalty, £4,480), £16,535.

BUILDING TRADE WAGES

THE table on this page shows the alterations according to the agreement reached last week.

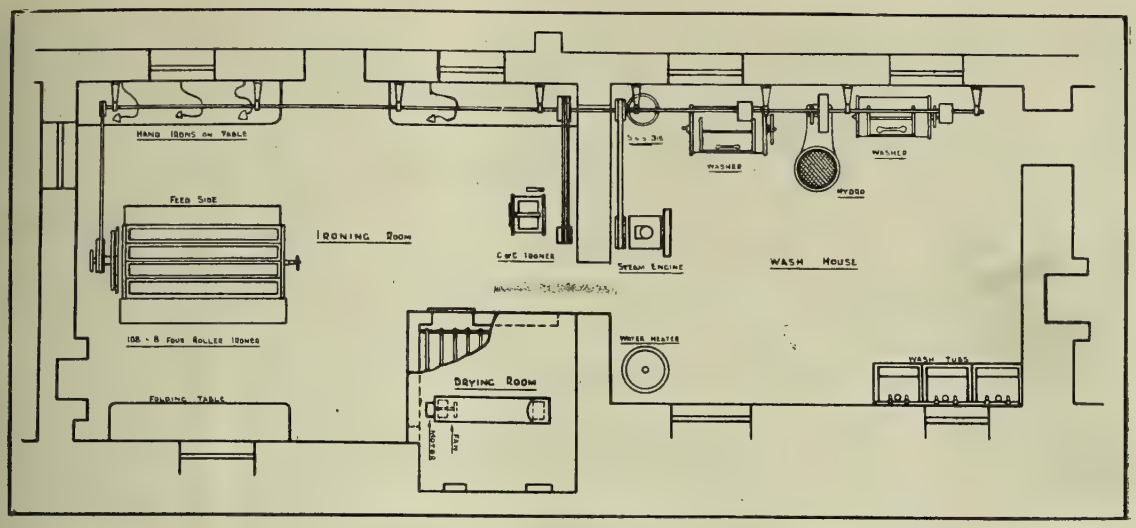
It is reported that certain sections of the operatives in London and a few other places are dissatisfied with the settlement, and have not yet returned to work.

RATES OF WAGES IN THE BUILDING TR

The following are the rates of wages in the building trade in England and Wal endeavour is made to ensure accuracy, but we cannot be responsible for errors that may

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labo
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam. (Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Torquay	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	

(For rates of wages in the Building Trade in Scotland, see page 341.



PLAN

ODEL LAUNDRY AT TAYMOUTH CASTLE

YMOUTH CASTLE, the late residence of the quis of Breadalbane, and situated at the of Loch Tay, has now been converted a hydropathic hotel. The architectural res of the historic building have been ned as far as possible, but certain innova-, such as electric lighting, heating, cook- and laundry plant, had to be installed neet the requirements of the converted olishment.

e steam laundry is located at the back of house, alongside the power station and ges, and can be reached from any part ne house by means of corridors without outside. The steam supply is taken the central boiler house adjoining to a cal steam engine of 10 b.h.p., which is ble of driving the complete laundry in-ation. The exhaust steam from this ne is taken first to the hot-water tank a yards distant, where it passes through a er coil and provides a constant supply of water for the two washing machines and sinks. From that point it is further utilised for heating the boiler feed water and thence to atmosphere. A regular practice in outfits of this kind is to utilise the exhaust steam for heating the drying closet as well, but at Taymouth Castle the intention is to use the drying chamber for other purposes than laundry work, such, for example, as drying wet clothes belonging to the guests. For that reason the chamber would often require to be in a heated condition when the laundry engine was off and no exhaust steam available, so that a live steam connection has been introduced to overcome that difficulty.

For washing the blankets and linen there are two all-metal belt-driven machines, one having a brass inside cylinder 28 in. diameter by 48 in. long, with capacity equal to 120 shirts per load, and a smaller machine having a brass sheet, 24 in. diameter by 48 in. long, with a capacity of 80 shirts per load.

The washing of a load occupies about 45 minutes, so that, allowing for the time occupied by handling, six loads can be put through each machine per day. The hydro extractor (shown in the illustration), placed alongside the washing machine, takes the load of wet linen as it comes from the washing machine and extracts all the water from it by centrifugal action. The load is placed in the inner revolving basket of the machine, which attains a speed of 1,700 revolutions per minute, causing the load to cling to the sides. When the operation is finished at the end of 15 minutes the mass of linen is in a damp state, and is then ready for the drying chamber or to go straight through the calandering machine. The third unit in the plant is the drying chamber, which is a brick-built compartment, 9 ft. 6 in. by 8 ft. 3 in., with a sliding iron door. Near the roof of the chamber a series of rods is fixed, on which the goods to be dried are hung.

Hot air is introduced into the chamber from lengths of steel-gilled pipe placed on the floor along the sides of the chamber, so that it rises to the hanging clothes and dries them off at a temperature of about 120 deg. To assist them in the drying process a motor-driven fan is fitted inside, which has the effect not only of distributing the hot air, but of keeping it changed and preventing humidity.

The architect was Mr. A. Balfour, of Glasgow, and the contractors Messrs. D. & J. Tullis, Ltd., of Clydebank.



PART OF WASHHOUSE.



IRONING AND FINISHING MACHINE.

Model Laundry at Taymouth Castle.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

AUGUST 30.—**Annfield Plain.**—WAR MEMORIAL.—Prices and designs for erection of war memorial in the Annfield Plain Park between £250 and £400. Hon. Secretaries, Council Offices, Annfield Plain.

AUGUST 30.—**Bakewell.**—CONVENIENCES.—For the erection of public conveniences, for the U.D.C. Mr. T. W. Newbold, architect, 70, Surrey-street, Sheffield.

AUGUST 30.—**Barry.**—CLUB.—For the erection of a new club and institute at Harbour-road, Barry, for the Wyndham Conservative Club and Institute, Barry, Ltd. Mr. E. F. Richards, architect, 58, Clive-road, Barry Island. Deposit £2 2s.

AUGUST 30.—**Brentford.**—ROOFING.—For the supply and erection of constructional steelwork, roofing, and contingent works necessary for the covering-over of stands in Brentford Market. Mr. W. J. W. Westlake, Surveyor, Clifden House, Boston-road, Brentford.

AUGUST 30.—**Buckhaven.**—INSTITUTE.—Erection of a Miners' Welfare Institute at Victoria-road, Buckhaven, for the Miners' Welfare Fund. Mr. Peter Sinclair, 311, Wellesley-road, Methil.

AUGUST 30.—**Exeter.**—HOUSE.—For the erection of a clerk's house at the Devon Mental Hospital. Messrs. E. H. Harbottle & Sons, architects, County Chambers, Exeter. Deposit £3.

AUGUST 30.—**Frome.**—REPAIRS.—For repairs to the chimneys at the Infirmary, for the Board of Guardians. Mr. W. R. Kent, Clerk, Frome.

AUGUST 30.—**Hatherleigh.**—MANSE.—For building a new United Methodist minister's manse at Hatherleigh. Mr. S. T. Follands, Hatherleigh.

AUGUST 30.—**Littleborough.**—PAINTING.—For painting premises of the Reform Club. Secretary at the Club.

AUGUST 30.—**Newcastle-under-Lyme.**—ALTERATIONS.—For structural alterations at St. John's Hospital, Keele-road, for the Board of Guardians. Mr. George Hollins, architect, Lloyd's Bank Chambers, Newcastle. Deposit £1.

AUGUST 30.—**Rhydfelin (Card.).**—PAINTING.—For painting and decorating of Gosen Chapel, Rhydfelin. Mr. J. Lewis Evans, architect, 21, Great Dorkgate-street, Aberystwyth.

AUGUST 30.—**Stafford.**—CONVENIENCES, &C.—For the erection of two public conveniences, situated in Martson-road and Gaol-road, and extension of the waterworks fitting shop, Borough Hall, for the T.C. Mr. W. Plant, Borough Engineer, Borough Hall, Stafford. Deposit £1 1s.

AUGUST 30.—**Talgarreg (Card.).**—VESTRY.—For building at vestry to Bwlch-y-fadfa chapel house. Mr. E. O. Jenkins, Llandyssul.

SEPTEMBER 1.—**Belfast.**—ADDITIONS.—For additions and alterations at Infectious Diseases Hospital, Purdysburn, for the T.C. Mr. A. Ferguson, Quantity Surveyor, Scottish Provident Buildings, Belfast. Deposit £3 3s.

SEPTEMBER 1.—**Bradford.**—FENCING.—For (1) Concrete wire fencing, (2) wood fencing, to 386 houses on various sites in the city. City Architect, Town Hall, Bradford.

SEPTEMBER 1.—**Broadstairs.**—GREENHOUSE.—For erection of a greenhouse in Pierremont Park, for the U.D.C. Surveyor, Broadstairs.

SEPTEMBER 1.—**Broadstairs.**—WALL.—For taking down and rebuilding churchyard wall at Vicarage-street, for the U.D.C. Surveyor, Broadstairs.

SEPTEMBER 1.—**Chelmsford.**—INFIRMARY.—For erection of infirmary and nurses' home, for the Board of Guardians. Messrs. Tooley & Foster, architects, Buckhurst Hill. Deposit £2 2s.

SEPTEMBER 1.—**Dublin.**—PAINTING.—For the painting of 302 sheep pens in the Cattle Market, Prussa-street, for the T.C. Engineer, 28, Castle-street, Dublin. Deposit £1 1s.

SEPTEMBER 1.—**Fishguard.**—MASONIC TEMPLE.—For the erection of a new masonic temple at Fishguard, for the Fishguard and Goodwick Joint Lodges. Sir Hugh Thomas & Ingleton, M.S.A., architects, 11, Victoria-place, Haverfordwest. Deposit £2 2s.

SEPTEMBER 1.—**France and Belgium.**—HEADSTONES.—Total supply of 20,000 headstones packed and delivered F.O.R., to be divided into a number of contracts, none of which shall be for less than 100 headstones, for the Imperial War Graves Commission. The Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, London, W. 1, marked "Headstone, Contract 5079-V."

SEPTEMBER 1.—**Lewisham, S.E.13.**—PAINTING.—For external painting at Lewisham Hospital, for the Lewisham Union. Guardians' Offices, 394, High-street, Lewisham, S.E. Deposit £1 1s.

SEPTEMBER 1.—**Oxford.**—HUTS.—For the erection of six wooden huts in Ferry Hinksey-road, for the T.C. Mr. J. E. Wilkes, City Engineer, Town Hall, Oxford. Deposit £1.

SEPTEMBER 1.—**Preston.**—HOUSES.—For the erection of 50 concrete houses, for the T.C. Borough Surveyor, Town Hall, Preston.

SEPTEMBER 1.—**Swanage.**—ROOFING.—For the roofing in of the water reservoir at Langton, for the U.D.C. Mr. C. Ratcliff, Surveyor, Swanage.

SEPTEMBER 1.—**Swindon.**—SCHOOL.—Erection of Ferndale-road Council School, for the Corporation. Mr. W. Seaton, Secretary, Education Offices, 22, Regent-circus, Swindon.

SEPTEMBER 1.—**Willesden.**—EMPLOYMENT BUREAU.—Erection of a juvenile employment bureau to adjoin Pound-lane Schools, for the Willesden D.C. Mr. F. Wilkinson, Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W. 6.

SEPTEMBER 2.—**Bethnal Green.**—PAINTING.—For the external painting and repair of their hospital in Cambridge-road, E.2, for the Board of Guardians. Mr. C. F. Jones, Clerk, 79A, Bishop's-road, Bethnal Green, E.2 Deposit £2 2s.

SEPTEMBER 2.—**Bethnal Green, E. 2.**—WOOD BLOCK FLOORINGS.—Repairs to the wood block floorings in the various wards, &c., in the Hospital in Cambridge-road, Bethnal Green, E.2., for the Bethnal Green Board of Guardians. Mr. C. Faulkner Jones, Clerk to the Guardians, Guardians' Offices, Bishop's-road, Bethnal Green, E.2.

SEPTEMBER 2.—**Birmingham.**—REPAIRS, &C.—For execution of ordinary works and repairs at The Beacon and Lickey Hotels, for the Commissioners of His Majesty's Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit 10s. 6d.

SEPTEMBER 2.—**Cardiff.**—PAINTING.—For external painting at back of 62, Charles-street, for the Board of Guardians. Mr. R. Stephenson, Clerk, Union Offices, 11, Park-place, Cardiff.

SEPTEMBER 2.—**Cupar.**—EXTENSIONS.—For the extension of the County Buildings and Sheriff Court Offices, Cupar, for the Fife C.C. Mr. C. R. Douglas, Surveyor, Prudential Chambers, 15, East Port, Dunfermline. Deposit £2.

SEPTEMBER 2.—**Lochmaddy.**—HOUSES.—For the erection of a block of two houses at Lochmaddy, for the North Uist District Committee. Mr. Jas. D. Scoular, Joint Clerk to the North Uist District Committee, Lochmaddy.

SEPTEMBER 2.—**London, S.E.**—TELEPHONE EXCHANGE.—For the erection of a telephone exchange at Walworth, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 2.—**Mitcham.**—STORES DEPOT, PAVINGS, BOUNDARY WALLS, AND ALTERATIONS.—Erection of a stores depot, pavings, boundary walls, and alterations to cottage at Church-road, Mitcham, for the Mitcham Urban District Council. Messrs. Chart, Son & Reading, Architects and Surveyors, Union Bank Chambers, Croydon. Deposit £1.

SEPTEMBER 2.—**Muckamore.**—SILO, &C.—For the erection at Greenmount Agricultural College, Muckamore, co. Antrim, of (1) grain silo, (2) cow byre, sheds, &c. Secretary, Ministry of Finance, 15, Donegall-square West, Belfast.

SEPTEMBER 2.—**Orpington.**—REPAIRS, &C.—For the execution of ordinary works and repairs at buildings in the Orpington district, for the Commissioners of His Majesty's Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit 10s. 6d.

SEPTEMBER 2.—**Teddington.**—LABORATORY, &C.—For the erection of a laboratory, &c., at the National Physical Laboratory, for the Commissioners of H.M. Works. The Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 2.—**Yeadon.**—SCHOOL.—For the erection of Sunday schools for St. John's Church, Henshaw, Yeadon. Messrs. T. H. & F. Healey, Architects, 42, Tyrrel-street, Bradford.

SEPTEMBER 3.—**Blackpool.**—SHELTER, &C.—For the erection of a tramway shelter and conveniences at South Shore, for the T.C. Mr. Francis Wood, Borough Engineer, Municipal Buildings, Town Hall-street, Blackpool. Deposit £1.

SEPTEMBER 3.—**Chesterfield.**—HOUSES.—For the erection of 26 houses (type B 3), on the Boythorpe Estate, for the T.C. Messrs. Wilcockson & Cutts, architects, Knifesmith-gate, Chesterfield. Deposit £1 1s.

SEPTEMBER 3.—**Keighley.**—PAINTING.—For painting of six houses in Murdoch-street, for the T.C. Mr. A. Bromley, Gas Manager, Keighley.

SEPTEMBER 3.—**London.**—PAINTING, &C.—For internal painting, &c., at the General Post Office, E.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 3.—**Lowestoft.**—REPEATER STATION.—For the erection of a repeater station, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 3.—**St. Ewe.**—FARMHOUSE.—For the erection of farmhouse at Levalse Farm, for the Cornwall C.C. County Land Agent, Truro. Deposit £1 1s.

SEPTEMBER 3.—**West Bromwich.**—JOINERY.—Supply to the Walsall and West Bromwich Unions Joint Committee of joinery work, consisting of windows and doors, to be used in the erection of workshop block at Great Barr Park. Mr. A. H. Ward, Clerk, 22, Lombard-street, West Bromwich. Deposit £3 3s.

SEPTEMBER 3.—**Yiewsley.**—PAINTING.—For painting of 258 houses, for the U.D.C. Mr. W. H. Lea, Clerk, High-street, Yiewsley.

SEPTEMBER 4.—**York.**—CONCRETE HOUSES.—For the erection and completion of 300 concrete houses, for the Corporation. Mr. F. W. Spurr, City Engineer, Guildhall, York.

SEPTEMBER 5.—**Lowestoft.**—COTTAGES.—For erection of two blocks of two cottages on Minden-r housing site, for the T.C. Mr. S. W. Mobbs, Boro Surveyor, Town Hall, Lowestoft. Deposit £2 2s.

SEPTEMBER 5.—**Wallingford.**—PAINTING.—For pa ing exteriors of the Cottage Homes and Receiving W for the Board of Guardians. Mr. P. C. A. Slade, Cl 7, St. Martin's-street, Wallingford.

SEPTEMBER 6.—**Chorley.**—BRIDGE.—For masonry work in connection with the reconstruct of Skew Bridge, for the Lancashire C.C. Mr. W. Schofield, County Surveyor, County Offices, Pres

SEPTEMBER 6.—**Congleton.**—SCHOOL.—For erection of an elementary school for 600 scholar New-street, for the T.C. Mr. J. H. Walters, archit Moody-street, Congleton. Deposit £2.

SEPTEMBER 6.—**Gilfach Goch.**—ALTERATIONS.— altering and making additions to 75, High-str Gilfach Goch, for the Workmen's Distress Committ Messrs. R. S. Griffiths & Partners, architects, To pandy.

SEPTEMBER 6.—**Nelson.**—HOUSES.—For the erect of 50 houses, for the T.C. Mr. W. Shackleton, Boro Surveyor, Nelson. Deposit £2 2s.

SEPTEMBER 7.—**Sunbury-on-Thames.**—HOUSES.— the erection of 12 houses in Charlton-lane, Upper Ha ford, for the U.D.C. Mr. Harold F. Coales, Cou Offices, Green-street, Sunbury.

SEPTEMBER 8.—**Belfast.**—ADDITIONS.—For erect of additional buildings at Purdysburn Asylum, for T.C. Messrs. Tulloch & Fitzsimons, architects, Castle-place, Belfast. Deposit £5 5s.

SEPTEMBER 8.—**Bridlington.**—HOUSES.—For the c pletion of 20 houses, partly erected, on the Pos Estate, for the T.C. Borough Engineer, 1, T Crescent, Bridlington.

SEPTEMBER 8.—**Dewsbury.**—REPAIRS.—For repa to 16 houses in Thornhill Lees, for the T.C., and c version of eight privies into water closets. Mr. J. Mellor, Chief Sanitary Inspector, Town Hall, Dewsbu

✱SEPTEMBER 8.—**St. Marylebone, W.**—BUILDI ANNEXE.—Erection of a small annexe to the laun at the St. Marylebone Home, Northumberland-stre W.1, in which to instal a drying machine, for t Guardians of St. Marylebone. Messrs. Constanti & Vernon, architects, 82, Mortimer-street, W Deposit £1 Treasury Note.

SEPTEMBER 8.—**Thornton.**—EXTENSION.—For t alterations and extensions of the Council Offices, Bla pool-road, Thornton. Mr. Henry Fenton, Survey Council Offices, Thornton-le-Fylde. Deposit £2 2s.

SEPTEMBER 8.—**Wood Green.**—FENCING.—For er tion of 500 yards of cleft-oak fencing at Nocl Pa recreation ground, for the U.D.C. Surveyor, To Hall, Wood Green, N. Deposit £1 1s.

SEPTEMBER 9.—**Bradfield Oughtibridge and Grea borough.**—ALTERATIONS.—For (1) Alterations and i provements to Bradfield Oughtibridge Council Schoo (2) alterations and additions to Greasborough Coun School, for the West Riding E.C. Education Depar ment, County Hall, Wakefield.

✱SEPTEMBER 9.—**Horsham.**—HOUSES.—Erection 12 houses in six pairs (non-parlour type), four hous in two pairs (parlour type). Two tenders are invite one for construction with brick and, alternativel for construction with concrete blocks, for the Horsha R.D.C. Mr. W. R. Guildford, Surveyor to the Counc 42, Albion-terrace, Horsham. Deposit £1 1s.

✱SEPTEMBER 9.—**Kingston-upon-Thames.**—CATT MARKET.—Construction of a new cattle mark adjoining Fairfield West, Kingston-upon-Thame together with the erection of a toll collector's offi shelter, pens, fencing, &c., for the Corporation Kingston-upon-Thames. The Borough Survey Municipal Offices, Kingston-upon-Thames. Depo £1 1s.

SEPTEMBER 9.—**Manchester.**—ALTERATIONS.—F alterations to females' wash-baths at Osborne-str Baths, for the T.C. City Architect, Town Hall, Ma chester. Deposit £1 1s.

SEPTEMBER 10.—**Barry (Glam).**—HOUSES.—F erecting an additional 108 houses at the Barry Gard Suburb, with necessary roads and sewers, for t Barry Garden Suburb Co., Ltd. Mr. T. Alwyn Llo architect, Welsh Housing & Town-Planning Tru Ltd., 6, Cathedral-road, Cardiff. Deposit £3 3s.

SEPTEMBER 10. **Denton.**—HOUSES.—For the er tion of 10 houses, for the U.D.C. Messrs. Tho & Collier, M.M.S.A., 66, Deansgate, Manchest Deposit £1 1s.

SEPTEMBER 10.—**Slough.**—EXTENSION.—Exte sion of the Post Office, Slough, for the Commission of His Majesty's Office of Works. Contracts Bran H.M.O.W., King Charles-street, London, S.W Deposit £1 1s. (Cheques payable to the Secretary.)

✱SEPTEMBER 11.—**Brighton.**—ELECTRICITY ST STATIONS.—Erection of two sub-station buildin foundations, &c., at Preston Park and Lewes-r respectively, for the Corporation of the Borough Brighton. Engineer and Manager, Electricity Dep County Borough of Brighton, Town Hall, Bright Deposit £1 1s.

SEPTEMBER 11.—**Tirphil (Mon).**—EXTENSIONS.—I making extensions to the Tirphil Liberal Club Institute. Mr. D. J. Thomas, architect, Blackwo (Mon).

SEPTEMBER 12.—**Clay Cross.**—COTTAGES.—For t erection of a pair of cottages on the Council's s adjoining the Derby main road at Clay Cross, for t Derbyshire C.C. Mr. J. W. Horton, County Survey St. Mary's Gate, Derby.

SEPTEMBER 12.—**Northamptonshire.**—COTTAGES Erection of three cottages at Geddington, near Kett ing, for the C.C. Plans, &c., from Mr. C. S. Mor County Surveyor, County Hall, Northampton. Tend to Clerk of the County Council, Northampton.

✱SEPTEMBER 12.—**Southend-on-Sea, Essex.**—HOU —Erection and completion of 55 houses, compri 22 parlour and 33 non-parlour type, for the Corporat of Southend-on-Sea. Mr. Robert H. Dyer, Boro Engineer, Southend-on-Sea. Deposit £2.

BER 12.—**Witham**.—REPAIRS, &c.—For erations and additions to house and farm at Stoverns Hall Farm, Rivenhall, near (*a*) Conversion of house into two dwell- onversion of farm premises for three holders. s Lock, County Land Agent, Chelmsford. 1 1s.

ER 13.—**Rufford.**—CONVERSION.—For con- Rufford Hall, Rufford, into Pulmonary or the Lancashire C.C. County Architect, Littler, 16, Ribblesdale-place, Preston.

MBER 13.—**Wandsworth, S.W.18.**—ALTERA- EXTENSIONS TO BATHS.—(*a*) Alterations and at Tooting Public Baths, Tooting High- d (*b*) alterations at Balham Public Bath, ad, Balham, for the Wandsworth B.C. Mr. rd, Borough Engineer, 215, Balham High- 17.

ER 15.—**Hull.**—ROOF.—For recovering t, for the T.C. City Engineer, Hull.

MBER 16.—**Brighton.**—INTERNAL REPAIRS ATIONS.—Execution of works comprising pairs, decorations, painting, &c., at the Institution, Elm-grove, Brighton, for the of the Brighton Parish. Mr. E. Wallis Long, . Old Steine, Brighton.

MBER 15.—**Newmarket.**—HOUSES.—Erec- rick and slated houses at the Rows, New- the County of Suffolk, for the Newmarket . W. H. Eley, Assoc.M.Inst.C.E., Godolphin wmarket.

ER 15.—**Pontyclun.**—ALTERATIONS.—For and additions to Miskin Manor, Pontyclun, s Williams, Bart. Mr. A. Lloyd Thomas, 3, Gelliwastad-road, Pontypridd.

ER 16.—**Brighton.**—REPAIRS, &c.—For airs, decorations, painting, &c., at the Poor ution, Elm-grove. Mr. E. Wallis Long, . Old Steine, Brighton.

MBER 16.—**Hampton.**—HOUSES AND NEW —(*a*) Erection and completion of 31 houses ete blocks on the Priory-road site, Hampton s may tender for a part or the whole number (*b*) new mortuary at Rosehill, Hampton. H. Chambers, Surveyor to the Council, es, Hampton, Middlesex. Deposit £2 2s.

ER 16.—**Newbiggin.**—HOUSES.—Erection of ype houses, for the U.D.C. Mr. Robert urveyor, Council Office, Newbiggin-by-Sea.

ER 18.—**Worthing.**—PIER PAVILION, RE- ON OF THE PARADE BANDSTAND.—A, New n, consisting of light steel-frame and rein- rete building on screw piling, with small f entrance to pier to provide seating accom- r about 1,200 people (Contract No. 1); and nstruction of the parade bandstand enclo- ing of a light steel and reinforced concrete d screw pile foundation to provide seating tion for about 2,200 people (Contract No. 2), oration of Worthing. Borough Surveyor's icipal Offices, Tudor Lodge, Chapel-road, Deposit £3 3s.

ER 19.—**Walsall.**—HOUSES.—For the erec- rlour type houses, in pairs, facing the Ring- n-parlour type houses, in five blocks of four, ing-road, and 60 non-parlour type houses, of four, facing Love-lane extension. Mr. J. ough Engineer, Council House, Walsall.

BER 20.—**Warwick.**—HOUSES.—Erection (32 parlour and 9 non-parlour type) upon e site, Warwick, for the Warwick T.C. ncis P. Trepess & Son, 1, Church-street, Deposit £1 1s.

R 23.—**Chesterfield.**—CONVENIENCE.—For of underground conveniences in New- the T.C. Mr. Vincent Smith, Borough hesterfield.

R 29.—**Leicester.**—PUMPING STATION .—For the extensions of the Abbey Pump- engine house, pump basement, &c., for the . G. Mawbey, City Engineer, Town Hall,

BER 29.—**Rochford (Essex).**—ALTERA- TING AND HOT WATER.—Competitive contracting engineers, for the proposed nd additions to the heating and hot water es and boiler plant at the Rochford Union, dians. Mr. F. Broadhurst Craig, 1, Fitzroy- n, W. 1; and 22, Cooper-street, Manches- £5 5s.

BER 30.—**Guernsey.**—HOUSES.—Erection of Collings-road, and 10 or 12 houses at Mill, St. Martin's, for the States Com- Homes for Workers, States of Guernsey. Guernsey, or at the office of Mr. Sydney rchitect, Grève d'Azette, Jersey.

—**Crookstown.**—HOUSES.—For the erection es at Hawkhead Asylum, Crookstown, for District Board of Control. Mr. James ect, 166, Buchanan-street, Glasgow.

—**Leek.**—EXTENSIONS.—For extensions to k, comprising a two-story building, 180 ft. rick and steel construction. Mr. Wilfred itect, 2, Church-street, Leek.

—**Rutherglen.**—PAVILION.—For erection of rmation of bowling green, for the Miners' me. Messrs. John H. Allan & Sons, 4, St. Vincent-street, Glasgow.

—**Wortley.**—HOUSES.—For the erection at Oughtibridge, for the R.D.C. Mr. F. rveyor, Greno Buildings, Grenoside.

TURE, MATERIALS, etc.

—**Ilford.**—MATERIALS.—For supply of rials to the U.D.C. Surveyor, Town Hall, e 1s. for each of 12 schedules.

—**Stockton-on-Tees.**—MATERIALS.—For months, for the T.C. Borough Engineer, lings, Stockton-on-Tees.

AUGUST 30.—**Yorkshire.**—MATERIALS.—For supply of road materials to the East Riding of Yorkshire C.C. County Surveyor, County Hall, Beverley.

SEPTEMBER 1.—**Dundee.**—BRICKS.—For supplying 650,000 common bricks, of best quality, for housing purposes, to the T.C. Mr. George Baxter, Housing Director, 91, Commercial-street, Dundee.

SEPTEMBER 1.—**London.**—ROOF SHEETS.—Supply of 3,450 galvanised roof sheets to the Burma Railways Co. Secretary, 199, Gresham House, Old Broad-street, E.C. Charge £1.

SEPTEMBER 1.—**Rhondda.**—LAMP COLUMNS.—Supply of 50 cast iron lamp columns for street lighting to the U.D.C. Mr. E. Taylor, Surveyor, Pentre, Rhondda.

SEPTEMBER 2.—**Leatherhead.**—MATERIALS.—Supply of Guernsey granite, limestone, and steam rolling, to the U.D.C. Mr. S. R. Drake, Surveyor, Council Offices, Leatherhead.

SEPTEMBER 2.—**Manchester.**—HOSE PIPING.—Supply of 1,000 yards of the best canvas hose-piping, 24 strands, 2½ in. in diameter. Mr. P. M. Heath, Town Clerk, Town Hall, Manchester.

SEPTEMBER 3.—**Sutton.**—MATERIALS.—Supply of road and other materials to the U.D.C. Mr. H. Bolton, Clerk, Municipal Offices, Sutton, Surrey.

SEPTEMBER 5.—**Wandsworth.**—TAR.—For supply of refined tar to the B.C. Mr. C. J. Waters, Deputy Town Clerk, Council House, Wandsworth, S.W.

SEPTEMBER 6.—**Trowbridge.**—MATERIALS.—Supply of granite, basalts, limestones, &c., oils, petrol and waste, tar and bitumen, tools (for roadwork), to the Wilts C.C. Mr. J. G. Powell, County Surveyor, Trowbridge.

SEPTEMBER 6.—**York.**—MATERIALS.—For supply of stoneware pipes, flags, kerb, lime, slag, &c., to the T.C. Mr. F. W. Spurr, City Engineer, York.

SEPTEMBER 8.—**London.**—FITTINGS.—Supply of sanitary fittings to Burma Railways Co. Secretary, 199, Gresham House, Old Broad-street, E.C. Charge 10s.

SEPTEMBER 8.—**Stoke-on-Trent.**—MATERIALS.—For supply of highway materials to the T.C. for six months. Borough Surveyor, Town Hall, Stoke-on-Trent.

SEPTEMBER 9.—**Manchester.**—BATHS.—For the supply of fireclay wash-baths at the Osborne-street Baths, for the T.C. City Architect, Town Hall, Manchester. Deposit 10s.

ENGINEERING IRON AND STEEL.

AUGUST 30.—**Babbacombe.**—HEATING.—For heating All Saints' Church, Babbacombe. Particulars at 12, Fore-street, St. Marychurch, Babbacombe.

SEPTEMBER 1.—**Blackburn.**—BRIDGE.—For erection of steel and iron bridge, for the T.C. Mr. A. T. Gooseman, Borough Engineer, Blackburn. Deposit £3 3s.

SEPTEMBER 1.—**Dublin.**—STEELWORK.—Steelwork for bridges, for the Midland Great Western Railway of Ireland Company. Chief Engineer, Broadstone Terminus, Dublin. Charge 4s.

SEPTEMBER 1.—**Finsbury.**—BLACKSMITH'S WORK, &c.—For blacksmith's work, &c., tools and general plant, for the B.C. Borough Surveyor, Finsbury Town Hall, Rosebery-avenue, E.C.1.

SEPTEMBER 1.—**Lochaber.**—AQUEDUCT.—For the construction of an aqueduct between Loch Treig and Fort William, Inverness-shire, including fifteen miles of pressure tunnel with intake shafts and other works, for the North British Aluminium Co. Messrs. C. S. Meik & Buchanan, 16, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER 1.—**Swanage.**—ROOFING.—For roofing-in water reservoir at Langton, for the U.D.C. Mr. C. Ratcliff, Surveyor, Swanage.

SEPTEMBER 1.—**Warrington.**—RAILINGS.—For supply of 140 yards of cast-iron ornamental railings, for the T.C. Borough Surveyor, Town Hall, Warrington.

SEPTEMBER 2.—**Cardiff.**—LIFTING BOILERS.—For lifting boilers at Ely Lodge, near Cardiff, for the Board of Guardians. Mr. R. Stephenson, Clerk, Union Offices, 11, Park-place, Cardiff.

SEPTEMBER 2.—**Liverpool.**—MATERIALS.—Supply of (1) brass castings and fittings, (2) miscellaneous iron pipes and castings, (3) sluice valves. Water Engineer, Alexandra Buildings, 55, Dale-street, Liverpool.

SEPTEMBER 2.—**London.**—FENCING MATERIALS.—For supply of steel posts, standards and other fencing materials, to the Madras & Southern Mahratta Railway Co. Offices, 25, Buckingham Palace-road, S.W. Charge £1 1s.

SEPTEMBER 3.—**Aberdeen.**—STEEL BUILDING.—Supply and erection of a structural steel and corrugated iron building, forming an extension of the Rubislaw Sub-station, for the Aberdeen T.C. Mr. J. Alex. Bell, City Electrical Engineer, Aberdeen. Deposit £1.

SEPTEMBER 3.—**Bath.**—BRIDGE.—For widening Victoria-road bridge, for the G.W. Railway Co. Engineer, Bristol Station.

SEPTEMBER 3.—**Manchester.**—LIGHT RAILWAY MATERIAL, &c.—For the supply of light railway material (rails, &c., and sleepers), new boilers, firebox, &c., for small locomotive, and 1,000 bags of broad bran. Mr. Robert Williamson, Superintendent of the Cleansing Department, Town Hall, Manchester.

SEPTEMBER 3.—**Rhondda.**—VARIOUS.—For supply to the U.D.C. of the following:—Contract No. 69, two sets of gas engine-driven pumps, capable of pumping 21,000 galls. of water per hour, and delivering the same against a total head of 485 ft. Contract No. 70, laying and jointing about 480 yds. of 9 in. water main, with necessary valves, &c., at Blaenclydach (Rhondda). Contract No. 71, supply, with delivery, of about 320 tons of 9, 6, 4, and 3 in. for water supply cast-iron pipes, Class "D." Contract No. 72, supply of unclimbable fencing for a piece of land 148 ft. sq. Specifications, &c., for Contracts 69 and 70 must be inspected at the Engineer's office. District rates of wages must be paid. Mr. Octavius Thomas, Engineer, Gas and Water Offices, Pentre (Rhondda).

SEPTEMBER 4.—**Canvey Island**—SLUICE.—For the construction of a new sluice of concrete tubes, with head and wing walls, iron penstock and tidal flap, through Smallgrains river wall, for the Canvey Island Commission. Richard B. Grantham & Son, 5, Little College-street, Westminster, S.W.1.

SEPTEMBER 5.—**Haslingden.**—SEWAGE PLANT.—Contract No. 3: Alterations and additions to machinery at Outfall Works, for the Haslingden, Rawtenstall and Bacup Outfall Sewerage Board. Mr. G. Midgley Taylor, 36, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER 5.—**Liverpool.**—HEATING INSTALLATION.—For the installation of a low-pressure hot-water heating system, at the Bank Telephone Exchange, Liverpool, for H.M. Commissioners of Works. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 6.—**Chorley.**—STEELWORK.—For the steelwork in connection with the reconstruction of Skew Bridge, for the Lancashire C.C. Mr. W. H. Scholefield, County Surveyor, County Offices, Preston.

SEPTEMBER 7.—**Frinton-on-Sea.**—SEA DEFENCE WORKS.—For extension of sea wall and slipway at Frinton-on-Sea, for the U.D.C. Surveyor, Council House, Frinton.

SEPTEMBER 8.—**Dundee.**—ELECTRIC LIGHTING.—For re-wiring of offices at 93 & 95, Commercial-street, for the Water Commissioners. Mr. G. Baxter, engineer, 93, Commercial-street, Dundee. Deposit £1 1s.

SEPTEMBER 8.—**Edinburgh.**—PIPES.—For supply of 410 tons of dry sand cast iron pipes, varying from 3 in. to 18 in. in diameter, and 26 tons of green sand cast iron pipes 1½ in. and 2 in. in diameter, for the T.C. Messrs. J. & A. Leslie & Reid, C.E., 29, Waterloo-place, Edinburgh.

SEPTEMBER 8.—**London.**—GIRDER BRIDGES.—Supply of girder bridges (one span 25 ft. and nine spans 40 ft.), to the Burma Railways Co. Secretary, 199, Gresham House, E.C. Charges 10s.

SEPTEMBER 8.—**Middleton.**—FENCING.—For supply of 500 yds. of wrought-iron railings and gates. Borough Engineer, Town Hall, Middleton.

SEPTEMBER 10.—**Liverpool.**—ENGINEERING WORK.—For the engineering work required at proposed public baths and washhouse, Minshull-street, Low-hill, for the T.C. Chief Superintendent, Baths Department, 75, Dale-street, Liverpool. Deposit £1 1s.

SEPTEMBER 10.—**Newmarket.**—BOILER.—For supply and erection of boiler at refuse destruction works, for the U.D.C. Mr. W. H. Eley, Surveyor, Newmarket.

SEPTEMBER 12.—**Burnley.**—ROAD PLANT.—For the supply of screening plant and tar macadam plant to the T.C. Borough Surveyor, Town Hall, Burnley.

SEPTEMBER 15.—**Stockport.**—SEWAGE WORKS.—For the construction of aeration and pyramidal tanks and other works at the Stockport Sewage Works, for the T.C. Mr. Herbert Hamer, Surveyor, Town Hall, Stockport. Deposit £5 5s.

SEPTEMBER 16.—**Goole.**—GAS PLANT.—For the erection of retort house, foundations, horizontal retort bench, coal and coke handling plant, telpher, electric generating set, and four cast-iron purifiers, at the Doyle-street Gasworks, for the U.D.C. Mr. Arthur F. Yates, Engineer, Gasworks, Goole.

SEPTEMBER 16.—**Walsall.**—RETORT HOUSE.—For reconstruction of horizontal retort house, &c., for the Gas Committee. Mr. E. Davies, Manager, Gasworks, Walsall. Deposit £5 5s.

SEPTEMBER 19.—**London.**—STEELWORK.—For supply of structural steelwork for underframe shop, for the South Indian Railway Co. Secretary, 91, Petty France, S.W. Charge £1.

SEPTEMBER 22.—**Plymouth.**—BRIDGE.—For the taking down and removal of a bridge to be placed across the Burrator Reservoir, situated about 12 miles from Plymouth, for the T.C. Mr. Frank Howarth, Water Engineer, Stonehouse, Town Hall, Plymouth. Deposit £2 2s.

★SEPTEMBER 27.—**Folkestone.**—CONSTRUCTIONAL STEELWORK, STEEL CASEMENTS, AND PATENT GLAZING CONTRACTORS.—(*a*) The supply and erection of cast-iron columns, steelwork in curved roof trusses, &c.; (*b*) steel casements; (*c*) patent roof glazing at the Concert Hall in Marine Gardens, for the Borough Corporation of Folkestone. Mr. A. E. Nichols, M.Inst.C.E., Borough Engineer and Surveyor, Corporation Offices, Folkestone Deposit £3 3s.

SEPTEMBER 30.—**Trowbridge.**—ROAD PLANT.—Supply of (*a*) 12 two-ton (British make) petrol lorries, side tippers, hand-operated; (*b*) four five-ton tandem quick reverse rollers, steam or internal-combustion engines; (*c*) tarspraying machines, mimimum 500 gallons capacity; (*d*) six bitumen boilers, to the Wilts C.C. Mr. J. G. Powell, County Surveyor, Trowbridge.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

NO DATE.—**Blackpool.**—CHIMNEY.—For erecting steel chimney, 6 ft. 6 in. by 47 ft. high, at Blackpool. Boving Engineering Works, Ltd., Stoke-on-Trent.

NO DATE.—**Reddish.**—ELECTRIC LIGHTING.—For electric lighting installation at Aspinal Gorton Wesleyan Methodist Church and Schools. Secretary, 52, Station-road, Reddish.

ROAD, SANITARY, AND WATER WORKS.

AUGUST 30.—**Bakewell.**—SEWER.—For construction of sewer in Baslow-road, for the U.D.C. Mr. W. H. Davis, Surveyor, Bakewell.

AUGUST 30.—**Birmingham.**—PAVING.—Supply and laying of 4,400 super yards of creosoted deal wood block paving in Hagley-road, for the T.C. Mr. H. H. Humphries, City Engineer, The Council House, Birmingham. Deposit £2.

AUGUST 30.—**Buxton.**—ROADS.—For the making-up of Windsor Park and Windsor Park-road, Fairfield, for the T.C. Mr. F. Langley, Borough Engineer, Town Hall, Buxton.

AUGUST 30.—**Erith.**—ROADS.—For widening of corner at Albert- and Bedonwell-roads, for the U.D.C. Surveyor, Bexley-road, Erith. Deposit £1.

AUGUST 30.—**Featherstone.**—ROADS, &c.—For the making of roads and laying of sewers in connection with the erection of 50 houses at Streethouse, near Pontefract, for the U.D.C. Mr. Samuel Chesney, A.R.I.B.A., Council Offices, Featherstone. Deposit £2 2s.

AUGUST 30.—**Mansfield Woodhouse.**—SANITARY.—For conversion of 320 pail closets at Forest Town into water closets, and construction of the sewers and drains, for the U.D.C. Mr. L. Walker, Surveyor, Council Offices, Mansfield Woodhouse. Deposit £2 2s.

AUGUST 30.—**Spenborough, &c.**—ROADS.—For road works at Spenborough, Hipperholme and Sowerby, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1 for each of the three contracts.

AUGUST 31.—**Dorchester.**—ROADS.—For resurfacing 1,800 sq. yds. on main Dorchester to Poole road, at Lytchett Minster, for the C.C. Mr. W. T. Fletcher, County Surveyor, Dorchester.

SEPTEMBER 1.—**Barnsley.**—ROADS.—For the making of Blenheim-road (part of), back roads between St. George's-road and Blenheim-road, for the T.C. Borough Engineer, Fairfield-House Offices, Barnsley.

SEPTEMBER 1.—**Bucklow.**—SEWERAGE WORKS.—For construction of sewerage disposal works at Mobberley, for the R.D.C. Mr. R. C. Cordon, 25, Station Buildings, Altrincham. Deposit £1 1s.

SEPTEMBER 1.—**Castleford.**—CRICKET PITCH.—For laying cricket pitch. Mr. S. Brayshaw, hon. secretary, Townville Sports Club, Castleford.

SEPTEMBER 1.—**Church.**—ROADS.—For paving portion of Elmfield-street, for the U.D.C. Surveyor, Council Offices, Church.

SEPTEMBER 1.—**Coseley.**—SEWAGE WORKS.—For the construction of storm water and liquefying tanks, &c., for the U.D.C. Messrs. Berrington, Son & Watney, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

SEPTEMBER 1.—**Cramlington.**—ROADS.—For making up access roads to houses on housing site, for the U.D.C. Mr. F. Kirby, Clerk, Bank Chambers, 26, Mosley-street, Newcastle-on-Tyne.

SEPTEMBER 1.—**Folkestone.**—SEWER.—For construction of 280 yards of concrete sewer, for the T.C. Messrs. W. H. Radford & Son, Albion Chambers, Nottingham. Deposit £3 3s.

SEPTEMBER 1.—**Hayes.**—WATER MAIN.—For providing and laying 1,260 yards of 6 in. cast-iron rising main, for the U.D.C. Mr. D. C. Fidler, Surveyor, Town Hall, Hayes, Middlesex.

SEPTEMBER 1.—**Hemsworth.**—SEWER.—For laying sewer in Station-road, for the U.D.C. Mr. A. Wright, Surveyor, Hemsworth.

SEPTEMBER 1.—**Hertford.**—ROADS.—For the construction of the new road from Bayford to Brickendon, for the R.D.C. Mr. J. W. Riggs, Surveyor, 21, Trinity-grove, Bengeo, Hertford.

SEPTEMBER 1.—**Kidderminster.**—PAVING.—For works of granite sett and wood block paving on reinforced concrete foundations in Oxford-street, for the T.C. Mr. J. Hawcroft, Borough Engineer, Town Hall, Kidderminster. Deposit £2 2s.

SEPTEMBER 1.—**Kirkcaldy.**—WATER MAINS.—For laying 2 miles of 14 in. and about 2 miles of 8 in. cast-iron pipes, with relative works, for the Water Commissioners. Messrs. J. & A. Leslie & Reid, C.E., 72A, George-street, Edinburgh. Deposit £1.

SEPTEMBER 1.—**Mansfield.**—ROADS.—For making-up of Baums-lane and Dallas-street, for the T.C. Mr. Waude Thompson, Borough Engineer, Market-street, Mansfield.

SEPTEMBER 1.—**Pembroke (co. Dublin).**—ROADS.—Construction of grano-concrete pathway (side-walk) at Ringsend Park, and construction of roadway and side-walks, main sewers, &c., at Bath-avenue housing site, for the U.D.C. Mr. Joshua C. Manly, Clerk, Town Hall, Ballsbridge, co. Dublin. Deposit £1.

SEPTEMBER 1.—**Peterborough.**—ROADS.—(1) Reconstruction with concrete foundation of London-road, Oundle-road, and Thorpe-road, Peterborough; (2) resurfacing with a bituminous carpet the same, for the C.C. Mr. W. J. Deacon, Clerk, Cross-street, Peterborough. Deposit £2 2s.

SEPTEMBER 1.—**Skegness.**—SEWERS.—For sewers in (1) Roseberry-avenue, and (2) Talbot-road. Mr. R. H. Jenkins, Surveyor, Skegness. Deposit £1 1s.

SEPTEMBER 1. **Sunbury-on Thames.**—ROADS.—For making-up Burgoyne-road and Cross-road, for the U.D.C. Mr. Harold F. Coales, Surveyor, Council Offices, Sunbury-on-Thames.

SEPTEMBER 1.—**Woodford.**—SEWER.—For laying sewer, &c., in Snakes-lane, for the U.D.C. Mr. W. Farrington, Surveyor, Council Offices, Woodford Green. Deposit £2 2s.

SEPTEMBER 1.—**Woodford.**—SEWAGE WORKS.—For extension to eastern sewage works, for the U.D.C. Mr. W. Farrington, Surveyor, Woodford Green, Essex. Deposit £2 2s.

SEPTEMBER 2.—**Bedlingtonshire.**—ROADS.—For making-up streets, for the U.D.C. Mr. J. W. Pooley, Surveyor, Bedlington.

SEPTEMBER 2.—**Dublin.**—SANITARY WORKS, &C.—For sanitary works and the adaptation of the basement at the Irish Land Commission, Upper Merrion-street, Dublin, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin.

SEPTEMBER 2.—**Godstone.**—SEWERS.—For sewer extensions, for the R.D.C. Mr. S. F. Evershed, surveyor, Oxted.

SEPTEMBER 3. **Hove.** ROADS. For making-up Silverdale-avenue, for a length of about 248 ft., for the T.C. Borough Surveyor (Mr. H. H. Scott), Town Hall, Hove.

SEPTEMBER 4.—**Glamorgan.**—ROADS.—For road works on (1) Bridgend and Llantrisant main road, (2) alterations and additions to Library Stores at rear of Bridgend Town Hall, for the C.C. Mr. T. Mansel Franklen, Clerk, Glamorgan County Hall, Cardiff.

SEPTEMBER 4.—**Glamorgan.**—VARIOUS.—For carrying out for the C.C. the following works:—Bridgend and Llantrisant main road, proposed piping ditch, forming footpath and widening carriageway between Pont-y-cyrff and Pencoed.

SEPTEMBER 2.—**Lanchester.**—SEWAGE WORKS.—For construction of sewage works at Burnhope Colliery, for the R.D.C. Mr. J. R. Lupton, Surveyor, Lanchester.

SEPTEMBER 3.—**Tutbury.**—ROADS.—For reconstruction of road from Tutbury to Rolleston, for the R.D.C. Mr. F. Rist, surveyor, Brentone-road, Burton-on-Trent.

SEPTEMBER 4.—**Southend-on-Sea.**—ROADS.—For making-up continuation of Marine Parade, Leigh, for the T.C. Mr. R. H. Dyer, Borough Engineer, Southend-on-Sea. Deposit £2.

SEPTEMBER 4.—**Southend-on-Sea.**—SEWERS.—For sewering Rylands-road, Cumberland-avenue, Seaforth-avenue, Seaforth-grove, Selwyn-road, and Westbury-road, for the T.C. Mr. R. H. Dyer, Borough Engineer, Southend-on-Sea. Deposit £2.

SEPTEMBER 4.—**Stockton-on-Tees.**—SANITARY.—For the conversion of approximately 1,200 privy middens and pan closets into water closets, in various localities within the borough. Borough Engineer, Victoria Buildings, Stockton-on-Tees.

SEPTEMBER 5.—**Portsmouth.**—MAIN DRAINAGE.—For the construction of reinforced concrete duct, suction chamber, laying of cast-iron pipes, &c., at their Eastney Sewage Pumping Station of the T.C. Mr. G. Midgley Taylor, 36, Victoria-street, S.W.1. Deposit £5.

SEPTEMBER 5.—**Rowley Regis.**—ROADS.—For a third section of work on Dudley-road, Tividale, for the U.D.C. Mr. D. Wright, Clerk, Rowley Regis.

SEPTEMBER 6.—**Haddington.**—ROADS.—For laying whinstone causeway in Court-street, for the T.C. Mr. Wm. Lee Hogg, Burgh Surveyor, Haddington. Deposit £1 1s.

SEPTEMBER 6.—**Swansea.**—ROADS.—For the private street works in Harry-street, Sketty; Glanbrydan-avenue, from Pantygwydr-road to Knoll-avenue; Oakwood-road (north end), for the T.C. Mr. J. Richard Heath, Borough Engineer, Guildhall, Swansea.

SEPTEMBER 8.—**Barnes.**—SEWER.—For laying 1,000 yds. of stoneware pipe sewer, in Lonsdale-road, for the U.D.C. Mr. G. B. Tomes, Surveyor, Barnes. Deposit £1 1s.

SEPTEMBER 8.—**Bognor.**—ROADS.—For construction of 7,100 square yards of reinforced concrete carriageway, &c., for the U.D.C. Mr. J. Draper, Surveyor, Bognor. Deposit £1.

SEPTEMBER 8.—**Eccles.**—SEWAGE.—For alterations to storm-water pumphouse and supplying and fitting of suction and delivery cast-iron pipes, for the T.C. Mr. Thomas S. Picton, Borough Engineer, Town Hall, Eccles.

SEPTEMBER 8.—**Hong Kong.**—WATERWORKS.—Driving and lining of two tunnels, approximately 2,160 ft. and 4,680 ft. in length, through the Smugglers' Ridge and Golden Hill respectively; the construction of an open conduit, approximately 2,000 ft. in length, and contingent works. Crown Agents for the Colonies, 4, Millbank, London, S.W.1.

SEPTEMBER 8.—**Southampton.**—ROADS.—For the reconstruction of roads in part of High-street, Hanover Buildings, Onslow-road, and Grove-street, for the T.C. Borough Engineer, Southampton. Deposit £1 1s. each work.

SEPTEMBER 8.—**Twickenham.**—PAVING.—For repaving with creosoted deal blocks 21,500 yds. of carriageways, for the U.D.C. Mr. F. W. Pearce, Surveyor, Town Hall, Twickenham.

SEPTEMBER 8.—**Wharfedale.**—WATER MAIN.—For laying about 750 lin. yards of 6 in. water main on the Menston Waterworks Gathering Ground, for the R.D.C. Mr. Harry Riding, Menston Waterworks Engineer, Council Offices, Menston.

SEPTEMBER 9.—**Glasshoughton.**—SANITARY.—Erection of temporary pail closets and urinal at Townville Primitive Methodist Chapel, Glasshoughton, for the West Riding E.C. Education Department, County Hall, Wakefield.

SEPTEMBER 9.—**Salford.**—ROADS.—For the paving of seven streets with stone setts, two streets with rock asphalt, and one street with tar-macadam. Borough Engineer, Town Hall, Salford.

SEPTEMBER 10.—**Middleton.**—SEWER.—For the laying of a new sewer from Alkrington Wood sewer to Woodland Way for the T.C. Borough Engineer, Town Hall, Middleton.

SEPTEMBER 10.—**Stoke-on-Trent.**—SANITARY.—For the conversion into water closets of 100 pail closets at Hanley. Chief Sanitary Inspector, St. Peter's Chambers, Glebe-street, Stoke-on-Trent.

SEPTEMBER 11.—**Bournemouth.**—SEWER.—For construction of land outfall sewer at Southbourne, for the T.C. Mr. F. P. Dolamore, Borough Engineer, Bournemouth. Deposit £1 1s.

SEPTEMBER 11.—**Edinburgh.**—SEWER.—Construction of a new sewer and outfall for the Cramond district, for the T.C. Burgh Engineer, City Chambers, Edinburgh.

SEPTEMBER 13.—**Lifton.**—DRAINAGE.—For connecting about 70 houses at Lifton, Devon, with the main sewer. Messrs. Parkes, Lees & Roseveare, architects, Launceston.

SEPTEMBER 13.—**Wolstanton.**—ROAD.—Construction of new road from Wolstanton to Chesterton, for the U.D.C. Mr. Arthur Cotton, Surveyor, Council House, Wolstanton. Deposit £2 2s.

SEPTEMBER 15.—**Bognor.**—ROADS.—For construction of 7,100 sq. yds. of reinforced concrete carriageway, &c., for the UD.C. Mr. J. Draper, Surveyor, Bognor. Deposit £1.

SEPTEMBER 15.—**Cheadle.**—WATER SUPPLY.—For laying water mains, constructing reservoir, &c., at Alton, for the R.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £5 5s.

SEPTEMBER 19.—**Middlesex.**—ROADS.—For construction of 5.72 miles of road works, being Section 2, Contract 3, of the Barnet bye-pass road, for the Middlesex C.C. Mr. A. Dryland, County Engineer, Guildhall, Westminster, S.W. Deposit £21.

Competitions.

(See Competition News, page 310.)

Auction Sales, Tenders,

SEPTEMBER 2.—**Denmark Hill.**—Mr. R... Chew will sell, at Denmark Hill, Champi... useful building materials of various ass... Auctioneers, 44, Bedford-row, Holborn, W.C.

SEPTEMBER 2.—**Steyning, Sussex.**—Mr. F. ... will sell, without reserve, building material, ... demolition of Steyning Brewery. Auctioneer, ... Wharf, York-road, Wandsworth, S.W.18.

✱SEPTEMBER 8.—**London. S.E. 18.**—Mr. ... Clark will sell, without reserve, at the Boys' ... Woodhurst-road, Plumstead, S.E. 18, clearing ... hut sections, timber and building materials ... second-hand). Auctioneer, Railway Wharf, ... road, Wandsworth, S.W. 18.

✱SEPTEMBER 9.—**London, E.**—Messrs. Jos... bard & Sons will sell, at Railway Arches, ... road, Mare-street, Hackney, E. (removed ... venience of sale), well seasoned stock of t... various assortment. Auctioneers, 15, N... green, Islington, London, N. 16.

✱SEPTEMBER 9.—**London, S.E.**—Messrs. ... Yates will sell, without reserve, at Cal... Brixton Hill, useful building materials. Au... 365, Norwood-road, S.E.27.

✱SEPTEMBER 9 AND 10.—**Rosyth.**—Messrs. ... Marshall & Co. has been instructed to sell by ... the Lords Commissioners of the Admiralty, wi... Dockyard, Rosyth, contractors' plant, old an... stores. Auctioneers, 72, Waterloo-street, Gl... to the Superintending Civil Engineer, H.M. ... Rosyth.

✱SEPTEMBER 9 & 10.—**Swindon (Wilts).**—... Clark will sell, without reserve, at the Centr... Depot, No. 18, Swindon, Wilts, clearance ... timber, buildings, and building material. Au... Railway Wharf, York-road, Wandsworth, ...

SEPTEMBER 10. — **Colchester.** — Messrs. ... Wright & Co. will sell a freehold property, ... yard, and goodwill of business as carried on ... of late Mr. T. J. Ward. Auctioneers, 146, Hi... Colchester.

SEPTEMBER 11.—**Edgware.**—Mr. Leslie ... will sell (unless previously disposed of) two ... building sites of about 5 acres and 2½ acres res... at Edgware, within about 700 yds. of the N... Station (now open). Auctioneer, The Estat... Church-lane, Edgware.

✱SEPTEMBER 11.—**London, E.C.4.**—Messr... Skelding & Co. will sell, by order of Rec... Debenture Holders, at the London Auctio... Queen Victoria-street, London, E.C.4, the ... freehold property known as the Tiddingto... Saw Mills, fully equipped with up-to-date ... machinery and plant, &c. Auctioneers, 48, ... street, Guildhall, London, E.C.2.

SEPTEMBER 11.—**Upminster (Essex).**—Mr. ... Clark will sell, without reserve, at New-... Mary's-lane, Upminster, Essex, timber and ... materials, Crossley gas engine, &c. Auction... way Wharf, York-road, Wandsworth, S.W. 18.

PRELIMINARY ANNOUNCEMENT. — **London.** ... Messrs. Knight, Frank & Rutley will sell, in ... of lots, in the Hanover-square Estate Room, h... ber (unless previously sold privately), a freeh... ing estate known as Broadfields Manor, Edgw... 273 acres. Auctioneers, 20, Hanover-square, ... W.1.

Public Appointments

AUGUST 30.—**Dorchester.**—Architectural ... required for education work. Mr. E. A. Fife, ... to the County Council, County Offices, Dorch...

SEPTEMBER 1.—**Greenwich.**—Architectur... tant, Commercial Clerk, and Grade "A" Cler... by the Metropolitan Borough of Greenw... Frederick J. Simpson, Town Clerk, Town Ha... wich-road, S.E.10.

SEPTEMBER 1.—**Plymouth.**—Temporary ... tural Assistant required by the C.B. Mr. J. ... Borough Engineer, Municipal Offices, Plymo...

SEPTEMBER 1.—**Portsmouth.**—Additiona... Clerk required in the Borough Engineer's D... Mr. A. W. Ward, A.M.I.C.E., Borough ... Town Hall, Portsmouth.

SEPTEMBER 8.—**St. Marylebone.**—Engine... Architectural Assistant required by the M... Borough. Mr. J. Paget Waddington, M... Borough Engineer and Surveyor, The T... Marylebone-road, N.W.1.

SEPTEMBER 9.—**London, S.E. 1.**—TECHNI... TANT.—Technical (Engineering) Assistant ... manent staff in the Architect's Departmen... by the L.C.C. Clerk of the Council, The Co... Westminster Bridge, S.E. 1, with stamped ... foolscap envelope.

✱SEPTEMBER 10.—**Swansea.**—Quantity ... Assistant on the temporary staff in the Bor... tect's Department required by the Corpora... County Borough of Swansea. Borough A... Prospect-place, Swansea, endorsed "Qua... veyor."

SEPTEMBER. — **London, S.E.1.**—(*a*) L... Architecture and Building; (*b*) Instruct... work, required by the Governors of the Bo... technic Institute, for two evenings a week. ... Bispham, Principal, Borough-road, Lond...

SEPTEMBER.—**Wimbledon, S.W. 19.**—Ex... turer in (a) Surveying, (b) Brickwork and ... the Standard of Grade 1 City and Guilds Syll... Principal, Technical Institute, Wimbledon, ...

✱NO DATE.—**Tanganyika.**—Inspector ... required by the Government of Tangany... Railway Department, for a tour of 20 to ... continuous service, with possible extension ... once by letter, stating age and experience a... married or single, to the Crown Agents for t... 4, Millbank, London, S.W.1, quoting M13...

POSED NEW BUILDINGS & OTHER WORKS *

e lists care is taken to ensure the accuracy of the information given, but it may occa-ppen that, owing to building owners taking the responsibility of commencing work s are finally approved by the local authorities, "proposed" works at the time of have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. District Council; R.D.C. for Rural District Council; E.C. for Education Committee; oard of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

.—Plans passed by T.C.: House, Queen's-Robert Cumming, junr., per Mr. George ect: alterations at 284, Great Western-r. Ferguson Smith; alterations at the r Motor Works, for the Kittybrewster Co., Ltd., per Mr. George Watt, architect; and offices on the west side of Whinhill-srs. J. Pope & Son, per Messrs. D. & J. R. chitects; addition to granite polishing vale-road, for Messrs. William Taggart & srs. J. & J. Cameron, architects; bunga-oad, for Mr. Charles Johnstone, per Mr. uce, architect.

ALLEY.—The Amman Valley Joint rd has made application to the Ministry r sanction to borrow £66,000 towards the joint drainage and disposal works to serve the whole watershed, the local oncerned being the Ammanford and Urban Councils and the Pontardawe and al Councils.

—The U.D.C. has received sanction from a loan of £25,000 for purposes of erecting Catchgate. A new road is to be con-ss Mountsett Fell, and the existing road m Catchgate to Annfield Plain, Four Lane be reconstructed.

DER-LYNE.—The M.H. has sanctioned a purpose of paving the unpaved portion Ground. Tenders are to be immediately ie work, and the whole matter is in the Markets and Lighting Sub-Committee.

E.—The Campbell Hospital Board has roceed immediately with the extension l, at a cost of £1,600.

—Plans passed by T.C. include plans for the Barnsley Main Colliery Co., all subsidy.

—The Tadcaster R.D.C. has been notified C. Council of their intention to build a lementary school with accommodation children.

—The Catholic population has secured erection of a new church of St. Gabriel's, esbytery.

Shop and house on Cliftonville-road, for Bell; alterations to shop and house on -road, for Mr. James Bouges, Mr. W. T. nitect; house on University-road, for Messrs. Tulloch Fitzsimons, architects; nview-avenue, for Mr. W. McGiffen Mr. rchitect; stores in Oxford-street, for the uting Co., Mr. W. C. Maxwell, architect. he foundation-stone has been laid for a Church at Biggin. The scheme includes el to be erected on the site of the old

D.—It is proposed to resurface the park s at a cost of £1,250. A cubicle block is l at the Infectious Diseases Hospital. £14,000 prepared by the Surveyor for er works on the Derby Park Estate have The Estates Committee has passed plans Mr. H. Collin on behalf of Messrs. William , for the erection of a show room and Corporation land in Hamilton-street.

—Messrs. Lawn & Howarth, furnishers, are proposing rebuilding and extending t 160, Church-street.

—The lay-out of a number of new houses at been approved, and the Council has tain tenders for their erection.

CUCKNEY.—An inquiry has been held lication of the R.D.C. for sanction to he Ministry of Health the sum of £18,840, e and sewage disposal scheme at Carlton

GE.—The Rev. Thos. Miley has bought w church and school. The church will Easter.

TH.—A loan of £7,000 is to be sought ion extensions. Thirty additional beach e to be erected as soon as possible. een prepared by the B.S. and adopted plots at Southhill and the erection of The M.H. has sanctioned an additional 50 for the construction of bridges at l Alum Chine. The T.C. has adopted ared by the B.S. for work in connection lopment of the Portman Estate, to cost prepared by the B.S. have been passed at bowling pavilions, to cost about C. has agreed to contribute £500 towards e enlargement of the Victoria Home for lren. A site is to be acquired in the new school. Revised plans are to be he conversion of the Lansdowne school school. Plans passed: Road extensions en; house, Uplands-road, for Mr. C. ub, Harcourt-road, for Southbourne Club, Ltd.; house, St. Alban's-road, ley; bungalow, Lascelles-road, for Mr. o houses, Watcombe-road, for Mr. T. e. Bethia-road, for Mr. W. Hayward; Roberts-road, for Mr. E. C. Langdon; Drive, for Mr. Webber; house, Christ-or Dr. H. Granger; house, Harewood-r. J. Edeson; house, St. Leger-road, for Mr. J. Stacey; house, Watcombe-road, for Mr. F. Harrington; house, Eldon-road, for Mr. Bishop; transformer sub-station, Charminster-road, for Electricity Supply Co.; house, Beechwood-avenue, for Mrs. MacGovan; house, Irving-road, for Mr. C. White; house, Cranleigh-road, for Mrs. C. Clark; house, Boscombe Cliff-avenue, for Mr. H. Hoare; house, Elvin-road, for Mr. B. Blunt; two houses, Glenmoor-road, for Mr. A. Barnes; two houses, Boscombe-drive, for Mr. Watson; two flats, Firbank-road, for Miss N. Robertson; two houses, St. Luke's-road, for Messrs. Hoare & Donaldson; house, West-drive, for Mr. A. Wright; three houses, Court-road, for Mr. C. Newton; bungalow, Tuckton-road, for Miss E. Moser; house, King George-avenue, for Mr. E. Stacey; house, Boscombe-drive, for Mr. Nabney; house, Dingle-road, for Mr. A. Tanner; house, Danesbury-avenue, for Mr. T. L. Foyle; bungalow, Strouden-road, for Mr. Walker; two bungalows, Lascelles-road, for Messrs. Midgeley & Hardy, Ltd.; house, Mordon-road, for Mr. C. Coul; house, Lonsdale-road, for Mr. G. Gordon; bungalow, King Edward-avenue, for Mr. J. K. Coffin; house, Tennyson-road, for Messrs. Way & Marshall; house, Pine-road, for Mr. J. Traves; four houses, Arnewood-road, for Mr. M. Urquhart; two houses, Wayside-road, for Mr. W. Hoare; 12 houses, Cranleigh-road, for Mr. C. Philpott; house, Albemarle-road, for Mr. A. J. Cole; house, Limited-road, for Mr. W. Morgan; house and shop, Stamford-road, for Messrs. H. Small & Sons; house, Seafield-road, for Mr. A. H. Jackson; house and shop, Kimberley-road, for Messrs. H. Small & Sons; house, Dingle-road, for Mr. h. Ebben; three houses, Court-road, for Mr. W. Moore; house, King George-avenue, for Mr. T. G. Dufall; six houses, Southbourne-drive, for Messrs. Midgeley & Hardy, Ltd.; house, Boscombe-drive, for Mr. A. Whittaker; house, Dingle-road, for Mr. H. Solomon; house, Prince of Wales's-road, for Mr. J. Medley; bungalow, Western-road, for Mrs. G. Hunter; bungalow, Mavis-road, for Mr. Grinshaw; two houses, St. Ledger-road, for Mr. J. Elkins.

BUCKTON.—Funds are being raised by the Rev. Father Newton and the Catholic congregation for the erection of the proposed Fitzherbert Memorial Hall on a site situated in Bristol-road.

BURNLEY.—A site is to be secured in the Palace House district for the erection of a new central school by the E.C. The R.D.C. has approved a plan for an extension at St. Nicholas' Church School, Sabden, and also proposes to purchase 150 sq. yds. of land for the purpose of widening and improving the highway at Pike Hill, Worsthorne.

CASTLEDERG.—Mr. A. V. Ashe, Inspector of the Ministry of Home Affairs for Northern Ireland, has conducted an inquiry into a scheme under the Labourers Acts, promoted by Castlederg R.D.C. The estimated cost of the new scheme was £18,550, and it was proposed to erect 53 new houses.

CHALLON KINGS.—The R.D.C. has approved plans for a bungalow in Lyefield-road, for Mr. Cleveley, and a bungalow in Hamilton-street, for Canon Burton.

CHEADLE.—The D.C. has received sanction to subsidise a further 100 houses to be erected by private enterprise. The plan for extension to the cemetery has been approved.

CHEPSTOW.—The U.D.C. is to acquire land to proceed with the St. Lawrence-road improvement scheme, estimated to cost £12,000.

CHESHIRE.—The C.C. proposes the widening of Backford canal bridge, at a cost of £5,685, and widening portions of the Chester-Birkenhead road at a cost of £11,700.

CLEVELEYS.—Plans have been approved by the Thornton Council for the following new buildings: Two houses and shops in Beech-road, for Holt & Dawson, and also two further houses for the same firm; pair of bungalows in St. George's-avenue, for R. Lancaster & Sons; bungalow in St. David's-road for the same firm.

CLITHEROE.—The Borough Surveyor has been granted £5 per house for 28 houses to be erected at the expense of the local rates.

COLWYN BAY.—It has been resolved to erect a new central school on the Pendorlan site. A special committee is inquiring for a suitable site for a new school at Old Colwyn. The M.T. will contribute £18,750 towards the cost of widening the main road in the direction of Mochdre. Plans were approved for the erection in various parts of the urban district of 52 houses to be privately built.—The U.D.C. received a report by the engineer, Mr. W. J. Dunning, as to the lay-out of the Tan-lane Estate for the erection thereon of houses for the working classes. He proposes to construct a road through the land from near the Old Colwyn Station up to the main road to Abergele, with a fairly easy gradient, and from this the subsidiary roads would radiate. He had arranged that every house would have a view of the sea and also the necessary amount of sunlight. The plan showed 70 semi-detached houses, also blocks of four houses and six houses. Each house will have fittings for electric lighting and a bath. It was decided to arrange for the erection of 175 dwellings, and to provide for hot and cold water in all the semi-detached houses, but for cold water only in the four-house and six-house blocks.

CROYDON.—As a provisional contract is about to be entered into for the purchase of a site in London-road for the erection of public baths, the T.C. is applying for sanction to a loan of £3,350 for the purpose.—The T.C. has under consideration the acquisition of a site in the neighbourhood of Gloucester-road for the erection of slipper baths and public conveniences.—Plans have been approved for a public convenience at Parchmore Green, estimated to cost £1,500.—The B.S. has prepared plans for a public convenience in Portland-road, South Norwood.—At Thornton Heath Recreation Ground a children's playground, three hard tennis courts, bowling green, &c., are to be provided at a cost of about £3,000.—A site in Thornton-road is to be used as a children's playground pending the erection thereon of an elementary school.

DARLINGTON.—Plans approved: H. Parvin, eight houses, Haughton-road, Kellett, and Clayton; five houses, Belgrave-street, and new shop front, 40–42, Yarm-road.

DONCASTER.—Great changes, involving the transformation of an agricultural district into a busy industrial centre, are likely to follow the discovery of the famous Barnsley coal seam at a new pit at Thorne Moorends, near Doncaster. As long ago as 1909 sinking operations were commenced at this spot, and now, after stoppages due to the war and other causes, coal has been reached at a depth of 921½ yds., which means that the pit is the deepest in Yorkshire. It will, of course, be some time before the coal can be worked, but, according to the *Yorkshire Post*, plans are already laid out for a model village to accommodate at least 10,000 people, with sanitary schemes estimated to cost £60,000, and an elementary school to cost the County Council £20,000.

EASINGTON.—The R.D.C. has approved plans submitted by the Weardale Coal and Iron Co., for the erection of 75 houses at Wheatley Hill, and for 60 houses at Deaf Hill, for the Trimdon Coal Co.

EASTBOURNE.—Professor Adshead has prepared for the T.C. a report on the proposed improvement of the Grand-parade.

EGHAM.—The U.D.C. has prepared a scheme for a widening of the Great Western main road near Denham House, estimated to cost £4,500, and for footpath improvements in High-street to cost about £700.

ELLESMERE PORT.—The U.D.C. has passed plans for a building at the gasworks, estimated to cost £285. Loan sanctions have been received for £86,250 for the erection of houses, £9,110 for the construction of streets, and £1,290 for the construction of sewers. Plans have been passed for a house and laboratory for Messrs. Shell-Mex, Ltd., on their Stanlow estate.

FAILSWORTH.—A sub-committee is to be appointed to consider the question of public baths and washhouses, and the erection of a refuse destructor works.

FALKIRK.—The Dean of Guild Court has granted the Falkirk Iron Company, Ltd., warrant to erect, at an estimated cost of £3,000, a new grinding mill at the west side of Falkirk Foundry.

FAVERSHAM.—Plans passed by R.D.C.: New wing to Lorender House, for Mr. Lewis H. Finn; house at West End, Doddington, for Mr. F. Parsons.

FINCHLEY.—The M.H. has sanctioned a loan of £4,100 for sewer reconstruction in Totteridge-lane.—Extensions of the electricity undertaking are to be carried out at a cost of £17,750. A scheme is to be prepared for the widening of the Church End railway bridge.—A scheme for a central depot, to cost £10,000, is recommended, subject to a grant from the Unemployment Grants Committee.

GLAMORGAN.—The Ministry of Transport has intimated grant of 75 per cent. of the cost (£400,000) of the road which the Glamorgan C.C. is to construct from east to west to cut the entrances of the mining valleys. The C.C. is to put the work in hand before the winter sets in.

GLASGOW.—Among the linings granted at the Dean of Guild Court were: Corporation of Glasgow, for the erection of public baths and washhouses in Dobbie's Loan at Wood-street, estimated cost, £21,627; to Corporation of Glasgow, for erection of shops and dwelling-houses, at 3, Ell-road, Crosslee-street, Paisley-road, and Barlogan-avenue, estimated cost, £47,302; Governors of Victoria Infirmary, for erection of wood pavilion, operating theatres, &c., at hospital, Langside-road, estimated cost, £49,601; James Templeton & Co., carpet manufacturers, Greenhead, for erection of welfare block at factory there, estimated cost, £14,595; James Bennie & Sons, Ltd., engineers, Govan, for reconstruction of engineering works at Drumoyne-road.

GRAVESEND.—A Port of London Authority report states that progress has been made with the drainage scheme for the northern portion of the borough of Gravesend. All sewers are laid and the effluent outfall is under consideration.

HALE.—The Urban District Councils of Hale and Altrincham are joining in a scheme for widening the Hale railway bridge, at a cost of £6,000.

HALIFAX.—Another Halifax estate, that of Norton Tower, situate at Roils Head, is to be developed for building. Mr. Joseph Thompson, the owner, announces his intention of having between 30 and 40 houses, detached and semi-detached, erected, as purchasers desire. There are some 10 acres available, and there is ample room for tennis courts, while the extensive stables belonging to the mansion can be converted into garages for the residents of the proposed houses.

HARDINGSTONE (NORTHANTS).—The R.D.C. has adopted a £1,800 scheme for widening and resurfacing the Wootton-Quinton road.

HASLINGDEN.—The T.C. is to urge the L.M.S. Railway to provide improved accommodation at the railway station. The construction of a new road from Prinny Hill to Carrs is under consideration. It has been decided to remove the church of St. Stephen, Haslingden Grane, from its present position on the moorland road, to a site about a mile nearer Haslingden, and the contract for the work has been let. The cost will be £6,000.

HESSLE.—Plans passed by U.D.C.: House and garage, Davenport-avenue, for Mr. F. Fagil, by Messrs. North & Andrew, Whitefriargate, Hull, Sunday School at the north-west corner of the Congregational Church,

South-lane; by Mr. N. C. Windross, Anlaby Park, block of houses, Plantation-drive, Anlaby Park, for Mr. A. N. Winsop, Hull.

HULL.—Mr. John Bouch Willows has left £10,000 to the directors of the British Oil and Cake Mills, Ltd., Hull, for providing artisans' and labourers' cottages, on the conddition that during the life of his wife they, shall pay 5 per cent. on that sum to her. —The M.H. has sanctioned a loan of £1,400 for the erection of a public lavatory at the entrance to East Park.—The M.T. has promised a grant of £3,865 towards the cost of widening Anlaby-road, between Newinton level crossing and Calvert-lane.—The Housing Committee is negotiating with the M.H. regarding the rehousing of those who will be displaced by the New George-street improvement scheme.—Subsidy house plans passed: Ten houses, Southcoates-lane, for Mr. C. Smith; 12 houses, Beverley Estate, for Mr. T. Barnett; six houses, Monmouth-street, for Mr. J. S. Williamson. Sanction is being sought to a loan of £40,000 for further subsidy houses.—The B.S. has prepared plans for the following schemes: Hessle by-pass road, £84,000; Anlaby by-pass road, £14,390; road through West Bulls Farm, £50,000; extension of Preston-road, £22,500.

KETTERING.—The U.D.C. have approved a scheme for constructing an arterial road from the Northampton road to the Rockingham-road, at an estimated cost of £20,000.

LEAMINGTON.—Plans passed by T.C.: House, new road off Guy's Cliffe-avenue (Grand-avenue), for Messrs. S. A. Mason & Co.; sub-station, Tavistock-street, for the Midland Electric Light & Power Co.; additions, 39, Archery-road, for Mr. J. W. Jubb.

LEEDS.—The M.H. has sanctioned a loan of £6,500 for the erection of an elementary school at Meanwood. —The Town Clerk has been authorised to proceed with the preparation of a draft Bill to be promoted in Parliament containing provisions enabling the Corporation to carry out street improvements (including the widening to 80 ft. of the streets between Victoria-square and Vicar-lane), and the making of a new road from Vicar-lane to St. Peter's-street, and an improvement of York-road (involving the reconstruction of the tramway on a reserved sleeper track), and to authorise the borrowing of further money for the construction of water-works.- The following unemployment relief schemes have been prepared: Construction of a new road from the Gledhow Valley to Harrogate-road; construction of a new road along the line of the footpath in South Accommodation-road to Knowsthorpe-lane; the widening of Mabgate near St. Mary's Church; reconstruction of 40 roads.—Application is being made for sanction to a loan of £2,500 for additional accommodation at the Sanatorium.—The Tramways Committee has accepted a design for covering the barriers in Briggate, and authorised the work at a cost of about £1,800.—An outlet sewer in Spen-lane is to be constructed, at a cost of £860.—A tower is to be built on the Middleton housing estate to supply water to the higher portions of the estate.—Subsidies have been promised in respect of the following: Two houses, Vancouver-place, for Messrs. Carby, Hall & Sons; six houses, Old-lane, Beeston, for Messrs. Roddy & Sons; two houses, George-avenue, for Messrs. Reddyhough & Son; bungalow, Blue Hill-lane, for Mr. T. Givens; two houses, Calgary-place, for Messrs. Harrison & Co.; bungalow, George-avenue, for Mr. A. Horne.—The Town-Planning Committee is to consider a suggestion by the Civic Society for the provision of walking ways in Beeston and Middleton.—The Library Committee is to suggest to the Carnegie Trust a site in Compton-road for a branch library.

LENNOXTOWN.—Stirlingshire Education Authority has ordered the preparation of plans for the addition of four class-rooms to the Catholic school.

LINTHWAITE.—Plans passed by U.D.C: Two houses, Western-road, for Messrs. Orton & Avison.

LLANDUDNO.—The U.D.C. is applying for sanction for a loan of £8,300 for the erection of houses in Howard-road and St. Serriol's-road.—Plans passed: Eight houses, Gogarth-road, for Mr. F. Collis; three houses, Herkomer-road, for Messrs. Even Hughes & Co.

LONDON DOCKS.—According to a report of the representatives of the L.C.C. on the Port of London Authority, the arrangements made with the Government for financial assistance towards the carrying out of Port developments at Tilbury Docks and Surrey Commercial Docks have been extended so as to include the proposed new passenger landing stage at Tilbury.—The road widening and improvements of railway facilities in connection with the new six-story tobacco warehouse at Royal Victoria Dock, have been completed.

LOSTOCK.—Messrs. Brunner, Mond & Co., Ltd., are to construct a culvert under the Manchester-Northwich road to take lines of pipes from Holford to Winnington. The scheme has been sanctioned by the Cheshire C.C., on condition that the Company are prepared at their own cost to construct the culvert for such length as would provide for a 60 ft. road being constructed in the future.

LYMM.—The U.D.C. has prepared a scheme for improving the canal bridge at a cost of £8,230, and the approaches at a cost of £5,550.

MANCHESTER.—Plans passed by the Corporation are as follows: Didsbury Park Estate, dedication plan and section of new street, viz., Parrs Wood-road and continuation of Parrs Wood-avenue and Cedar-road, also revised plan of Rectory-avenue, Didsbury; R. Harrison, alterations to premises, Albert-street, Didsbury; W. Campbell, garage and store, Autumn-street, Chorlton-on-Medlock; W. Arnold, alterations to showrooms and offices, Upper Brook-street, Chorlton-on-Medlock; Didsbury Park Estates Co., Ltd., 26 houses, also revised plans and sections of 102 houses and drains of same, Didsbury; R. H. & J. Sharp, printing works, Stockport-road, Ardwick; Manchester & Salford Coo-perative Society, 40 houses on portion of Burnage Housing Estate, Crossley-road, Burnage; J. W. Langfield, six houses, Brook-road, Withington; W. Meredith, six houses, Ash-grove, Rusholme; Didsbury Park Estates, 128 houses on the estate, Didsbury; A. Hartley, dedication plan and section of new street, Wembley-grove, West Didsbury; North Western Counties Development Co., dedication plan and section of continuation of Rutland-avenue, West Didsbury; S. H. Finney, dwelling house, Darley-avenue, West Didsbury. ; F. Stapleton, two houses, Burton-road, Withington; Manchester & Salford Co-operative Society, Co-operative stores and hall, Withington-road, Moss Side; Lord Bros., alterations to premises, Deansgate; M. Thornham, shop and house, Lloyd-street South, Withington; G. B. Cox, six houses, St. Austell's-road, Chorlton-cum-Hardy; J. Wates, three houses, Ellesmere-road South, and Egerton-road South, Chorlton-cum-Hardy; G. Littler, two houses, St. Brannocks-road, Chorlton-cum-Hardy; Clarke & Co., two houses, Milton-grove, Whalley Range; North Western Development Co., Ltd., two houses, Manor-drive, West Didsbury, and 44 houses, Goulden-road, Hague-road, and Rutland-road, Withington.

MILLWICH.—The U.D.C. has sent plans and estimates to the Cheshire C.C. in order to obtain a grant towards a proposal for the widening of the town bridge.

MIRFIELD.—Tenders are being invited for the construction of a new steel bridge over the Rivers Calder and Hebble, at Mirfield, for the Calder and Hebble Navigation Co., Ltd.

NANTWICH.—Goodall's corner is to be widened at a cost of £1,000.

NEWPORT (MON.).—The T.C. is considering alternative sites for erection of a new Town Hall. The scheme is estimated to involve expenditure of £100,000.

NORMANBY.—The Surrey C.C. has voted £872 for improvements to buildings, drainage and water supply at Cleygate Farm small holding.

OLDHAM.—Plans have been approved for the erection of five houses in Ripponden-road.

OSWESTRY.—Plans passed by R.D.C.: Two houses for Mr. Beckitt, Pant; bungalow for Mr. Norman, Kinnerley; house for Mr. Foulkes Jones, Pentre Cefn; house for Mr. Griffiths, Pant and shop for Mr. Martin, Trefonen; bungalow for Mr. E. Betts, Knockin.

PARKGATE (CHESHIRE).—The Mollington bridge is scheduled for widening, at a cost of £5,000.

PENNINGTON.—A faculty has been granted by the Carlisle Consistory Court for alterations and additions to the parish church.

PONTEFRACT.—Plans passed by R.D.C.: House, at Red Hill-road, for Mr. Battye; house at Red Hill-road, for Mr. P. Beckitt; six houses at Joffre-avenue, for Armitage Bros.; bungalow at Hill Crest Estate, for Mr. C. Smales; two houses at Burton Salmon, for Mr. Clayton; cottage at Hill Crest, for Mr. G. W. Belcher.

POULTON.—The work of erecting the new gasholder has now been commenced. The extensions in the retort house have also been commenced.

PREESALL.—A sub-committee has been appointed to consider a site in Park-lane for the erection of a new power station and yard.

PRESTON.—The Board of Management of the Preston Royal Infirmary has decided to erect a new block consisting of 60 beds in three wards, and an additional six small wards. Mr. A. C. M. Lillie, architect, Bamber Bridge.

RAWTENSTALL.—The M.H. has sanctioned a scheme for the erection of eight houses on a site at Crawshawbooth.

RHOS-ON-SEA.—The Denbighshire E.C. proposes to erect a new elementary school.

RIPLEY.—Surrey C.C. has voted £495 for improvements at Homewood Farm small holdings.

ROTHERHAM.—Sixty-four more houses are to be erected on the Eastdene Estate. Land is to be purchased at a cost of £1,720, in Meadow Bank-road, for rehousing in connection with the Square-yard insanitary area clearance. Rooms at St. George's Hall are to be adapted for use as a child welfare clinic, at a cost of £400. Plans passed: House, St. Leonard's-road, for Mr. R. P. Gates; four houses, Broom-grove, for Mr. A. Thompson; bungalow, Treherne-road, for Mr. W. Robson; house, Cranworth-road, for Mr. A. Caswell; bungalow, Clough-road, for Mr. A. Prescott; two houses and shops, Badsley-lane, for Mr. G Bilton; block of shops with tenements above, Doncaster-road, for Corporation. The Borough Engineer has been asked to submit particulars of alterations at the Town Hall. The tramway track between Badsley Moor-lane and Broom-lane is to be doubled when the road is being reconstructed, at a cost of £5,500.

RUSHDEN.—Plans passed by U.D.C.: Office and lavatory accommodation, Palace Theatre, for Palace Co., Ltd.; garage, Gordon-street, for Mr. C. N. Clark; garage, Montague-street, for Mr. A. W. Warner; additions to house, 10, Wentworth-road, for Mr. J. H. Jones; garage, Queen-street, for Mr. Arthur Mantle.

SALFORD.—The De La Salle Fathers have acquired "Hopefield," Weaste-lane, which is to be equipped and adapted to meet the requirements of a first-class secondary school.

SARN.—Plans and estimates are being prepared by the Flintshire County Surveyor for repairs to the Sarn county bridge.

SEAHAM HARBOUR.—Plans passed: Extensions to premises, Londonderry-road, for British Legion Club; alterations to premises, Church-street, for Messrs. Hunter's tea stores; house and shop, Station-road, for Mr. J. W. Claxton; house and shop, Queen Alexandra-road, for Mr. Chambers; house and shop, Princes-road, for Mr. Huitson; two houses, Princes-road, for Mr. J. S. Ankers.

SHERBURN.—A site at Sherburn, Elmet, has been fixed upon for a proposed new bacon factory for Yorkshire.

SIDMOUTH.—The U.D.C. is negotiating for the acquisition of Salter's Meadow for a housing site. Plans passed: Two cottages, Woolbrook, for Messrs. E. Barnard & Co.; two cottages, Water-lane, for Messrs. T. Baker & Sons; house, Manor-road, for Mr. W. R. Sampson.

SKELBY.—The Mansfield Colliery Co. propose to erect 820 houses at Blidworth immediately, and to increase up to 2,000 houses within the next four years.

SOUTH CROSLAND.—House, Butternab-road, for Mr. A. Mellor.

STAINFORTH.—Plans of the new Wesle have been approved, and the architec instructed to proceed with the prelimina quickly as possible.

STALYBRIDGE.—The T.C. has prepared follows: Reconstruction and paving with of Stamford-street, £6,390; widening £3,000; widening Huddersfield-road, £1,6

STANLEY.—Plans passed: House at Lin lane, Lofthouse Gate, for Mr. E. Elliott Lawns-lane, Outwood, for Mr. J. Leig houses at Third-avenue, Newton Hill, Kilkenny; and additional conveniences t Horse" Inn, Bradford-road, for the Leeds Breweries, Ltd.

STOKE-ON-TRENT.—The T.C. has sanc sidies in respect of houses to be erected Four houses, Market-street, Milton, for Moss & Son; house, Victoria-road, Tuns J. Foskett; house, Chell Green, for Mr. two houses, High-lane, Burslem, for Mr. two houses, Sneyd Green, for Messrs. She house, Birches-road, Hanley, for Mr. two houses, Harpfield, for Mr. A. Bates; Stone-road, Stoke, for Mr. A. Bass; house for Mr. L. Cartlidge; house, Stone-roa Boden; house, Stone-road, for Mr. H bungalow, Weston-road, for Mr. D. Good Grange-road, for Mr. J. Deacon; 60 hous lane, for Messrs. J. Grant, Ltd.

STOKESLEY.—Plans passed by R.D.C. galows, Worsall-road, Yarm, for Mr. R three cottages and a shop at Great Ay S. R. W. Moody; three cottages at Great for Mr. W. H. Whitfield.

SUTTON WEAVER (CHESHIRE).—The We tion Trustees are taking steps to acquire l in connection with the scheme for the w improving of the Sutton Weaver swing bri

TADCASTER.—Plans passed: Bungalow lane, for Mr. C. J Brice; and bungalow i lane, for Mr. C. Johnson.

TAUNTON.—Plans passed by T.C.: Wo *Gazette* offices, for Messrs. Woodley & Co to "Elmhurst," The Avenue, for Mr. R. electrical treatment department in Eas the Taunton and Somerset Hospital; s Lambrook-road, for the Taunton abattoir in East-reach, for Messrs. Dorse

THORNABY.—Plans passed by T.C. Thornaby-road, for the North Riding Cou alterations to outbuildings, Bon Lea H North Eastern Breweries; bungalow Thornaby Village, for Mrs. W. A. Conroy.

THORNE.—A new village is to be develo 10,000 people, together with school, ho works, &c. The West Riding C.C.'s estim the school is £25,000.

THORNTON.—Intimation has been receiv M.H. approving subsidy for an additiona making 100 in all. For the purpose of the gas works and plant, the Council apply to the M.H. for sanction to bo Application is also to be made for san borrowing of £4,000 for additions to the C Plans approved: Three shops, cafe, h Victoria-road, Missses Armstrong; Henley-avenue, Mr. Gillott; house i avenue, E. Walmsley; pair of houses, L S. Hayward; pair of houses off Victo Threlfall; dairy and garage, Lawson Stansfield.

THURNSCOE.—The M.H. has sanctioned ing of £20,900 and £1,100 for works on sewage disposal.

TILBURY.—The Port of London Au decided upon the construction of a dry western side of the main dock. Its proje 1,150 ft., of which 800 ft. will be undertak Its width will be 100 ft., and the depth 42 ft. 6 in. below T.H.W. The cost of th improvement is estimated at £1,138,000. approach, and tenders are about to be i

TORQUAY.—The Victoria and Albert H decided to enlarge the hotel.

UXBRIDGE.—The Council is borrowing the erection of 58 houses on the Hillingdon passed:— Alterations and additions Lo house, Cowley Mill-road, for Messrs. Ha additions to printing works, for Messrs. K ings, Ltd.; brick store, High-street, for Mr

WAKEFIELD.—The Markets Committee ing the carrying out of a scheme for r ments at Teall-street.

WALLASEY.—Important alterations are to Wallasey Market. The Corporation of the plans for the transformation of th garage in Poulton-road. When rebu large shops or outside stalls, the mark a space of 20,000 cub. ft.

WALTON.—Cheshire C.C. has a scheme the Walton county bridge and approaches £2,500.

WELLINGBOROUGH.—Provided a Mini 50 per cent. can be obtained, the U.D.C. carry out an unemployment relief scheme a by-pass road from Senwick-road across road on to the river; also to provide a riv The cost is estimated at £13,500.

WETHERBY.—The L. & N.E.R. immediately with the work of making course station.

WHITLEY AND MONKSEATON.—The voted subsidies as follows: House, St. O for Mr. J. R. Luke; house, George-terr Bell; house, Victoria-terrace, for Mr. house, Margaret-road, for Mr. G. Miller; terrace, for Mr. W. Robinson; house, for Mr. W. Reah; house, Promontory-t Fisher.—Plans passed: Two houses, B for Mr. J. M. Dawson; two houses, Cl for Messrs. Livingston & Canning; two h road, for Mr. R. Dryden; bungalow

. Nesbit; two houses, Davison-road, for
; two houses, Brunden-avenue, for Mr.
houses, Richmond-terrace, for Mr. A.
use, Grange-park estate, for Mrs. K.
o houses, Chester-terrace, for Mr. W.
ght houses, Brunden-avenue, for Mr.
se, Hillcrest, for Messrs. Gofton Bros.—
Surveyor are to prepare a joint report
e development of the district.
e committee of the Highfield Football
ided to proceed with the scheme for
accommodation and increased facilities
y extension of the press box.
.—The rector and wardens of St.
rch, Mauldeth-road, have decided that
ould be completed as per the original
s. Austin & Paley, architects. The
set the total cost at £3,500.
—The County E.C. has sanctioned the
new Church of England day school at

Plans passed include lay-out of a new
called Rhodesia, and the erection of
the Shireoaks Colliery Co., all available
The director of Notts Education
notified the U.D.C. that they propose
school in the new village of Rhodesia.
—H.M. Office of Works is arranging for
rom the T.C. of Gloucester Lodge, at the
, for the Post Office. Land at the rear of
is being purchased by the T.C. for the
store and depot. The M.H. has sanc-
rchase of "Fairlawn," Chapel-road, for
f municipal offices, at a cost of £5,555.
& Co., Lewes, propose to develop fields
ng estate for building purposes. Plans
houses, King Edward-avenue, for
ndell & Sons; new street from Heene-
srs. Singer, Hyde & Son; house, St.
. for Mr. A. Churcher; shop and flats,
ach, for Mr. F. G. Abell; two houses,
avenue, for Mr. R. C. Turnham; two
omas-road, for Mr. C. E. Parsons; two
ry-road, for Mr. J. E. Lund; 14 houses,
for Mr. E. H. Barton; two houses,
enue, for Mr. J. E. Lund; house, St.
nue, for Mr. J. Banfill; seven shops, &c.,
d. for Mr. C. H. Treacher; workshop and
ank-passage, for Mr. P. D. Stoneham;
s, joining up Pavilion street and Bulking-
r Messrs. Denman & Son; house, Grand-
ssrs. S. W. Phillips & Co.; house, Grand-
r. H. J. Sparks; house, Homefield-road,
und; two houses, St. George's-road, for
ter.

FIRES.

fire has occurred in a large block of
rossgate and Kirk Wynd, Cupar, owned
cupied by Messrs. Hood & Robertson,
e and retail ironmongers.
Considerable damage has been done to
e of the Wholesale Supply Co., Ltd.,
reet, boot factors, by fire.
—A warehouse belonging to Messrs. Wm.
ons, Ltd., feeding-cake manufacturers,
has been the scene of a fire.

Private Building.

try of Health report for England
was a certain amount of house
ing the year 1923–4 by private
without financial assistance. A
returns received shows that 67,546
were entered on the rate books
il 1, 1923, and March 31, 1924;
ere under construction or had been
pleted, but were not occupied on
24.
46 houses first entered on the rate
en April 1, 1923, and March 31,
were of rateable value not exceed-
.049 of rateable value exceeding
exceeding £52; and 2,058 of
exceeding £52, but not exceeding

NEW COMPANIES.

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

R. & G. KNOWLES, LTD. (197,777). Registered May 7. The Oaks, Bamford-road, Wolverhampton. Builders and contractors, &c. Nominal capital, £1,000.

MARYLEBONE JOINERY CO., LTD. (197,794). Registered May 8. 21, Cross Keys-mews, High-street, Marylebone, W.1. Joiners and contractors. Nominal capital, £400.

A. & F. POLDEN, LTD. (197,833). Registered May 9. Camden Works, Woodstock-road, Shepherds Bush, W. Builders and contractors. Nominal capital, £3,000.

F. B. YOUNG & CO., LTD. (197,817). Registered May 9. 22, Conduit-street, W. 1. Builder and contractor Nominal capital, £2,000.

BAXENDALE BROS. (CHORLEY), LTD. (197,756). Registered May 7. Lyons-lane, Chorley. Builders and contractors, &c. Nominal capital, £10,000.

GUESSELITE TILE AND BRICK CO., LTD. (197,820). Registered May 9. Manufacturers and dealers in tiles and bricks. &c. Nominal capital, £400.

D'ART, LTD. (197,836). Registered May 9. 15, Hart-street, Bloomsbury, W.C.1. Builders and decorators, &c. Nominal capital, £100.

W. D. SPEDDING, LTD. (198,630). Registered June 13. County Chambers, Westgate-road, Newcastle-on-Tyne. Builders and contractors. Nominal capital, £1,000.

J. NORTHFIELD, LTD. (198,529). Registered June 10. 25, Victoria-street, Westminster, S.W. 1. Builders, contractors, engineers, &c. Nominal capital, £500.

CREMER, WHITING & CO., LTD. (198,546). Registered June 10. Brick manufacturers and merchants, gravel and flint merchants. Nominal capital, £30,000.

LAW STEAD & SONS, LTD. (198,541). Registered June 10. Hillhouse-lane, Huddersfield. Builders and contractors. Nominal capital, £10,000.

BAILEY & WOOD, LTD. (198,476). Registered June 6. Cassiobury Works, Watford, Herts. Builders, contractors, land, estate, and house agents, &c. Nominal capital, £500.

SCATTERGOOD & SONS, LTD. (198,390). Registered June 2. Hurst Field Steam Saw Mills, New Mills, Derby. Builder and contractor. Nominal capital, £6,000.

F. RENDELL & SONS, LTD. (198,444). Registered June 4. Builder, contractor, engineer, and plumber. Nominal capital, £20,000.

WOODHILL ESTATES, LTD. (198,442). Registered June 4. 12, Gray's Inn-square, W.C. 1. Builders and contractors, decorators and builders' merchants, estate or house agents. Nominal capital, £8,000.

PRENTON TILE AND TERRA COTTA CO., LTD. (198,361). Registered May 31. Brick, tile, and terra cotta manufacturer. Nominal capital, £15,000.

PATENTS

APPLICATIONS PUBLISHED.*

214,433.—L. Gaisman: Rubber-faced blocks for road paving.

214,482.—A. Hiley, H. T. Garvie, and E. Le Bas: Loading-skips for concrete-mixers.

199,719.—J. Sax-Wyss: Receptacles for oil-paint.

201,553.—M. J. G. A. Lemaistre: Hot-water heating-installation.

206,847.—G. Baehr: Vehicle window construction.

210,792.—C. V. Hansen: Roofing-plate.

213,949.—Stothert & Pitt, Ltd., C. M. Toplis, and W. W. Padfield: Jib cranes.

213,950.—H. S. Skenfield, H. J. Webber, and S. E. Smith: Holders for sliding-window sashes.

214,021.—J. S. Dale: Automatic lock for hoist doors.

214,028.—C. H. Haley and K. Haley: Furniture castors.

214,035.—C. Kearton: Concrete hoppits.

214,046.—F. C. Hall, A. E. Hall, W. O. Roberts, and A. V. Jones: Door knobs.

214,050.—P. Hal-Barnett: Screens combined with other furniture.

214,061.—A. Cooksley: Chain guards for chain mortising machines.

214,090.—A. R. Parkes: Mortice locks.

214,114.—C. Camplin: Stone sawing machines.

214,122.—E. A. Schneidan and T. B. O'Brien: Chimney cowls.

214,134.—J. W. Snape and G. F. Mohlman: Varnish.

214,180.—J. Fowler & Co. (Leeds), Ltd., and C. M. Wilcock: Apparatus for mixing concrete.

214,186.—F. J. J. Gibbons: Casement-window stays.

213,650.—J. M. Strachan: Doors and door-operating appliances.

213,660.—G. W. R. Noble: Sectional vaults for interment.

213,691.—O. Cermak: Process for removing the bark from willow or like wood.

213,713.—W. & J. Lawley, Ltd., and J. Lawley: Syphonic flushing-cisterns.

213,714.—H. R. Morgan: Devices for illuminating the interiors of buildings by reflected day-light.

213,718.—W. A. Cruze: Sliding-sash windows.

213,720.—J. E. L. Marshall: Drop-down ends of settees.

213,727.—W. H. Mottershall: Chimney and ventilating cowls.

213,728.—Educational Supply Association, Ltd., and H. Woolard: School desks or tables.

213,744.—H. W. Cowling: Concrete railway sleepers.

195,096.—F. Kattinger and F. Reger: Foot of iron concrete for masts or poles.

213,769.—J. Stoddart: Sliding-sash windows.

201,937.—A. & G. Boulton: Hollow blocks for floors and ceilings.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

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BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

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Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fletton, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire brick:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends	32 10 0
Headers	22 10 0	Two Sides and one End	33 10 0
Quoins, Bullnose and 4½in. Flats	29 10 0	Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
½ in. Shingle for Ferro-Concrete	14 0	" "
¼ in. "	15 0	" "
½ in. Broken Brick "	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to 51/- alongside at Vauxhall in 80-ton lots. £3 3 6

Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE.	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station London.	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4
HARD YORK—	
Delivered at any Goods Station London.	
Scappled random blocks Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags. Per Yard Super	9 0

ARTIFICIAL STONE.

	s. d.
Delivered in London Area in full van loads.	
Plain per ft. cube	6 6
Moulded " "	7 9
Cills " "	8 3

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£3 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

WOOD (*Continued*).

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
½	21/-	1¼	33/6
¾	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
½	17/6
¾	21/-
1	26/-

Inches	BATTENS	s. d.
¾ × 2		2 6 per 100 ft.

SAWN LATHS.

Per bundle				0	2 8
Dry Wainscot Oak, per ft. super, as inch	0	2 0	to	0	2 6
¾ in. do.	0	1 6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1 9	to	0	2 6
Cuba Mahogany	0	3 0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0	14 0	to	—	
American Whitewood planks, per ft. cube	0	12 0	to	0	14 0
Best Scotch Glue, per cwt.	4	10 0	to	—	
Liquid Glue, per cwt.	4	7 0	to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 " 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Hip and valley tiles (per dozen) Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ¾ in.	13 10 0
⅜ in.	14 10 0	⅞ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Gas	50 %	50 %	60 %
Water	45 %	45 %	55 %
Steam	40 %	40 %	50 %
Galv'd—			
Gas	35 %	40 %	50 %
Water	28¾ %	35 %	45 %
Steam	22½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

IRON—	Per ton in London. £ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0		15 10 0
Staffordshire "Marked Bars"	17 0 0		18 0 0
Mild Steel Bars	12 10 0		13 10 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	
Hoop iron, basis price	16 10 0	
" Galvanised	31 0 0	
Soft Steel Sheets, Black—Ordinary sizes to 20 g.	15 0 0	
" " " 24 g.	16 0 0	
" " " 26 g.	18 0 0	
Sheets Flat Best Soft Steel, C.R. & C.A.		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0	
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	
Best Soft Steel Sheets, 26 g.	26 0 0	
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	

METAL WINDOWS—Standard sizes suitab plete houses, including all fittings, p coats, and delivery to job, average pric to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	
NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s	
Old lead, ex London area, at Mills per ton	30 0 0
Do., ex country, carriage forward per ton	31 0 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
29/-	45/-	76/-	153/-	246/-	51

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in
41/6	62/-	92/-	174/-	300/-	588

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per d

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	81/- p

NEW RIVER PATTERN CROYDON BALL VAL

½ in.	¾ in.	1 in.	1¼ in,	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRAS SCREW.

	1½ in.	1¾ in.	2 in.
8 lbs. P. traps	33/-	41/-	56/- 10
8 lbs. S. traps	35/-	45/-	66/- 12

COPPER—	£ s. d.
Strong Sheet per lb.	0 0 3
Thin "	0 0 4
Copper nails "	0 0 3
Copper wire "	0 0 4
TIN—English Ingots "	0 0 4
SOLDER—Plumbers' "	0 0 2
Tinmen's "	0 0 4
Blowpipe "	0 0 5

PAINTS, &c.

Raw Linseed Oil, in pipes per gallo	
" " " in barrels	"
" " " in drums	"
Boiled " " in barrels	"
" " " in drums	"
Turpentine in barrels	"
" in drums (10 gall.)	"
Genuine Ground English White Lead, per t (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms "Park," "Supremus," "St. Paul's "Spedol" and other best brands (14 lb. tins) not less than 5 cwt. lots per ton deliver	
Red Lead, Dry (packages extra) per t	
Best Linseed Oil Putty per cw	
Fllocol per cw	
Size. XD Quality fir	

[Concluded on next page.

* The information given on this page has compiled for THE BUILDER and is copyright this list is to give, as far as possible, the of materials, not necessarily the highest or and quantity obviously affect prices—a fact be remembered by those who make use of thi

RRENT OF MATERIALS (*contd.*)

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.		Per Ft
.. 3½d.	32 oz. fourths	8½d
.... 4½d.	32 „ thirds	10½d
.. 5d.	Obscured Sheet, 15 oz.	4d.
.... 6½d.	„ „ 21 „	5½d.
.. 6d.	Fluted 15oz. 6½d., 21oz.	9½d.
.... 7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

cording to size and substance for squares ck.

LLED PLATE IN CRATES OF STOCK SIZES. Per Ft.

e	4½d.
d	5½d.
ed	5⅞d.

lled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large white ..... 6½d.
tinted ..... 9d.
et ..... 6d.
ed Cathedral ..... 5½d.
do. ..... 7½d.
te is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
rriage	ditto	1 4 0
.....	ditto	1 12 0
.....	Inside	0 18 0
er	ditto	0 18 0
binet	ditto	1 2 6
tting	ditto	1 0 6
Oak	ditto	0 18 0
ring Oak	ditto	0 19 0
rnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
ld Size		0 10 0
pan		0 10 6
gany Stain (water)		0 12 0
ck		0 7 6
.....		0 14 6
nt)		1 5 0
ush Polish		0 17 0
in Terebine		0 9 0
Enamel		0 7 0

Obituary.

as occurred, at Daventry, of Mr. s, aged 75, who founded the firm ms & Son, builders, 45 years ago.

ok place recently, at his residence ue, West Hartlepool, of Mr. Robt. who, prior to his retirement 18 d been in business as a builder and many years.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Ayr.—ABATTOIR.—The Dean of Guild Court has passed plans for the reconstruction of the abattoir in Mill-street, for the Corporation, at an estimated cost of £14,800

Govanhill.—HOUSES.—The Glasgow Corporation has been requested to sanction the purchase of 49½ acres of ground at Govanhill, at a cost of £55,000, as a site for a further housing scheme.

Glasgow.—GENERAL.—The Dean of Guild Court has passed the following plans: The Glasgow Royal Cancer Hospital, Hill-street, Garnethill, addition to X-ray rooms; the National Bank of Scotland, alterations at 78, Union-street; Allen-Liversidge, Ltd., London, new works at Helen-street, Govan; the Corporation Tramways Dept., a covered stand at sports ground, Helenvale-street, Parkhead; Arthur Porter, 70, Cambridge-street, alterations at 42, Kelvinside-gardens; Cooper & Co.'s Stores, Ltd., 24, Howard-street, additions to premises in Howard-street and additions to premises at Howard-court; and alterations and additions to 28, Elmbank-street, for the Highlanders' Institute.

Stirling.—SCHOOL.—The Stirlingshire Education Authority intends to proceed with the erection of a new school at Riverside, Stirling.

Edinburgh.—GENERAL.—The Dean of Guild Court has passed the following plans: The Convent of the Sacred Heart, extension to the Convent at Craiglockhart; Thomas Cleave, bungalow at Dovecot-road, Corstorphine; Sir Robert Greig, house, at Barnton-avenue; Holiday Real Estate Co., four semi-detached houses, at Laverockbank-avenue; St. Bernard's Football Club, foundations and steelwork of grand stand, Gymnasium Grounds; and J. & A. M. Twaddle, bungalow at Craig's-road, Corstorphine.

Giffnock.—GENERAL.—The Buildings Committee of the Upper Renfrewshire District Committee has passed the following plans: Bungalow, Carolside-avenue, Clarkston, for John McCallum; villa at Elphinstone-road, Whitecraigs, for Robert H. Lindsay, 1,330, Pollok shaws-road, Glasgow; villa at Glenpatrick-road, Elderslie, for R. Snodgrass; bungalow at Douglas-avenue, Giffnock, for John K. M'Millan, 90, Main-street, Newton Mearns; four bungalows at Hamilton-drive, Giffnock, for John Taylor, 23, Eastwood-avenue, Giffnock; bungalow at Southview-avenue, Potterhill, for W. S. Reid, Linndale; a church hall and retiring rooms, at United Free Church, for the Building Committee of Mearns U.F. Church; villa at Woodland-avenue, Potterhill, for J. S. Hamilton, Corsehill, Potterhill-avenue, Paisley; shop and five houses at Paisley-road, Cardonald, for Paisley Provident Co-operative Society Ltd.; and additions to Kirkton Bleachworks, at Neilston, for James M'Haffie & Sons, Ltd.

CONTRACTS OPEN.

SEPTEMBER 2.—**Cupar.**—Extension of County Buildings and Sheriff Court offices, Cupar, for the Fife County Council. Particulars from Mr. C. R. Douglas, F.F.S., surveyor, Prudential Chambers, 15, East Port, Dunfermline. Deposit £2. Plans with J. M. Mitchell, Joint County Clerk, County Buildings, Cupar, or at office of architects, Messrs. Thoms & Wilkie, FF.R.I.B.A., 81, North-street, St. Andrews.

NO DATE.—**Dumbarton.**—Erection of four tenements of shops and houses at West Bridgend. Application for schedules, &c., should be made to Mr. W. A. Macartney, A.M.I.C.E., Burgh Engineer, Dumbarton.

The Glasgow School of Art.

The calendar of the Glasgow School of Art has just been issued for the Session 1924–5. Enrolment dates are from September 22–26. The School of Architecture is under the superintendence of a joint committee on Architecture, representative of the Royal Technical College, and the School of Art. Mr. T. H. Hughes, A.R.I.B.A., is Director of Studies, and Professor of Architectural Design, assisted by Professors A. M'Gibbon, A.R.I.B.A., and E. G. Wylie, A.R.I.B.A. Two studentships are awarded each year: the Arthur Leslie Hamilton Memorial Studentship and Medal and the Bourdon Memorial Studentship. The John Keppie Studentship is awarded in alternate years to students of Architecture and Sculpture. Several bursaries and prizes are also awarded. The secretary and treasurer of the school is Mr. John M. Groundwater, 167, Renfrew-street

Victoria Infirmary Extension.

An extension to Victoria Infirmary, Glasgow, was recently sanctioned. A new wing is to be erected at an approximate cost of £100,000. The extension consists of wards, with accessory buildings. An additional nurses' home will be built, containing 63 bedrooms, with sitting-rooms, bathrooms and lavatories, and a large recreation room. An extension to the dispensary is included. The buildings will be erected of stone, with fireproof floors and roofs. Additional escape stairs are arranged in suitable positions. The contractors are: Mason work, P. & W. Anderson; joiner work, John Cochrane; ferro-concrete work, Gray & Co.; plumber work, H. Twaddle & Son; plaster work, Wemyss & Livingstone; terrazzo work, G. Zani & Co. The work is under the supervision of Mr. H. E. Clifford, F.R.I.B.A., architect.

New Bridges for Glasgow.

A sub-committee of the Glasgow Corporation has recently recommended the construction of a bridge over the River Clyde in the centre of the city to relieve the traffic congestion. The proposal involves acquisitions of business property for street-widening purposes in Dixon-street and the removal of St. Enoch Parish Church and Subway Railway Station in St. Enoch-square. A new bridge is at present being constructed at Oswald-street, a few hundred yards down the river, but this is not considered sufficient for the purpose of relieving congestion.

ING TRADE WAGES IN SCOTLAND.*

g are the present rates of wages in the building trade in the principal towns of ry endeavour is made to ensure accuracy, but we cannot be responsible for errors r:—

	Masons.	Brick layers.	Carpenters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Plasterers' Labourers.
...	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½	
...	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½	
...	1/7½	—	1/7½	1/7	1/7	1/7	1/6½	—	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
...	1/5	1/5	1/5	1/6	1/5½	1/6	1/5½	1/1 to 1/1½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
...	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/5½	1/0 to 1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/5½	1/5½	1/5½	1/6	1/5	1/5	1/5½	1/2	
...	1/7½	1/7½	1/7½	1/8½	1/8	1/7½	1/6½	1/2½	
...	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/2	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½	
...	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
...	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

given in this table is copyright. This table does not include all the alterations due to the last week.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

York stone templates fixed	per foot cube	12	6	
York stone sills fixed	" "	21	6	
Bath stone and all labour fixed	" "	10	6	
Portland stone fixed	" "	19	6	

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9	
Do. 20 in. × 10 in. Do. Do.	"	80	9	
Do. 24 in. × 12 in. Do. Do.	"	90	0	

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	3	
Do. joists	" "	5	9	
Do. roofs, floors and partitions	" "	6	3	
Do. trusses	" "	8	3	

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"
Deal wrot moulded and rebated	per foot cu	
Plain deal jamb linings framed	per ft. sup.	1/8
Deal shelves and bearers	"	1/5
Add if cross tongued	"	2d.

STAIRCASES.

	1"	1¼"	1½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers	
Deal balusters, 1 in. × 1½ in.	per ft. ru
Mahogany handrail; average 3 in. × 3 in.	"
Add if ramped	"
Add if wreathed	

FIXING ONLY IRONMONGERY (INCLUDING SCRE

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hing letting in to flo	
Casement stays	1/2	making good	
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	p
Plain compound girders	
Do. stanchions	
In roof work	

RAIN-WATER GOODS.

		3"	4"
Half-round plain rebated joints	ft. run	1/11	2/4½
Ogee Do. Do.	"	2/4½	3/1
Rain-water pipes with ears	"	2/9	3/7
Extra for shoes and bends	each	4/4	5/11
Do. stopped ends	"	1/11	2/4½
Do. nozzles for inlets	"	2/2	2/7

PLUMBER.

Milled lead and laying in flashings and gutters	per
Do. Do. in flats	
Extra labour and solder in coated cesspools	ea
Welt joint	per ft
Soldered seam	"
Copper nailing	"

		½"	¾"	1"	1½"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5
Do. service	"	1/8	2/2	2/7	3/10
Do. soil	"				
Bends in lead pipe	each				
Soldered stop ends	"	1/2	1/8	2/1	2/10
Red lead joints	"	11d.	1/-	1/3	1/11
Wiped soldered joints	"	2/10	3/6	4/-	4/11
Lead traps and cleaning screws	"				14/7
Bib cocks and joints	"	6/4	9/7	15/4	41/-
Stop cocks and joints	"	15/4	17/2	25/8	64/-

PLASTERER.

Render, float and set in lime and hair	per ya
Do. Do. Sirapite	"
Do. Do. Keen's	"
Add sawn lathing	"
Add metal lathing	"
Portland cement screed	"
Do. plain face	"
Mouldings in plaster	per l
One-and-a-half granolithic pavings	per ya

GLAZIER.

21 oz. sheet plain	per fo
26 oz. Do.	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
½ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per y
Knotting and priming	"
Plain painting 1 coat	"
Do. 2 coats	"
Do. 3 coats	"
Do. 4 coats	"
Graining	"
Varnishing twice	"
Sizing	"
Flatting	"
Enamel	"
Wax polishing	per f
French polishing	"
Preparing for and hanging paper	per p

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishme percentage of 1½ should be added for Employers Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. T

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TENDERS

for insertion under this heading should "The Editor," and must reach him not ay evening.
ted. † Denotes *provisionally accepted.*
mended for acceptance.
ted subject to modifications.

D.—Pointing and repairing destructor
:—
Liverpool..... £246

or the erection of a new school on a site
ove, for the Rev. C. Chronnell, Rector
. Mr. H. J. Greenhalgh, architect,

Sons, Bolton £13,500

JTH.—For reconstruction in rein-
of the Boscombe pierhead :—
& Neilsen.
t, Ltd.
, Ltd.
& Son.
sey & Sons, Ltd.
ill, Ltd.
, Ltd. £10,250

For the construction of a new sewer
the Cheadle and Gatley Council :—
g & Sons, Ltd., Cheadle £250 11

For the construction of a sub-station in
or the Council. Mr. H. A. Yearsley,
ester :—
n & Sons, Fallowfield.... £600

—For Byfield sewage scheme, for the

td., Westminster ..	£6,420	12	0
Co., Birmingham ..	6,205	10	11
Leamington	5,584	10	6
ugby	5,475	0	0
am, Birmingham ..	4,990	0	0
g, Rugby	4,781	0	0
r, Hinckley	4,697	15	0
Wakefield, Daven-			
.....	3,995	0	0
., Hendon	3,968	0	0
ter, Guilsborough ..	3,686	0	0

.—For erection of a mortuary in the
or the T.C. Mr. R. E. Ford, 3, Priory-

were received varying from £996 to

l, Bentinck-street,
..... £996 18 4

D.—The tender of Messrs. J. H. S.
Sheffield, for the erection of houses on
Estate, for the Dukinfield T.C., at
20 houses, and not 28, as stated in our
tender was accepted.

N.—For erection of a sub-station, for
akerfield U.D.C. Mr. C. Cole, Town
:—
Co., Golbourne,
ington £2,243 18 9

-Sewer construction, for U.D.C. :—
, Woking £39,046

erection of water tower, for the

ns, Doncaster £23,162

OF WORKS.—Accepted during July :
Aberdare Post Office, &c., erection,
d., Stroud; asphalte damp-courses,
Bristol. Abertillery Post Office,
ourses, Ernest H. Bird, Bristol.
ntenance work, J. W. Hodgson,
Accrington. Barton-on-Humber, alterations, &c., to premises in Burgate, Stamp & Son, Barton-on-Humber. Bath Post Office and Telephone Exchange, demolition work, &c., E. Chancellor & Sons, Bath. Birmingham Post Office Stores, relaying roadway, J. E. Harper & Sons, Ltd., Birmingham. Bognor Post Office, &c., steelwork, Dorman, Long & Co., Ltd., London, S.W. Bootle Employment Exchange, alterations, &c., Henry T. Collin & Son, Liverpool. Bury, maintenance work, Chesters & Co., Bury. Colwyn Bay Post Office, &c., erection, William Bowers & Co., Hereford. Dartford Employment Exchange, erection, Fred. & T. Thorne, London, E. Glasgow, Bridgeton Employment Exchange, erection, John McDonald (Contractors), Ltd., Glasgow. Hoylake Post Office, &c., Portland stonework, Walter Davis, Hereford. Kirkcaldy Telephone Exchange, glazing, John Haxton & Co., Kirkcaldy; joinery, Rodger & Grieve, Kirkcaldy; painting, Tait & Jeffryes, Kirkcaldy; plumbing, H. Hutchison & Sons, Kirkcaldy; structural steelwork, Anderson, Brown & Co., Ltd., Leith. Llangefni Post Office, erection, William Griffith, Anglesey. Longton Telephone Exchange, erection, Tompkinson & Bettelley, Stoke-on-Trent. Newcastle (Staffs), Telephone Exchange, erection, Stephen Heath & Son, Newcastle (Staffs). Newport (Mon), Telephone Repeater Station, plumbing, Beaven & Sons, Ltd., Newport (Mon). Newquay, erection of Coastguard cottages, Carkeek & Sons, Ltd., Redruth. Palmer's Green Telephone Exchange, plumbing, T. B. Cochrane, London, N.; roof filling, Stirling & Johnson, Ltd., London, W.C. Rampton State Institution, extensions, &c., Bernard Pumfrey, Ltd., Gainsborough. Sheffield, Attercliffe Employment Exchange, alterations, &c., Abbott & Bannister, Ltd., Sheffield. Sheffield, Sharrow Telephone Exchange, erection, Thos. Wilkinson & Sons (Builders), Ltd., Sheffield. Shrewsbury Station Sorting Office, extension of roof, William Bowers & Co., Hereford. South Kensington, erection of "Western" Telephone Exchange, Walter Jones & Sons, Ltd., London, S.W. Stoke-on-Trent Telephone Exchange, erection, W. Thomas & Son, Hanley; asphalte damp-courses, The Ragusa Asphalte Paving Co., Ltd., Birmingham; constructional steelwork, Redpath, Brown & Co., Ltd., Edinburgh. Teddington, National Physical Laboratory, erection of High Voltage Laboratory, Chessums, Ltd., London, N. Tilbury Telephone Exchange, glazing, Smith & Owen, Beckenham. Whitley Bay Post Office, &c., plastering, Peter Harle, Sunderland. Wimbledon, Merton-road Employment Exchange, erection, John Alfred Hunt (Hoddesdon), Ltd., Hoddesdon; fencing, H. J. Ford, London, N.W.; slating, J. J. Etridge, junr., Ltd., London, E.; tar paving, A. C. W. Hobman & Co., Ltd., London, S.E. *Painting*: James Carmichael (Contractors), Ltd., London, S.W.; Dilliway & Co., London, W.; Edwards Construction Co., Ltd., London, S.E.; M. Greenwood & Son, Ltd., London, N.W.; Douglass, Halse & Co., Ltd., London, S.E.

HASLEMERE.—Erection of police station at Haslemere, for Surrey Joint Committeee :—
*Chapman, Lowry & Puttick, Ltd..... £7,190

HEYFORD.—For the design, construction and erection of five aeroplane sheds at Heyford Aerodrome, Oxfordshire, for the Air Ministry :—
*The Cleveland Bridge and Engineering Co., Ltd., Darlington.

HULL.—Piling for bridge across the Holderness drain on the Ring Rood, for T.C. :—
*Hy. Langton & Son, Ltd. £598

LEEDS.—Painting houses, for T.C. :—
For Meanwood Estate—
*Mason & Howell £486
Ivy and Park Estates, &c.—
*Oates Bros..... 350

LEEDS.—Provision of marquee, for T.C. :—
*C. W. Carr & Son..... £130

LEEDS.—Supply and fixing main valves and platforms at Leighton Reservoir :—
*J. Blakeborough..... £4,550

NETHERNE.—Erection of two verandas at the Reception Hospital, for the Surrey C.C. :—
*Crosby & Co., Ltd., Farnham £1,333

NETHERNE.—Provision of additional accommodation for nurses at hospital, for Surrey C.C. :—
‡Crosby & Co., Ltd., Farnham £5,165

PONTEFRACT.—For necessary repairs at the Ferrybridge sewage works, for the R.D.C. :—
*S. T. H. & J. Baker.

RUSHDEN.—Making of Allen-road, for the U.D.C. :—
*H. Wilmott, Rushden £1,020
Laying of Hayway sewer—
*H. Wilmott 430

SALTBURN.—For the erection of 19 houses, for the U.D.C. :—
*— McCretton £9,270

SALTBURN.—For making-up Marine-parade, for the U.D.C. :—
*G. H. Phillips £1,274

SIDMOUTH.—Erection of refuse destructor at Manstone-lane, with brick chimney, for U.D.C. :—
*Meldrum Bros. £2,196

SMETHWICK.—For tar-spraying and repairing the whole of the roadways in Messrs. Mitchells & Butler's Brewery :—
*George Macdonald, Hunt & Co., Ltd., Birmingham.

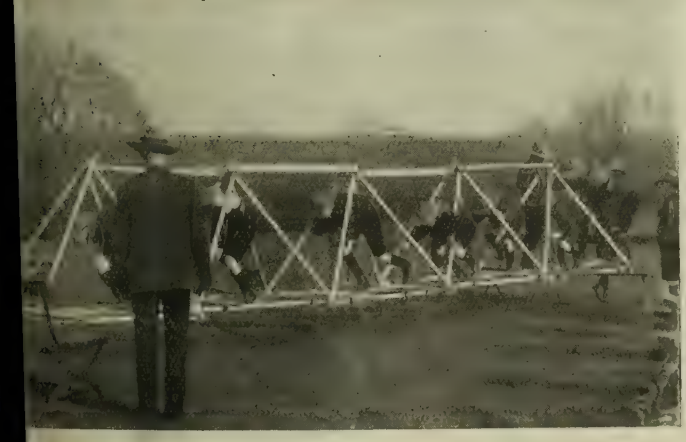
TAUNTON.—For the construction of concrete screening tank at Coal Orchard, for the T.C. :—
*F. & E. Small £350

THURNSCOE.—For the construction of a new reservoir in Clayton-lane, for the U.D.C. :—
*Geo. Bell & Son £6,840

TREDEGAR.—For painting the park rails, Bedwellty House, &c., for the U.D.C. :—
*S. Jones Bros. £119 7

WELLINGBOROUGH.—For erection of convenience at the Workhouse, for the Guardians. Messrs. Sharman, Moore & Morley, architects, Sheep-street :—

W. J. Richardson & Son, Newport Pagnell.....	£1,252	19	6
Smith & Son, Ltd., Raunds....	910	0	0
G. Henson & Son, Ltd., Wellingborough	899	10	0
E. Brown & Son, Ltd., Wellingborough.....	894	10	0
H. H. Robinson, Roade.....	857	0	0
Stevens & Co., Wellingborough	827	0	0
*C. Adams & Co., Wellingborough.....	787	10	0





[The bridge and observation tower illustrated above were built by the Malvern Association of the Worcestershire Boy Scouts. The observatory is 23 ft. in height, and both the bridge and the observatory were built of Scout's staves.]

WELWYN.—For the erection of 40 houses at Welwyn, for the R.D.C. :—

†Simms, Son & Cook, Nottingham £19,280

WIGTON.—For the carrying out of the Fletchertown sewage scheme, for the R.D.C. :—

*W. Wilson, Newcastle £2,832 2 6

WOODLESFORD.—For reconstruction of cellars and erection of a new fermenting room at Eshaldwell Brewery, for Messrs. Bentley's Yorkshire Breweries, Ltd. :—

*J. Hindle, Hunslet, Leeds.

WORTHING.—Painting at Elm-grove School, for the T.C. :—

*C. W. Collier £235

WORTHING.—For sinking bore holes at Long Furlong, for the T.C. :—

R. A. Fitch, Bradford	£4,308 0
Le Grand Sutcliffe & Gell, Ltd., Southall.....	3,773 8
C. Isler & Co., Southwark-street, S.E. 1.....	2,839 1
F. Smith & Son, Grimsby	2,551 0
‡A. C. Potter & Co., Grantham	2,392 10

YARMOUTH.—For alterations to male mental wards, for the Board of Guardians :—

*H. Benwell & Sons £350

TRADE NEWS

Messrs. Chas. Walker & Co. have removed from 174, Victoria-street, to 72–74, Victoria-street, S.W.1. The telephone number remains the same.

Messrs. The British Dolomont Co., Ltd., are removing to Astor House, Aldwych, directly opposite Australia House. Astor House is an eight-floor building, and the whole of the floors are being covered with Dolomont flooring.

Owing to a printers' error in our issue for August 15 the second line of Mr. H. Johnston Thomas's advertisement headed "Timber, Floorings, Matchings, etc.," read "2 in. by 4 in. good building timber, 10s. 6d. per 100 ft. run." The size should of course have been 2 in. by 3 in., as in our issue for August 1.

Messrs. Aspinall's Enamel, Ltd., of New Cross, London, S.E.15, have issued an attractive little booklet, entitled "Colour the Sunshine of Life," in which architects, builders and decorators will find much useful information concerning this firm's well-known brands of enamel, paint and distempers. "Sanalene" enamel, in four shades of white and 60 other colours and shades, is claimed to cover as much as 100 square yards per gallon, and "Wapicta" distemper 500 square yards per cwt.

We have received from Messrs. The Expanded Metal Co., Ltd., a booklet dealing with expanded metal at Wembley. At Wembley very large quantities of expanded metal lathing have been used for ceilings, internal and external walls, &c., while the heavier types of expanded metal have been used for innumerable purposes. The method of construction includes la external walling built of timber fra expanded metal lathing fixed to tim receive plaster. This, it is claimed and rapid form of construction, t required being low in cost, few readily obtainable, and quickly transported.

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STEVENS & A
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VICTORIA MILL, POINT P
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WARM AIR VENTILATING PATT
GEO. WRIGH
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Burton Weir Works, Rother

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

—No. 4257. SEPTEMBER 5 1924.

COAL AND POWER *

E have lived so long in an atmosphere of admiration for the efficiency of the nineteenth century that we are still capable of being shocked by the overthrow of some old illusion. We realise that chaotic inefficiency has been the leading ristic of town development and architecture. We his, and are trying with infinite toil to substitute sense and order. But before we can make bricks nsport materials we must obtain and utilise coal. ition in the mining industry—as observed by the man—is that it is a house divided against itself, may compare it with a volcano which, after a period, will burst into eruption for a few weeks lie quiescent until the pent-up gases are once more with devastating violence. Seeing that coal is not foundation of our own building industry but of the prosperity, these volcanic attributes are disquieting. ittle book we are shown a section of the volcano, and ining this we are lost in wonder, not that earthquakes otions occur periodically, but that the mountain lies for a moment.

ulliver had enlightened us on the mining methods in Laputa, we should have expected this story, because en Dean Swift was the most capable of illustrating cribing the futile and the preposterous. This comad, however, no need to resort to the imagination, re here given, in a matter of fact form, 139 pages each hich contains a fresh proof of our cupidity, stupidity, mpetence. The committee was well advised to make the outset that the report has no political significance ; st given facts, and then proposed remedies with which, , we may or may not agree. The report provides, an excellent opportunity for men of all opinions y it is that we are constantly on the edge of trouble nes, and why we are asked such preposterous prices reatest material assets—coal and power.

niner is dissatisfied because he receives inadequate ich are determined largely by what the poorest mines istrict can afford to pay, so that good mines can reap profits while low wages are being given. He feels miner has no voice in the conduct of the industry, t he can obtain by collective bargaining and by war. He resents the payment of royalties. The ical effect of these royalties is very great, because cannot see why a man should live in luxury, as he a distance on the sixpence a ton he levies on the those who spend their lives in digging coal in the the earth. The miner is further embittered by the l houses, and the ugly and filthy environment in and his family so frequently have to live.

nineowner also has his grievances, the first being rest itself; the second the multiplicity of mineral owners he has to deal with—there are no less than sand royalty owners: "The mineowner is at the the landowners whose land happens to contain A third difficulty is the obstinate and recalcitrant who will not co-operate with the others for efficient nd who insists upon extortionate demands, and means of overcoming factious or greedy opposition. ins of the shortness of working hours, but in this ably wrong, since men working freely and with a ce better results when excessive physical fatigue overning factor in output.

sumer, as we can all testify, is not without grievances. ged absurd prices, he feels that there are too many coal factors and merchants making a living out of the coal trade, and that they are making too much, and he believes that only waste and bad organisation or profiteering can explain the price he has to pay; "He feels that he is helpless in the hands of warring interests and warring political doctrines." The royalty owner alone seems to have no grievance.

But the worst feature of the whole business is the appalling waste of national resources. We need not here tabulate the objections to air pollution or to the waste of by-products involved in burning raw coal, but we would draw attention to the evidence given before the Coal Conservation Committee. Mr. Merz observed that 16,850,000 tons of coal were used in coal-burning furnaces in 1913, and he stated that one-fifth of this amount would have supplied the power required if the power were produced in large modern stations. Sir Richard Redmayne, in his Presidential Address to the Institute of Mining and Metallurgy, in 1915, stated that "the present power requirements of the country could be met by utilising one-third of the fuel consumed at present." While Great Britain, owing to its compactness, is pre-eminently suited for the distribution of power from great central power stations, yet we lag far behind America, Canada, and France, and plod along dependent in the main upon undertakings that are too small to be economical in working.

The conclusions arrived at by the committee are perfectly definite; nationalisation of mines is rejected on the ground that theory and practice combine to show that nationalisation in any form reduces efficiency and, therefore, either diminishes the amount available for wages or increases the price of the product. It is further insisted that if the miners want to manage the mines they ought to carry the full responsibility for raising the capital needed, and for making the industry pay. Nationalisation having been rejected, the report continues: "We believe that better results for all concerned will be attained by freeing the industry from the obstacles to efficiency which at present obstruct it, by continuing to enlist the energy, adaptability and resource of private enterprise in the business of mining coal, and by creating machinery whereby all parties engaged in the industry can frame and apply a common policy for its development, and whereby more human relations can be established between employer and employed." The report says that the duty of the State in a modern industrial society is not that it should undertake creative and productive functions, but that it should ensure the necessary conditions in which the creative enterprise and energy of its citizens can most effectively operate. The committee, while being strongly in favour of private enterprise, is no less insistent that private enterprise should be subject to strict control so that the old haphazard methods can be replaced by efficiency. This is the view we, in these columns, have consistently urged in favour of private enterprise in housing. Housing is a vital factor in the mining question, and we find, on page 45 of the report, that "It is a cardinal point of our proposals that the ugly and wasteful legacies of the past should be swept away and that not only better houses but better amenities . . . should be not the exception but the rule."

An appendix by Mr. R. A. Scott-James deals with housing conditions in mining areas. The author insists that "If there is any place in England which reveals in a striking and conspicuous way the finer possibilities of architecture it is surely the city of Durham . . . the early colliery owners, however, seem to have exceeded all other employers in their indifference to the conditions under which their workers lived."

The price of this book brings it within reach of everybody, and we hope it will be widely studied because, whether or not we agree with the proposed solutions, at least the facts are there, and these make it evident that drastic action is necessary.

Power. The Report of an Enquiry presided over by the Right Hon. ge, O.M., M.P. Price 1/- net. Hodder & Stoughton.

NOTES

Steel Frame and Reinforced Concrete Construction.

ARCHITECTS concerned with steel-frame and reinforced concrete construction will learn with pleasure of the forthcoming visit to the United States of Mr. Topham Forrest, Superintending Architect of the London County Council, to report to the London Building Acts Committee on modern methods of construction as practised in America. It has long been felt that the London Building Act and the L.C.C. Regulations for reinforced concrete construction are unduly irksome in regard to these methods of construction. We believe the Committee which for some two years has been considering these Regulations has now completed its work, and recommended considerable revisions to be made in order to bring the Regulations into line with up-to-date constructional methods.

Parliament and Housing.

WE will all agree with a statement by the Minister of Health in a contemporary that "Acts of Parliament cannot build houses"; on the contrary, the trend of recent legislation—the Finance Act of 1910, the Rent Restriction Acts, and the Housing Acts which have tended to encourage building by local authorities rather than by private enterprise—has been to check the building of houses by those who provided them before that legislation was enacted. But few will admit the correctness of the Minister's further statement that Acts of Parliament "provide means and remove obstacles" if he refers to building by house builders for private ownership. If the object of the new Act is to transfer housing to the local authorities and make us a nation of municipal tenants, we get a clearer idea of the Minister's meaning. Certainly the provision of "means" to the extent of over two thousand millions is on a gigantic scale, but it is probable that the only "obstacle" to be removed will be the builders and those who financed them to whom we looked for the houses in the past.

Housing Costs in Scotland.

AN intimation of the difficulties before the Government in carrying out its new housing programme is contained in a circular now being issued by the Scottish Board of Health. One of the differences in procedure between Mr. Wheatley's Act and the Act of 1923 is that whereas in the latter case the approval of tenders by the Board has not been necessary, under the new Act the price at which it is proposed to build houses for which a subsidy is asked will have to receive the approval of the Board. In pointing out that it expects the prices of new houses to approximate to those ruling early this year, the [illegible] states: "In the spring of this ye[ar] Board were approving tenders fo[r] of three apartments costing slightl[y] £300 for each flat even in countr[y] tricts. For the same type in [illegible] months the cost would appear in [illegible] cases to have increased by over [illegible] cent."

The Plasterer.

LONDON plasterers, di[s]fied with the settlem[ent] the recent dispute, demanding an increa[se] wages of 4d. per hour, and threate[n] further sectional strike. From *H[ousing] Betterment*, the journal of the Am[erican] National Housing Association, we [learn] that an American architect has inv[ented] a machine with which one plastere[r] six labourers can do the work of [twenty] plasterers. It is stated that in a [test] wall 222 ft. long by 9 ft. high, wit[h] quent gables, was plastered with [a] three-eighths of an inch thick by on[e] in two and a-half hours, and tha[t] machine has been taken up b[y] Japanese Government for use in rebu[ilding] operations. "The invention co[mes] states our contemporary, "followi[ng] exorbitant demands of the plas[terers] who are now earning twenty-five[shillings] a day and upwards with all kin[ds] bonuses." We are reminded o[f] dictum of Mr. Winston Churchill [at] Architectural Association recently,



Detail of the Doorway of the Baptistry, Florence: "The Creation of Adam and Eve."
BY LORENZO GHILBERTI.



l of Capital for Nebraska State pitol. MR. LEE LAWRIE, Sculptor.

a nation badly wants anything it ot allow the interests of a section to in its way, and we have in the e in the employment of masons, ed to in our last issue, as an example r own industry of the result of pting to force wages above the level the industry can afford to pay.

Sky-raper urch.

WE understand it is intended to erect (at a contemplated cost of £800,000) the Broadway Temple, New York, with its cruciform orium accommodating 2,000 people, in the form of a skyscraper building, surmounted by a tower terminating a revolving cross illuminated by city as a skysign advertisement. "church" will be set just above reet level. The special accompanyatures of the structure include an bly hall fit for concerts and dances; nasium for 800 persons; a swimpool with removable toilet cubicles th sexes; a stage and a cinema. nday school provision is mentioned, ower rooms and arrangements for c events are included. The upper of the establishment will be devoted ping apartments and kitchens, with g contrivances above the fifth level. This unusual scheme of so ehensive a character should furnish ie opportunity for a fresh form of ectural treatment. The cruciform laid out on a big scale and its parochial accommodation thus ed on a restricted site combine to the composition very distinctive, if rhaps entirely unprecedented in its . Double historic churches built bove the other are more or less r, as at Sainte Chapelle, Paris, the one in that case being connected as essory to a palace. St. Francesco, isi, is another splendid example. come to mind, as the twin groined and lower churches at Schwarzorf, with the square belfry rising at the crossing supporting its tall spire. Or, again, witness the double chapels of Eger Castle, Bohemia. Collegiate, ecclesiastical, or monastic establishments, with their adjacent buildings, mostly covered considerable sites, and included many purposes grouped round their church, which dominated the whole composition, as also happened, of course, in most of our large modern parochial centres.

Architectural Problems.

THIS American project, set on so limited a plot, obviously renders the skyscraper form inevitable in such a city. This must be so, whatever uses were applied to the subordinate parts of the scheme. Moreover, apart from these precise considerations in relation to the novelty of the particular programme thus briefly described, it may be incidentally remembered that in the Middle



Panel, St. George and Dragon, at Harkness Memorial Building.
MR. LEE LAWRIE, Sculptor.

Ages plays were periodically performed in churches and certain Psalms before then were accompanied by dancing. Usually, early basilican church plans provided cloistered baptisteries with a pool or spring set in the midst of a garth for the total immersion of the catechumens who congregated in the western narthex, which is still to be seen, marked off by a line crossing the nave next to where the font stands at Durham Cathedral. The swimming bath and gymnasium connected with the projected Broadway Temple at New York for promoting physical displays and aquatic events, arise, of course, from quite different ideals, and the absence of any school accommodation is equally distinctive. The architect cannot fail to recognise these conditions, and the lighting of such a building, and the provision of elevators to the several floor levels, as well as ample contrivance of emergency exits, must manifestly influence the architectural treatment irrespective of the ethical or religious aspects of the problem. Structurally, too, the weight of the swimming bath and its adjuncts naturally will determine the design, besides controlling the lay-out of the auditorium or cruciform "church" situated in the substructure just above the street level below which the basement will possibly be contrived after the manner of a crypt.

The Personal Craftsman.

IT was surprising in reading the recent discussion on the decline of the art of the silversmith to notice the absence of any mention of the individual craftsman of our own time, much of whose work suggests the very opposite of decline. The art must be looked for in the quarters where it may be found. The methods of industrialism do not admit the freedom to the worker out of which sensibility to beauty can find expression, and if we limit our view to this direction only we may easily admit what is accepted as the decline of the art. If, however, this failure must be recognised, it is none the less true that in other directions, in the hands of the craftsman working freely and directly, there is much vitality at the present day, and if we look in the right direction for it the art of the gold and silversmith shows great beauty and development.



Modelled Details for Carving. MR. LEE LAWRIE, Sculptor. (*See p.* 350.)

GENERAL NEWS

School of Building.

The enrolment dates of the London County Council School of Building, Ferndale-road, Brixton, for the session 1924–25, are from September 15–19.

British Non-Ferrous Research Association.

The British Non-Ferrous Research Association will hold a Conference on Bureaux of Information and "Special" Libraries from September 5–8, at Hertfordshire.

Bolingbroke Hospital Extension.

Sir James and Lady Carmichael, of Kingston Hill-place, Kingston, have given £10,000 towards the cost of erecting the William Shepherd Memorial Wing at the Bolinbroke Hospital, Wandsworth Common, S.W. The cost of this wing, it is estimated, will amount to £60,000.

Councillor's Building Contract.

A Councillor of Sheffield City Council wrote recently releasing the Corporation, if it wished, from his firm's contract to build 198 houses for over £88,000, in view of the recent decision concerning the position of company directors on public bodies. The Estates Committee accepted the offer, and adopted the tender of another firm for £88,744.

Operatives for Australia.

In the House of Commons recently attention was called to the fact that advertisements were appearing in the Press offering assisted passages to Australia to skilled carpenters, bricklayers, plasterers, masons, and plumbers for employment, chiefly in the State of Victoria.

In his reply, Mr. Lunn, the chairman of the Overseas Settlement Committee, states that the Government had not considered it desirable to interfere. He is now in a position to state that a telegram has been received from Melbourne requesting the Director of Emigration and Settlement, Australia House, to cancel all existing applications under the Victorian requisition, provided no hardship is involved. It is understood that the total number originally asked for was 800, and that 146 men, with their families, have actually sailed.

The Institute of Plumbers.

The Institute of Plumbers recently held their quarterly meeting at Cardiff, and were accorded a civic welcome by the Lord Mayor of Cardiff. Mr. J. W. Willoughby (Manchester) said there was a great affinity between the health of the people and the humble craft of the plumber. The plumber controlled the health of the towns, the sanitary arrangements, and the light, &c., and was therefore a factor to be considered.

Mr. George Wood, the President, in referring to the recent building trades dispute, expressed a hope that the peace they had now arrived at would be with them for a good time. There were undoubted lessons to be learned from the dispute, and he trusted that in future the plumbing trade would safeguard the interests for which they had been fighting. Throughout the dispute they, as master plumbers, had been loyal to the Master Builders' Federation, and had been congratulated on their solidarity.

A discussion on the proposed new constitution of the Institute, aiming at forming a federation of master plumbers, was adjourned to the November quarterly meeting of the Institute to be held at Sheffield.



Model for Humorous Gargoyle for Tower of Harkness Memorial Building.

MR. LEE LAWRIE, Sculptor.

Edgware Parade.

The address of Messrs. The Empire Stone Co., Ltd., is Thanet House, 231, Strand, London, W.C.2, and not as given in our issue of last week.



Clay Sketch for Relief for Nebraska State Capitol.

MR. LEE LAWRIE, Sculptor. (*See p.* 350.)

Architect's Estate.

Mr. William Winder Lee, of Victory Chamb Houndgate, Darlington, Durham, and Ardennes, Staindrop-road, Darlington, archi and surveyor, who died on April 2, left estat the gross value of £7,769 5s. 2d.; net persona £6,853 8s. 2d.

Building Materials Committee.

Major Harry Barnes has accepted an invi tion from the Minister of Health to become member of a committee to inquire and rep as to new materials or methods of construct which are now or may be available for the bui ing of houses for the working classes, and to ma recommendations as to the organisation requi for securing the adoption and use of appro new materials or methods by local authorit and other bodies or persons providing s houses.

COMPETITION NEW

Bridgeton Public Halls.

The assessor has made the following awards this competition:—(1) £150, Mr. C. Cow Voysey, 14, Gray's Inn-square, London; (2) £1 Messrs. D. McNaughton & Son, and John Arth 164, Bath-street, Glasgow; (3) £75, Mr. Wal Alison, 27, Kirk Wynd, Kirkcaldy; (4) £ Messrs. Harrison & Ash, 22, Ellison-place, Ne castle-upon-Tyne. The design placed first illustrated in this issue.

Methodist Church.

Designs are invited for a Methodist Chur school house and manse, Sheffield. Particula from Mr. T. A. Hardy, 24, Thornsett-roa Sheffield. (See advertisement this week.)

Masonic Memorial.

The sending-in day for this competition May 1, 1925.

Manchester Art Gallery.

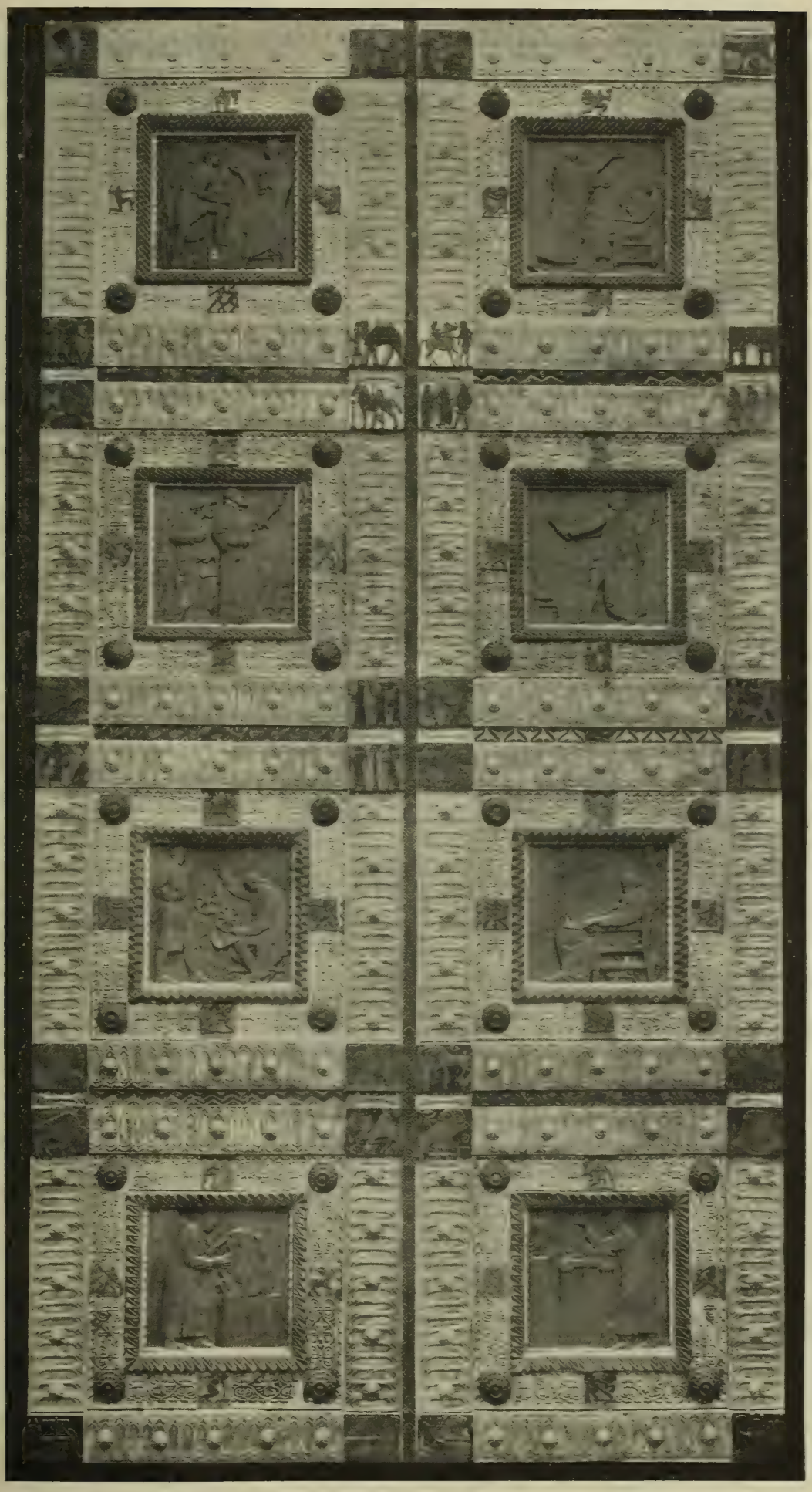
The conditions of the competition for arc tectural designs for the new art gallery a museum of art to be built on the Piccadi site have now been issued by the Corporati and a copy may be seen at *The Build* office. The building is not to c more than £300,000 and is to be of Portla stone. It must be approached by a flight steps and must include a Hall of Memory commemorate Manchester men of all ra and services who fell in the war. The j of assessors consists of Mr. Paul Waterhou Professor C. H. Reilly, of Liverpool, and P. S. Worthington, who will award f prizes, the first of £500, the second of £3 the third of £200, and the fourth of £1 The building is to occupy an area not ceeding 5,500 sq. yds., and the total floor a required for the central sculptural hall 6,000 sq. ft. (See our issue for Aug. 22.)

Glasgow High School Memorial.

Competitive designs are invited for a memo club house and pavilion to be erected on ground of the Glasgow High School Club Anniesland, Glasgow. The competition is fined to former pupils of the High Schoo Glasgow. Premiums of £150, £100 and are offered respectively. Mr. John Kep F.R.I.B.A., Glasgow, has been appointed sessor. Sending-in day, Sept. 30. Particu and plans may be obtained from Mr. H. Buchanan, 172, St. Vincent-street, Glasg

Other Competitions.

Other competitions still open include following (the dates given are, first the se ing-in date, and second the issue of *The Bui* in which full particulars were given):—R Smith Memorial (Sept. 30; Feb. 22). Pu Baths, Newton-in-Makerfield (Sept. July 11). London Hotel, banned by R.I.I (Sept. 24; August 22).



Bronze Door, National Academy of Sciences, Washington. MR. LEE LAWRIE, Sculptor. (*See p.* 350.)

AN AMERICAN ARCHITECTURAL SCULPTOR: LEE LAWRIE

By KINETON PARKES.

New York is not only the habitat of the skyscraper unadorned, it is also the home of some of the most extensive and wholehearted expressions of neo-Gothic sculptural decoration and architecture.

America is fortunate in synchronising the architect, Bertram Grosvenor Goodhue, and the sculptor, Lee Lawrie. The two men are friends and collaborators, and have worked together in a fashion that recalls Gilbert and Sullivan. As in the case of dramatist and musician the work of each is separate, so in that of architect and sculptor: their respective arts are dual, yet distinct.

One of the principal evidences of it is also one of the chief neo-Gothic works in New York, the Church of St. Thomas; but are other instances of the usefulness of "entente," the Nebraska State Capitol an Academy of Sciences at Washington. churches which owe their decorative val Lawrie are St. Vincent's, New York Mary's, at Tuxedo, and one at Pittsburg remarkable illustrations of the hold upo modern imagination of the Gothic idea, as as of the good fortune in having an exp of it of such sympathy and accomplishm

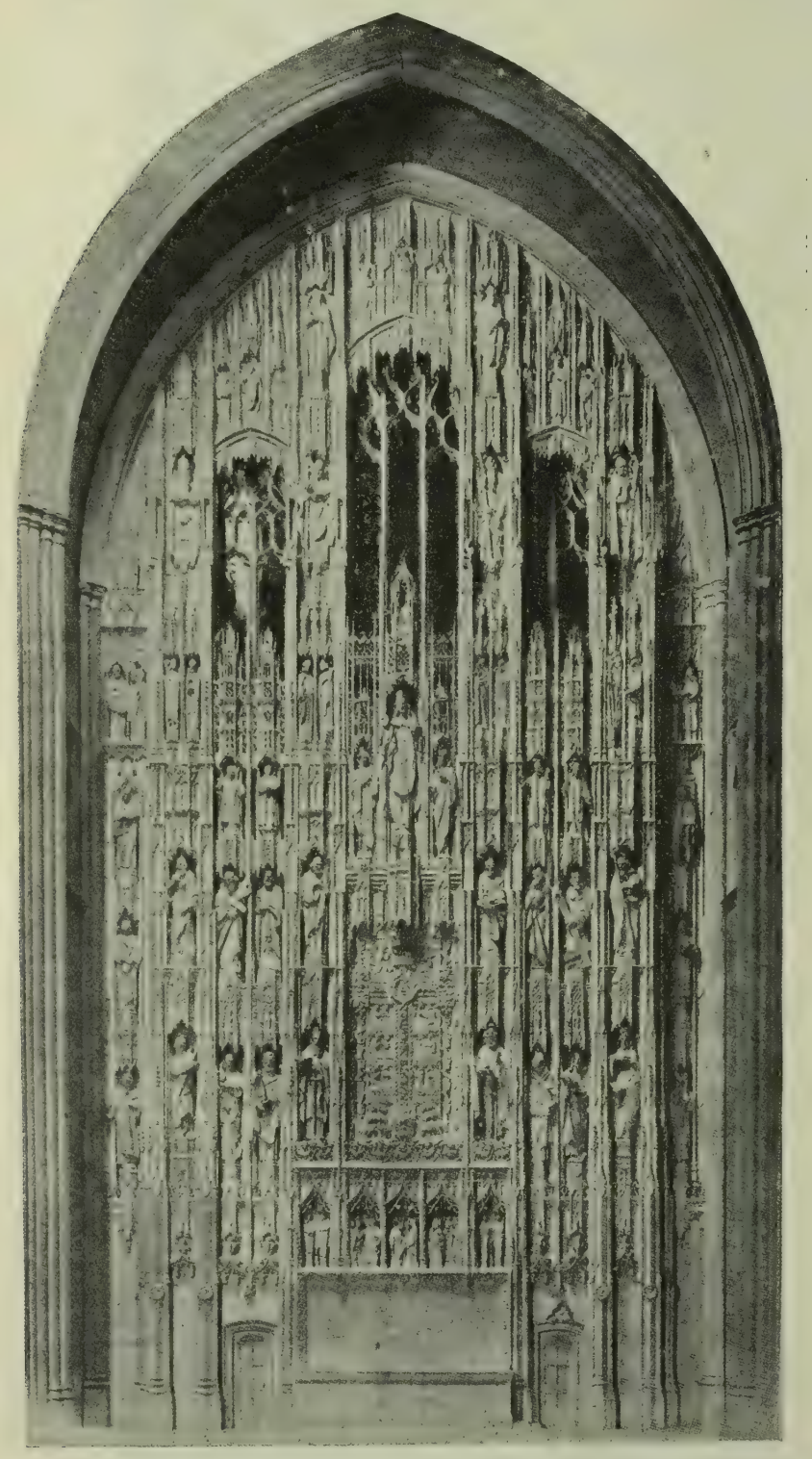
It is, however, of the architectural scul of Lee Lawrie and not of the actual arch ture of the buildings that I am concern the moment, and I have to note that La has also collaborated with James Ga Rogers, the architect of the Memorial Q rangle at Yale University, and has, more exercised his own palpable architectonic in many fine works which he has cr alone. He is a sculptural designer of the order; a master of plastic modelling student and lover of research, and a w of indomitable energy, persistency, fecundity.

Lee Lawrie was born in Germany in and went to the United States at an age. He received no academic art educa but worked in the studios of Saint Gau and Martiny from 1891 to 1905. He wa structor in sculpture for two years at Har and for ten at Yale, of which latter unive he is a graduate. The American Institu Architects awarded him a gold medal in He believes in the decoration of architec spaces in the way in which the Gothic a believed. He models for stone and wood. he essays polychromy. He rarely works the exhibition gallery, and so his sep pieces are few; in point of fact, he ha time for the formal finishing of such. decorating a building plastically there is need for the high finish of gallery req ments. His work is seen at its best carved and in situ, either as an integral of the structure or as applied decoration. aim is to prove that the dignity and stat the architectural sculptor are at least no than that of the statuaire.

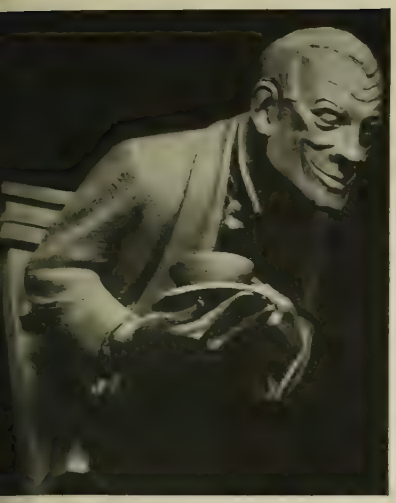
The Church of St. Thomas, a stately includes numerous sculptural details—cor finials, crestings, and springs of arches- its chief plastic feature is the astonis reredos reaching from the chancel floor t apex of the roof. Broken by two doo the base, it rises in multiplying richnes two-thirds of its full height, until its mass is broken to admit the light of the windows behind. Its niches are surmo by serried pinnacles and crowded with no than eighty figures of varying sizes. the altar is a group of St. Thomas kne and other figures panelled to form a ground for the cross decorated with d and crown of thorns, and this serves as a for the main statuary of Christ, with St. and St. John on either side. Statu martyrs, saints, and ancient and m ecclesiastics abound, and the whole for strangely moving replica of the spirit animated the old cathedral builders, wi little of their eminently endearing sen form. The rich picture is framed i severely plain columns which soar in unb simplicity to the spring of the vaulting.

St. Vincent Ferrer is another New church which owes much to Lee Lawrie its main portal of a double doorway is carved and surmounted by a crucifixion of fine character. In this edifice is the esting cryselephantine Virgin and Ch coloured alabaster and onyx and silve gold, while in St. Mary's, Tuxedo, is a polychrome work, mostly of the materials, in the form of a triptych in of the Annunciation. A striking figure Michael forms a war memorial in a Pit church, and another important work stone pulpit bearing nine carved ecclesi figures.

Collegiate work is quite as sympath Lee Lawrie as ecclesiastical, and he fine opportunity in providing the archit



Reredos at the Church of St. Thomas, New York: From a Small Scale Model.
Mr. Lee Lawrie, Sculptor.



del for Humorous Gargoyle for wer of Harkness Memorial Building.
By Mr. Lee Lawrie.

lpture for James Gamble Rogers's Harkness morial group of buildings at Yale Univer-. Here again the sculptor had modern res to deal with in a Gothic setting, and success at St. Thomas's Church is sur-sed. The figures of the founder and alumni he University, and many others, are chiefly ised as details of the great memorial er, a tapering column with belfry, pin-les, buttresses, and niches, rivalling the Thomas's reredos in its decorative detail. figures of the modern subjects in the opied niches on the eight buttresses are ched by others higher up in the belfry nings of Phidias, Homer, Aristotle, and elid, standing for art and science, and on central buttresses others symbolising dicine, Law, Business, and the Church, in the angles of the cornerpieces, twelve resentative of the virtues and other sub-s. Further sculptural work is found on the rways, arches, and other parts of the build-s, and quadrangle architecture, here and re touched with humour as in the gargoyles heads of undergraduates. A particularly utiful piece of ornament is the panel of University Arms on the main archway, ther interesting detail being the St. George Dragon panel. It is in the decorative de-s of works of this kind that the talent of Lawrie presents itself so strikingly. He st have modelled hundreds and hundreds the many works he has been called on to dertake, and they are all marked by an un-ying sense of fitness of subject and situa-n, and all made without compunction or plaining; sincere art and honest crafts-ship.

Goodhue is again the architect who enters collaboration with Lee Lawrie in the ldings for the Nebraska State Capitol, at coln, Nebraska, now being built. Lawrie made for this big job his usual varied and nerous series of illuminating and suggestive igns. There is a sketch model of an en-nce with many steps, flanked by huge ble bull-reliefs, surmounting a tunnel, and ling by more steps to double doors set in n masonry, and headed by a vigorous relief bullocks and wagons, and enclosed by mas-pylons bearing ornamental reliefs, with haut-reliefs of full figures of men on er side a lunette. There is a series of ches with Assyrian motives, the lead to gh is given by a huge ornamental buffalo ted in Assyrian fashion and bearing well-red inscriptions. The motive is continued ugh several modelled friezes, depicting r offerings, slave offerings, victory offer-, and leading to more friezes in which iæval subjects of the Development of Law, Magna Charta (pierced for a balcony d), and those of the eighteenth century, such as the Signing of the Declaration of Independence, are used. The buttress figures are two of a series of Law-Makers, and, in addition, there are ornamental capitals in which Nebraskan motives are used to immense advantage as the indigenous fauna and flora of Australia was used and urged by Lucien Henry last century. The new and vigorous life such a method of treatment ensures is well illustrated in these strong fresh designs.

This series of works is matched by that for the National Academy of Sciences at Washington, again with the same architect. In this an even wider view of the past has been taken, and Egyptian and Greek motives added to Assyrian. Mediævalism is again exploited, and later periods of the seventeenth, eighteenth, and nineteenth centuries are modified by a certain amount of classicism, or at least formalism, to go seriatim with the rest. The great philosophers and scientists are represented in a magnificent set of at least half-a-dozen bas-reliefs, from Hippocrates and Aristotle to Darwin and Pasteur, each relief being enclosed in a repeating symbolical ornamental border. A corresponding border with carved bosses of human and animal figures encloses the eight panels of the fine bronze door of the Academy, each containing a square pictorial plaquette, the whole producing a very rich, even sumptuous effect. Other details include panels of the Zodiac signs, forming part of a bronze grille, terminals of pillars of naturalistic heads with ornamental accessories for lamp standards, crestings in bronze of botanical and zoological indigenous motives, which repeats for the full length of the building, and classical low reliefs of occupations for ceiling decoration.

Other important statues and ornament are to be found at the United States Military Academy at West Point, and there are hundreds of busts, statues, groups, reliefs, and other isolated examples of Lee Lawrie's exceptional capacity for turning out the best of work in the shortest possible time without scamping, in various cities and states of America. He is indefatigable in support of his aim of trying to bring a fresher impulse into architectural sculpture than that of the architectural modelling shops that copy the plates of the accepted styles, and of his endeavour to make the appellation of architectural sculptor as acceptable in art as that of the maker of statues or of ideal groups. It is a just and estimable ambition, and is admirably supported by the work with which he endeavours to justify it.



Portrait Panel of Mr. J. G. Rogers, Architect of the Harkness Memorial Building, with Sketch of the Tower of the Harkness Building.
Mr. Lee Lawrie, Sculptor.

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ILLUSTRATIONS.

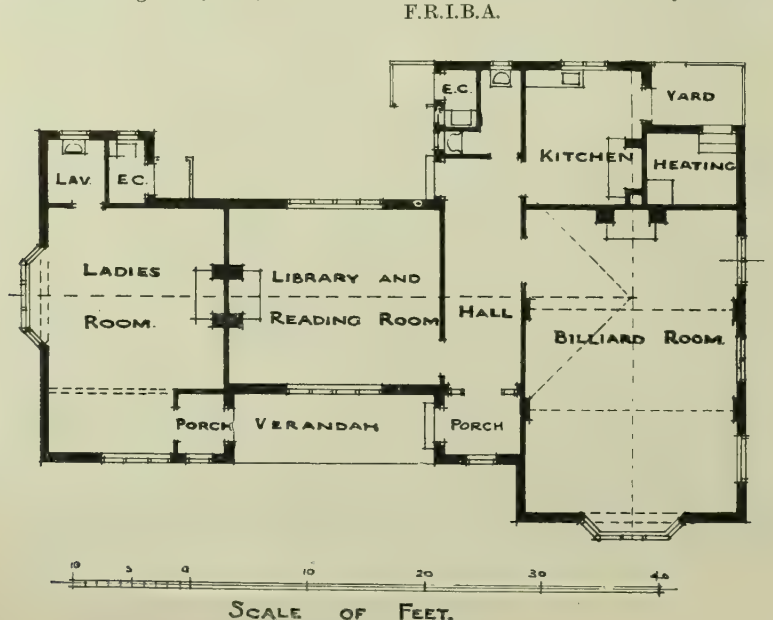
Sports Pavilion at Grove Park, Kent.

The perspective drawing illustrated in this week's issue is of a sports pavilion to be erected as a war memorial on the City of London School Sports Ground at Grove Park, Kent.

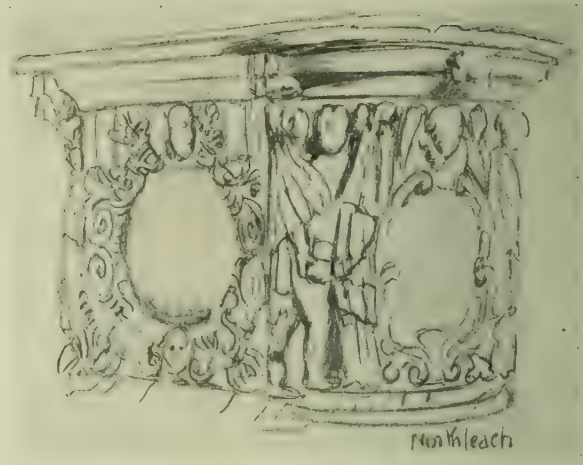
On the ground floor are provided two large changing rooms, an extra changing room, and a groundsman's room. Also a large room with shower baths and lavatory basins, with w.c.'s and urinals adjoining, and the boiler house.

On the first floor are a large tea room with service kitchen, and master's dressing room. Two partially-covered stands on the east and west side of the building give an excellent view of cricket, football, and other sports, and can be approached by way of the external steps or the tea room, which can be reached either from the stands or by a separate staircase communicating direct with the ground floor.

On the second floor are the caretaker's quarters, consisting of living room, two bedrooms, kitchen arrangement, w.c., and bathroom.



Caerwys Memorial Institute. MESSRS. REES & HOLT, Architects.



In Northleach Churchyard.

The building is of red brick with cement stucco dressings, tiled roof, surmounted by a copper-covered fleche containing a clock.

Messrs. Ralph Knott, F.R.I.B.A., and E. S. Collins are the architects.

Masonic Hall, Stroud.

This building was designed by Messrs. Falconer, Baker & Campbell, of 12, Buckingham-street, W.C.2, to provide accommodation for the Masonic confraternity of a country town. The site is a sloping one to the street, and the temple and dining-room were placed at the back, with hall, serveries, cloakrooms, &c., to the front. Since the design was prepared the Masonic Lodges in Stroud have secured an interest in the subscription room designed by Basevi, and this is to be re-arranged and enlarged to the designs of Messrs. Falconer, Baker & Campbell, which were selected in a limited architectural competition.

Loggia and Terrace, Coombe Ridge.

This loggia and terrace formed part of an extensive scheme of alterations at the house which were carried out by Messrs. Prestige & Co., of Grosvenor-road, S.W.1, a year or so ago. The terrace paving is in York self-faced stone, and the dressed stonework is in Doulting stone.

The architect is Mr. E. Guy Dawber, F.S.A., F.R.I.B.A.

Bridgeton Public Halls Competition.

We give this week the design, by Mr. Cowles-Voysey, A.R.I.B.A., placed first in Bridgeton Public Halls Competition. The result is given on p. 348.

St. Margaret's Church, Putney.

The church is to be enlarged by a considera extension eastwards, and this drawing (fr the R.A. Exhibition, in water-colour by architect, Mr. H. P. Burke Downing, F.S. of Westminster), shows the east end in design. It is marked by a severe simplic and economy, features no doubt in some meas dictated by conditions of the undertaking the nature of the existing building, but used aid rather than hinder the achievement o dignified character. The present building i Kentish rag stone.

Caerwys Memorial Hall, North Wales.

This hall was erected in memory of the fa in the war. It consists of library and reac room, billiard room for men, and reading sewing room for ladies, kitchen, service, On the land adjoining the hall are bow green and tennis courts. The building i brick, cement rough-cast whitened, ro slated roof, and rustic brick base.

The contractor was Mr. Robert Willi Brymbo, near Wrexham; and the archit Messrs. Rees & Holt, Liverpool. The buil was formally opened by the Rt. Hon. D Lloyd George.

Royal Naval Barracks Church, Devonpo

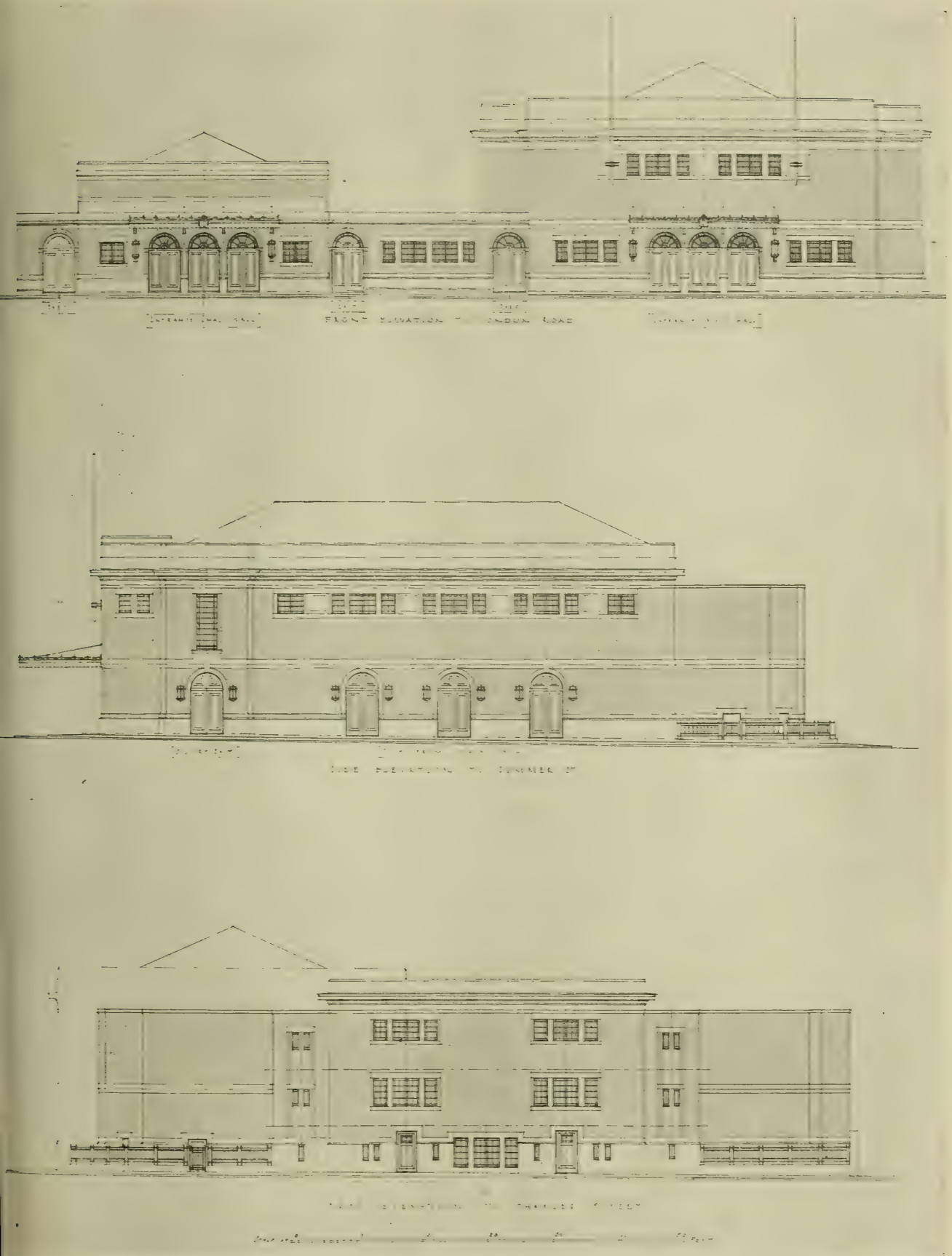
In the description in our last issue situation of this Church was wrongly give Southsea.

Gardener's Cottage at Lowfield Heath

The gardener's cottage at Hydecroft, Low Heath, Crawley, was erected by Messrs King & Sons, of Horley. The entrance piers and the plinth are in Horsham s also the chimney stack, and the rest of building is slurried brickwork with half ti framing of old oak. The roof was designe thatch, but was carried out in old tiles. H. Lidbetter, A.R.I.B.A., is the architect.

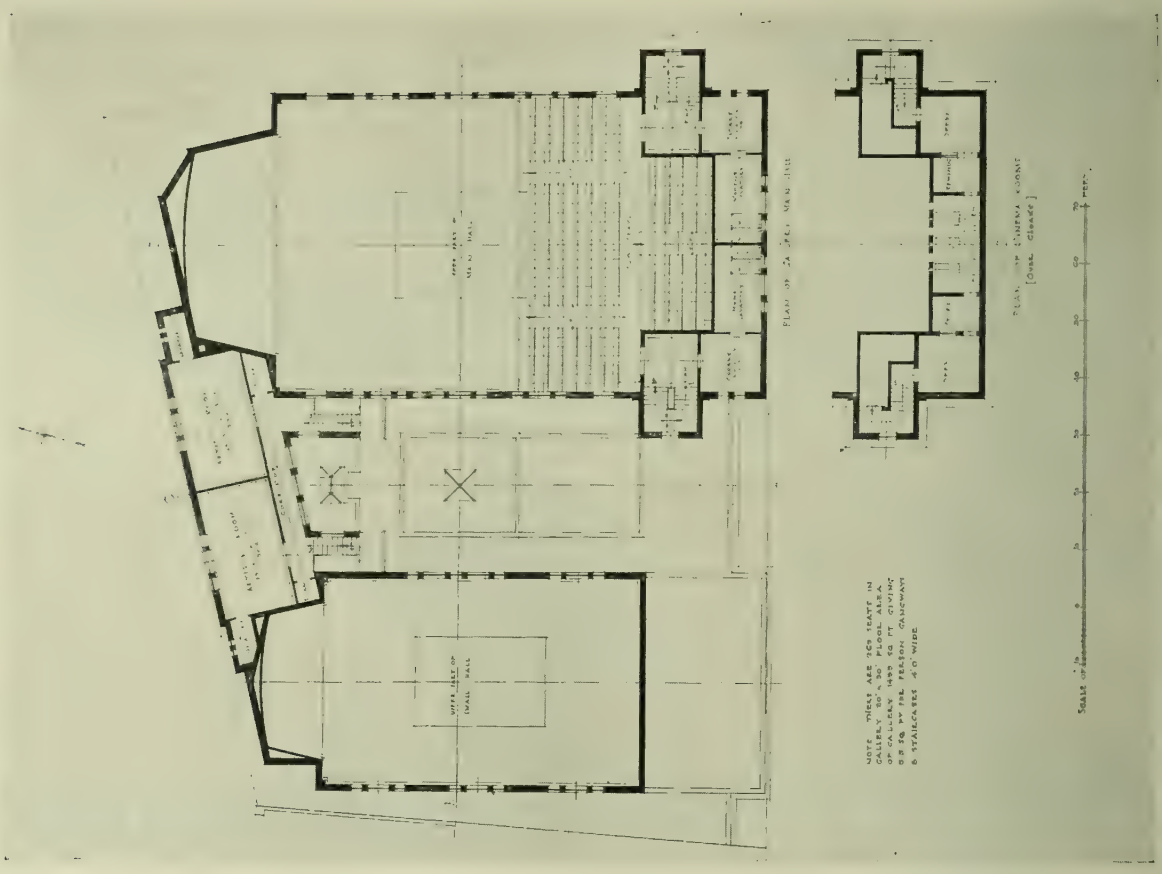
New Colliery Offices, Thorncliffe, Sheffie

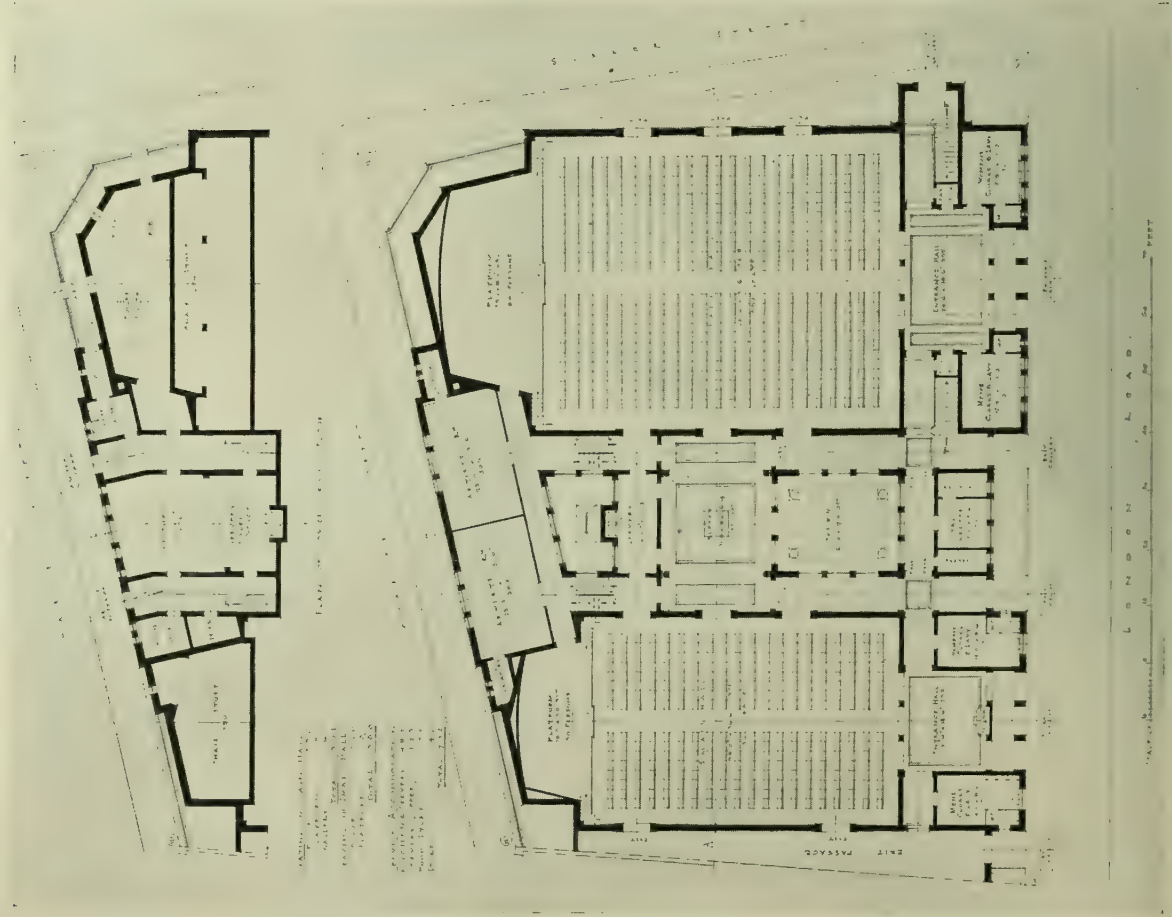
The general contractor for this work wa J. T. Wailes, 23, Layerthorpe, Yorks. heating installation and steel roof was the of the engineering department of Messrs. Ne Chambers & Co.



Bridgeton Public Halls Competition.

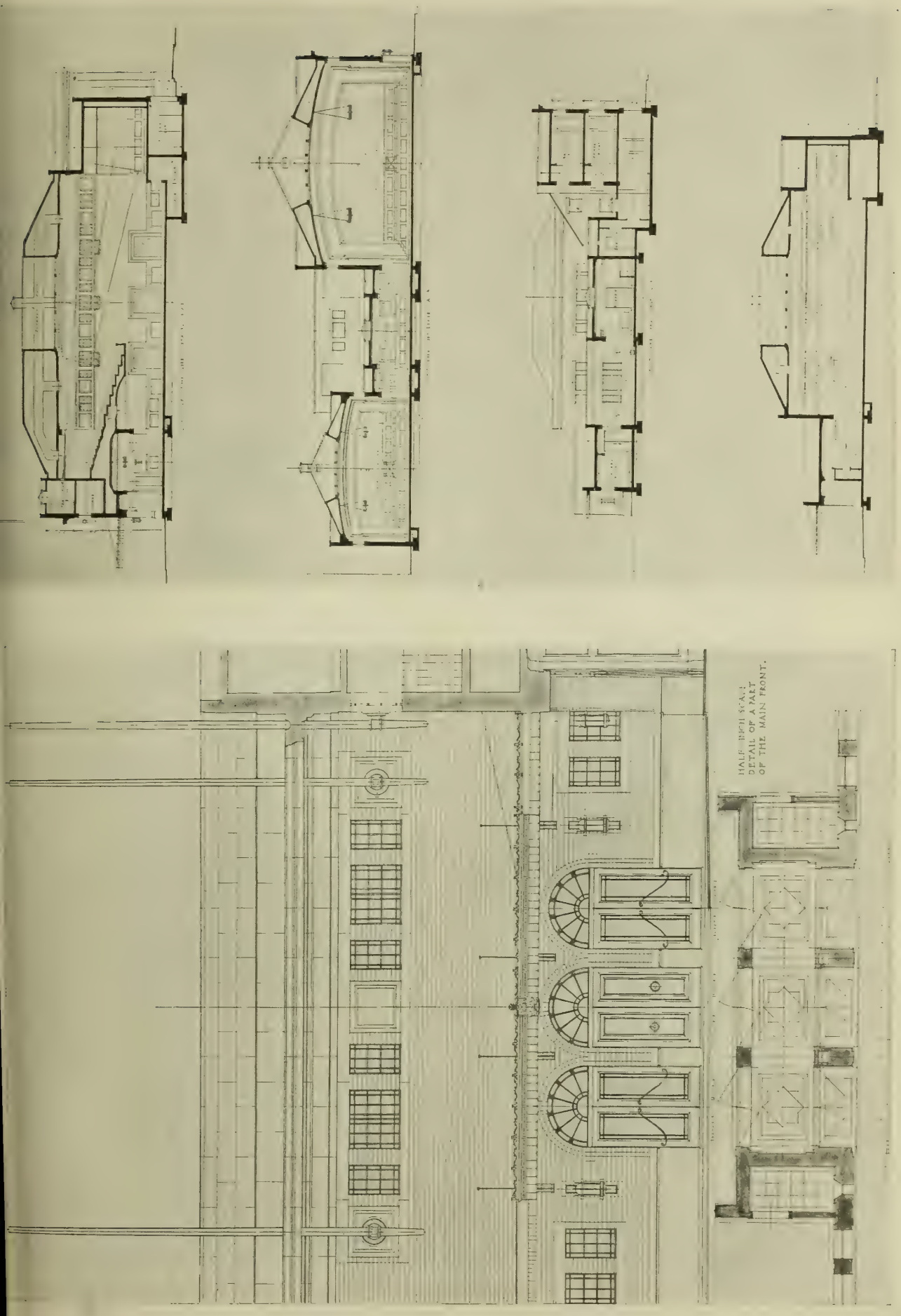
Design Placed First: By MR. C. COWLES-VOYSEY, A.R.I.B.A.





Bridgeton Public Halls Competition.

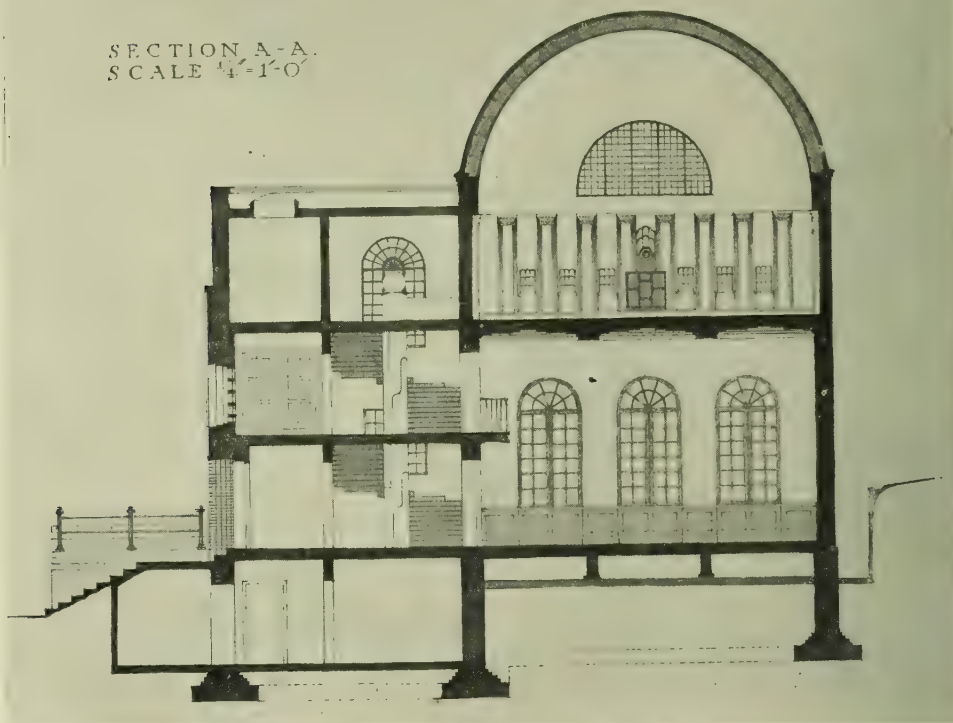
Design Placed First: By Mr. C. Cowles-Voysey, A.R.I.B.A.

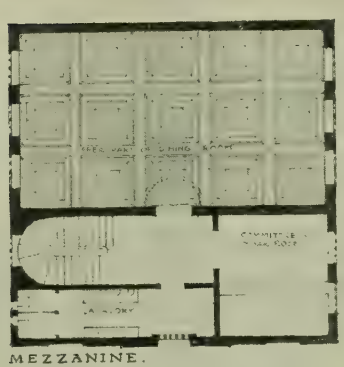


Bridgeton Public Halls Competition. Design Placed First: By Mr. C. Cowles-Voysey, A.R.I.B.A.

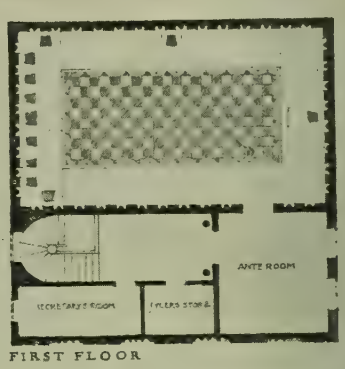
PROPOSED MASONIC HALL.
STROUD GLOS.

SECTION A-A.
SCALE ¼"=1'-0"





MEZZANINE.

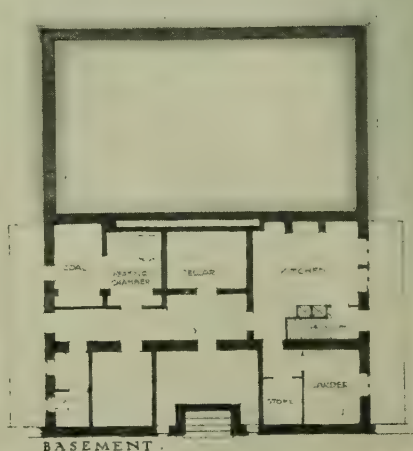


FIRST FLOOR

SCALE: EIGHT FEET TO ON INCH



GROUND FLOOR.



BASEMENT.

MESSRS. FALCONER, BAKER & CAMPBELL, Architects.

(*See p. 352, and also inset illustration.*)



R.A. Exhibition, 1924.

Mr. E. Guy Dawber, F.R.I.B.A., Architect.



R.A. EXHIBITION 1924.

MEMORIAL PAVILIC

MESSRS. RALPI



ROVE PARK, KENT.

ARCHITECTS.

PROPOSED MASO

HALF INCH DETAIL O



R.A. EXHIBITION 1924.

MESSRS. FAL

IALL : STROUD.

T ELEVATION : 8



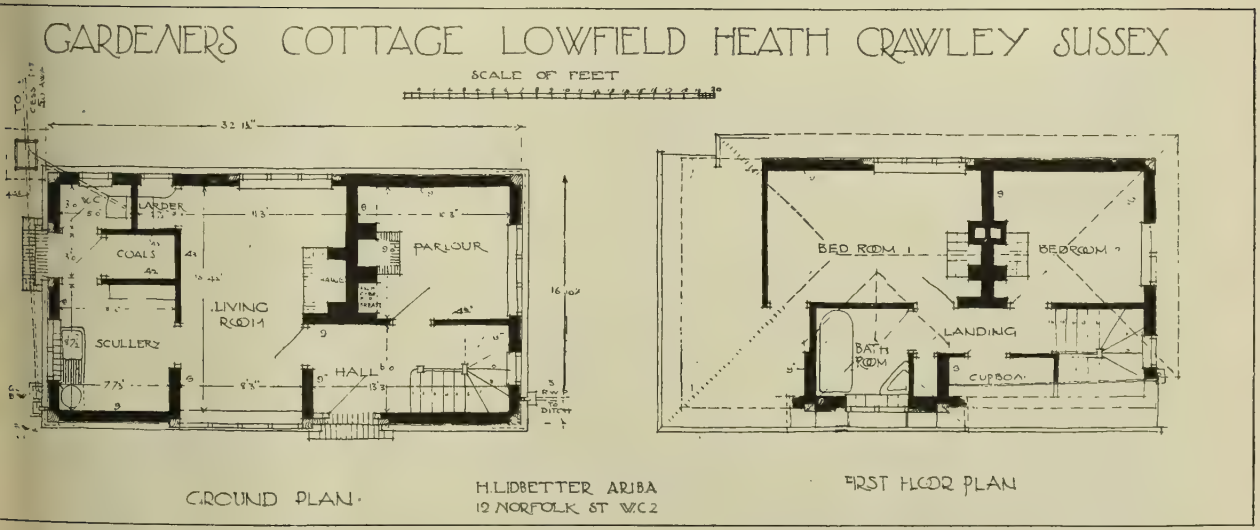
CTS.



St. Margaret's Church, Putney: East End.

Mr. H. P. Burke Downing, F.R.I.B.A., F.S.A., Architect.





Gardener's Cottage at Lowfield Heath, Crawley.

Mr. H. Lidbetter, A.R.I.B.A., Architect. (*See p.* 352.)



Pavilion at the British Empire Exhibition. MR. W. B. SINCLAIR, F.R.I.B.A., Architect. (*See p.* 359.)

PAVILION AT THE ITISH EMPIRE EXHIBITION

use of metal for the treatment of buildings onstrated by Messrs. Fredk. Braby & Co. ns of their pavilion in the eastern section British Empire Exhibition. The building xample of the application of metal for branch of building work, and is entirely cted of metal, including walls, floors, nd finishings.

entrance front has a large central feature d by a rectangular architrave formed of d copper, and contains a recessed le two stories in height entirely executed ze, with bronze doors and screens. The bordinate wings to this central feature ated with copper window panels flanked ticated steel sheet panels. The design d somewhat upon the typical Indian y of the Mogul period. The roof s copper and zinc roofing tiles with a motif, and is surmounted by a copper- dome or fleche. Copper covering for s, parapets, string courses and mouldings osed positions are all illustrated in the building. Metal casements of many various types are shown, including those of large dimensions as well as the ordinary sizes. The back elevation is covered with stamped sheet steel of a new pattern. The lettering is encased with copper and sunk to receive on the face a coloured wax enamel.

The interior generally has been lined with stamped steel sheets and painted in a French grey picked out with a soft blue to form a suitable background for the various metal articles on exhibition. The inside of the building is decorated throughout with material manufactured by Necol Industrial Collodions, Ltd., and "Necol" materials are also employed to obtain the bronze effect on steel shown outside the building, the work being executed by Messrs. Green & Abbott, Ltd.,

The roof is constructed of unit steel trusses which have been exposed to view, and picked out in a metallic paint. The flooring is of steel girders and joists filled in with pressed steel ribs carrying composition flooring or concrete. The staircase is executed in a special type of pressed steel formed on the unit and interlocking principle.

The architect is Mr. W. Braxton Sinclair, F.R.I.B.A., of 8, Buckingham-street, Adelphi, W.C.2.

LAND FOR ROAD WIDENING

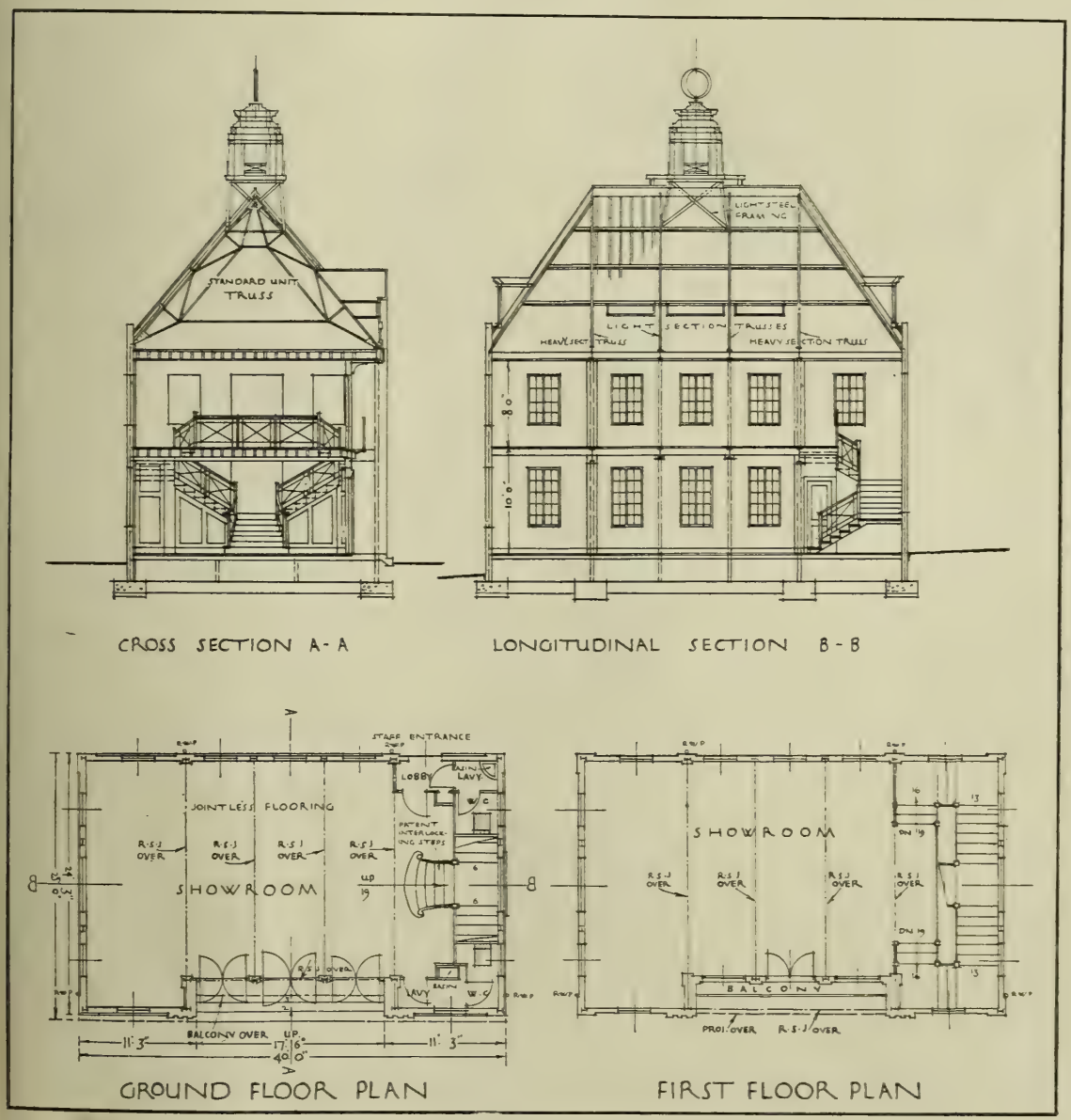
Mr. J. D. Wallis, Official Arbitrator under the Acquisition of Land (Assessment of Compensation), Act, 1919, sitting at Burton-on-Trent, heard a claim against the Burton Corporation by Mr. George W. Parsons, concerning the Corporation's acquisition of certain property for the widening of a road.

Mr. Whittaker, solicitor, of Messrs. J. K. Nye and Donne, Brighton, put in a claim of £2,250. The property had cost Mr. Parsons about £4,000.

Mr. Edward German, acting for the Corporation, valued the property at £1,266 8s.

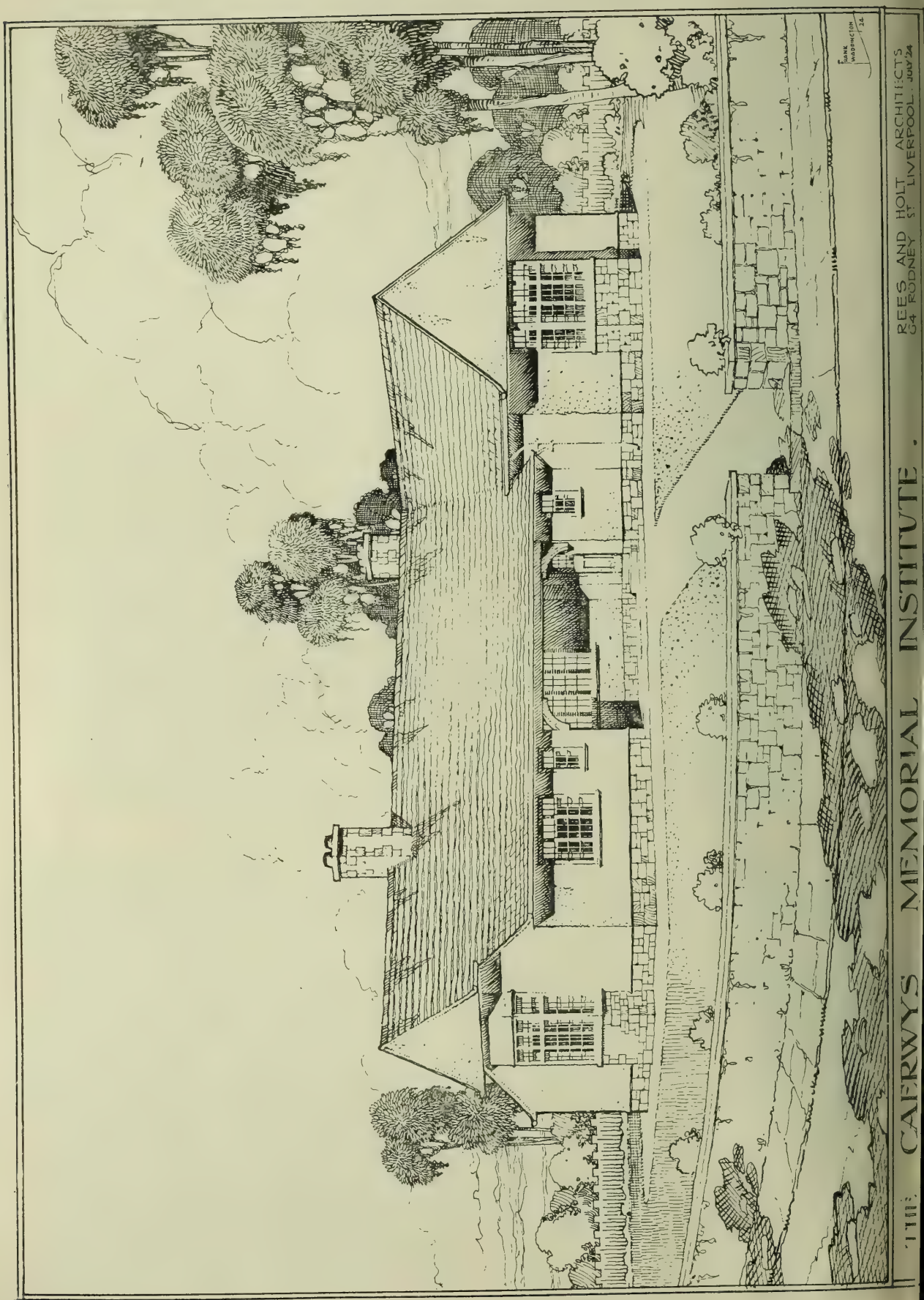
The Arbitrator has since issued his award as follows: —

(1) The Acquiring Authority to pay to the owner the sum of £1,750 as purchase money and compensation; (2) the Acquiring Authority to pay interest at the rate of 5 per cent. per annum from the date of entry until payment of the compensation; (3) the Acquiring Authority to pay the fees on this award; (4) each party to pay their own costs.



Pavilion at the British Empire Exhibition.

Mr. W. B. Sinclair, F.R.I.B.A., Architect.


THE CAERWYS MEMORIAL INSTITUTE.
REES AND HOLT ARCHITECTS
64 RODNEY ST LIVERPOOL. JULY 24
FRANK WADDINGTON '24

ESTMINSTER ABBEY RE-EXAMINED—VII.

By W. R. LETHABY.

The Abbey Buildings.

xcellent foundation for a full study of bey buildings was laid by Mr. Micklein a paper printed in the *Archæological* 1875.

he east side of the Cloister extending rds from the Chapter House entry is range of buildings once occupied by the ory, with vaulted cellars beneath. On h side of the Cloister was the Refectory, ned. The Dorter range runs on beyond end of the Refectory for some distance. terminated by a transverse building, e Dorter. The west end of this, where apped the end of the passage extension he Cloister, was destroyed about a ion since, when the usual recessed tments of a Rere Dorter were found. uildings are of early Norman character. ndercroft of the Dorter, now the Abbey n, is divided into two spans by a row of ow cylindrical pillars from which spring supporting vaults of concreted rubble. ginal capitals had a single steep chamfer g the form of the shaft with a square bout twice as high above; the bases atter chamfer projecting further. Most capitals were altered in the century g the first building; some of them, he Pyx Chapel especially, have interestvings. In the east and west walls of f the bays were single windows about de on the inside. All the arches of the s and vaults were built of two varieties , a coarse tufa and chalk or Caen stone, rnately. At the north end—the Chapel Pyx—the "Norman" work has been into by the newer building. At the nd there is a "respond" in the centre to those on the side walls.

comparison with the crypt of Winchester al, begun in 1179, Mr. Bilson pointed t our work is a little less advanced. At ster the lower member of the capitals ly convex, the square planned abacus hollow chamfer, and there are impost gs to the wall piers. At Westminster nes of the vault are, as usual, set out semi-circle, in this case to the slightly r wall arches east and west of the Pyx the arches of wider span are segments es struck from centres a little below nging line, so that all the arches rise same level at their crowns. The same is followed at Winchester. The vaults idently built, as usual, on a through- barrel centering with sections of g applied on either side. The crowns aults are level.

se advances at Winchester justify our the Westminster undercroft a little n date. . . . We may conclude that astic buildings would be pushed forward Conquest and this eastern range would arliest work. If not a little earlier it the work of Abbot Vitalis, whom the or brought from Bernay about 1076, ny case to judge from Winchester it be later than his time." (*Archæo- ournal*, 1910.)

old Dormitory is now occupied by ster School. On both sides within traces of the original ancient windows, all of which were subdivided in the hich followed on the fire of 1298, and ese still serves its purpose. A doorway emains near the south-west angle of er has alternate voussoirs of tufa and ne showing dark and light, like the f the cellars below, and doubtless the vindows had similar arches. The head of the window next the southle is preserved in a class room; this apitals of the nook shafts still in place, nner arch rims have the two different stone. This great room, eleven or ays long, with a handsome window in each bay, must have been a fine and impressive thing.

On taking out a decayed and fractured capital from the outside of a hidden window on the east side of the Dormitory (October 23, 1910), we found that the back of it still retained its carved form which was entirely similar to those near the south-west angle just mentioned. This capital is preserved in the Museum, where there is also another which is as fair and fresh as the day when it was wrought. All were evidently of the same form. They were only set on the shafts, and not bonded into the jambs. (Fig. 1). They are of a type used

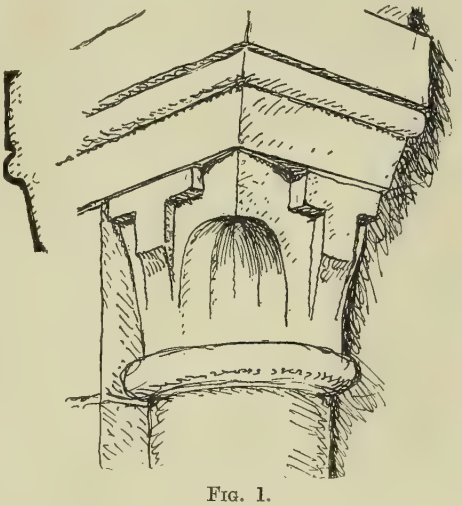


Fig. 1.

at Jumièges and at the Tower of London. We found that the window shafts were 6 in. in diameter in separate stones 4 ft. 8 in. long, which rested on bases having flat chamfers. The arch stones were of tufa and freestone (or chalk) (Fig. 2). A day or two later part of

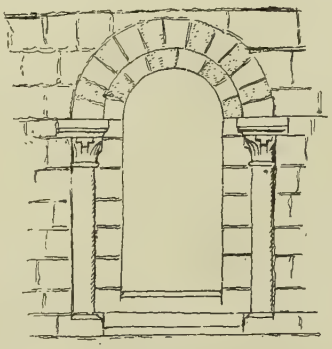


Fig. 2.

a second window arch was found on the same side at a distance of about 14½ ft. (or one bay) from centre to centre. There were three and a-half courses of masonry here above the window arch, and on the other side more remained. The windows of Westminster Hall were very similar, having recessed jambs and nook shafts. These facts give very complete knowledge of this range of buildings.

A view of the Rere-Dorter (under destruction) is given by Mr. Westlake, together with an enlarged detail of the arched recesses along the walls. Even these little arches were formed with dark and light stones alternately, as evidently were all the arches of the Dorter range. The walls within were plastered, but the angles of the arches must, I think, have shown margins of the stones, as certainly was the case in the Refectory and the later work of St. Katherine's Chapel.

In the south-west angle of the Little Cloister is a portion of the external wall of the east end of the Rere Dorter. Above a small eleventh-century window is a band formed of stones and tiles about 8½ in. square laid diagonally. The tiles are in the upper row next a fourteenth-century cornice, and it may be that they were set in at that time. In the Deanery what seems to have been the external face of the west wall of the Refectory is preserved and this has a similar diagonally chequered facing of tiles and stone. Here all the dark squares are of tile. This wall is surmounted by a band of fourteenth-century work, and I find it difficult to convince myself whether the chequers here are of this date or of the eleventh century. The wall may be of the earlier date but this is not certain, and even if it were the chequer work might, like the quatrefoil band, be a later alteration. The masonry part of the diagonal work on the wall of the Rere Dorter is certainly original. A similar band of diagonal work is recorded as having existed at Westminster Hall, and chequered masonry occurs in the tympana of the "Norman" triforium arches at Chichester Cathedral. The stone and tile facing of the wall in the Deanery is certainly an interesting and beautiful type of work, and the wall itself must be the west end of the Refectory range.

The old Chapter House must have been on the east side of the Cloister; it is described in a thirteenth-century poem as "a Chapter, in front towards the east vaulted and round." That is, it probably had, as Micklethwaite thought, an apsidal end to the east. Micklethwaite assigned it a position opposite the middle of the Cloister, in part on the site of the present Chapter House entry, but he gave the Confessor's Church a transept extending much further to the south than there is reason to suppose it actually did. In the upper floor, too, the "Norman" walls of the Dorter run on northwards of the position thus allotted to the Chapter House, which must, consequently, have been further north, thus lengthening the vaulted cellar by one or two bays.

The "Norman" doorway near the south-west angle of the Dorter and already mentioned was thought by Micklethwaite to have given access to a chamber, but it really opened to a spiral staircase and several of the upper steps still remain in place, although it has been destroyed below. Mr. Westlake suggests that it may have led to the cellar beneath, which was possibly a prison. It was built of fair masonry and was about 5 ft. in diameter. A flight of steps only 2 ft. 2 in. wide and a doorway not any wider would seem to be very narrow for the day stair to the Dorter. On the other hand, the wall had to be considerably thickened to take it. Fig. 3

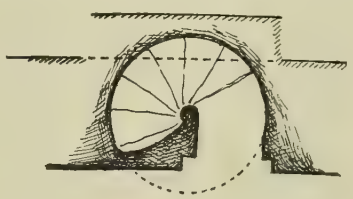


Fig. 3.

is a rough sketch plan of this. When some chambers against the outer side of this wall were destroyed the stair was broken into and a photograph shows that it must have projected considerably on the outside. I have little doubt that a stair of this importance opened from the ground floor passage. Micklethwaite thought that the Abbey prison was in another cellar near by; the day stair, he suggested, might have been in the entry to the Little Cloister occupying a central strip and only leaving narrow passageways on either hand.

Describing the entry to the Little Cloister, Micklethwaite said: "The roof is barrel-vaulted and there is a large oblong opening in it [it is now closed up] which has been made or left for some purpose, which may be recent, but it

is possible this is the site of the eleventh-century stairs to the Dorter. The stair would be carried on two walls and pass up a 'well-hole' in the Dorter floor. If the original stair was not here it is not clear where it was."

INFIRMARY.—To the east of the Dorter range, reached by the passageway through its lower story, are the ruins of St. Katherine's, the Chapel of the Infirmary.

Micklethwaite says: "It consists of a nave of five bays, with aisles and a chancel. It has been suggested that the nave may have been longer and have been shortened when the court-yard [now Little Cloister] was built, but the arcades [between nave and aisles] end with responds at the west end, so that the additional length must have formed quite a separate hall, as it did at Canterbury."

When I described the chapel in 1906 I had not noticed the fact that the western responds are bonded into the west wall in such a way as to show that this wall is of the twelfth-century work. I wrote: "the considerable remains of St. Katherine's, the chapel to the east of the Little Cloister, are of delicate late Norman work, almost transitional in character, which I should date about 1165–70. . . . The nave and aisles of this building were almost certainly continued westward over part of the present Little Cloister and included the Infirmary hall. (An infirmary cloister is mentioned in the thirteenth century.) . . . That the chapel of St. Katherine was the work of Abbot Lawrence seems to be shown by the fact that his anniversary was celebrated here, and one of the altars of the chapel was dedicated in honour of St. Lawrence. St. Katherine's was destroyed in the year 1571." I suggested that the building master was probably Alnoth, Henry II's master of the works at the Tower, the Palace, and Windsor. He was working at the Palace from 9 to 24, Hen. II. According to Ackerman, Henry II was a particular benefactor to Westminster, and the "New Works there." In the Pipe Roll 21, Hen. II, is recorded the payment of 40 shillings to Alnoth for works at the Refectory. He is elsewhere called *Ingenator*. Certain work to the King's great chamber in the Palace which had chevron mouldings around the windows must have been done in Alnoth's time.

The date of the chapel as given in *Gleanings* is c. 1160. Mr. Westlake also suggests "between the years 1154 and 1161." When I wrote before, I spoke of its "almost transitional character, which I should date about 1165–70." I am now still more impressed by the advanced character of the work and should say not earlier than 1170–75.

Enough of the chapel remains to allow of a paper restoration. (Fig. 4). The columns were 2 ft. in diameter and about 12 ft. high. They were alternately octagonal and round, corresponding on each side of the "nave." The capitals were scalloped and varied slightly; the arches had various forms of chevron decoration. The western responds are fully bonded to the wall, and there was fair bonding masonry also at the angles of the structure. (See Fig. 4). The chancel arch had small attached shafts. The window jambs had round mouldings with small scalloped capitals at the angles (Fig. 5*b*).

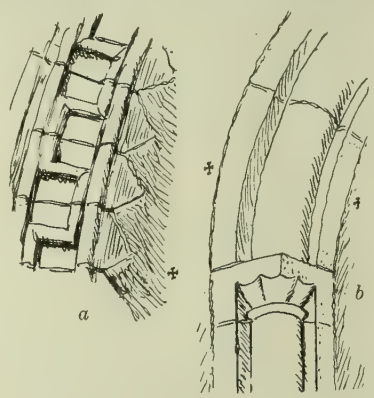


FIG. 5.

The wrought masonry of the jambs and arches showed, while the wall surfaces of rubble were covered with plaster, which was finished to a line against the windows. The splays were also plastered in a similar way, leaving a margin against the outer stonework. The soffits of the "nave" arches also had strips of thin plastering, finished with zig-zag edges against the margins (Fig. 5*a*).

Over the arcades were stone wall courses carved with a zig-zag, of which only a few hardly recognisable fragments remain. Under the window cills is a half-round string moulding. The roof was evidently of the hall type, that is, in one span over the whole width. I have a note that traces of the "lining out" of the interior wall surfaces in red were found, being the ordinary "masonry pattern" with a segment (quadrant?) in the lower left-hand angle of each rectangle. Altogether, this chapel is a very refined example of transitional work. The fourteenth-century doorway in the west wall is at a higher level than the chapel floor, and I have little doubt that the jambs of the earlier door would be found beneath, if searched for.

According to Scott, in *Gleanings*, "The Infirmary proper (the Hall) is gone and m been destroyed when the small cloist built. If so, it no doubt extended w to the wall of the dormitory. This, h would be disproved if the small cloister proved to be earlier, which Widmore i it to be. In that case, I should imag infirmary surrounded it."

Mr. Westlake gives some further evic show that the hall for the sick was to t of the chapel, and he suggests a restor which it covers the whole of the preser Cloister, and is several feet wider than i would be a very large hall for the West monks. Moreover, there seem to have be rate houses or chambers as well. Its so angle as suggested abuts on the early "N masonry of the Rere Dorter, and I do n that there has ever been the attachme wall here. The mention of the In cloister. Mr. Westlake would apply to the entry.

Such record as there is of the Hall that it was an inferior work to the Cha possibly of earlier date. We have seen t Chapel was entirely separated from it by wall. Altogether, I would accept the mary Cloister" as meaning a court, and that the Hall was much inferior to that by Mr. Westlake.

Mr. Westlake quotes an order issue 1268 that the Prior should no longer occ chamber "before the door of the in next the infirmary cloister," except in (p. 443). "Whether the structure of t room was of the same solid character as the chapel itself may well be doubte infirmarer was evidently much grati record that the pulling down of the ol ment provided sufficient fuel to save hi purchases for two years."

On the plan (Fig. 6) is shown how a a smaller but seemingly reasonab

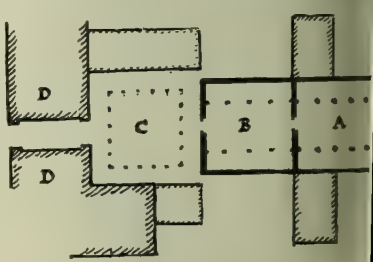


FIG. 6.

indeed, as wide and nearly as long as the of the chapel, would leave room for an I Cloister. A is the chapel with known projecting from it; B is the infirmary suggested; C is the little cloister with bers" and "houses" accessible from DD shows the Dormitory range of b The projection shown to the south of th is a later and still existing resident probably the Infirmarer's. The p opposite on the north side is only repres some fragmentary ruins; one is a carv of the fourteenth century.

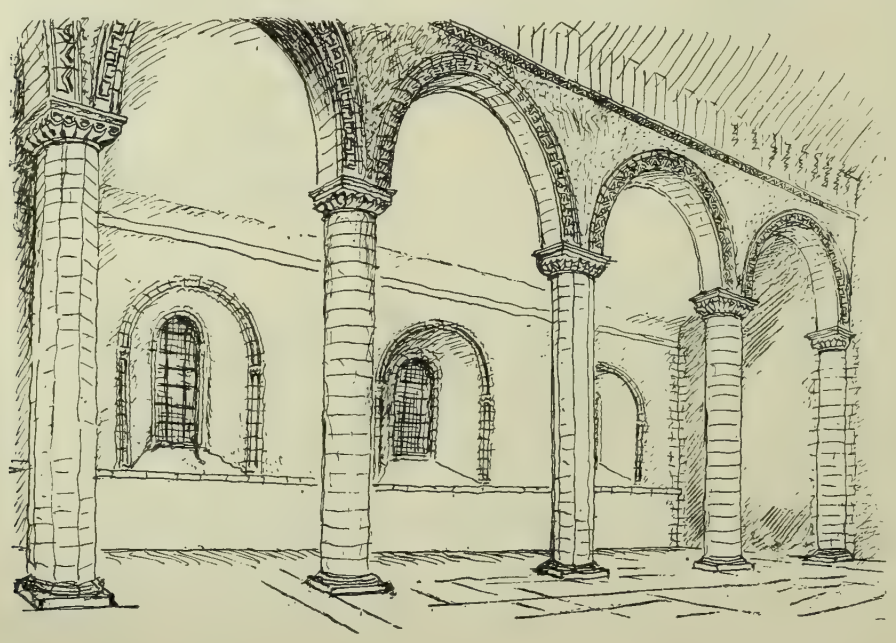


FIG. 4.

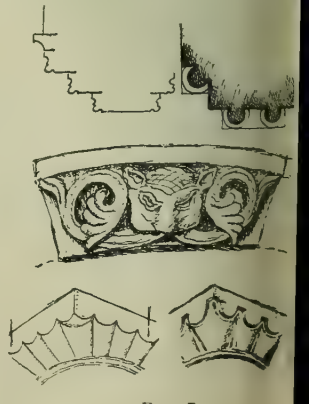


FIG. 7.

ng a great number of "Norman" carved preserved in the museum, there is one from its style, may have belonged to therine's Chapel. This is a voussoir of h order or label moulding carved with nust have been a repeating unit. (Fig. 7.) ne from an arch of considerable width, ly the Chancel arch of the Chapel which, see, is of such a plan that the arch must een in several orders. (Fig. 7.) The style nearly approaches the work of the west f the Temple church. Diagrams of the of the main capitals are also given on

In the store of fragments is a stone an interlacing arcade of remarkable ter, which looks as if it might have come St. Katherine's. (Fig. 8.) The chevrons

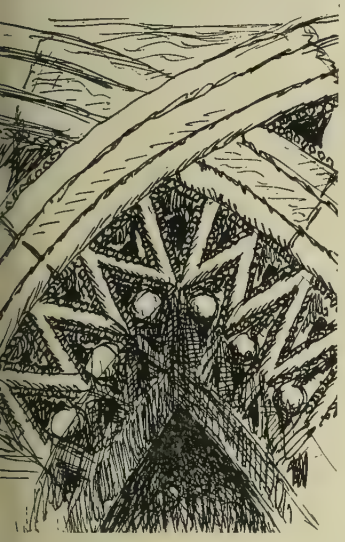


FIG. 8.

t so much from the ground that they seem cut. I may also here mention that in useum is preserved the half of a large man carved capital for a shaft of 2 ft. 4 in. ter. From a sketch of it given me by Weatherley it appears that it was found Chapter House (works) in 1868. I give 9 a sketch of an elaborate and beautifully

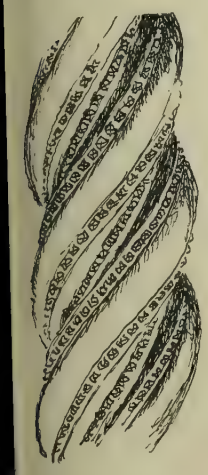


FIG. 9.

shaft, probably from a door jamb; the oll-moulding is coloured red. In *Glean-* illustration is given of an elaborate d stone found under the nave in 1848. is from another stone of the same kind, h a different and beautiful pattern.

CLOISTER.—Many Norman capitals about t cube in size are preserved among the its and some have been fitted into the ngth of Cloister arcade which has been n the museum. Some of these capitals

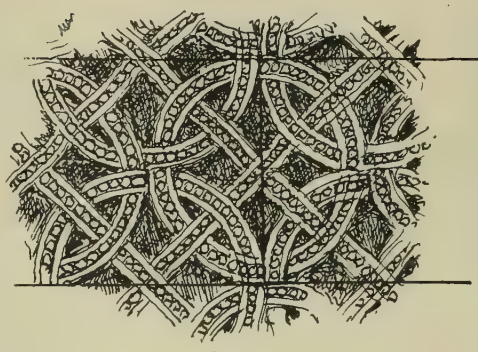


FIG. 10.

have sculptured figures, others are carved with scrolls, and interlaces of foliage, and others are a developed variety of the cushion capital. Many of these were found when Scott practically rebuilt the outer walls of the west and south cloister walks, and as he saw they must have belonged to the ancient cloister. There are also some early bases 16 in. square which bore

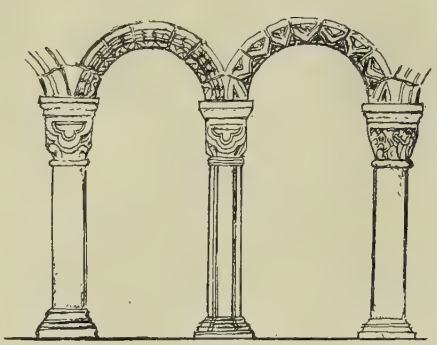


FIG. 11.

a shaft nearly 8 in. in diameter, a size which exactly suits the capitals. Other bases of the same scale were finished for shafts of quatrefoil form shown in Fig 11. Now some of the capitals are also of quatrefoil form above the necking (Fig. 12). About 1909 I looked for shafts of the form required and found one which seems to have been of the full original length. Again in 1911 another piece was found in the later masonry of the south cloister. A little later the dwarf wall of the arcade of the western walk

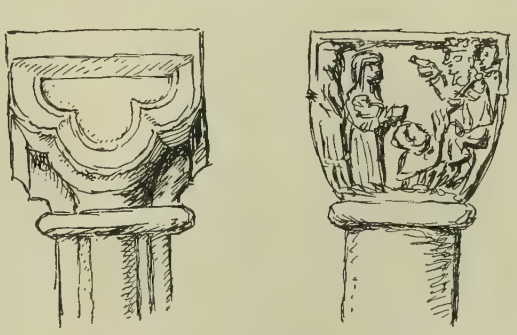


FIG. 12.

was found beneath the grass nearly parallel with the present cloister: the capping slabs were 1½ ft. wide and on them were traces of the bases of the old arcade of narrow arches. (Some half-bases and capitals suggest that the arcade was broken into groups between piers.)

Later again, in removing accumulated earth and stones from the Dorter cellars a large number of stones from narrow arches decorated with chevron work were found, and with these we were able to complete the short length of arcade. The manner of work is rich and the elaborate cushion capitals are similar to many in the Reading Museum found in the Abbey ruins of that town. We might date these capitals about the middle of the twelfth century. A capital of the same type, however, found at Westminster outside the Abbey, which obviously belonged to the sculptured series, had a carving of an Abbot receiving a charter, together with an inscription naming William the Second and Abbot Gilbert. This would seem to date the work between 1087 and 1100, which is impossible. Either the inscription must have been faultily restored, or it was retrospective in its character. I suggest that there was a series of capitals recording Kings' gifts. This capital was sold to a collector and has been entirely lost.

Of the other sculptured capitals which are preserved, one is carved with the Judgment of Solomon, another has Devils and the Jaws of Hell, while a fragment represents two dragons biting at a woman's breasts. This is the symbol



FIG. 13.

of one of the Vices (*Luxuria*) and suggests that a series of the virtues and vices were represented. Fig. 13 is a partial restoration of this interesting fragment. So far as I know no other figure of the kind exists in England. On the return side there seems to have been a devil seizing a person.

Fig. 14 is one of the foliage capitals, and a magnificent work of art it is.

REFECTORY.—The north wall of the Frater

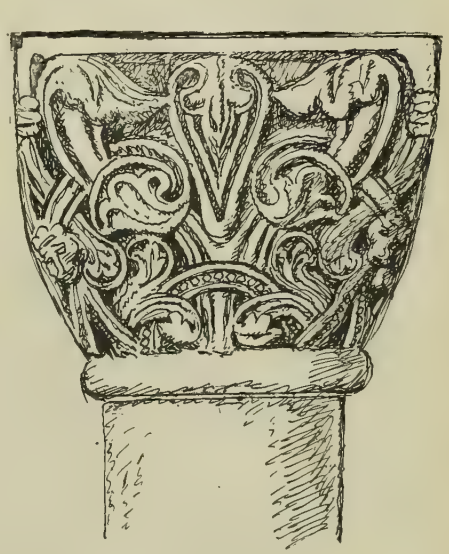


FIG. 14.

stands its full length and height. In the upper part fourteenth-century windows have been inserted in the place of the old ones, which, doubtless, were similar to those of the Dorter. A Norman string mould of rounded profile still remains beneath the windows. Below ran a continuous wall arcade; the ground on the site had accumulated so that in the excellent engraving given of the wall in *Gleanings* it looks as if the base of the arcade were at seat level. It has been further exposed since, and even now the

original floor level is about 1½ ft. below the grass The base of the arcade was originally about 7 ft. above the floor. The capitals are of simple block type, square above and conical below, and the bases are plain splays.

A further portion of the arcade was also found on the south side in the present song-school about 1912. On the soffites of arches was some thin plastering, which left 2 in. of the stone exposed at the margins; there were traces of red, and doubtless the whole was originally washed and lined into blocks. When fresh and fair it must have been a noble barn-like structure —as barns were in the Middle Ages.

The exterior of the wall appears over the South walk of the cloister, and in repairing it, about 1912, some sound masonry was found, many of the stones of which still retained their mason's marks (Fig. 15). These were similar to



FIG. 15.

others on the west wall of the Dorter, by the entrance to the Pyx Chapel, and one seems to occur in both places. The external walls of Westminster Hall were also plentifully scored with these marks. From the character of the work and these marks, and the fact that the little arches of the wall arcade seem to have had alternate voussoirs of two kinds of stone, it must have followed on the Dorter at once and doubtless was an eleventh century work. If the inscription on the capital mentioned above is to be trusted, it appears that the Refectory was built at the cost of William Rufus. Probably the same building master was employed at both the Palace and the Abbey. A full and clearly illustrated account of eleventh and twelfth-century Westminster would be a romantic contribution to English history.

The Refectory needed serious repairs after the great fire of 1298. References to works appear from 1301, and in 1305-6 master Edmund the Carpenter with sixteen to nineteen other carpenters and several sawyers and labourers, were engaged on the works—doubtless a new roof. An archway of very refined earliest fourteenth-century work near the south-west angle, which communicated with the kitchen, and a low vaulted building to the south of it, of which shafts and bases (c. 1300) remain, are likely to be of this time. Master Robert Cementarius receiving 9d. a day, who is mentioned in connection with the repairs (Rackham), was probably the master mason of this work, and to him I would also assign the pretty two-light windows in the "Norman" openings of the Dorter, which also followed on the fire. This work is very delicate and beautiful, and I am glad to make the acquaintance of Master Robert. A plan of the low vaulted building just mentioned is given by Mr. Westlake. The columns were 15 in. in diameter, and only 6 ft. high. The vault rose 4 ft. higher. It was very like the entry to the Chapter House.

Some considerable works in the Refectory seem to have been undertaken at a later time by Litlyngton, Prior and then Abbot (1350-85), whose arms are on some of the floor tiles found here. The roof corbels are very like those in the Abbot's Hall. I have thought that the elegant two-light windows in the north wall were of an earlier period, about 1310-20, but I now think that they are Litlyngton's work. The rebuilding of the cloister may have given occasion, by blocking the lower part of the "Norman" windows for inserting new ones. There are several fragments of tracery in the triforium, from which I have been able to assemble a three-light window of exactly the same style and scale as the others, which probably came from a gable end of the Refectory (Fig. 16).

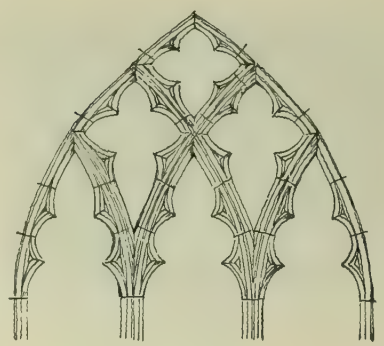


FIG. 16.

In this form the work looks later. There is also at the east end of the Refectory a wall-arcade, which appears fully as late as, say, 1360 (Fig. 17). Again, the shafts of the inner jambs of the two light windows are like those of the Refectory door, which it seems impossible to date before the middle of the century. This door resembles in feeling the doorway to the Chapel of St. Katherine. On the inside of the west wall of the Refectory (the chequered wall) remains the base of a window jamb at the height of those in the north wall and probably the jamb of one of the three light windows (Fig. 16). The quatrefoil band on the exterior of this wall above the chequers may range with the parapet of the Refectory.

At the south end of the arcade (Fig. 17) is the springer of a door-like arch, which is doubtless part of the Reader's pulpit. The arcade ranges with the "Norman" arcade, and was obviously part of the general scheme of modernising the great hall. The "Norman" arcade is itself walled up flush, and the abacuses were cut down to the face of the wall; evidently it was

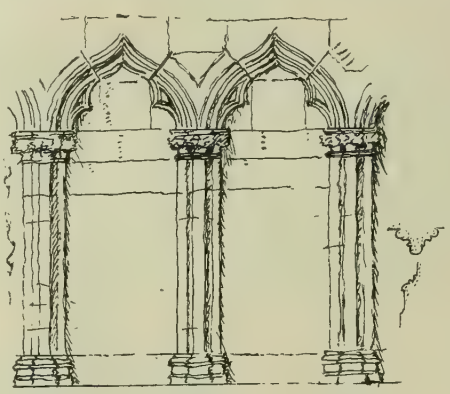


FIG. 17.

obliterated and the Refectory was *completely* transformed into a fourteenth century work, of which the doorway and windows made part. The roof corbels are long, heavy stones, which pass through the whole thickness of the wall; over the top of each there seems to have been an extra carved stone (see plate in *Gleanings*). From their position it would seem that the roof cannot have been of the hammer-beam type; it was fifteen bays long. We may now imagine the complete recasting of the "Norman" work, a precedent which was later to be followed at Westminster Hall.

Perhaps we may assign all the masonry to John Palterton, who was master mason in 1349, and can be traced until 1373–4, and inserted the doorway into St. Katherine's Chapel in 1361. The masons of the fourteenth century who preceded him were, the master Robert mentioned above, say, about 1300-10, and Walter de Bole, working in 1349.

Other masons recorded about 1300 and soon after are Richard (1299), Maurice de Tothill (c. 1316), and Alexander de Tothill.

A WANDERER IN LONDON

The twenty-third edition of this pop work* has just been issued in a revised f Among the changes are new description accordance with the post-war rearrange of pictures in the National Gallery, the Gallery, and the Wallace Collection. It is misfortune of so many guide-books that are so severely practical; it is the charm Mr. Lucas's book that it represents the pressions of a wanderer. In guiding u takes us to the things which he assumes will appreciate and like, and we flatter selves that his personal likes and dislikes ours also. There are no suggestions for t who merely wish to record the fact that have "seen" everything; but even they at least succumb to the written charm of book. Readers who are familiar with Lucas's writings will realise that they being guided through the various picture leries by a genuine lover of painting.

To architects and builders a book of nature should be invaluable; it might, in opinion, be even more valuable if we had the feeling that Mr. Lucas's affection architectural antiques may have a tend to cause him to ignore the new. He give the charm of the quiet, unassuming Geor houses in their quiet streets, and even i assume that age and sentiment have ve them with an individual charm of their we admit we are not optimistic enoug believe that time will soften the crude noisy modern substitutes which offend Lucas. He would probably deny any c to be a professional architectural critic, he is certainly a very cultured critic, some of his architectural criticism der that he has a fine conception of architec principles. Here is an example:

"Too many London architects dislike l restful, unworried spaces and long, unbr lines: hence many of our new buildings been for the most part fussy and ornam and not at all, I think, representative o national character. Somerset House for its fiddling little cupola) and Ca House-terrace are perhaps London arch ture at its simplest; the Law Courts, wit their amazing intricacy and elaboration London's public architecture at its most plex and unsuitable. St. James's Pala beautiful, but Buckingham Palace hardly be more commonplace."

St. Paul's Cathedral has no religious nificance to Mr. Lucas; it has neither te ness nor mystery, and its true appea considers, is external. There are many will agree with these feelings, and we believe that they represent an attitude of since there are also many to whom St. P makes a religious appeal where the C cathedral fails. Probably Mr. Lucas is lover of the Renaissance style of archite in all its phases (the old Georgian house evidently an exception), but it is diffic argue from this that "Wren, of course no religion." It is a more pleasing th —and probably more correct—to imagine Wren worked in the style which he and believed was capable of the higher pression of Christian symbolism. C architecture is still a pagan style to people, and Mr. Lucas's impressions ar cidedly interesting and worthy of cons tion. We agree with him when we c that at certain times the lighting of St. P is almost commercial.

His comments upon the many phas London make delightful reading; if critical he is sympathetic, and inva deals gently with our human foibles. excuses his architectural digressions o plea that his pen ran away; we would that it did it more frequently.

* "A Wanderer in London." By E. V. (London: Methuen & Co., Ltd.) 10s. 6d. net.

MOHAMMEDAN ARCHITECTURE IN EGYPT AND PALESTINE *

many years Mohammedan architecture eived considerable attention from the cts of Western Europe, and as the f their efforts, and particularly of the gable labours of such students as , Saladin, and Migeon, we have now disposal an immense amount of well- ted literature on this fascinating subject. as been augmented recently by "Les ents Mauresques du Maroc," by J. de la , and "L'Architettura e L'Art Musul- n Egitto e nella Palestina," by Ugo published in Paris and Turin respec- both profusely illustrated ; and by the before us. There is a sufficient thread of lance running through the whole of the ture of Islam in Palestine and Syria its progress through the ages and under ious rulers—Arab, Sassanian, Mameluke, rkish, by whom it was fostered—to with a distinct impress. Apart from its aditions and requirements, its growth ubtless influenced by the customs and traditions of the peoples who came ts sway or with whom it came into direct . Thus Byzantine, Syrian, Coptic, an, and Indian influences can all be ly traced in its buildings, while indi- initiative appears to be no less clear.

author traces the history of his subject e birth of Islam to the period subsequent Turkish conquest of Egypt in 1517, g a chapter each to the first mosques, the xecuted under the governor of Egypt ūlūn), and that under the several rulers Fātimids, Saladin, the Turkish Mame- the Circassian Mamelukes, and the This is followed by most interesting luable chapters on domestic architecture, ornament and craftsmanship. It is a treatment of the subject, and shows painstaking and research, supported by l investigation made while serving in and Palestine during the late war. The s illustrated throughout by a fine series r and large-sized photographs, and by gs made principally by the author. ains copious bibliographies and a useful , and is produced in attractive binding. Arabs of the early period were evidently different artists, making use of such ls as was provided from the pillage of ncient buildings, and of the impressed of the races they subdued. Details are und misapplied, as a Corinthian capital and used as a base ; or columns them- were even reversed. But in process of reater skill was shown, and in the great of Ibn Tūlūn, at Cairo, finished in 879, re introduced for the first time in place ns. A good story is told by an early -century writer of the occasion of rm. Ibn Tūlūn was building an aque- convey water from the Muqattam hills ity, and as he was riding out one day desert to inspect this work his horse d in a heap of mortar. He immediately ed the architect of the work to prison neglect, ordering five-hundred blows ministered in place of the five-hundred he to him. Some time later the governor to build a mosque on a magnificent t when he was told that it would hree-hundred columns to erect a mosque e he required under the usual method ruction, involving the destruction of number of provincial churches, he to authorise the work and it lay in . This state of affairs came to the ears nfortunate architect of the aqueduct, still languishing in prison. He wrote vernor offering to build him a mosque uired size without the use of a single ave those on either side of the mihrab. rought before the governor, described his scheme, and Ibn Tūlūn was so delighted with it that he ordered the architect's immediate release, arrayed him in a rich robe, and paid him the sum of 100,000 dinars to enable him to commence the work forthwith. The piers of this mosque are rectangular on plan and have engaged columns formed out of the angles. They are built entirely of brickwork and covered with stucco.

That the influence exercised by the Crusades on Islamic architecture was very considerable is abundantly clear from the existing remains. The minaret of the White Mosque at Ramlah (which is illustrated opposite page 104), is a remarkable example of this influence. This minaret was built in 1318, and has all the characteristics and appearance of a Gothic church tower of the period. At Jerusalem and elsewhere in Syria are other and scarcely less striking examples of this influence, quite apart from the Christian churches, as at Gaza, Ramlah, Ludd, Samaria, and Jerusalem. which have been converted into mosques. The period of greatest magnificence was evidently that of the Turkish and Circassian Mamelukes, from 1250 to 1517. The mosques, colleges, hospitals, fountains and tombs erected at Cairo and in Syria during this period, including the mosque of Mu Ayyad and the collegiate mosques of Qāyt-Bay, of Abū-Bakr Ibn-Muzhir, and of Al-Ghurī, all at Cairo and all illustrated and described by the author, are most noble works of art, richly embellished with both plastic and applied decoration. The foliated and geometrical decoration carved out of the stonework on the outside surface of numerous domes at Cairo, of which the dome of the mosque of Qāyt-Bay is a fine example, or the zigzag or fluted treatment adopted in other cases are equally striking.

We could wish that in some of the descriptions a more direct relationship was established between the text and the illustrations. However well worded a description may be, it becomes much more lucid when direct connection is maintained with the illustrations and when the illustrations are chosen with this end in view. Perhaps this defect is most pronounced in the disquisition on the origin of the Mohammedan dome (pp. 194–197). In this case, though numerous domes are referred to as examples of the remarks made, only one reference is given as to the page on which an illustration of the dome would be found. We would also point out two slight printer's errors on p. 48, line 27, and p. 78, line 28.

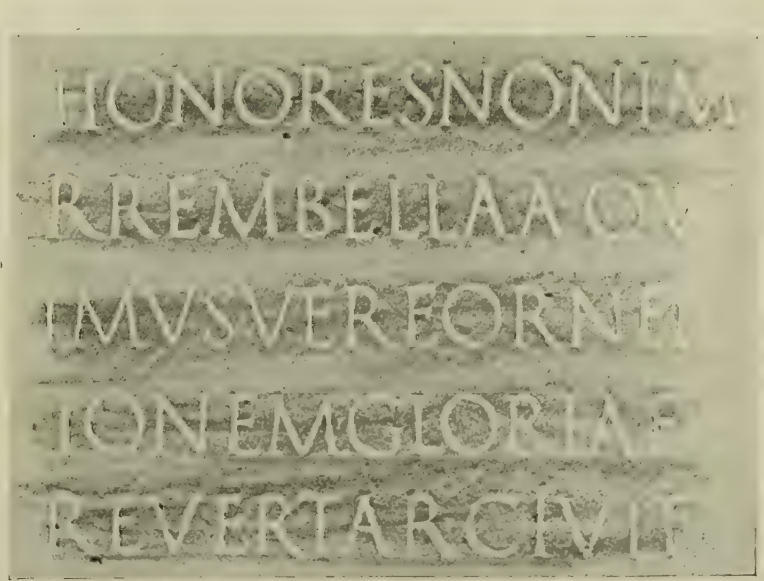
The chapter devoted to domestic architecture contains descriptions of Mohammedan dwelling-houses of the periods under consideration such as exist at Cairo, Damascus, and in the towns of the Delta, and of the tenement houses or Rabs, the khāns, and the shops in the bazaars. The description of the peculiar arrangements and plan of a typical house in Cairo during the mediæval and later periods is most interesting, and it must be a revelation to many not already well acquainted with the subject to realise the rare beauty of decoration contained within the walls of these dwellings, in mosaic pavements and marble faience lining, apart from the attractive and picturesque character of their exteriors.

The prohibition by Mohammed of the use of human and natural forms in religious art has resulted in that prolific employment of formal foliage and geometrical forms which is characteristic of Saracenic ornament and which has produced most charming compositions. Relief was also obtained by the use of alternate courses of stone of different colours or, in later periods, alternate artificial colouring, both for the horizontal courses of walls and pillars and for the voussoirs of arches. That much of the internal decoration, as of large wall surfaces covered with enamelled tiles employed in some of the mosques, is much too brilliant and insistent to be reposeful or pleasing to the Western mind must be acknowledged, but the mosaic and marble pavements, the inlay work on pulpits, reading desks and other furniture, and the fine grills are all works of great beauty and deserve careful study. As a valuable contribution in English on this subject Mr. Briggs' volume is heartily welcomed.

ammadan Architecture in Egypt and Pale- y Martin S. Briggs. Oxford: Clarendon ice 84/-.

EXHIBITION NOTES

The private view of portraits and studies by P. A. de Laszlo, at the French Gallery, was crowded with interested visitors from the fashionable world, who, we suppose, accepted without surprise the pictures of so many good-looking people. One would imagine that the artist is particular about having good subjects, but he certainly can set forth in a fascinating way both men and women who have a decent share of good looks. The men one feels inclined to take for granted; but are the women really as fascinating as the painter makes them?



Rubbing from Bronze Tablet found at Lyons, bearing parts of a speech delivered in the Roman Senate by the Emperor Claudius.

By Mr. F. W. Knight, A.R.I.B.A.

THE DECORATIVE ARTS IN ENGLAND*

COLONEL MULLINER'S "Decorative Arts" is a catalogue *raisonnée* with a difference, which even a superficial glance would reveal. To take the furniture sections alone, after reading the first few pages, the reader realises that the author has a marvellous grasp of his subject, and has written a real furniture book in quite unconventional form. The more usual method is to write the book more or less chronologically, and then to illustrate the text by the aid of appropriate plates. In this case, the author has taken some 250 specimens from his own superb collection, giving each one a concise and quite lucid description in catalogue form, adding thereto further details as to provenance and workmanship of the piece illustrated and historical data concerning the particular type or period. There is in every case an uncrowded page of such text opposed to a page of illustration—a virtue in make-up.

The twenty chapters deal with Furniture (1-6), Woodcarving, Chandeliers, Silver, Medals, Stuart Enamel, Locks, Battersea Enamel, Ormolu, Glass, Tapestries, Needlework (each one chapter), and Bookbindings (18-20), each commencing with from one to five pages of historical matter. The text is of much interest, and, together with the fine illustrations, should satisfy the most fastidious connoisseur.

The author adds a short note in which he says, "My object has been to embrace for the first time in one work representative examples of various decorative articles produced in England during the late seventeenth and the eighteenth centuries, as the more comprehensively the subject is treated the more interesting it appears, and the more readily it is unde No work covering such a wide field can p be complete. For instance, I have no with costumes, pottery or porcelain; and ings, pastels, mezzotints, engraving jewellery are entirely omitted." Doubtl author could have handled these missing s quite satisfactorily; but he has c himself to a selection from his own co which is—or rather was—quite priceless as it went. Under this limitation, in Cha "Furniture under the French Rococo In 1740-1763," the reader has to be conte example, in the mahogany of Chippen the Chippendale school with but nine illust comprising three chairs, two commod wardrobe, a table, and a cabinet, and, but one "three-chair-back" settee in taste; and how much we should like had an equally fine three (or four)-cha settee of interlaced ribbon or Chinese work! Again, in clocks, we are restri three, of which two are by Thomas T We have no quarrel with Tompion, who the top-note in the collector's gamut, are greedy for something by his pupil, Graham, who sleeps in the same grave nave of Westminster Abbey.

In Chapter III, "Furniture und Classic Revival, 1763-1790," we ge examples of English furniture directly i by French models, and some half-doze designed by Robert Adam or influenced genius.

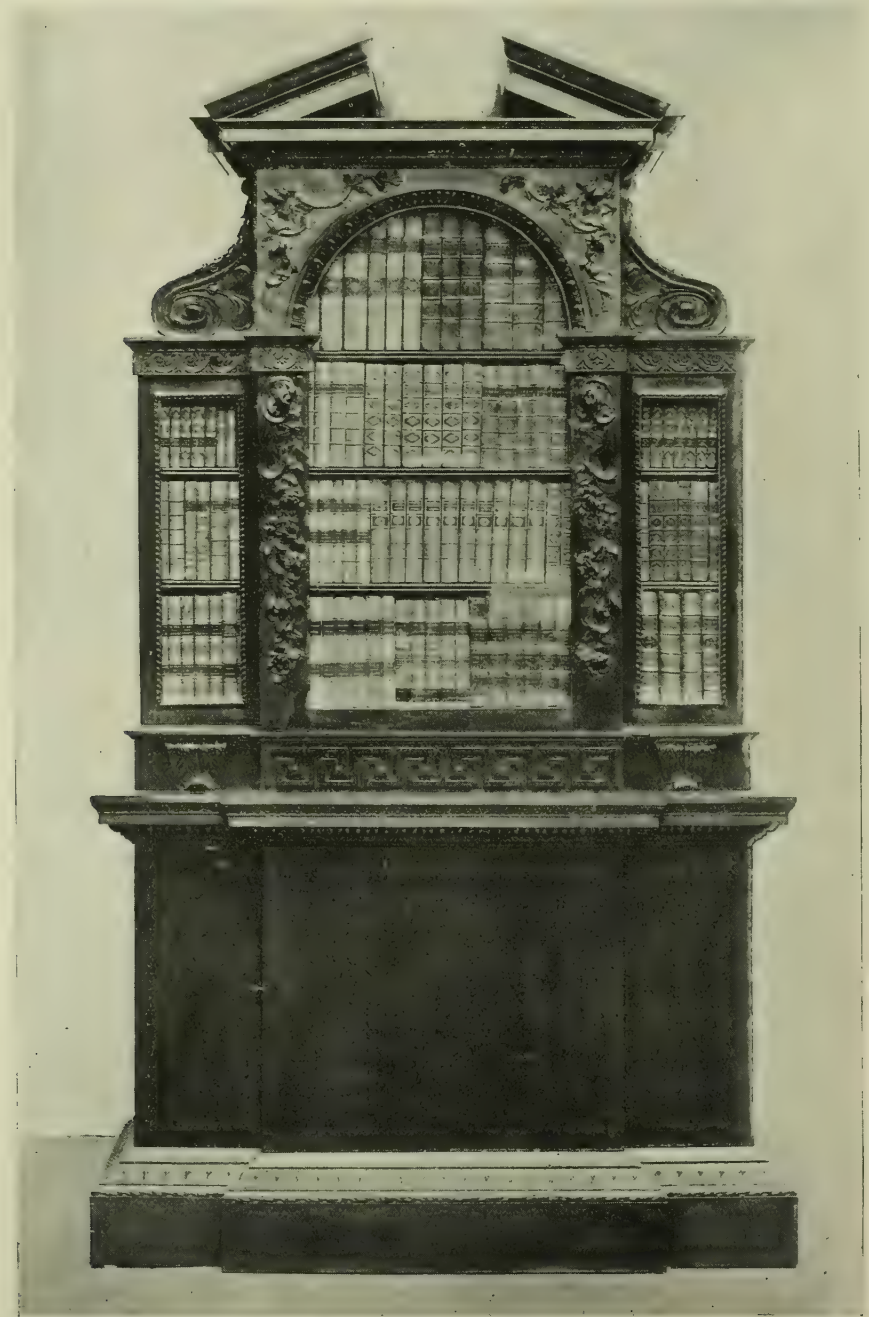
The Bureau Cabinet of semi-archi design (figure 31 in the same chapte superb combination of the arts of the maker and painter—the central lights o Gothic tracery in the break-front cabi mounting the bureau being decorated with emblematical of the three cardinal virtu titude, justice, and temperance—from the by Sir Joshua Reynolds, for the window College, Oxford; whilst the painting of amorine sacrificing a goat in the p suggests the work of Pergolesi. The pro of this fine effort of craftsmanship is r gested in the text; but we can visu appropriate first home in the Adelphi perhaps No. 5, under the ceiling pai Zucchi and facing David Garrick's marble chimney piece, which is said to h £300. It is interesting to compare this l graceful structure of mahogany, overl inlaid with satin-wood, tulip wood an with the cabinet of purely architectural plain mahogany (Fig. 15), relying f upon its broken pediment and carving pattern, rope ornament, Vitruvian sc pendant flowers.

The chapters on Lacquer and Marqu particularly illuminating, both in t illustrations. We are shown quite cl difference not only between purely Chi purely English lacquer, but also bet interesting Anglo-Chinese varieties some cases exhibit purely Chinese imposed upon English made cabinets others, English designs executed by lacquerers, who inevitably gave the clad figures distinctly Oriental coun

In dealing with Marquetry the auth this interesting form of decoration ba thirteenth-century intarsia or inlays o which spread to Florence and othe cities and reached the French towards t of the seventeenth century. We ar the elementary English inlays of T early Stuart times, and are given illust delightful examples of somewhat late tions in this country, with bold inla patterns influenced by the Dutch; a clearly the tulipomania of the Ne reflected in our English tables and Again, we have examples of delicate cate "endive" or "seaweed" m of late seventeenth and early eighteenth resembling the Arabesque designs in shell and brass of the contemporary

In referring merely and quite shor furniture items, we have but touched of the matter; but we have endea indicate the scope of the book, which

* The Decorative Arts in England, 1660-1780. By H. H. Mulliner. B. T. Batsford, Ltd. Price, £3 10s.



From "The Decorative Arts in England, 1660-1780."

A Mahogany Cabinet.

From the collection of Sir Spencer Maryon-Wilson.

to furniture lovers and in no small to virtuosi generally.

decorative arts were perhaps at their in England under the influence of Wren, houses, churches and public buildings aced by the inimitable carvings of Gibbon, Brothers Adam, whose designs in furniture r houses were carried out by the master an, Chippendale II, and his contem-s. History repeats itself in our own day, r Edwin Cooper designed the new home Port of London Authority, on Tower d makes himself responsible for its entire ings.

late Colonel Mulliner was a notable mongst connoisseurs. Possessed of an g judgment—and perhaps a very deep —he was doubtless well in the way of ng and (under a continual process of n and rejection) of amassing an almost collection. We regret that, dying but onths ago, he did not live to see the tion of his book. The disposal at 's, on July 10, of 146 lots of "The r Collection of Old English Furniture, of Art and Tapestry," realising some , was evidence of his catholicity of nd judgment. One hundred and two of ts—approximating to £34,000 under the eer's hammer, ranging from 17 guineas tuart Disc of Enamel, to 3,500 guineas Chippendale commode—were selections e items illustrated and described in the nder review, as were also the fifty-seven silver which were sold at auction on the s day for £10,698. We could have the best of the best examples in our l collection to fill regretable gaps, the collection could not have been l as a whole. "*Hinc illæ lacrimæ!*" have the book to remind us of what have been.

BOOK REVIEWS

ey Friars of Canterbury. By CHARLES TTON. (Manchester: The University ess.)

monograph, issued by the British Society ciscan Studies, traces the progress of the riars at Canterbury, from their arrival city in 1224, to the dissolution of their n the sixteenth century. After living y in meanly constructed dwellings for ty years, they received a grant of land from John Digge, a wealthy citizen of ury, and on this they proceeded to eir conventual buildings, the remains of still exist. The author has evidently much time in painstaking research the documents which bear upon his with the result that he has collected here luable information. In respect to the ural restoration of the plan of the opposite page 24, the disposition of unconvincing, having regard to the plans of the churches of the Mendicant but it is hoped that further investigation ow more light on this subject. The last is devoted to an illustrated description storation, effected in 1919, of the charm-e building which stands astride of the tour, and which is the only remains of blishment now above ground. Appendix abstracts of wills of benefactors to the .396-1538) is a most valuable adjunct work. The volume is supplied free to s of the Society by whom it is issued. rticulars of membership of the Society obtained from Dr. Walter Seton, Hon. y and Treasurer, at University College, reet, London, W.C.1.

e Mouldings: Full-size Sections of lded Details on English Furniture from to 1820. By E. J. WARNE. (London: est Benn. Ltd.) Price 25s

s when machinery plays so paramount a ne production of mouldings of all kinds he first importance that all those con-n the design of furniture should thor-rasp the true principles of the applica-tion of mouldings, the relation to each other of those in juxtaposition, and their proper disposition on the particular piece of furniture to be made. For this purpose the study of the best types is essential and the volume by Mr. Warne is a welcome contribution to this end. It contains illustrations of about one hundred and forty pieces of furniture, including bedsteads, various forms of cabinets, bookcases, cupboards, chests, tables, sideboards, mirrors, and clocks. These are made of oak, walnut, mahogany, satinwood, pine, marquetry, and lacquer and comprise examples of English furniture extending over a period of about 250 years, from an oak armchair of about 1574 to a mahogany table of about 1820. All these are well illustrated by full-size details and by a thumb-nail sketch of each complete piece on which the positions of the several mouldings are indicated. The examples are admirably chosen and are representative of the various types, and the author has advisedly arranged them in order of types of furniture and not chronologically.

Architecture in England. By CYRIL DAVENPORT, F.S.A. (London: Methuen & Co., Ltd.) Price 6s.

In its treatment of the history of English architecture, this manual follows the usual sequence of periods, Norman, Early English, Decorated, and Perpendicular, each period being illustrated by examples drawn from cathedrals and churches. Cursory descriptions of the examples selected follows a foreword on the style of each period. There is an introductory chapter on Roman and Saxon remains and a concluding chapter on the Renaissance period. A short glossary of architectural terms is appended. Presumably, there is no pretension in this work to supplement what is already known, but rather to popularise the subject. The line followed, however, is over well-trodden ground, and it can scarcely be said that we have here anything more simple, compact, or anything superior in erudition or illustration to many of the manuals already published on the same subject. The volume is illustrated by photographs and drawings by the author.



From "The Decorative Arts in England, 1660-1780."

A Bureau Cabinet.

AN OPEN-SPACE POLICY FOR GROWING TOWNS

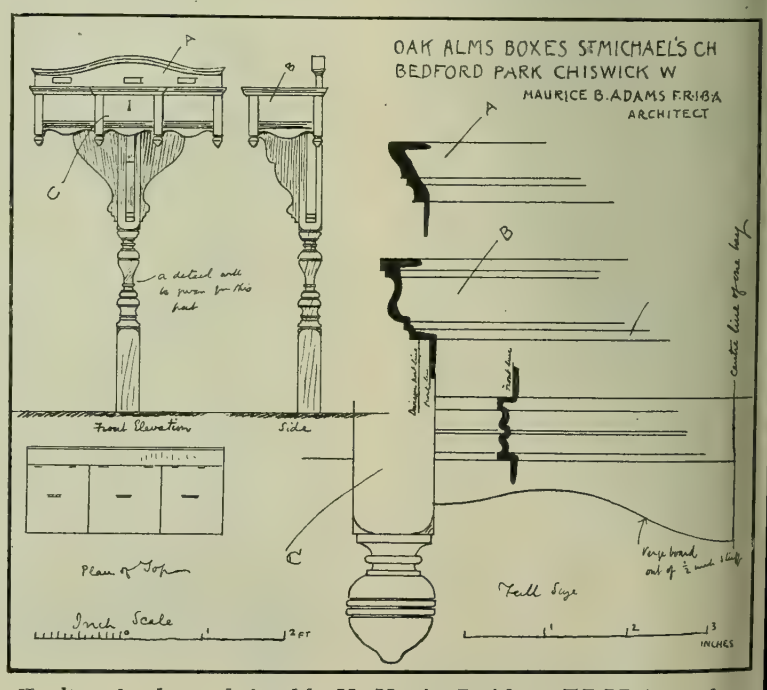
By J. P. ORR

THE expansion of a town from the nucleus of its original built-over centre generally takes place along the main roads, railways, or navigable waterways leading to the surrounding trade centres. Land situated on these routes gets its prospective building value sooner than land situated in less accessible areas between them; but in course of time these areas are made accessible by new cross roads, radial roads, or railways, and are developed for building; and so the built-over area is always expanding outwards in the shape of an octopus, the main centre always growing larger, while the original built-over tentacles keep stretching farther and farther out, and new tentacles keep coming into existence wherever new roads or railways are constructed. Agricultural land which had, say, a value of £60 per acre when it was two miles outside a town, might, when the town had expanded nearly up to it, have a value of £600 per acre as building land. The advance from £60 to £600 would be more or less rapid according to (i) the situation of the land with reference to the built-over town; and (ii) the rapidity of the town's expansion towards it. During the first few years of this expansion the land in question could perhaps be put to an agricultural use only, and yet its value would increase because a purchaser would allow for the prospect of being able to sell the land after a few years for building purposes. There is generally an intermediate stage before the building stage, viz., that in which land is in demand for recreational purposes. It has then a value considerably higher than that of similar agricultural land further out, but considerably lower than that of land newly appropriated for building. Were there no chance of its being in demand for building, it might have a value of, say, £200 per acre; but the prospect of its being required for building a few years hence may perhaps raise this value to £350. The average landowner is, of course, out to make the most for himself out of his land. He does not generally think of the interests of the community. So the man who buys land at £350 per acre will generally let it for recreational purposes only for a short term. He reckons perhaps that by the end of that term (1) the built-over area will have crept much nearer to his land and will have absorbed much of the land now used for recreation; and (2) the demand for recreation grounds and perhaps also for building sites in the vicinity of his land will consequently have increased, so that he will be able to raise his recreational rent or lease or sell his land at great profit for building. Occasionally, a landowner may be found sufficiently public-spirited and sufficiently interested in sport to reserve part of his land as a permanent open space. He may, even without being at all public-spirited, make such a reservation from consideration of the increase in value of one part of his land if another is kept permanently open; but experience shows that, in the ordinary course of events, suburban land under private ownership is put to its most paying use, so that, though part of it may for a few years be used for recreational purposes, the bulk of it is ultimately appropriated for building. If, then, the ultimate needs of a growing community in the way of open spaces (including both roads and recreation grounds) are to be adequately provided for, it is evident that the private land needed must be acquired by some public authority, and that in the interest of economy it should be acquired long before it has reached its full building value. This calls for far greater prevision on the part of local authorities than has ordinarily been shown in the past in, *e.g.*, Greater London, and emphasizes the need for careful and comprehensive regional-planning of suburban areas far in advance of their actual development for building purposes. Early action is specially needed in respect of land which lies between two or more expanding centres, because the advance of buildings towards it is from several directions, and tends, therefore, to make its advance in value all the more rapid. When a town is expanding outwards into open country all around, the temporary recreation grounds in its outskirts are driven gradually farther and farther from the centre; but when a town, and one or more of its suburbs, are expanding towards one another, there comes a time when all the intervening land has become too valuable to be used for recreation, and then the substitution of new for old temporary recreation grounds for the main town involves not a gradual move but a sudden long move to the far side of the suburbs, to the disadvantage of everyone concerned except the railway and omnibus companies. This ought to be guarded against by a far-seeing regional plan; but the needs of the future population in the way of permanent open spaces are usually not thought of till too late. There are conspicuous examples of this all round London.

It is not only for public recreation that, in anticipation of the expansion of a city, the local authorities need to acquire surburban land while it is still far from the built-over area. There are many other public purposes for which they will ultimately need land when the city is more fully developed, *e.g.*, building-sites for schools, hospitals, asylums, offices, halls, markets, police-stations, fire-stations, registry offices, &c.; and open spaces for parking grounds, cemeteries, aerodromes, storeyards, sewage farms, &c. It is also very advantageous to the local authority to have suburban land of their own to offer in exchange for private land which they may find it necessary to acquire in the public interest in the heart of the old town, *e.g.*, land required for improving a narrow or crowded street, slums requiring demolition and reconstruction, or sites occupied by offensive trades or for uses which tend to depreciate surrounding properties.

It will, however, often be very difficult for a local authority, hampered by the proble volved in rapid development of a rural i urban centre, to finance the acquisition c In the earlier stages of development th able value of the town will be low, and therefore be difficult to raise the funds re even for such pressing needs as new roa drainage schemes; and without these t houses, on which the increase of rateable and therefore of borrowing power de will not be built. On the other hand, th of open spaces is not felt at first, becaus is so much open land within easy reach centre—many times more, perhaps, t required by the present population f creation. The local authorities are pr overlook the fact that most of the p private recreation grounds are only temp available as such, and are liable to be priated ultimately for buildings, the erec which will not only decrease the supply also increase the demand for permane creation grounds and so increase thei It is all the more necessary that some s authority like a County Council, with interests and more ample resources tha local authority of the growing town while open land is still cheap, come to t of the latter, either by loans or by grants or otherwise.

To recapitulate: (i) With the gradu pansion of growing towns there accr suburban land a gradual enhancement of in consequence of the changes in the pu for which it is likely to be used—first agric then recreation, then building. (ii) landowners will ordinarily put their la the most paying use without considerat public interests; so private land is seld served permanently for recreation but i temporarily put to recreational use until i demand at an enhanced price for bu (iii) It is, therefore, desirable in the interest that at an early stage i development of towns the local auth should acquire such suburban land a ultimately be needed for public recreatic other public purposes while it has still o agricultural value. (iv) The financial diffi which the local authorities would enc could be largely overcome if the Mid County Council's policy of subsidising Municipal and District Councils' open space schemes by grants of one-fou the cost were adopted by all County Cour



[In these alms boxes, designed by Mr. Maurice B. Adams, F.R.I.B.A., one key locks the three compartments.]

CHITECTS' AND LDERS' INQUIRY BUREAU

glad to give questions and answers ccept responsibility for contributed cially on legal matters.

appeal to our correspondents to queries on paper of a size easily ritten as legibly as possible, or in typescript?—ED.

Rot in Woodwork.

uld be much obliged if you would n me of any remedy for preventing g in woodwork. It appears in owths of fungus on door-frames e, causing the woodwork to crack away. Is there any remedy other all woodwork renewed?

J. J. JONES.

Elm Boarding.

shall be glad to know if any of your give us information as to the proper r elm-boarding as employed on s of houses, in order to obtain the ffect. "BUILDER."

Legal Question.

t a basement flat to a tenant in lace continued to be inhabited until while the tenant sublet, and the new g ill, and being of a nervous dis- led in the sanitary inspector, who t to be damp and unfit for habita- certain work was done. sted alterations were so drastic and at, rather than go to what was o great an expenditure, the place and still is. The sign of dampness to the outside wall, and could be y ventilating, re-cementing, and d coating with a damp resisting

s successfully accomplished, would be possible to re-let without being n any way evading the original tions laid down by the sanitary am asking this from the legal aspect and would like confirmation or the suggested act.

"INQUIRER."

Architectural Data.

EPLY TO "RESEARCH."]

correspondent "Research" is to find that our architectural very incomplete, and that our are packed full of apparently nterest. I have found Batsford's d Cottages and Farmhouses" very counties to which they apply, but k Wiltshire is dealt with. tful source of information is often s of the houses concerned, where s can be obtained, when a com- yle with other known houses in hood will often give a very useful gin. "BOOKWORM."

Laying of Bricks.

TO MR. V. J. WENNING.]

e seen a very similar method to d by Mr. Wenning used in several buildings of a very cheap class, retchers on edge were alternated on edge which, though making ger wall by the through bond, her for probably the same reason. g's method is, however, unsound nds. k on edge, without the keyed joint ost methods of slab work, is ex- and would hardly stand a sharp cavity wall construction, to be weather tight, throws almost the entire weight of the superstructure upon the inner shell. If we take 1½ tons per ft. run as a fair weight on the foundations of the outer walls of an ordinary house, this is equivalent to a load of 6 tons per sq. ft. on the narrow base of the inner shell, and this is outside the safe load of most stock brickwork in lime mortar. (3) The appearance would be bad, and the application of rough cast would about cancel the saving. Facing bricks would have to be specially made for an exposed bed.

Many centuries of practice have evolved the best methods of building brickwork, and the best sizes and shape thereof. The problem of dear brickwork will have to be solved rather by the politician than the constructional inventor.

"TRADITION."

SIR,—In the United States the National Association of Brick Manufacturers has been urging for several years the use of the Ideal Rolok Bond for brick walls. Thousands of dwelling-houses have been thus built all over the country and a number of cities contemplate admitting it under the building ordinances. The city of Los Angeles, California, has permitted it for three years to my knowledge. In this method (which is not patented) the bricks are laid in Flemish bond, but on end instead of flat.

It is a modification of the hollow-wall system. The 9 in. wall has one space, the 13½ in. wall two, the 18 in. wall three, &c. When buildings exceed two stories in height the face is usually of ordinary brick bond backed on the Rolok system.

Strength tests have been quite satisfactory and the advantages of hollow walls, when well built, are known to all architects and builders. The idea was thought to be new when first proposed several years ago, but it is said that a number of men claim it has been in use in Norway and Sweden in isolated places for several generations. The Ideal Rolok Bond effects a saving in brick, mortar and labour.

The offices of the National Association of Brick Manufacturers are in Cleveland, Ohio, U.S.A., and those of your readers who care to address them are certain to receive some interesting literature on the economy, practicability and strength of walls in which bricks are laid on edge instead of flat.

"ENGINEER."

Oak Timbering.

[REPLY TO MR. T. M. COUZENS.]

SIR,—The best treatment for external oak timbering is an unlimited quantity of the best quality English climate liberally applied for an unlimited number of years. The firm that supplies these goods is Nature & Co. If, however, you are impatient, and long for the nice silver-grey effect, this can be obtained with some success by the application of quicklime, mixed into a stiff paste, applied with a brush, left on for a few days, and then rubbed off. If you desire a very dark effect, there is nothing for it but to use a stain, such as Solignum, but pray spare your beautiful oak this indignity, and your Solignum for its legitimate purpose of protecting soft timbers.

"NATURE."

SIR,—The following information is required before a definite formula or method can be given for the requirements of Mr. Couzens. What is old weathered colour? This is rather comprehensive, as it covers anything from silver grey to black. Is it exterior work or interior? Any polish or finish required afterwards?

ERNEST S. RICHARDS.

Artificial Daylight.

With reference to our correspondent's letter ("K. W.") in our issue of last week, Messrs. The Sheringham Daylight Development Co. inform us that the statement "or by the Sheringham daylight system in which the light is either reflected from a specially coloured surface or transmitted through tinted glass," is incorrect. They state there is only one Sheringham system which is covered by world patent rights. In this system the light of the electric lamp is converted to daylight by reflection from the underside of a top shade treated with their special coloured pigments, in correct scientific proportion according to area. Sheringham Daylight, they inform us, is in no way whatever associated with the transmission of light through a glass colour filter.

Pipes.

SIR,—We shall be glad if any of your readers can inform us what kind of pipe for conveying water and cooling same is employed in Eastern countries. We have been told that a pipe which weeps has the effect of keeping the water inside cool and is frequently used. Is this so, and what is the nature of the pipe employed?

SHAW & STABLES.

Distemper and Asphalt.

SIR,—The distemper referred to by your correspondent in his letter of August 29 was evidently not fit for outside use or it would not have washed off. There are some distempers on the market which when mixed with petrifying liquid are quite reliable outside and will not wash off, but in the case mentioned, it would certainly have been much better and cheaper in the end to have used oil paint instead of the distemper.

ARTHUR S. JENNINGS.

London.

THE PAINTER-STAINERS' COMPANY

THERE is much to regret in the fact that modern trade unionism has not developed on the lines of the ancient livery companies of the City of London. These corporate societies were formed in the Middle Ages for the mutual protection of the members of the various trades concerned, and for the purpose of checking the production of inferior work—which was recognised as prejudicial to their true interests. In the course of time, the companies acquired considerable power in the regulation of matters concerning their trades, and especially in regard to apprenticeship, to the conduct of members, the production of good work, and the use of good materials.

The Painter-Stainers became a united body in 1500, though they existed as separate companies, often acting in association, for centuries before that date. The earliest existing reference to the Stainers is in 1268, when we find them involved in a desperate encounter in which several companies took part, and during which many persons were killed and injured. The Painters are introduced to us by a list of ordinances or rules, dated 1283. These are rules made by "the good men of the painting craft" . . . "for the betterment and relief of the same and for the abatement of false works and all manner of guile." Directions follow as to the good quality of the workmanship required on certain specified items and as to other matters relative to the craft, including abstention from work on Sundays and certain other Holy Days, "save under compulsion of the King." Apparently the painters of the latter part of the fifteenth century were not a little distressed by the influx of aliens into London, for in 1488 they petitioned the Mayor to remedy the hardship to their craft occasioned by "the multitude of foreyns repayring daily to the said citee."

The author of this interesting work* traces the history of the Company from its earliest records to the present day, giving copious extracts from ordinances and charters, and the work is illustrated by several photographs. Particularly interesting among the illustrations is the initial letter of a charter granted by Elizabeth in 1581, showing the Queen in Coronation robes.

* The History of the Painter-Stainers' Company of London. By W. A. D. Englefield. (London: Chapman & Dodd, Ltd.)

PRACTICAL DESIGN FOR BUILDING CONSTRUCTION.—VII.

AN ELEMENTARY EXPLANATION OF THE APPLICATION OF THE THEORY OF CONSTRUCTION TO PRACTICAL DESIGN

By EWART S. ANDREWS, B.Sc., M.I.Struct.E., A.M.Inst.C.E.

SECTION II.—FLOORS AND BEAMS (Continued).

Stress-strain Diagrams.—Before we can decide upon the suitability of a material for constructional purposes we must know its elastic properties, and for this purpose tests are made in which the extensions or contractions of specimens are measured with great care by means of magnifying instruments called extensometers, and notes are taken of the extension at each load. By dividing the load by the original area of the specimen we obtain the stress per square inch, and by dividing the extension by the original length we obtain the unit strain which in British units is the strain per inch length. We then make a graph or diagram on squared paper in which the stresses are plotted vertically and the strains are plotted horizontally and the resulting diagram is called a stress-strain diagram. By the study of the stress-strain diagram of any material we can tell at once its strength and certain other qualities to which we will refer later.

Mild Steel.—A mild steel is one possessing only a small amount of carbon, so that it is tough or ductile as opposed to a hard steel, which is stronger but more brittle than mild steel. The ductability of mild steel which is an indication of its ability to resist shocks without fracture is one of its qualities which make it so excellent for structural purposes.

A stress-strain diagram for mild steel complying with the British Engineering Standard Specification for Mild Steel for Structural Purposes is shown in Fig. 11.

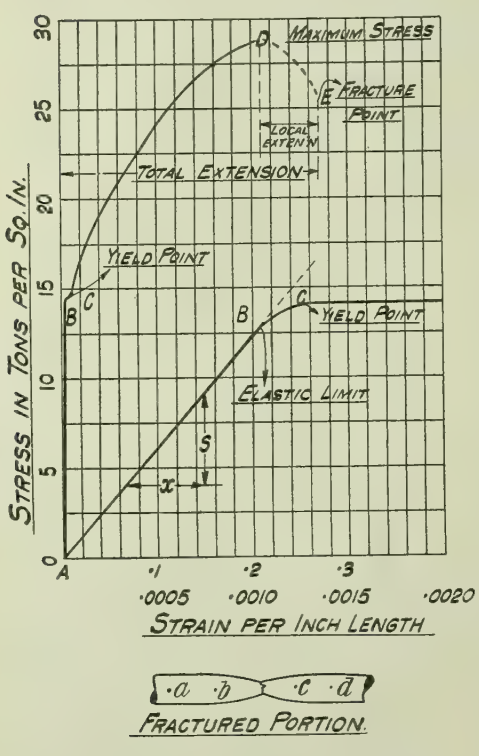


FIG. 11.

For most metals, the stress-strain diagram will be a straight line until a certain point is reached, called the elastic limit, after which the strain increases more quickly than the stress, until a point called the yield point is reached, where there is a sudden comparatively large increase in strain. After the yield point is reached, the metal becomes in a plastic state and the strains go on increasing rapidly until fracture occurs.

The portion AB of the diagram is a straight line, and represents the period over which the material obeys Hooke's law. At the point C the yield point is reached, and the strain then increases to such an extent that the first portion of the diagram is redrawn to a considerably smaller scale. as shown on the left in the figure. The strain then increases in the form shown until the point D is reached, the curve between C and D being approximately parabolic in shape. When the point D is reached, the maximum stress has been reached, and the specimen begins to pull out and thin down at one section, and if the stress is sustained, fracture will then occur. The portion DE, shown dotted, represents increase of strain with apparent diminution of stress. This diminution is only apparent, because the area of the specimen beyond the point rapidly gets smaller, so that load may be decreased and still keep the stress the same. In practice it is very difficult to diminish the load so as to keep pace with the decrease in area, so that this last portion of the curve is very seldom accurate, and has, moreover, little practical importance.

The specimen draws down at the point of fracture in the manner shown in the diagram. Before the test, it is customary to make centre-punch marks at equal distances apart long the length of the specimen. The distance apart of these points after the fracture of the specimen indicates the distribution of the elongation at different points along the length. Four such marks—a, b, c, d—are shown in the figure. The greatest extension occurs at the point of fracture, so that with a specimen of short length, the percentage total extension will be greater than with a longer specimen.

The yield point in mild steel corresponds to a change in the crystalline structure of the steel and is of very great importance; all steel structures should be designed so that the yield point is never exceeded; if the yield point of a beam is exceeded the beam will be visibly deflected, and the deflection will not disappear when the load is removed, the beam being permanently bent. When a steel beam is permanently bent, however, it is not necessarily dangerous and usually has a considerable reserve of strength upon which it can draw until final failure occurs. This is a fact of great importance in considering the safety of mild steel as a constructional material; it does not break suddenly, but gives timely warning by its sagging or deflection. In this connection we ought to explain that the term breaking load applied to a steel beam is an inaccurate term; it is almost impossible to break a mild steel beam. Under test the beam might be so highly stressed that it bent so much that it moved clear of its supports and fell down; but it would not break even if bent nearly into the form of a horse-shoe.

In the mild steel bars used in reinforcing concrete it is a common, and highly desirable practice to bend the ends into the form of a hook, and except for the largest sizes of bars this bending is, and should be done, cold. Now, if you bend the end of a bar to the form of a hook, you must very much exceed the yield point of the material in doing so, but you have not hurt the material if it is good mild steel. That is one practical reason why it is an excellent plan to have all such reinforcing bars bent cold to a hooked form; if the steel is not ductile, but brittle, it will break off—like a carrot, as it is often expressively stated—thus showing that the material is not up to the specification. This means that every bar on the job is put through a very practical test by forming the cold bend upon it.

This we have referred to as o
reason for forming the hook at the e
important reason for so doing is
an excellent anchorage in the c
many of the relatively few failure
forced concrete would have been
attention had been given to this p
Tests for ductility.—We have ex
ductility is a very desirable quali
with a view to ensuring ductility,
Standard Specification for mild st
that the alternate strength of a ba
must be between 28 and 33 tons per
and that the elongation on 8 ins.
per cent. This means that if bef
we make two marks on the speci
apart, then, after fracture and plac
together in the manner indicated
the length must be 9.6 ins. so that
permanently stretched by 1.6 ins.,
of course, a very considerable amou
Many authorities are of the o
a more reliable test for ductilit
elongation test is that of reducti
This is carried out in the followi
The area of the cross-section of the
measured before the test, and after
area across the fracture is mea
difference in area before and after t
reduction in area and this is usual
as a percentage of the original are
ductile steel has a reduction in ar
60 per cent.

Great progress has been made i
tively recent years in the manufact
generally, it may be said that the
steel, the less the ductility; but
possible by means of alloying sma
of other metals with the steel to pr
tensile steel with excellent ductility
fly in the ointment in this respect
price of this alloy steel is beyond
ordinary mortals. Our present r
live to see the day when a ductile s
is rolled into beam sections and
troubles will be no more. We wi
with the question of rusting or corro
and will now only mention that we h
problem of some architects and en
anticipate being very busy soon w
frame buildings that collapse throu
will not materialise.

Annealing and tempering of s
leaving the question of the proper
we ought to explain that steel f
purposes should be in its annealed
condition. One of the curious
steel is that its strength qualities d
only upon its chemical compos
depend also upon their "wor
"heat treatment." If steel is
severe cold working, such as dra
a die in the process of wire drawin
stronger but more brittle. It is
produce wire having a tensile stre
than one hundred tons per sq. in.
wire be heated beyond a certain
and is allowed to cool slowly, the
to be annealed, and it returns t
condition. Examination under th
clearly shows the difference in th
structure of the steel between its
its annealed condition.

A similar effect can be obtai
treatment. If steel is heated bey
temperature, this temperature
determined in practice by notin
such as "cherry red," and then
water, it becomes very strong and
This is often called "quenchin
steel thus quenched is sometimes
hard"; it will certainly usually
easily on hammering. The process
ing" consists in taking out some
ness, so as to produce a steel that i
and harder than the normalised
relatively ductile; it is usually dc
to a certain temperature, below
or normalising temperature, and
to cool slowly.

STRESS-STRAIN DIAGRAM FOR COMPRESSION.—We will now stud

diagram for a typical brittle as concrete.

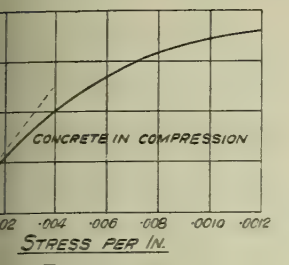


FIG. 12.

n represented in Fig. 12 is for , 90 days old; by 1–3–6 concrete is meant concrete made of 1 volume of cement, 3 volumes of sand, and 6 volumes of coarse aggregate, such as gravel or broken stone, from ¾ in. diameter down to ¼ in. diameter; the material from ¼ in. diameter downwards being regarded as sand. It will be noted that there is nothing corresponding to the elastic limit or to the yield point in the diagram; nor is there any portion of the diagram for which the stress is strictly proportional to the strain, the diagram curving right from the beginning, so that the strains increase more rapidly than the stresses. The working or safe stress of this quality of concrete would be about 450 lbs. per sq. in., and it will be clear from the description that the error involved in regarding the stress strain diagram as straight up to this point will be very small; this has an important bearing upon the theory upon which the strength of reinforced concrete beams are calculated.

From this diagram it will be seen that when the strain per in. (unital strain) is .0002, the intensity of stress is 600 lbs. per sq. in.

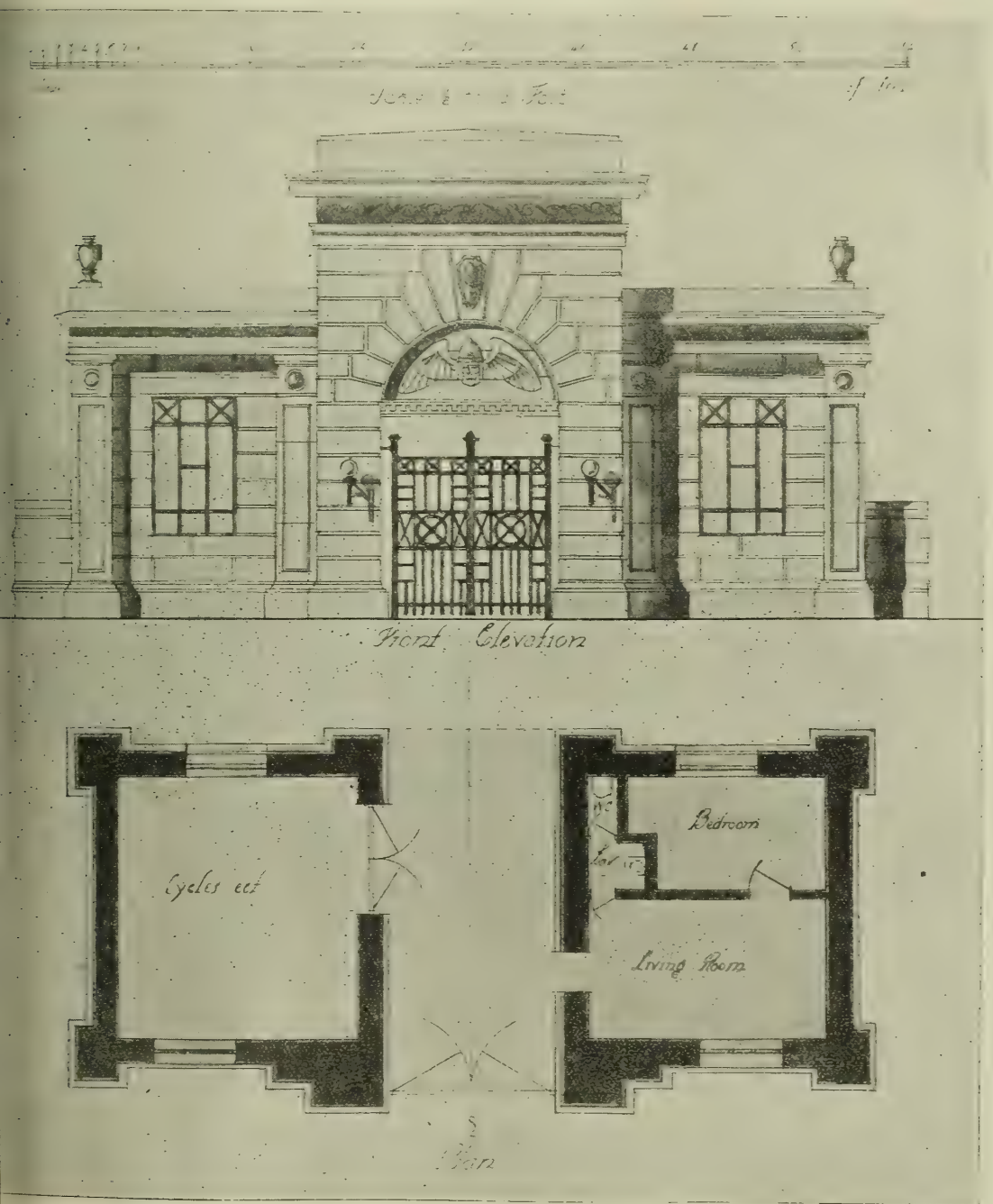
Young's modulus for 1–3–6 concrete:—

$$= E = \frac{600}{.0002} =$$

= 3,000,000 lbs. per sq. in.

This is one-tenth that of steel.

Before leaving this diagram, we will note that the breaking stress of this concrete was 1,800 lbs. per sq. in.; this is 116 tons per sq. ft., and the mixture is not such as we should use for first quality concrete, nor is the test result high for this mixture. Yet the London Steel Frame Act only allows 12 tons per sq. ft. on concrete, no matter how poor the quality is; it is obviously absurd and results in much waste of money in providing much larger base plates for steel stanchions than are necessary.



Design for a Gateway Entrance and Lodge. By MR. J. C. HUGHES.

oduced this design at the age of 16, and had had only seven months' training. He had not attended any university classes.]

THE BUILDING TRADE

THE HOUSING ACT AS PASSED

THE Housing Bill was so hurried through Parliament in its last stages that it was very difficult to follow all the amendments, some of which were promised at previous stages and drafted at the last moment; therefore we propose considering the Act in the final form it has assumed.

Extension of Period in Act of 1923.

Section 1, subsection (1) is as in the Bill. The effect of this subsection is to extend the provisions contained in sections 1 and 3 of the Housing Act, 1923, to houses which are completed before October 1, 1939, instead of October 1, 1925, as provided in that Act. These sections of the Act of 1923 apply to houses provided by local authorities or by public utility societies or other bodies. But by subsection (2) of section 1 of the new Act the following paragraph is substituted for paragraph (*b*) in section 1, subsection (1) of the Act of 1923, which relates to contributions by the Minister, and now reads: "Towards any expenses incurred by the local authority in the provision of such houses" (that is, houses under Part III of the Housing of the Working Classes Act, 1890) "by the local authority themselves," and the subsection goes on to provide, "Where a local authority purchases any such houses as are referred to in the said paragraph for the purposes of Part III of the Housing of the Working Classes Act, 1890, the houses shall not be treated as houses provided by the local authority themselves within the meaning of the said Act of 1923 or this Act if the houses are houses which have been completed before the passing of this Act" (August 7, 1924), "or have been occupied prior to the purchase."

Increased Contributions under New Act.

Section 2 deals with the increased contributions to be granted to local authorities for houses provided by themselves, or to public utility societies, or other bodies under section 3 of the Act of 1923, and with expenses incurred by a local authority in promoting the construction of houses under section 2 of the Act of 1923, or this Act. The first part of the subsection stands as in the Bill, and there is an alteration in the proviso. This proviso now reads: "Provided that where the contributions are made towards expenses incurred by a local authority in promoting the construction of houses in accordance with section 2 of the said Act as amended by this Act, the said Act in its application to any of those houses shall have effect with the following modifications..." Then paragraph (*i*) which relates to the amount of contributions payable under section 1 subsection (1) of the Act of 1923, substituting £9 for £6 and 40 years for 20 years has been amended from what it was in the Bill by inserting the words "or in the case of a house situated in an agricultural parish" and £12 10s. is substituted for £6. In the following paragraph (ii) in the Bill paragraphs (*a*) and (*c*) of section 2, subsection (3) of the Act of 1923 were repealed, but in the new Act as it now stands only paragraph (*c*) ceases to apply, but paragraph (*b*) has been considerably altered from what it was in the Bill. This paragraph now provides that one of the methods in which assistance under this section may be given by the local authority is that they may "undertake to pay such annual sum as may be specified in the proposals for a period not exceeding 40 years to the person for the time being in receipt of the rent payable by a tenant to whom the house is let, or in the case of a house not so let to the person by whom the rates on the house are payable." The latter sentence was not in the Bill, and a further proviso has been added to the subsection: "Provided also that in any case where proposals are submitted to the Minister which, in consequence of the adoption of new materials, or new methods of construction, involve a reduction in the estimated annual expenses to be incurred in connection with each house substantially greater than the equivalent of £4 10s. per annum for forty years, the Minister may reduce the contribution by such amount as he shall think just and reasonable, but nevertheless that the contribution shall not be reduced to such an extent as to leave any part of such estimated annual expenses to be borne by the local rate, or by the said body, trustees, or company, as the case may be."

Subsection (2) of section 2, which relates to the definition of agricultural parishes, has been altered from what it was in the Bill by substituting 25 per cent. of the new annual value to be the lowest proportion of agricultural land instead of one-third, and by stating that the population shall be less than 50 persons per hundred acres. In the Bill the number was 35 persons.

Subsection (4) has been considerably amended and now runs: "Houses provided in pursuance of proposals approved by the Minister before the passing of this Act (August 7, 1924), if the contract for the construction of the houses was entered into, or, in the case of houses constructed otherwise than under contract, the construction was begun after February 1, 1924, may for the purposes of this section (that is, increased contributions) if the Minister so directs, be treated as if the approval had been given after the passing of this Act, notwithstanding that the houses do not comply in every respect with the conditions imposed by or under this Act."

Subsection 5 did not appear in the original Bill; it provides that where in pursuance of proposals approved by the Minister under this Act houses are provided by the Common Council of the City of London, or by a Metropolitan borough council, the London County Council may, in respect to a house subject to special conditions, supplement any contribution made by the Minister to an extent not exceeding £2 5s. annually for a period of 40 years. It is provided that for the purposes of paragraph (*e*) of section 3 subsection (1) "the amount of any such supplemental contribution shall be treated as if it were part of the expenses borne by the local rate in the city or borough," which we understand to mean that they are to be taken into account in fixing the rents of the houses.

As to houses provided by the London County Council see sections 12 and 14 below.

The Special Conditions.

The special conditions mentioned in section 2 of the new Act are set out in section 3. In the Bill the local authorities had to undertake that the conditions would be complied with "in such manner as the Minister might require," but in the Act the undertaking is to be "in accordance with rules made by the Minister and approved by the Treasury."

The conditions are set out in section 3, subsection (1), and the first is: (*a*) That subject to the following conditions (these words were not in the Bill) the houses shall be let by the local authority for occupation by tenants who intend to reside therein.

The first part of condition (*b*) is as in the Bill, that it shall be a term of such letting that the tenant shall not assign, sub-let, or otherwise part with possession of the house without consent in writing, but then follow these words now inserted in the Act: "and that such consent shall not be given unless it is shown that no payment other than rent has been, or is to be, received by the tenant in consideration of the assignment, sub-letting or other transaction."

Condition (*c*) has been slightly redrafted as to the first portion and at the end an addition has been made. It now reads: local authority desire to sell or lettings as aforesaid) otherwise houses, the sale, or disposal, shall except upon, and subject to, suc if any, as the Minister thinks reduction of the amount, or the the duration of any contribution Minister, or for both reduction a (here follows the addition made t so, nevertheless, that the contribu of any house sold before the e period of 20 years, from the d contribution first became paya be reduced by more than £3, or a house in an agricultural parish £6 10s., and the duration there curtailed by more than twenty

Condition (*d*) did not appea exactly in its present form. It i wage clause which complies with of the House of Commons applica of Government departments, an being in force, shall be inserted i for the construction of the house

Condition (*e*) which relates to t charged, except for an addition a "that no fine, premium or other be taken in addition to the rent" in the Bill, but there is a new c the Act that "reasonable prefe given to large families in letting

Subsection (2) of section 3, wh houses provided by a society, bo or company under section 3 of th and to houses the construction o moted by a local authority unde that Act has been redrafted, th ditions being set out in full.

They follow in the main the sp already referred to under subsect condition (*f*) as regards large fa appear under this subsection.

Subsection (3) which relates previous subsections and defines priate normal rent," has been ar insertion of the words "exclusive there is a new provision as to t "Every rule made under this s laid before both Houses of Parliam and if an address is presented t by either House of Parliament w subsequent 28 days on which th sat after any such rule is laid, pr rule may be annulled, it shall void, but without prejudice to anything previously done there making of a new rule."

Termination of Contribu

Section 4 which deals with terminate Government contribu conferred by subsection (1), is the Bill, but alterations have been in Act in subsection (2). The fi paragraph (*a*) which makes a de number of houses completed terminating contributions is the s Bill, but the following extra pas added to the paragraph: "Wh ciency is due to the absence of ade ments for the necessary increase of labour (including any necessary of the number of apprentices em the necessary increase in the supp at reasonable prices, or for the obt at reasonable rates of interest provision of houses, or arises fr cause whatever."

We cannot help pausing here to this subsection is hardly consis so-called guarantee to the buildi

Paragraph (*b*), which deals reason for terminating contri inquiry by a body of indepe appointed by the Ministry, the Mi that the cost of erecting hous

regard being had to all the circum-
e case, and in particular to the
ther and how far any increase in
excessive charges are attributable
hin the control of persons in the
istry, or in the manufacture or
ding materials, has been reinforced
ion of the words "whether as
workers" after the words "con-
s."
(3), which provides that, when an
made under the section cancelling
the Minister shall not be liable to
ertake to make, contributions in
ses not completed at the date of
been amplified by the following
er than a house which is completed
eight months after the specified
t of which the Minister is satisfied
e to complete the house before the
was due to circumstances over
cal authority, person, or body
he house had no control." This
d appear to cover the case of a

vision of Contributions.

the date for the revision of con-
been altered from 1927 to 1926,
n is to take place in each succeed-
instead of three years as fixed in
the section has also been altered
he Minister to consult not only
ns of local authorities as appear
concerned, but also any local
h whom consultation appears to
rable. There are also alterations
ng paragraph of this section which
An order under this section shall
onsequential alterations of any
ds mentioned in the financial pro-
said Act (the Act of 1923), or in
ding the sum of £4 10s. mentioned
(1) of section 3 of this Act, as
Minister to be necessary for the
usting the same to any alteration
rder in the amount, or duration,
utions, and that Act and this Act
ct accordingly."
change in section 6 which relates
f such orders before the House of

lauses in the Bill and the sections
e run concurrently, but now there
f new sections in the Act and
cides with clause 7 in the Bill.

s to Town Planning Schemes.

he new sections is section 7, which
shall be the duty of a local
ubmitting proposals for the pro-
s for the purposes of this Act to
nister (*a*) that they have taken
the requirements of any town
e likely to be made in respect of,
bourhood of, the area in which
to be provided, and (*b*) that the
of the houses ascertained in such
Minister may determine will not,
consent of the Minister, exceed
an agricultural parish and twelve
ere."

Areas Between Local Authorities.

rovides, "Where the Minister
roposals of a local authority in
provision of houses in the area of
thority and any difference arises
authorities with respect to the
the proposals, such difference
d by either authority to the
decision shall be final and
respective authorities."

**al Authority to Promote Con-
struction.**

vides that where the Minister
cal authority has failed to take
steps for promoting the con-
uses, either under the Act of
, then the provisions of section
1923 shall "apply to persons
take, or who have undertaken,
of houses in the area of the
n like manner as they apply to the societies, bodies of trustees, and companies therein mentioned, and the provisions of this Act relative to such societies, etc., shall extend to those persons." This is an extension of section 3 of the Act of 1923, apparently to any person willing to construct the houses.

Materials and Methods of Construction.

Section 10 is very important and we give it *in e tenso*. Subsection (1) provides "In approving proposals for the construction of houses under this Act the Minister shall not impose any condition which would prevent the materials required being purchased in the cheapest market at home or abroad or which would require the employment of any particular trade."

Subsection (2) is: "If at any time it is shown to the satisfaction of the Minister that a local authority has without reasonable cause refused to adopt a new material, or method of construction, which in his opinion would reduce the cost of the house without unduly affecting its durability, suitability or appearance, the Minister shall require the adoption of the said new material, or method of construction, to be reconsidered for that purpose by the local authority, and in the event of their failure without reasonable cause to adopt the same shall make such deduction from the amount of the contribution payable by him, as in his opinion is reasonable having regard to the amount of the unnecessary expenditure so incurred by the local authority, but for the purposes of paragraph (*e*) of subsection (1) of section 3 of this Act (that is the rent chargeable) the expenses of the local authority shall be calculated as if no such deduction had been made."

This section appears to call for some comment as it confers very wide powers on the Minister. We live in times like the Athenians of old who were always anxious to hear of any new thing. New methods of construction are being placed before us which require careful testing and proving by the lapse of time. We have had experience of some Ministers in the past who are by nature somewhat impulsive, and this section will place the local authorities entirely in the hands of the Minister, the contribution depending entirely on what may appear to him "reasonable cause" for not adopting new methods.

Suspension of Operations by Local Authorities.

Section 11 may be difficult to interpret in connection with the absolute provisions of the Act. It provides "A local authority in carrying out any proposal approved by the Minister for the purposes of this Act shall have power to determine the number of houses which they will build in any particular period subject to a maximum limit by the Minister, and should the local authority find it necessary to suspend building operations on the ground of excessive cost, or on any other reasonable ground, the suspension shall not be treated as a failure on the part of the local authority to fulfil their obligations as to the preparation of schemes under the Housing Acts, or their obligations under any such schemes."

Here the Minister's jurisdiction seems limited to fixing a maximum, and he appears to have no voice in what may be deemed to be "excessive cost or any other reasonable ground." Local authorities may differ as to what is "excessive cost," and the same sort of deadlock may occur as has sometimes been experienced in connection with town planning. We approve the local authorities being given considerable discretion, and deprecate the overriding powers conferred by some sections on the Minister, but for the general working of the Act it would appear that some independent tribunal should exist to decide on the kind of question dealt with in this section.

Powers of County Councils.

Section 12 confers upon County Councils the same powers as are conferred upon local authorities by section 5 of the Act of 1923 to make advances to persons or bodies of persons for constructing or altering houses, and contains provisions as to the borrowing of money for this purpose.

Section 13 is as clause 7 stood in the Bill, and relates to minor amendments of the Act of 1923 contained in the Second Schedule to this Act.

Section 14 subsection (1) relates to agreements between the London County Council and the Common Council of the City of London or any metropolitan borough council by which the latter may contribute such amounts as may be agreed subject to the provision of this Act towards the provision of houses by the County Council within, or without, the county to meet any special needs of the Common Council, or the borough council, and in such a case for the purposes of paragraph (*e*) of subsection (1) of section 3, relating to rent, the amount of any such contribution shall be treated as if it were part of the expenses borne by the county rate.

Subsection (2) provides that any expenses incurred by the London County Council under this Act, and under section 2 of the Act of 1923, as amended by this Act, shall be defrayed as expenses for general county purposes.

There are some alterations in section 16, which applies the Act to Scotland, which we need not notice here.

The complication of the legislation, we fear, makes it very difficult to explain the matter clearly, but what we have endeavoured to do in this notice is to show the form the Act has taken now it is law, so that its provisions can be followed by our readers.

THE PREVENTION OF EVICTION ACT

THIS Act, which represents the "ridiculus mus" brought forth by the Government when the Bill they originally introduced in connection with the agitation as to evictions, more especially on the Clyde, was defeated owing to its form, is only another Rent Restriction Act which introduces further confusion in the law. We noted the Bill when it passed its third reading in our issue May 16, but it has since been amended in the House of Lords and its provisions should be considered, for they have a material bearing on the Rent Acts.

The legislation is rather confused because the Rent Restriction Act, 1923, in section 4, re-enacted as amended the whole of section 5 of the Rent Act 1920, which deals with "Restriction on right to possession," and therefore section 4 of the Act of 1923 now represents section 5 of the Act of 1920. This explains the wording of the first subsection of section 1 of the Eviction Act, which is as follows:—"Paragraphs (iv) and (v) of sub-section (1) of the section which, by section 4 of the Rent and Mortgage Interest Restrictions Act, 1923, is substituted for section 5 of the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920, are hereby repealed as respects pending, as well as future, proceedings, and the following paragraph shall be substituted therefore." Before setting out this paragraph which takes the place of paragraphs (iv) and (v) it should be noted that they occurred, and the new paragraph occurs, in that part of section 4 of the Act of 1923, or 5 of the Act of 1920, which deals with a relaxation of conditions laid down in paragraph (d) earlier in the sections. The paragraphs in question are headed by the statement "The existence of alternative accommodation shall not be a condition of an order or judgment on any of the grounds specified in paragraph (d) of this subsection" and then follow five paragraphs beginning with the word 'where' and the new paragraph substituted for paragraphs (iv) and (v) is as follows: "Where the dwelling house is reasonably required by the landlord (not being a landlord who has become a landlord by purchasing the dwelling-house or any interest therein after May 5, 1924) for occupation as a residence for himself, or for any son or daughter of his over 18 years of age, and the Court is satisfied having regard to all the circumstances of the case, including any alternative accommodation available for the landlord, or the tenant, that greater hardship would be caused by refusing to grant an order or judgment for possession than by granting it."

The sons and daughters were restored to the Act in the House of Lords. In the first place, it

is necessary to see in what respect this new paragraph alters the two paragraphs it is substituted for. Paragraph (iv) applied to the landlord or the husband or wife of the landlord requiring the house reasonably for occupation for himself or for any sons and daughters over 18, but where the house had been acquired by the landlord or husband or wife of the landlord before June 30, 1922, stated no condition. Paragraph (v) dealt with the same persons, but provided that where the house had not been acquired before that date then the Court must be satisfied that greater hardship would be caused by refusing to grant an order or judgment than by granting it.

The new paragraph repeals both these paragraphs and applies only to a landlord who has become landlord before May 5, 1924, and thus in all other cases the landlord requiring possession is thrown back on paragraph (d) with the much more stringent provisions as to alternative accommodation, for the Court has to be satisfied that "alternative accommodation is available which is reasonably suitable to the means of the tenant and to the needs of the tenant and his family, as regards extent, character, and proximity to place of work, and which consists either of a dwelling-house to which the Act of 1920 applies, or of premises to be let as a separate dwelling on terms which will afford to the tenant security of tenure reasonably equivalent to the security afforded by that Act in the case of a dwelling-house to which that Act applies." Section 2 sub-section (1) of The Prevention of Eviction Act has a side note, "Application of Act to pending proceedings," but this seems misleading as the sub-section, as will be seen, enables proceedings which are completed, save as to execution, to be re-opened. The sub-section is as follows: "Where any order or judgment has been made or given before the passing of this Act but not executed, and in the opinion of the Court the order or judgment would not have been made, or given, if this Act had been in force at the time when such order or judgment was made or given, the Court on application of the tenant may rescind or vary the order or judgment in such manner and subject to such conditions as the Court shall think fit for the purpose of giving effect to this Act."

The next sub-section (2) we find extremely difficult to explain, it provides "Where a landlord has on or after April 15, 1924, taken possession of a dwelling-house under a judgment, or order so rescinded as aforesaid, such possession shall not in any case exclude the dwelling-house from the operation of the Rent and Mortgage Interest (Restriction) Acts 1920 to 1923."

The sub-section is obviously directed to section 2 Sub-section (1) of the Act of 1923, which takes houses out of the Restriction Acts when the landlord comes into possession at any time after the passing of that Act (July 31, 1923), but it is difficult to see how a landlord could take possession under an order or judgment not executed, for it is only judgments and orders not executed which can be "so rescinded as aforesaid," and also whether the sub-section applies to an order varied under sub-section (1). Whatever the meaning of this section may be, it appears that although no time limit is imposed under sub-section (1), and thus any unexecuted order or judgment can be dealt with, so far as losing the benefit of the Act of 1923 is concerned a time limit is given, and a landlord coming into possession before April 15, whether under an order or judgment subject to sub-section (1) or not, takes his house free from Rent Restriction. The section is so curiously drafted that questions as to its interpretation are certain to be raised in the courts.

By section 3 of this Act The Prevention of Restriction Act is to be construed as one with the Rent and Mortgage Interest (Restrictions) Acts, 1920, and 1923, and those Acts and this Act may be cited together as the Rent and Mortgage Interest (Restrictions) Acts 1920 to 1924. This curious nomenclature is a pitfall for the practitioner in the future, who may well overlook this Act in considering the Rent Restriction Acts, and it can only have been esorted to in order to connect this Act with the Bill which did not pass relating to evictions.

RATES OF WAGES IN THE BUILDING TR

The following are the rates of wages in the building trade in England and W endeavour made to ensure accuracy, but we cannot be responsible for errors that ma

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	La
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam.(Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport. Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	

(For rates of wages in the Building Trade in Scotland, see page 381.

CONTRACTS, COMPETITIONS, &c.

ontracts still open, but not included in this List, see previous issues. Those with an asterisk ed in this number. Certain conditions beyond those given in the following information in some cases, such as that advertisers do not bind themselves to accept the lowest or any t a fair wages clause shall be observed; that no allowance will be made for tenders; and are returned on receipt of a bona-fide tender unless stated to the contrary.

iven at the commencement of each paragraph is the latest date when the tender, or the names g to submit tenders, may be sent in; the name and address at the end is the person from whom e quantities, forms of tender, &c., may be obtained.

DING AND PAINTING.

8.—**Aberystwyth.**—HOUSES.—For the houses, for the T.C. Mr. W. D. Puddih Surveyor, Aberystwyth. Deposit £1.

8.—**Belfast.**—ADDITIONS.—For erection uildings at Purdysburn Asylum, for the Tulloch & Fitzsimons, architects, 21, elfast. Deposit £5 5s.

.—**Bridlington.**—HOUSES.—For the comhouses, partly erected, on the Postill ne T.C. Borough Engineer, 1, The ington.

.—**Carlisle.**—PAINTING.—For re-decoraapels and sundry other painter's work at ry, for the T.C. Mr. Henry C. Marks, 18, Fisher-street, Carlisle.

.—**Consett.**—SHOP.—For the erection of house, in Delves-lane, for the Consett ociety. Mr. J. J. Ettringham, architect,

8.—**Dewsbury.**—REPAIRS.—For repairs Thornhill Lees, for the T.C., and conprivies into water closets. Mr. J. W. nitary Inspector, Town Hall, Dewsbury.

8.—**Luddendenfoot.**—PREMISES.—Forpremises in Burnley-road, Luddenden. uddendenfoot Co-operative Society, Ltd, artment, Co-operative Wholesale Society n-street, Manchester. Deposit £1 1s.

8.—**St. Marylebone, W.**—BUILDING ction of a small annexe to the laundry ylebone Home, Northumberland-street, to instal a drying machine, for the St. Marylebone. Messrs. Constantine rchitects, 82, Mortimer-street, W.1. asury Note.

8.—**Thornton.**—EXTENSION.—For the extensions of the Council Offices, Blackrnton. Mr. Henry Fenton, Surveyor, Thornton-le-Fylde. Deposit £2 2s.

.—**Wood Green.**—FENCING.—For erecrds of cleft-oak fencing at Noel Park nd, for the U.D.C. Surveyor, Town en, N. Deposit £1 1s.

9.—**Barnsley.**—HOUSES.—For the erecelling-houses at Shafton-Two-Gates, near ssrs. Senior & Clegg, architects, Barnsley.

9.—**Bradfield Oughtibridge and GreasERATIONS.**—For (1) Alterations and imBradfield Oughtibridge Council School; and additions to Greasborough Council West Riding E.C. Education DepartHall, Wakefield.

9.—**Bromley.**—PAVILION, &C.—For the owling pavilion, women's convenience, &c., on the Whitehall Recreation e B.C. Borough Engineer, Municipal y. Deposit £1 1s.

9.—**Dewsbury.**—SCHOOL.—Reconstructry Wesleyan Sunday School, Wellingtony. Messrs. Firth, Son & Blackburn, llington-road, Dewsbury.

9.—**Glasgow.**—DEMOLITION.—For the removal of the large mills at 87, M'Neil-T.C. Mr. J. Lindsay, Town Clerk, City gow.

9.—**Glasgow.**—HOUSES.—For erection at Hamiltonhill, for the T.C. Mr. J. Clerk, Glasgow.

9.—**Horsham.**—HOUSES.—Erection of x pairs (non-parlour type), four houses arlour type). Two tenders are invited, uction with brick and, alternatively, with concrete blocks, for the Horsham . R. Guildford, Surveyor to the Council, ace, Horsham. Deposit £1 1s.

9.—**Kingston-upon-Thames.**—CATTLE truction of a new cattle market field West, Kingston-upon-Thames, he erection of a toll collector's office, fencing, &c., for the Corporation of Thames. The Borough Surveyor, es, Kingston-upon-Thames. Deposit

—**Liverpool.**—PAINTING.—For painting mes, Olive Mount, Wavertree, for the dians. Mr. Ernest B. Bailey, F.S.I., Liverpool. Deposit £1 1s.

.—**Llanelly.**—BUILDINGS.—For executigated iron buildings, for the Farmers' Mr. G. H. Phillips, manager, Coldstream-

9.—**Manchester.**—ALTERATIONS.—For emales' wash-baths at Osborne-street C. City Architect, Town Hall, Man-t £1 1s.

—**Mexborough.**—CONVENIENCES.—For new conveniences at Mexborough ouncil School, for the West Riding E.C. rtment, County Hall, Wakefield.

.—**Mountain Ash.**—HOUSES.—For the ouses on housing site at Penrhiwceiber, Mr. W. H. Williams, M.S.A., Town Ash.

0.—**Barry (Glam).**—HOUSES.—For tional 108 houses at the Barry Garden ecessary roads and sewers, for the burb Co., Ltd. Mr. T. Alwyn Lloyd, Housing & Town-Planning Trust, al-road, Cardiff. Deposit £3 3s.

SEPTEMBER 10.—**Coventry.**—CLASS ROOMS.—For the erection of additional class rooms at Bablake School, Coundon-road, Coventry. Mr. Herbert W. Chattaway, architect, Trinity Churchyard, Coventry.

SEPTEMBER 10.—**Denton.**—HOUSES.—For the erection of 10 houses, for the U.D.C. Messrs. Thorpe & Collier, M.M.S.A., 66, Deansgate, Manchester. Deposit £1 1s.

SEPTEMBER 10.—**Dewsbury.**—SHED.—Erection of storage shed at Kiln Mill, Watergate, Dewsbury. Messrs. Firth, Son & Blackburn, Wellington-road, Dewsbury.

SEPTEMBER 10.—**Kingswood.**—HOUSES.—For the erection of 14 houses on the Hanham building estate, for the U.D.C. Mr. H. Glynn Warne, Council Offices, Kingswood, Bristol.

✱SEPTEMBER 10.—**London, S.E.18.**—ARTIFICERS' WORKS.—Artificers' works contract from October 1, 1924. Tenders are required for the undermentioned station and divisions in the Woolwich Royal Engineer District, Contract No. 1, Woolwich 1st and 2nd Divisions. Commanding Royal Engineer, R.E. Office, New-road, Woolwich, S.E.18, or in person between the hours of 10 a.m. and 3 p.m., up to September 10, 1924, at the above Royal Engineer Office. Every candidate will pay the sum of 15s. for the copy of the schedule issued to him, which sum will not be returned, but the schedule may be inspected without payment at the above office.

SEPTEMBER 10.—**Pontypridd, &c.**—PAINTING.—For external painting and decorating at the Ynysybwl Industrial Co-operative Society's shops at Market-square, Pontypridd, Trallwyn, Cilfynydd, and Llantwit Fardre. Messrs. Thomas & Morgan & Partners, Architects, 23, Gelliwastad-road, Pontypridd.

SEPTEMBER 10.—**Slough.**—EXTENSION.—Extension of the Post Office, Slough, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

SEPTEMBER 10.—**Thornley.**—HALL.—For the erection of a hall and institute at Thornley. Messrs. Frank Caws, Steel & Caws, of 22, John-street, Sunderland. Deposit £1.

SEPTEMBER 10.—**Woolwich.**—REPAIRS.—For works and repairs in the Woolwich District, for the War Department. Lieut.-Col. L. N. Malan, Commanding Royal Engineers, Woolwich.

SEPTEMBER 11.—**Bedwellty.**—HOUSES.—Erection of (1) 14 houses at Aberbargoed, (2) 16 houses at Argoed, (3) extensions to Council Offices, Aberbargoed, for the U.D.C. Mr. Dan H. Price, Surveyor, Aberbargoed.

SEPTEMBER 11.—**Brighton.**—ELECTRICITY SUB-STATIONS.—Erection of two sub-station buildings, foundations, &c., at Preston Park and Lewes-road respectively, for the Corporation of the Borough of Brighton. Engineer and Manager, Electricity Dept., County Borough of Brighton, Town Hall, Brighton. Deposit £1 1s.

SEPTEMBER 11.—**Deal.**—ALTERATIONS.—For alterations at mortuary, for the T.C. Mr. T. C. Golder, Borough Surveyor, Deal.

SEPTEMBER 11.—**Tirphil (Mon).**—EXTENSIONS.—For making extensions to the Tirphil Liberal Club and Institute. Mr. D. J. Thomas, architect, Blackwood (Mon).

SEPTEMBER 12.—**Barry.**—HOUSES.—For the erection of (*a*) three pairs of semi-detached non-parlour type houses at Claude-road, and (*b*) the conversion of 38 structures into 82 dwellings at the Buttrills Camp, Barry. Mr. E. R. Hinchcliff, F.S.I., Public Offices, Barry. Deposit £1 1s.

SEPTEMBER 12.—**Blean.**—SHELTER.—For the construction at the Institution of a revolving shelter, 11 ft. by 8 ft., to accommodate two persons, for the Board of Guardians. Mr. A. Holliday, Poor Law Institution, Herne Common, near Herne Bay.

SEPTEMBER 12.—**Clay Cross.**—COTTAGES.—For the erection of a pair of cottages on the Council's site adjoining the Derby main road at Clay Cross, for the Derbyshire C.C. Mr. J. W. Horton, County Surveyor, St. Mary's Gate, Derby.

SEPTEMBER 12.—**Ebbw Vale.**—ROOFING.—Removing of old roofing sheets at the north and south end of Workmen's Hall, Ebbw Vale, and re-roofing with corrugated iron sheets. Mr. Percy Clark, Glen Roy, Fair View, Ebbw Vale.

SEPTEMBER 12.—**Geddington.**—COTTAGES.—Erection of three cottages at Geddington, for the Northampton C.C. Mr. C. S. Morris, County Surveyor, Northampton.

SEPTEMBER 12.—**Huddersfield.**—HOUSE.—For erection of detached house in Gledholt-road. Messrs. Abbey & Hanson, architects, 11, Cloth Hall-street, Huddersfield.

SEPTEMBER 12.—**Northamptonshire.**—COTTAGES.—Erection of three cottages at Geddington, near Kettering, for the C.C. Plans, &c., from Mr. C. S. Morris, County Surveyor, County Hall, Northampton. Tenders to Clerk of the County Council, Northampton.

COMPARISON OF PRICES OF BUILDING MATERIALS BETWEEN AUGUST 4, 1914, AND SEPTEMBER 1, 1924

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	August 1, 1924. £ s. d.	Sept. 1, 1924. £ s. d.	Rise or Fall during Month. (Per cent.)
Bricks—					
Best Stocks	1 16 6	3 3 6	4 3 6	4 3 6	—
Flettons	1 14 0	2 7 8	2 13 3	2 13 3	—
Glazed	13 0 0	17 17 6	23 0 0	23 0 0	—
Thames Ballast	5 9	17 0	10 6	10 6	—
Thames Sand	7 3	17 0	15 6	15 6	—
Shingle (¾ in.)	—	15 0	14 0	14 0	—
Portland Cement	1 17 0	3 8 0	2 18 0	2 18 0	—
Ground Blue Lias Lime	1 0 0	2 2 6	2 4 6	2 4 6	—
Grey Stone Lime	1 8 0	2 7 0	2 11 9	2 11 9	—
Bath Stone	1 7½	1 7	2 9½	2 9½	—
Portland Stone	2 4½	2 10½	4 4	4 4	—
Good Sound Building Timber—					
4 in. × 11 in.	16 10 0	53 0 0	34 0 0	34 0 0	—
3 in. × 7 in.	13 0 0	46 0 0	25 10 0	25 10 0	—
3 in. × 11 in.	15 0 0	50 0 0	30 0 0	30 0 0	—
2 in. × 11 in.	—	51 0 0	30 0 0	30 0 0	—
2 in. × 7 in.	—	46 0 0	24 0 0	24 0 0	—
3 in. × 4 in.	—	—	24 10 0	24 10 0	—
Slates—					
24 in. × 12 in.	—	—	37 12 6	37 12 6	—
22 in. × 12 in.	—	—	34 0 0	34 0 0	—
20 in. × 10 in.	—	—	25 12 6	25 12 6	—
16 in. × 10 in.	—	—	17 12 6	17 12 6	—
16 in. × 8 in.	—	—	13 15 0	13 15 0	—
R.S. Joists	9 10 0	—	13 10 0	13 10 0	—
Iron—					
Common Bars	9 0 0	16 10 0	13 10 0	13 10 0	—
Mild Steel Bars	9 5 0	21 0 0	12 10 0	12 10 0	—
Steel Bars	9 5 0	19 10 0	13 0 0	13 0 0	—
Cut Nails	11 10 0	29 0 0	20 10 0	20 10 0	—
Sheet Lead	22 15 0	40 0 0	44 0 0	43 0 0	—2.27
Glass—					
15 oz. Sheet	2	7	3⅜	3⅜	—
21 oz. „	3	8	5	5	—
26 oz. „	3¾	9	6	6	—
Raw Linseed Oil	2 4	8 4	3 11	3 11	—
Turpentine	2 6	11 0	5 9	5 11	+2 90
Ground English White Lead	30 5 0	60 10 0	57 0 0	57 0 0	—
White Lead Paint	—	83 10 0	80 5 0	80 5 0	—
Red Lead	28 10 0	47 0 0	52 0 0	52 0 0	—

SEPTEMBER 12.—**Rotherham.** — TENEMENTS.—For the erection of a block of 10 tenements and shops, at the Eastdene Estate, for the T.C. Mr. C. A. Broadhead, Architect to the Housing Committee, St. George's Hall, Rotherham. Deposit £2 2s.

SEPTEMBER 12.—**Southend-on-Sea, Essex.**—HOUSES —Erection and completion of 55 houses, comprising 22 parlour and 33 non-parlour type, for the Corporation of Southend-on-Sea. Mr. Robert H. Dyer, Borough Engineer, Southend-on-Sea. Deposit £2.

SEPTEMBER 12.—**Witham**—REPAIRS, &C.—For repairs, alterations and additions to house and farm premises at Stoverns Hall Farm, Rivenhall, near Witham: (*a*) Conversion of house into two dwellings; (*b*) conversion of farm premises for three holders. Mr. Charles Lock, County Land Agent, Chelmsford. Deposit, £1 1s.

SEPTEMBER 12.—**York.**—MESS ROOM.—For the erection of a pay and mess room in Rougier-street, for the T.C. Mr. F. W. Spurr, City Engineer, Guildhall, York. Deposit £1 1s.

SEPTEMBER 13.—**Dewsbury.**—ALTERATIONS. — For joiners' works necessary in the proposed alterations at the Public Library. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

SEPTEMBER 13.—**Hebden Bridge.**—PAINTING.—For painting of 36 houses, for the Hebden Bridge Industrial Co-operative Society, Ltd. General Office, Crown-street, Hebden Bridge.

SEPTEMBER 13.—**Litherland.**—WALLS, &C.—For the erection of boundary walls, gates, &c., for the U.D.C. Mr. Geo. Ponsford, Surveyor, Council Offices, Seftonroad, Litherland.

SEPTEMBER 13.— **Oldham.**—WALL.— Erection of boundary wall at Watersheddings Recreation Ground, for the T.C. Borough Engineer, Oldham.

SEPTEMBER 13.—**Rufford.**— CONVERSION. —For conversion of Rufford Hall, Rufford, into Pulmonary Hospital, for the Lancashire C.C. County Architect, Mr. Henry Littler, 16, Ribblesdale-place, Preston. Deposit £2.

SEPTEMBER 13.—**Wandsworth, S.W.18.**— ALTERATIONS AND EXTENSIONS TO BATHS.—(*a*) Alterations and extensions at Tooting Public Baths, Tooting High-street; and (*b*) alterations at Balham Public Bath, Elmfield-road, Balham, for the Wandsworth B.C. Mr. E. J. Elford, Borough Engineer, 215, Balham High-road, S.W.17.

SEPTEMBER 13. — **Wednesbury.**— ADDITIONS.—For alterations and general overhaul of Myvod House, Wood Green, and the erection thereto of a new wing. Mr. Arthur Booth, Borough Engineer, Town Hall, Wednesbury. Deposit £2.

SEPTEMBER13.—**Wellsbourne, Mannamead.**—ALTERATIONS.—For structural alterations and repairs. Messrs. D. Ward & Son, 11, The Crescent, Plymouth.

SEPTEMBER 15.—**Airth.**—HOUSES.—For the erection of eight houses at Airth, for the Stirling C.C. Messrs. A. & W. Black, architects, 5, King's-court, Falkirk. Deposit £1 1s.

SEPTEMBER 15.—**Carlisle.**—WALLS, &C.—For the construction of new masonry and concrete retaining walls and the necessary filling to form the new approach at the south end of St. Nicholas Bridge, for the T.C. Mr. Henry C. Marks, City Engineer, 18, Fisher-street, Carlisle. Deposit £2 2s.

SEPTEMBER 15.—**Evesham.**—ADDITIONS.—For alterations and additions to kitchen and laundry at Poor Law Institution. Mr. R. J. Atkinson, Union Offices, Evesham. Deposit £2 2s.

SEPTEMBER 15. — **Halifax.** — ALTERATIONS.—For alterations to Brearley's Warehouse, Bull Green, for the T.C. Borough Engineer, Crossley-street, Halifax. Deposit £2 2s.

SEPTEMBER 15.—**Hemsworth.**—HOUSES.—For the erection of 18 houses at Highfields, for the U.D.C. Mr. A. Wright, Surveyor, Council Offices, Barnsley-road, Hemsworth, near Pontefract.

SEPTEMBER 15.—**Horncastle.**—ALTERATIONS.—For alterations at maternity ward, of the workhouse, for the B.G. Mr. J. E. Chatterton, Clerk, Union Offices, Horncastle.

SEPTEMBER 15. — **Horncastle.**—PAINTING. — For painting exterior of workhouse and hospital, for the B.G. Clerk, Union Offices, Horncastle.

SEPTEMBER 15. — **Hull.** — ROOF.— For re-covering Market roof, for the T.C. City Engineer, Hull.

✱SEPTEMBER 15.—**Margate, Kent.**—SWIMMING BATH AND BUILDINGS.—Erection of a block of bath buildings, including a large swimming bath at Margate, for the Committee of the Royal School for Deaf and Dumb Children. Mr. H. Carter Pegg, 35, Parliament-street, Westminster, S.W.1. Deposit £1.

SEPTEMBER 15. — **Macclesfield.**— ADDITION.—For addition to mill at Grosvenor-street, for Messrs. Neckwear, Ltd., silk manufacturers. Messrs. Whittaker & Bradburn, architects, 19, King Edward-street, Macclesfield. Deposit £2 2s.

SEPTEMBER 15.—**Manchester.**—CAR SHED, &C.—For (*a*) erection of cable shed, residence, &c., including foundations, steelwork, &c.; (*b*) street work for above. Mr. S. L. Pearce, Manager, Electricity Department, Town Hall, Manchester. Deposit £2 2s.

SEPTEMBER 15.—**Newmarket.**— HOUSES.— Erection of 12 brick and slated houses at the Rows, Newmarket, in the County of Suffolk, for the Newmarket U.D.C. Mr. W. H. Eley, Assoc.M.Inst.C.E., Godolphin House, Newmarket.

SEPTEMBER 15. — **Pontyclun.**—ALTERATIONS.—For alterations and additions to Miskin Manor Pontyclun, for Sir Rhys Williams, Bart. Mr. A. Lloyd Thomas, architect, 23, Gelliwastad-road, Pontypridd.

SEPTEMBER 16.— **Brighton.**—INTERNAL REPAIRS AND DECORATIONS.—Execution of works comprising internal repairs, decorations, painting, &c., at the Poor Law Institution, Elm-grove, Brighton, for the Guardians of the Brighton Parish. Mr. E. Wallis Long, architect, 6, Old Steine, Brighton.

SEPTEMBER 16.—**Dewsbury.**—WALLS.—For the erection of entrance gateposts and palisade walls at Earlsheaton Park. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

SEPTEMBER 16.—**Hampton.**—HOUSES AND NEW MORTUARY.—(*a*) Erection and completion of 31 houses with concrete blocks on the Priory-road site, Hampton (contractors may tender for a part or the whole number of houses); (*b*) new mortuary at Rose hill, Hampton. Mr. Sidney H. Chambers, Surveyor to the Council, Public Offices, Hampton, Middlesex. Deposit £2 2s.

SEPTEMBER 16.—**Newbiggin.**—HOUSES.—Erection of 66 "A" type houses, for the U.D.C. Mr. Robert Appleby, Surveyor, Council Office, Newbiggin-by-Sea.

SEPTEMBER 16.—**Sherburn Hill.**—HALL.—For erection of a concert hall at Sherburn Hill, in connection with the Miners' Welfare scheme, for the Sherburn Hill Colliery Welfare Committee. Mr. F. Charlesworth, Heather View, Littletown.

SEPTEMBER 17.—**Alloa.**—POST OFFICE.—For the erection of a post office at Alloa, for H.M. Commissioners of Works. Architect, H.M. Office of Works, 4–5, Drumsheugh-gardens, Edinburgh. Deposit £1 1s.

SEPTEMBER 17.—**Bolton-upon-Dearne.** — PAVILION, &C.—(*a*) Erection of sports pavilion, bandstand, shelters, boundary walls, &c., and (*b*) digging and planting of trees, and laying of cricket and football grounds and cinder racing track at Bolton-upon-Dearne in connection with Miners' Welfare scheme. Messrs. Garside & Pennington, architects, Ropergate, Pontefract.

SEPTEMBER 17. — **Bradford.** — ALTERATIONS.—(1) Alterations to caretaker's house, Drummond-road School, (2) extensions to boiler-house, Textile Department. City Architect, Town Hall, Bradford.

SEPTEMBER 17.—**Duns.**—POST OFFICE.—For the erection of a new post office at Duns, for H.M. Commissioners of Works. Architect H.M. Office of Works, 4–5, Drumsheugh-gardens, Edinburgh. Deposit £1 1s.

SEPTEMBER 17.—**Green Hammerton.**—REPAIRS.—For alterations and repairs to farm buildings and houses at High Farm and Low Farm, Green Hammerton, near York, for the West Riding C.C. County Land Agent, County Hall, Wakefield. Deposit £1.

SEPTEMBER 18.—**Chelmsford.**—HOUSES.—For erection of 50 houses on the Boarded Barns estate, for the T.C. Mr. E. J. Miles, Borough Engineer, Chelmsford. Deposit £2 2s.

SEPTEMBER 18.—**Wayland.**—HOUSES.—For erection of four houses in Brandon-road, Watton, for the R.D.C. Mr. C. Whitworth, Housing Surveyor, Watton, Norfolk.

SEPTEMBER 18.—**Worthing.**—PIER PAVILION, RECONSTRUCTION OF THE PARADE BANDSTAND.—A, New pier pavilion, consisting of light steel-frame and reinforced concrete building on screw piling, with small extension of entrance to pier to provide seating accommodation for about 1,200 people (Contract No. 1); and B, The reconstruction of the parade bandstand enclosure, consisting of a light steel and reinforced concrete structure and screw pile foundation to provide seating accommodation for about 2,200 people (Contract No. 2), for the Corporation of Worthing. Borough Surveyor's Office, Municipal Offices, Tudor Lodge, Chapel-road, Worthing. Deposit £3 3s.

✱SEPTEMBER 19. — **Acton.** — CONCRETE BRIDGE, WOOD BLOCK PAVING, PAINTING AND DECORATING.—(*a*) Improvement of Acton-lane, (*b*) ferro-concrete bridge, Acton-lane (contractors are to be duly authorised to execute ferro-concrete work on the Hennebique System), (*c*) new foundation and wood block paving to The Avenue, Bedford Park, (*d*) painting and decorating houses on the East Acton housing estate for the Borough of Acton. Borough Surveyor's Office, Municipal Offices, Acton, W.3. Delivery of Tender dates (*a*), (*b*) and (*c*) not later than 3 p.m. on September 19, and (*d*) not later than 3 p.m. on September 15, 1924.

SEPTEMBER 19.—**Guildford.**—ADDITIONS.—For the erection of a new staff dining-room and other works at the Institution, Warren-road, for the Board of Guardians. Messrs. Norris & Shattock, architects, 51, High-street, Guildford.

SEPTEMBER 19.—**Neath.**—HOUSES.—For the erection of 50 houses (parlour type), also for stoneware pipe sewers in connection, for the T.C. Mr. H. A. Clarke, Borough Engineer, Gwyn Hall, Neath. Deposit £3 3s.

SEPTEMBER 19.—**Walsall.**—HOUSES.—For the erection of 20 parlour type houses, in pairs, facing the Ring-road; 20 non-parlour type houses, in five blocks of four, facing the Ring-road, and 60 non-parlour type houses, in 15 blocks of four, facing Love-lane extension. Mr. J. Taylor, Borough Engineer, Council House, Walsall. Deposit £1.

SEPTEMBER 20.—**Dewsbury.**—MORTUARY.—For the erection of a mortuary at Whitley Grange Hospital, for the T.C. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

✱SEPTEMBER 20.—**Friern Barnet, London, N.11.**—HOUSES.—Erection of 32 houses for the Friern Barnet U.D.C. Mr. F. P. Kindell, Engineer and Surveyor to the Council, Council Offices, The Priory, Friern Barnet-road, Friern Barnet, N.11. Deposit £2 2s.

✱SEPTEMBER 20.—**London, W.7.**—DEAL FLOORING.—Providing and laying a new deal floor for the Dining Hall at the Central London District School, Greenford-avenue, Hanwell, W.7. George P. Morrell, Clerk to the Managers, Central London District School, Greenford-avenue, Hanwell, W.7.

SEPTEMBER 20.— **Warwick.**— HOUSES.—Erection of 41 houses (32 parlour and 9 non-parlour type) upon the Emscote site, Warwick, for the Warwick T.C. Messrs. Francis P. Trepess & Son, 1, Church-street, Warwick. Deposit £1 1s.

✱SEPTEMBER 22.—**Northampton.**—HOUSES.—Erection of 18 type B3 (parlour) and 16 A3 (non-parlour) houses on the Abington Lodge Farm Estate, for the Housing and Town-Planning Committee of the County Borough of Northampton. Mr. Alfred Fidler, M.Inst. C.E., Borough Engineer, Guildhall, Northampton. Deposit £5 (crossed cheques made payable to "Northampton Corporation").

SEPTEMBER 23.—**Chesterfield.**—CONVENIENCE.—For the erection of underground conveniences in New-square, for the T.C. Mr. Vincent Smith, Borough Engineer, Chesterfield.

✱SEPTEMBER 23.—**London, S.W.**—F Construction of foundations for five bloc on the East Hill Estate, Wandsworth, The Architect to the Council, The Coun No. 3), Westminster Bridge, S.E.1. payable to the Cashier.

✱SEPTEMBER 23.—**Portsmouth.**—Ex ployment Exchange, for the Commissi Works, &c. Contracts Branch, H. Charles-street, London, S.W.1. Depos

✱SEPTEMBER 24.—**Manchester.**—Ex ployment Exchange, Aytoun-street, missioners of H.M. Works, &c. Con H.M.O.W., King Charles-street, Lo Deposit £1 1s.

SEPTEMBER 26.—**London, S.E.1.**—Po GLASS.—Polished plate glass required b General, India Store Department, B Belvedere-road, Lambeth, S.E.1. Ten tainable from above.

✱SEPTEMBER 26.—**Neath.**—HOUSES Erection of 50 houses (parlour type) on t road (North) site, Briton Ferry, also for sewers in connection with the above. neer, Gwyn Hall, Neath. Deposit £3 3

NO DATE.—**Aberaman.**—CLUB HO erection of a club house and gymnasium for the Aberaman District Welfare As George Henshole, architect, 30, Charles Deposit £2 2s.

NO DATE.— **Barry.**—REBUILDING.—F central premises, for the Barry and Dis tive and Industrial Co-operative Society T. Springall, Architect's Department, Wholesale Society, Ltd., St. Mary-s Deposit £5 5s.

NO DATE.—**Castleford.**—VILLAS, &C (1) two detached villas, Redhill, Castlefo tions and extensions to W.M. Club, Loc Bywater. Messrs. Blenkinsopp & Sc tects, Castleford.

NO DATE.—**Doncaster.**—CLUB.—For proposed British Legion Club, Princes lands, near Doncaster. Mr. S. Siddall, Woodlands-road, Woodlands.

NO DATE.—**Guiseley.**—HOUSES.—For houses for the owners of the Tranmere worth, Guiseley. Jones & Stocks, Prudential Buildings, Park-row, Leeds.

NO DATE.—**Harrogate.**—HOUSE.—F stone house, Harrogate. Mr. F. A.R.I.B.A., 21, Bond-street, Leeds.

NO DATE.—**Hull.**—CINEMA.—For the new picture theatre, Anlaby-road, Hu Cinemas, Ltd. Messrs. Blackmore, Ruskin Chambers, Scale-lane, Hull.

NO DATE.—**Hull.**—DYE WORKS.—F dry-cleaning and dye works, Clough Messrs. F. Zerny. Messrs. B. S. Jaco architects, Land of Green Ginger, Hull.

NO DATE.—**Leeds.**—ALTERATIONS.— to Club premises and new offices, Bernar for the Kingston Unity of Oddfellows, Mitchell & Sons, architects, 9, Upper F Albion-street, Leeds.

NO DATE.—**Mountain Ash.**—PAVIL struction of a pavilion, bowling green &c., at Mountain Ash, for Messrs. Nix Committee. Mr. T. W. Millar, archi Ash.

NO DATE.—**Rothbury.**—ALTERATION tions and additions to houses at Rothb G. Mackay. Mr. J. W. Corking, archi street, Gateshead.

NO DATE.—**Three Bridges Station.**— a cottage; also thatching work. Pell, Court Mansions, S.W.6.

✱NO DATE.—**Tiverton, Devon.**—BO —Erection of a new boarding house the Governors of Blundell's School. C Dixon, 25, St. Peter-street, Tiverton.

FURNITURE, MATERI

SEPTEMBER 8.—**London.**—FITTING sanitary fittings to Burma Railways 199, Gresham House, Old Broad-street 10s.

SEPTEMBER 8.—**Stoke-on-Trent.**—M supply of highway materials to the T.C. Borough Surveyor, Town Hall, Stoke

SEPTEMBER 9.—**Edmonton.** — MA supply of road and other materials. Surveyor, Town Hall, Edmonton.

SEPTEMBER 9.—**Manchester.**—BA supply of fireclay wash-baths at the Baths, for the T.C. City Architect, T chester. Deposit 10s.

SEPTEMBER 11.—**Salford.**—FURNITU of school furniture, to the T.C. Secr tion, Chapel-street, Salford.

SEPTEMBER 13.—**Merthyr Tydfil.**— supply to the B.C. for six months a materials. Borough Engineer, Town Tydfil.

SEPTEMBER 15.—**Bromley.** —MATERI of highway materials to the R.D.C. Park House, Beckenham-lane, Bromle

SEPTEMBER 20.—**Stafford.**—MATERI stores and materials for six months, to Plant, Surveyor, Stafford.

ENGINEERING IRON A

SEPTEMBER 8.—**Dundee.**— ELECTR For re-wiring of offices at 93 & street, for the Water Commissioners. engineer, 93, Commercial-street, D £1 1s.

ER 8.—**Edinburgh.**—PIPES.—For supply of dry sand cast iron pipes, varying from 3 in. diameter, and 26 tons of green sand cast iron and 2 in. in diameter, for the T.C. Messrs. llie & Reid, C.E., 29, Waterloo-place, Edin-

ER 8.—**London.**—GIRDER BRIDGES.—Supply idges (one span 25 ft. and nine spans 40 ft.), na Railways Co. Secretary, 199, Gresham . Charges 10s.

ER 8.—**Middleton.**—FENCING.—For supply of wrought-iron railings and gates. Borough own Hall, Middleton.

ER 8.—**Whitstable.**—HEATING.—For instal- ntral heating at the Council Offices, for the . J. Dunn, Surveyor, Council Offices,

ER 9.—**St. Pancras.**—STEELWORK.—For the teelwork required for boiler house exten- tricity Offices, 57, Pratt-street, N.W.1.

ER 9.—**Wroughton.**—RESERVOIR.—For con- small reservoir, &c., for the Wilts C.C. Mr. County Architect, Trowbridge.

ER 10.—**Haslemere.**—RESERVOIR.—For the of a 54,000 gallon ferro-concrete reservoir e, for the U.D.C. Mr. C. A. Best, Surveyor, ces, Haslemere.

ER 10.—**Liverpool.**—ENGINEERING WORK.— ineering work required at proposed public ashhouse, Minshull-street, Low-hill, for the Superintendent, Baths Department, 75, Liverpool. Deposit £1 1s.

ER 10.—**Newmarket.**—BOILER.—For sup- tion of boiler at refuse destruction works, C. Mr. W. H. Eley, Surveyor, Newmarket.

ER 10.—**Wednesbury.**—BRIDGE.—For the Mill Fleam Bridge, which carries the Crank- r the Mill Fleam, for the T.C. Mr. Arthur ough Engineer, Town Hall, Wednesbury.

ER 12.—**Burnley.**—ROAD PLANT.—For the eening plant and tar macadam plant to the gh Surveyor, Town Hall, Burnley.

ER 13.—**Methley.**—BRIDGE.—For the partial nd reconstruction of Methley Bridge, which Leeds and Barnsdale main road over the , for the West Riding C.C. West Riding unty Hall, Wakefield. Deposit £1.

ER 15.—**Southampton.**—BRIDGE.—For re- of Cobden Bridge in reinforced concrete. Mr. H. W. FitzSimons, 39, Victoria- Deposit £5 5s.

ER 15.—**Stockport.**—SEWAGE WORKS.—For tion of aeration and pyramidal tanks and t the Stockport Sewage Works, for the T.C. Hamer, Surveyor, Town Hall, Stockport. 5s.

ER 16.—**Goole.**—GAS PLANT.—For the retort house, foundations, horizontal , coal and coke handling plant, telpher, rating set, and four cast-iron purifiers, e-street Gasworks, for the U.D.C. Mr. ates, Engineer, Gasworks, Goole.

ER 16.—**Walsall.**—RETORT HOUSE.—For n of horizontal retort house, &c., for the tee. Mr. E. Davies, Manager, Gasworks, posit £5 5s.

ER 17.—**Haslemere.**—PUMPING MACHINERY. upply and erection of two 50 b.h.p. semi- starting, four-stroke, cycle type, heavy oil o turbine pumps, oil storage tanks, &c., for Mr. C. A. Best, Surveyor, Council Offices,

ER 19.—**London.**—STEELWORK.—For supply steelwork for underframe shop, for the Railway Co. Secretary, 91, Petty France, e £1.

ER 22.—**Plymouth.**—BRIDGE.—For the and removal of a bridge to be placed across Reservoir, situated about 12 miles from or the T.C. Mr. Frank Howarth, Water onehouse, Town Hall, Plymouth. Deposit

ER 27. — **Folkestone.** — CONSTRUCTIONAL STEEL CASEMENTS, AND PATENT GLAZING .—(*a*) The supply and erection of cast-iron lwork in curved roof trusses, &c.; (*b*) steel (*c*) patent roof glazing at the Concert Hall ardens, for the Borough Corporation of Mr. A. E. Nichols, M.Inst.C.E., Borough Surveyor, Corporation Offices, Folkestone. s.

SANITARY, AND WATER WORKS.

8.—**Barnes.**—SEWER.—For laying stoneware pipe sewer, in Lonsdale-road, . Mr. G. B. Tomes, Surveyor, Barnes. s.

8.—**Bellshill.**—ROADS.—For the improve- ways in Bellshill, for the Lanark C.C. hapman, road surveyor, District Offices,

8.—**Eccles.**—SEWAGE.—For alterations r pumphouse and supplying and fitting of elivery cast-iron pipes, for the T.C. Mr. icton, Borough Engineer, Town Hall,

8.—**Hong Kong.**—WATERWORKS.— lining of two tunnels, approximately ,680 ft. in length, through the Smugglers' lden Hill respectively; the construction nduit, approximately 2,000 ft. in length, t works. Crown Agents for the Colonies, ondon, S.W.1.

SEPTEMBER 8.—**Southampton.**—ROADS.—For the reconstruction of roads in part of High-street, Hanover Buildings, Onslow-road, and Grove-street, for the T.C. Borough Engineer, Southampton. Deposit £1 1s. each work.

SEPTEMBER 8.—**Twickenham.**—PAVING.—For repaving with creosoted deal blocks 21,500 yds. of carriageways, for the U.D.C. Mr. F. W. Pearce, Surveyor, Town Hall, Twickenham.

SEPTEMBER 8.—**Wharfedale.**—WATER MAIN.—For laying about 750 lin. yards of 6 in. water main on the Menston Waterworks Gathering Ground, for the R.D.C. Mr. Harry Riding, Menston Waterworks Engineer, Council Offices, Menston.

SEPTEMBER 8.—**Wolstanton.**—SANITARY.—For conversion of privies into water closets, for the U.D.C. Mr. W. Simcock, Sanitary Inspector, Wolstanton.

SEPTEMBER 9.—**Glasshoughton.**—SANITARY.—Erection of temporary pail closets and urinal at Townville Primitive Methodist Chapel, Glasshoughton, for the West Riding E.C. Education Department, County Hall, Wakefield.

SEPTEMBER 9.—**Lichfield.**—SEWERS.—Provision and laying of 800 yds. lin. of 9 in. stoneware sewers, for the T.C. Mr. P. A. Benn, City Surveyor, Lichfield. Deposit £2 2s.

SEPTEMBER 9.—**Salford.**—ROADS.—For the paving of seven streets with stone setts, two streets with rock asphalt, and one street with tar-macadam. Borough Engineer, Town Hall, Salford.

SEPTEMBER 9.—**Tynemouth.**—ROADS.—For street works comprising the laying of cement concrete paths, tar macadam carriageways, random sett and whin chip pavements, for the T.C. Mr. John F. Smillie, Borough Surveyor, Tynemouth.

SEPTEMBER 10.—**Enniscorthy.**—WATERWORKS.—For improvements to water supply at village of Ferns, for the R.D.C. Mr. Aidan A. Connolly, Clerk, Council Offices, Enniscorthy.

SEPTEMBER 10.—**Leeds.**—ROADS.—For paving and concreting, &c., of portions of highways in Globe-road, Saynor-road, and Skinner-lane, for the T.C. Mr. J. B. Hamilton, Commercial Manager, 1, Swinegate, Leeds. Deposit £1 1s.

SEPTEMBER 10.—**Llandudno.**—ROADS.—For the extension of The Parade and Promenade between Carmen Sylva-road and Nant y Gamar-road, for the U.D.C. Mr. W. T. Ward, Surveyor, Town Hall, Llandudno.

SEPTEMBER 10.—**Llantrisant.**—ROADS.—For resurfacing on prepared foundations 51,500 square yards of the Llantrisant-Pontypridd road, for the R.D.C. Mr. J. Saunders, Surveyor, Council Offices, Pontyclun, Glam.

SEPTEMBER 10.—**Longbenton.**—ROADS, &C.—Construction of roads, footpaths and sewers and works incidental to the laying out of Glebe housing estate, for the U.D.C. Mr. Wm. Bean, Surveyor, Council Offices, Forest Hall. Deposit £1 1s.

SEPTEMBER 10.—**Middleton.**—SEWER.—For the laying of a new sewer from Alkrington Wood sewer to Woodland Way for the T.C. Borough Engineer, Town Hall, Middleton.

SEPTEMBER 10.—**Stoke-on-Trent.**—SANITARY.—For the conversion into water closets of 100 pail closets at Hanley. Chief Sanitary Inspector, St. Peter's Chambers, Glebe-street, Stoke-on-Trent.

SEPTEMBER 10.—**Tavistock.**—SEWER.—For the laying of about one mile of 6 in. piped sewer, at Dousland, for the R.D.C. Mr. T. H. Harris, Town Hall Chambers, Tavistock.

SEPTEMBER 11.—**Bournemouth.**—SEWER.—For construction of land outfall sewer at Southbourne, for the T.C. Mr. F. P. Dolamore, Borough Engineer, Bournemouth. Deposit £1 1s.

SEPTEMBER 11.—**Colne.**—ROADS.—For the repaving of George-street, Church-street to Raglan-street, for the T.C. Borough Surveyor, Town Hall, Colne.

SEPTEMBER 11.—**Durham.**—ROADS.—For the construction of roads and common drains in connection with the housing scheme at Framwellgate Moor, for the R.D.C. Mr. J. N. Adams, Architect, 40, Sadler-street, Durham. Deposit £2.

SEPTEMBER 11.—**Edinburgh.**—SEWER.—Construction of a new sewer and outfall for the Cramond district, for the T.C. Burgh Engineer, City Chambers, Edinburgh.

SEPTEMBER 11.—**Ramsgate.**—ROADS.—For making up Clifton-road, for the T.C. Mr. T. G. Taylor, Borough Engineer, Albion House, Ramsgate.

SEPTEMBER 12.—**Carlisle.**—SEWERS.—For the construction of stoneware sewers and roads and streets on Blackwell-road housing estate. Mr. Henry C. Marks, City Engineer, 18, Fisher-street, Carlisle. Deposit 10s.

SEPTEMBER 12.—**Westbury.**—WELL.—For sinking of brick-lined well, for the Westbury and Dilton Marsh Joint Water Committee. Messrs. W. H. Radford & Son, Albion Chambers, Nottingham. Deposit £2 2s.

SEPTEMBER 13.—**Bootle.**—ROADS.—For making up back roads, for the T.C. Borough Engineer, Town Hall, Bootle.

SEPTEMBER 13.—**Lifton.**—DRAINAGE.—For connecting about 70 houses at Lifton, Devon, with the main sewer. Messrs. Parkes, Lees & Rosevеare, architects, Launceston.

SEPTEMBER 13.—**Reigate.**—ROADS.—For the resurfacing of Frenches, Woodlands and Earlswood-roads, Redhill, with tarviated slag macadam. Mr. Fred T. Clayton, Borough Surveyor, Municipal Buildings, Reigate.

SEPTEMBER 13.—**Wolstanton.**—ROAD.—Construction of new road from Wolstanton to Chesterton, for the U.D.C. Mr. Arthur Cotton, Surveyor, Council House, Wolstanton. Deposit £2 2s.

SEPTEMBER 13.—**Yeovil.**—DRAINS.—For the construction of 219 lineal yards of 9 in. and 392 lineal yards of 6 in. subsoil drains, and 50 yards of 6 in. surface water drains at Cemetery, for the Joint Burial Committee. Borough Surveyor, Yeovil.

SEPTEMBER 15.—**Bognor.**—ROADS.—For construction of 7,100 sq. yds. of reinforced concrete carriageway, &c., for the U.D.C. Mr. J. Draper, Surveyor, Bognor. Deposit £1.

SEPTEMBER 15.—**Cheadle.**—WATER SUPPLY.—For laying water mains, constructing reservoir, &c., at Alton, for the R.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £5 5s.

SEPTEMBER 15.—**Eccles.**—ROADS.—For making up various back passages within the Borough, for the T.C. Mr. Thomas S. Picton, Surveyor, Town Hall, Eccles. Deposit £1 1s.

SEPTEMBER 15.—**Hastings.**—ROADS.—For widening of Red Lake, and new road across allotments to the "King's Head," Winchelsea-road, Ore, for the T.C. Mr. Philip H. Palmer, Engineer, Town Hall, Hastings. Deposit £2.

SEPTEMBER 15.—**Hastings.**—SEWER.—For construction of pay entrances and sewer at Pilot Field, for the T.C. Mr. P. H. Palmer, Borough Engineer, Town Hall, Hastings. Deposit £1.

SEPTEMBER 16.—**Kilmarnock.**—ROADS.—For the completion of certain roads at Scott-road housing scheme, for the T.C. Mr. William Dunbar, Burgh Surveyor, Market Bridge, Kilmarnock.

SEPTEMBER 16.—**Leeds.**—PLUMBING.—For the execution of plumbing repairs on the several housing estates, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds.

✱SEPTEMBER 17.—**Norwich.**—SEWERS, DRAINS, MANHOLES.—Construction of stoneware pipe sewers, drains, manholes, &c., at the Saint Andrew's Hospital, Thorpe, Norwich, for the Committee of Visitors. Mr. G. S. Smith, Architect and Surveyor, Saint Andrew's Hospital, The Close, Thorpe, Norwich. Deposit £3 3s.

SEPTEMBER 17.—**South Mimms.**—SEWER.—For construction of 1,000 yards of 9 in. stoneware pipe sewer, &c., Surveyor, Offices, Potters Bar.

SEPTEMBER 17.—**Wembley.**—SEWER.—For the construction of 270 lineal yards of 15 in. stoneware pipe surface water sewer, for the U.D.C. Mr. C. R. W. Chapman, Engineer, Council Offices, Wembley, Middlesex. Deposit £2 2s.

SEPTEMBER 18.—**Bury.**—SEWER.—For construction of concrete pipe sewers, for the T.C. Mr. J. A. Settle, Borough Engineer, Bury. Deposit £2.

SEPTEMBER 19.—**Middlesex.**—ROADS.—For construction of 5.72 miles of road works, being Section 2, Contract 3, of the Barnet bye-pass road, for the Middlesex C.C. Mr. A. Dryland, County Engineer, Guildhall, Westminster, S.W. Deposit £21.

SEPTEMBER 19.—**Worthing.**—WATER MAINS.—For laying 2⅝ miles of 14 in., 1 mile of 9 in., and ¾ mile of 6 in. cast-iron socket pipes and providing and laying about 500 yards of 9 in. stoneware pipes (Contract No. 3), and the supply of about 365 tons of 14 in. diameter, 130 tons of 9 in. diameter, and 55 tons of 6 in. diameter cast-iron socket pipes (Contract No. 4). Water Engineer, Municipal Offices, Tudor Lodge, Worthing. Deposit £3 3s.

SEPTEMBER 21.—**Greenwich.**—ROADS.—For the forming and paving of Sections 2 and 3 of North-street, Charlton, for the B.C. Borough Engineer, Town Hall, Greenwich, S.E.10.

SEPTEMBER 22.—**Nottingham.**—APPROACH WORKS.—For construction of embankment, &c., for the South Approach-road, for the C.C. Mr. J. C. Haller, County Surveyor, Shire Hall, Nottingham. Deposit £3 3s.

SEPTEMBER 23.—**London.**—FOUNDATIONS.—For the construction of foundations for five blocks of dwellings on the East Hill Estate, Wandsworth, for the L.C.C. Architect, County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £1 1s.

✱SEPTEMBER 24.—**Broadmoor.**—Drainage works at the Broadmoor Asylum, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 25.—**Lambeth.**—ROADS.—For the following:—(*a*) Making up of Felsberg-road, (*b*) laying bituminous paving in Dante-road, (*c*) taking down and rebuilding two bays and piers of boundary wall at Lambeth Cemetery, for the B.C. Mr. Osmond Cattlin, Borough Engineer, Town Hall, Brixton Hill, S.W.2.

SEPTEMBER 27.—**Reigate.**—SEWER.—For sewer extensions in Balcombe-road, Horley, for the R.D.C. Mr. F. E. Traviss, Sanitary Surveyor, 48, High-street, Reigate. Deposit £2 2s.

OCTOBER 3.—**Cylla and Deri Valleys.**—SEWERAGE WORKS.—For carrying out, for the Gellygaer U.D.C., of the construction of about 11 miles of 15 in., 12 in. and 9 in. diameter glazed stoneware and cast-iron pipe sewers, together with manholes, storm overflows, gauging chambers, and other incidental works. Messrs. Wilcox & Raikes, 63, Temple-row, Birmingham. Deposit £7 7s.

OCTOBER 3.—**Gellygaer.**—SEWERS.—For the construction of 11 miles of 15 in., 12 in., and 9 in. diameter glazed stoneware and cast-iron pipe sewers, &c., for the U.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £7 7s.

Competitions.

(*See Competition News, page* 348.)

Auction Sales, Tenders, etc.

SEPTEMBER 8.—**London. S.E. 18.**—Mr. F. H. Clark will sell, without reserve, at the Boys' Hostels, Woodhurst-road, Plumstead, S.E. 18, clearing sale of hut sections, timber and building materials (new and second-hand). Auctioneer, Railway Wharf, York-road, Wandsworth, S.W. 18.

SEPTEMBER 9.—**London, E.**—Messrs. Joseph Hibbard & Sons will sell, at Railway Arches, Ellingfort-road, Mare-street, Hackney, E. (removed for convenience of sale), well seasoned stock of timber of various assortment. Auctioneers, 15, Newington-green, Islington, London, N. 16.

SEPTEMBER 9.—**London, S.E.**—Messrs. Veryard & Yates will sell, without reserve, at Calders-row, Brixton Hill, useful building materials. Auctioneers, 365, Norwood-road, S.E.27.

SEPTEMBER 9 AND 10.—**Rosyth.**—Messrs. Matthew Marshall & Co. has been instructed to sell by Order of the Lords Commissioners of the Admiralty, within H.M. Dockyard, Rosyth, contractors' plant, old and surplus stores. Auctioneers, 72, Waterloo-street, Glasgow, or to the Superintending Civil Engineer, H.M. Dockyard, Rosyth.

SEPTEMBER 9 & 10.—**Swindon (Wilts).**—Mr. F. H. Clark will sell, without reserve, at the Central Stores Depot, No. 18, Swindon, Wilts, clearance sale of timber, buildings, and building material. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W. 18.

SEPTEMBER 10.—**Colchester.**—Messrs. Fenn Wright & Co. will sell a freehold property, builder's yard, and goodwill of business as carried on by Exors. of late Mr. T. J. Ward. Auctionecrs, 146, High-street, Colchester.

SEPTEMBER 10.—**Peckham, S.E.15.**—Mr. C. E. Clark will sell, without reserve, at Rollin's Wharf, Canterbury Bridge, Peckham, S.E.15, large quantities of prime new timbers (landed and piled away to length). Auctioneers, Beddington House, near Croydon.

SEPTEMBER 11.—**Edgware.**—Mr. Leslie Raymond will sell (unless previously disposed of) two freehold, building sites of about 5 acres and 2½ acres respectively, at Edgware, within about 700 yds. of the New Tube Station (now open). Auctioneer, The Estate Offices, Church-lane, Edgware.

SEPTEMBER 11.—**London, E.C.4.**—Messrs. J. T. Skelding & Co. will sell, by order of Receiver for Debenture Holders, at the London Auction Mart, Queen Victoria-street, London, E.C.4, the valuable freehold property known as the Fiddington Steam Saw Mills, fully equipped with up-to-date saw-mill machinery and plant, &c. Auctioneers, 48, Gresham-street, Guildhall, London, E.C.2.

SEPTEMBER 11.—**Upminster (Essex).**—Mr. F. H. Clark will sell, without reserve, at New-place, St. Mary's-lane, Upminster, Essex, timber and building materials, Crossley gas engine, &c. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W. 18.

✱SEPTEMBER 16.—**Hendon.**—Mr. George Weston, F.A.I., will sell, at the Old Welsh Harp Hotel, Hendon, thirty-five plots of freehold building land situate in the main Edgware-road, almost opposite the Old Welsh Harp Hotel, Hendon. Auctioneer, 10, Sutherland-avenue, Paddington, W.9.

✱SEPTEMBER 16.—**London, N.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of C. Hale & Co., upon the premises, Elkhorn Works, Cleveland Gardens, St. Ann's-road, builders' stock rain-water and sanitary goods, large quantity of ironmongery, paints, &c., and Crossley gas engine. Auctioneers, 15, Newington Green, Islington, London, N.16.

✱SEPTEMBER 16.—**London, S.W.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, timber, fittings and building materials, at 255, Clapham-road. Auctioneers, 365, Norwood-road, S.E.27.

✱SEPTEMBER 24.—**Clacton-on-Sea.**—Messrs. Knight, Frank & Rutley will sell, in conjunction with Messrs. Edwin J. Gilders & Co., by direction of Mr. Arthur Webster, Alton Park Estate as a whole or in lots, at the Royal Hotel. Auctioneers, 20, Hanover-square, W.1.

PRELIMINARY ANNOUNCEMENT.—**London, W.**—Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

Public Appointments.

SEPTEMBER 8.—**St. Marylebone.**—Engineering and Architectural Assistant required by the Metropolitan Borough. Mr. J. Paget Waddington, M.Inst.C.E., Borough Engineer and Surveyor, The Town Hall, Marylebone-road, N.W.1.

SEPTEMBER 9.—**London, S.E. 1.**—TECHNICAL ASSISTANT.—Technical (Engineering) Assistant on the permanent staff in the Architect's Department required by the L.C.C. Clerk of the Council, The County Hall, Westminster Bridge, S.E. 1, with stamped addressed foolscap envelope.

SEPTEMBER 10.—**Swansea.**—Quantity Surveying Assistant on the temporary staff in the Borough Architect's Department required by the Corporation of the County Borough of Swansea. Borough Architect, 3, Prospect-place, Swansea, endorsed "Quantity Surveyor."

✱SEPTEMBER 24.—**Middleton, Lancs.**—Surveying Assistant in the Borough Engineer and Surveyor's Department required by the Town Council of Middleton. Mr. J. P. Walmsley, Town Clerk, Town Hall, Middleton, Lancs, endorsed "Surveying Assistant."

SEPTEMBER.—London, S.E.1.—(*a*) Lecturer in Architecture and Building; (*b*) Instructor in Brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week. Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1.

SEPTEMBER.—Wimbledon, S.W. 19.—Evening Lecturer in (a) Surveying, (b) Brickwork and Masonry, to the Standard of Grade 1 City and Guilds Syllabus. The Principal, Technical Institute, Wimbledon, S.W.19

✱NO DATE.—**London, S.W.18.**—EVENING CLASSES.—(1) Teacher in Building Science, Grade 1; (2) Teacher of Builders' Book-keeping and Costing, Grade II and Grade III. The Principal, Wandsworth Technical Institute, High-street, Wandsworth, S.W.18.

✱NO DATE.—**Gold Coast.**—Foremen of Works (9) urgently required by the Government of the Gold Coast, for the Public Works Department, for two tours each of 12–18 months' service. Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/12880.

✱NO DATE.—**Tanganyika.**—Foreman Mason (M.13036) and a Foreman Carpenter (M.13037) required by the Government of Tanganyika for a period of 20 to 30 months in first instance for the Dar-es-Salaam Harbour Works. Apply at once, Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1, quoting reference number.

PROPOSED NEW BUILDINGS & OTHER WO

IN these lists care is taken to ensure the accuracy of the information given, but i sionally happen that, owing to building owners taking the responsibility of comme before plans are finally approved by the local authorities, "proposed" works at publication have been actually commenced. Abbreviations: T.C. for Town Cou for Urban District Council; R.D.C. for Rural District Council; E.C. for Education B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education

ABERDEEN.—The T.C. have applied for sanction to carry out various road improvement schemes at an estimated cost of £61,000. The scheme comprises the following improvements: Extension of Anderson-drive from the Great Western-road to Holborn-street at the Bridge of Dee (£42,000); widening of King's-gate between Moray-place and Queen's-road at the entrance to the City's new park at Hazelhead (£12,500); extending Laurelwood-avenue to Back Hilton-road (£3,750); widening of Elmbank-terrace (£2,700); and widening of Mount-street at the junction of Westburn-road (£380).

ACCRINGTON.—A sub-committee has been appointed by the Parks Committee to consider the provision of suitable lavatory accommodation at Bullough Park.

ADWICK.—The U.D.C. has decided to go forward with the construction of a new road, estimated to cost £7,000—from Woodlands village to Adwick station.

ANNFIELD PLAIN.—The erection of a new parish church, at an estimated cost of about £6,000, is proposed. A site has already been given by the South Moor Colliery Co., Ltd.

BENFIELDSIDE.—The Building Committee has approved revised lay-out and house plans for 76 houses at Shotley Bridge, and has instructed the surveyor to prepare a further amended lay-out of 48 houses.

BILLERICAY.—The B.G. have passed plans prepared by Mr. H. R. Bird, architect, for a new infirmary.

BINGLEY.—Plans passed by U.D.C.: House at Prospect-road, Eldwick, for Messrs. J. F. & M. M. Seatree. The Surveyor to the U.D.C. is instructed to prepare a plan of public conveniences on the site of the Old Toll Bar at Cottingley Bar.

BIRKENHEAD.—Plans passed by T.C.: House and shop, Borough-road; two pairs of semi-detached houses, Seaton-road; detached house, Egerton-park; alterations to the shop premises, 250 and 252, Conway-street; 124 houses, Price-street, adjoining Patten-street and the Wirral Railway; 12 pairs of semi-detached houses, Bidston Avenue.

BLACKPOOL.—Plans passed by T.C.: House, Sixth-avenue, C. S. Doeg; two houses, Norbreck-road, J. Marsden; house, Windermere-road, T. Fenton; house, Windermere-road, J. Marlow; bungalow, Burgate, Mr. and Mrs. R. Aspden; ten houses, Highfield-avenue, Abson Bros.; six houses, Ilford-road, R. Hesketh; two houses, Cleator-avenue, G. Hodgson; seven houses, Grenfell-avenue, E. Mason; seven houses, Grenfell-avenue, E. Mason; three houses, Main-road, T. & J. Pye; six houses, Borough-road, J. E. Dugdale; two houses, Condor-grove and Borough-road, J. E. Dugdale; two bungalows, Queen's-road, G. H. Edge; two houses, Bournemouth-road, G. Francis; house, Whinney Heys-lane, T. M. Watson; ten houses and five garages, Condor-grove, Queen Victoria-road, and Central-road, F. White; house, Milton-avenue, H. Cocker; two bungalows, Rosebery-avenue, L. Barker; two houses, off Bispham-road, T. Rhodes; house and shop, St. Annes-road, Mrs. L. Beecroft; two houses, Rosebery-avenue F. Unsworth; house and garage, Boscombe-road, J. Bootherstone; six houses, Boscombe-road, F. Foster; convalescent home, King's-road, Bispham, Lancs. & Ches. Miners' Welfare Committee; bungalow, Shore-road, J. Whalley; shop and offices, Cheapside, Johnson Bros.; house, Piccadilly, Mrs. Pickford; two houses, Hall-avenue, Dewhurst & Holt; two bungalows, Summerville-road, Mawdsley & Spencer; tram shelter and conveniences, Lytham-road, Blackpool Corporation; shop and three houses, Squires Gate-lane and St. Annes-road, Wm. Moss; house, Lincoln-road, H. Thompson; two houses, Coniston-road S. Boydell; eight houses and garages, Wyre-grove, G. Wade; house, Links-road, J. Midgley; two houses, off Mere-road, A. Wilson.

BLACKROD.—The D.C. are considering the reconstruction of the main Manchester road from Vaize House through the village. The road is to be relaid with a concrete bed and surfaced with granited rock asphalt, and the gradient at Pool Green paved with granite setts. The War Memorial Committee have accepted the design of Mr. W. Bradley, architect, Acresfield, Bolton, which is to take the form of a way-side shrine to be erected in the cemetery grounds. Tenders are to be obtained for the work to be executed in Portland stone.

BLAENAU FESTINIOG.—Merioneth Standing Joint Committee is considering repairs at the police buildings.

BOLSOVER.—The U.D.C. has made application for sanction to borrow £14,000 for the erection of 30 houses in Moorfield-lane, and £2,650 for the construction of the necessary streets and sewers.

BOLTON.—Plans passed by T.C.: E. Howarth, two houses, Belmont-road; J. B. Isherwood, house, Sweetloves-lane; Greenhalgh & Shaw, Ltd., bridge, Halliwell Mills; Electricity Committee, sub-station, Bertha-street; T. R. Bridson & Sons, Ltd., pipe store, Chorley-street; Smithills Private Tennis Club, pavilion, Back Church-road; Thomas Shields, shop, Shepherd Cross-street; J. H. Coope, Ltd., four houses, Green-lane; E. & S. Street, two houses, St. Michael's-avenue; W. Gornall & Sons, Ltd., two houses, Carlton-road; Bolton Modern Building Co., Ltd., six houses, Maple-avenue; and 15 houses, Chorley Old-road and Maple-avenue; W. H. Smith, one house, Wigan-road; Bridgwater Estates, Ltd., streets and levels, Bays-water-street.

BRIDGE.—Plans passed by R.D.C.: Two houses at New House-lane, Thannington, for Captain Smith;

* See also our List of Contracts, Competitions, etc.

bungalow at Rough Common for Mr. bungalow at Littlebourne for Mr. T. Hug low at Barham for Mr. S. Madge; bunga bourne for Mr. Tilling; and bungalow a for Mr. E. Moat.

BURNHAM-ON-CROUCH.—Plan passed Bungalow, Alexandra-road, for E. D. G.

BURNLEY.—In connection with the gasworks at Old Hall, it has been arr Borough Surveyor to supervise the drain building works. A sub-committee has b in connection with the proposed acqui Corporation of land at Towneley for educ and playing fields purposes.

CARMARTHENSHIRE.—The Llandyssul improve the Tygroes-Llandyssul road a cost of £2,000. The M.H. has advised consult an engineer with reference to a scheme for the area. The Cwmamman poses to embark upon a water supply sc area at estimated cost of £10,000. A p has been conducted by the M.H. into joint Amman Valleys Councils' scheme fo struction at estimated cost of £66,000.

CHEADLE.—Plans passed by R.D.C.: San Common, Ipstones, for Mr. G. Sher Cheddleton, for the late Mr. Allerto bungalow, Brookhouse-lane, Bucknall, fo son; bungalow, near Caverswall schools Unest.

CHELTENHAM.—The Housing Committe has approved a lay-out scheme for shops road. The M.H. has sanctioned loans the completion of the Swindon Road sch and £4,600 for the erection of Practica school buildings.

CHORLEY.—The E.C. has adopted pla by Messrs. Biram & Fletcher, architects of the proposed Highfield Council Schoo has decided to purchase 23½ acres at a for the enlargement of Astley Park.—T seek permission for the erection of 100 h Highfield Estate.—The B.S. has prepar the reconstruction of a portion of the Pr main road at a cost of £5,000, and the r of Lyons-lane, at a cost of £7,500.—P Improved elevation of proposed buildings of Market-street and St. Thomas's-road, of the late Mr. Hiughton; house, Harring Mr. T. Banks.

COLNE.—At the meeting of the T.C. that the M.H. had sanctioned the foll £6,000 for the extension of the filter hous lation of additional filters at Laneshawbri and £772 in respect of the construction Keighley-road (Laneshawbridge). Sancti received from the E.C. to the borrowi for the mains and services. Applicati made to the M.H. for sanction to bo being the estimated cost of the erecti conveniences in Colne-lane. Also for borrow £9,288, being £2,088 in respect o for reconditioning of Skipton Old-road, for the scheme prepared by the B.S. for of Shaw-street. Tenders are to be invited Gt. George-street, from Church-street street.—Plans have been approved for of a bungalow in Hereford-road, for Mr and a bungalow in Keighley-road, for T

CORWEN.—Merioneth County Survey asked to prepare a scheme for repairs station.

CROESOR.—A conference of represent County Councils of Merioneth and Carna decided that a new bridge should be pro delay and that it should be a ferro-conc on Hennebique's system. Messrs. T. Owe Jones, the County Surveyors of Ca Merioneth respectively, estimated the co Application is to be made to the M.T.

DEUDRAETH.—The R.D.C. proposes to corners at Llanfair, where the district r main road.

DONGELLEY.—Merioneth C.C. has aske Surveyor to draw up a scheme for adaptin bank premises for use as county offices structing a passage beneath the county the "Brown Horse." The Standing Join is considering the provision of more lav modation at the Merioneth County Hall.

DOUGLAS (ISLE OF MAN).—The T.C. h the B.S. to prepare plans and estimates ing of the pier approach from the Nort Regent Hotel. Land is being purcha widening of Woodbourne-road. The consented to a scheme for the erection on the Hills Estate.—Plans passed: Bu road, for Mr. S. Taylor; villa, Quarter for Mrs. Bowling; house, Alexander-d E. Carine; two houses, Tromode-road. Douglas; 40 houses, Hills Estate, for Co

DUNDEE.—Plans and sections of p buildings, &c., have been lodged at the offi Engineer:—Kerrington-crescent, Barnhi Alexander Thomson; Loons-road, su Corporation Electricity Department; new streets between Dalkeith-road, Old and Pitkerro-road, for Trustees of Craigie

—Plans passed by R.D.C.: House, Horden, Mrs. Bamlett; house and shop, e, South Hetton, Mrs. B. M. Gray; Seaside-lane, Easington Colliery, Rev. rell; four houses, Michael-street, New G. T. Forster; bungalow, Cotsford-lane, . T. Herron; lock-up shop, Sixth-street, . Cockburn.

E.—The Town Clerk has written to the out the proposals with regard to the r at Seaside, and asking for sanction to nole of the present branch library site se of baths, and the Board is com- ith the M.H. on the matter.—A com- eal with a proposal to negotiate for the the Devonshire Park baths.—Plans ic pavilion, Eastbourne pier, for Mr. m; bungalow, Green-street, for Messrs. Sons; houses, Woodgate-road, for Mr. house, Baslow-road, for Mr. H. Strange; t. Phillips-avenue, for Mr. C. F. Benz; King's-drive, for Mr. P. D. Stoneham; x-road, for Mr. P. D. Stoneham.

—Warrants granted by Dean of Guild Cant, house at Bonaly-road, Colinton; way shelter at St. John's-road, Corstor- ray sheds at Damhead-road, Gorgie; ay and another, double bungalow at , Corstorphine; J. Robertson, bunga- one Field, Braid-road; D. J. Thomson to take down existing building at St. , and erect wine store; Robert Wallace, Inchview-terrace, Portobello-road.

A new Catholic church, with presbytery, n a site comprising 5 acres, bounded by Tilford roads. About £10,000 is the of the undertaking. It is intended ads of the new church shall make an space.

—The M.H. representative has held a into the proposal of the Coldffranc P.C. 500 to lay out the Skewen recreation M.H. has conducted an inquiry into the e Neath R.D.C. to expend £6,608 on tion to serve the Tonna, Blaenrhondda ver districts.

The Corporation Health Committee has widening of the roadway at Robroyston estimated cost of £3,000.—The M.T. has lay-out of a bridge across the River yhill-road, and the Master of Works ected to obtain designs and offers for a bridge of reinforced concrete.—The to acquire the property necessary for nt of Great Eastern-road, which will housing scheme for displaced tenants. irector has been authorised to proceed for the erection of experimental houses glands, Govan.—Subsidy house plans houses, Kelvingdale-road, for Messrs. & Co., Ltd.; 10 houses, Park-road, Mr. Thomas Baird, 134, Bath-road.

Works for the relief of unemployment, cost of £47,373, have been adopted by ment Committee, and the Town Clerk cted to apply to the Unemployment tee for the necessary sanction. The are as follows: Shibden Hall Estate. mprovement.—Causeway Foot to the he Denholme U.D.C. Widening of o-extensive with Ashfield, Newland- r sewerage of the Norton Tower g of gas main in new street between nd Hopwood-lane. Laying of gas ces for development of Willow Field

The Parks Committee of the Cor- greed to sanction the placing of the orial in the Queen's Park.

TGH.—The B.G. propose to carry out a tions at the women's department of the ommodation is to be made for 30 addi- improved accommodation for nurses. eing made to the M.H. for sanction to 3,250 to carry out the work.

Efforts are being made by the ation to raise funds for the building

s have been prepared for erection of anteen at the Health Cocoa Works of rne & Co. Tenders for the work are the architects, Messrs. Kitson, Parish eds. A Baptist chapel is to be erected . Headingley. The plans have been ssrs. Stocks & Jones, architects, of rs are now being invited. A start is ade with the erection of banking -row, for the Bank of Liverpool and The contract has been let by the . Kitson, Parish & Ledgard, of Leeds. .—By improvement schemes for the and other areas in the eastern part ision will have to be made for the persons who are now living in houses or occupation or in premises required n of the projects. The Corporation ng the necessity for providing alter- ation. No site for this purpose can City, but the City Engineer, having sites, has in view one within three y on which balcony-type tenement ing about 420 rooms in all, can be ccommodation to about 600 people st of £95,000. These would produce me of £2,252. The Corporation are mit this scheme to the Ministry of provision will have to be made for 98 other persons who will be displaced ison-street scheme materialises. A atter will be arrived at when the emble after the vacation.

GREEN).—At a cost of £20,000 a ol is to be built at Wood Green, N.

LYTHAM ST. ANNES.—The houses in course of erection in the borough total 472; permission is being sought for the borrowing of £11,650 for private street works. If the M.H. permission is given for the work to be proceeded with, application is to be made for £14,000 to lay out a portion of the new cemetery in Lytham Hall Park.—A verandah is to be constructed over the main entrance to the Lowther Pavilion at Lytham. A scheme is being prepared for the laying-out of the recreation ground at Park-road. The widening of St. Annes-road West is shortly to be commenced, and will include the laying-out of ornamental gardens on each side of the road. The L.M. & S.R. Co. are to be asked to consider the advisability of widening their bridge over North-crescent, in conjunction with the completed scheme for widening the roadway from the bridge approach in St. Annes-road East to Clifton-drive.

MAIDSTONE.—The R.D.C. has granted the following subsidies: house, Marden, for Mr. J. Collins; pair of semi-detached cottages, Green-lane, Boughton Monchelsea, for Mr. G. Hazlewood.—Plans approved: Five detached houses near the Walnut Tree Inn, Loose, for Mr. T. S. Bowles; house in Clapper-lane, Staplehurst, for Miss Easton: block of three cottages at Barn-hill, Hunton, for the Marquis of Ormonde.

MERIONETH.—The County Surveyor has been asked to prepare schemes for the improvement of Pandyrodyn Bridge, Onwydd Bridge, and Bontnewydd Bridge, Festiniog.

MERTHYR TYDFIL.—The T.C. has decided to purchase a housing site at Gellifaelog, at a cost of £110 per acre. —The Council's architect is reporting on a housing site of 7 acres, at Troedyrhiw, suitable for the erection of 72 houses.—The M.O.H. has reported on the need for the erection of a maternity home.—The B.S. has prepared a scheme for widening and improving the Rocky-road, Gellifaelog, at an estimated cost of £5,000.—The Pontyrhun Bridge at Troedyrhiw is to be widened.—A church hall is to be erected at the rear of Quar Church. It is to be constructed with timbered framing, with asbestos sheet lining, upon masonry foundations.—The B.S. has prepared plans for a garage for 10 vehicles on the site of the old canal at an estimated cost of £3,800.—The Coffee Tavern field is to be laid out as a recreation ground. In connection with the proposed central library, Mr. E. W. G. Richards, the architect, has submitted plans for a building estimated to cost £10,000, and has been asked to prepare other plans for a one-story building with provision for the future addition of a first floor.

MONKSEATON.—Whitley and Monkseaton U.D.C. has decided, in conjunction with the Tynemouth T.C., to construct a sewer at a cost of £9,000 on the borough boundary.—Plans have been passed for widening the West-road, at a cost of £11,650.—Plans passed: Bungalow, Grange Park, Mrs. S. Wanless; four houses, Ivanhoe, for Messrs. Gofton Bros.; house, Bygate-street, for Messrs. R. & A. Tait; house, Davison-avenue, for Mr. R. Woodman; five houses, Briar-avenue, for Mr. S. Harris; eight houses, Earsdon-road, for Mr. J. Hogg; four houses, Abbotsford Park, for Mr. A. L. Hastings; house, Grange Park, for Mr. J. Maughan; house, Frankland Mount, for Mr. H. Teasdale.

MONMOUTHSHIRE.—The Bargoed District Local Welfare Committee has received a grant of £1,500 for the layout of Aberbargold recreation ground.

NARBETH.—The Council hasbeen informed that a grant of 75 per cent. of cost will be made by the M.T. of the £30,000 to be expended by the Council on improving Pantlogrig-Robertawathen road.

NEWRY.—The U.D.C. proposes to appropriate the live pig market at Needham-street, and erect eight workers' dwellings on the site, at a cost of £540 each.

NEWTOWNARDS.—The B.G. has adopted a scheme for the transformation of the present hospital and old workhouse buildings into a fully-equipped hospital, at an estimated cost of £25,180.

NORTHAMPTON.—Plans passed by T.C.: Two houses, Birchfield-road, E., for C. H. Rainbow; house, Linden-road, for S. G. Sale & Co.—The playground of the County School for Boys is to be levelled at a cost of £625.

NORTH WALES.—A conference of authorities of North Wales has decided on the preparation of a scheme for joint accommodation for all the mental deficients of the North Wales counties.

OSWALDTWISTLE.—The plans have been approved for two bungalows in High-street, Broadfield, for Messrs. Crankshaw & Bowen. A sub-committee has been appointed by the Parks Committee to consider provision of a playing ground in the park for children.

OUNDLE.—The U.D.C. has passed plans for four houses in Gunter-road, for Mr. A. Tebbutt.

PENARTH.—The Penarth branch of the G.W.R. Employees' Welfare and Educational Union proposes to erect a clubhouse at Penarth.

PLYMOUTH.—The development of the Randwick Park Estate, which was recently purchased for building purposes, has begun. The area of the estate is 36 acres, and upon it is to be erected 10 houses to each acre, which will be built and sold on a rent purchase plan extending over periods of 20 and 30 years. An estate at Swanvale, Falmouth, is being developed on similar lines.

PONTYGLYN.—Merioneth County Surveyor has been instructed to submit an estimate for the repair of Pontyglyn Bridge.

RAWTENSTALL.—The General Purposes Committee of the T.C. recommend the erection of a memorial hall as the town's war memorial.

REDBOURN.—The P.C. has asked the St. Albans R.D.C. to build at least 20 houses in the parish.

ROCHDALE.—Mr. H. H. Clough, Architect to the B.G., has submitted to the Works Committee a plan for the lay-out of the grounds in front of the Nurses' Home; the estimated cost is £750.

ROMFORD.—The R.D.C. has resolved to apply to the Ministry of Health for sanction to borrow £15,000 for twenty years for the purposes of Section 2 of the Housing Act, 1923.

SADDLEWORTH.—The Housing Committee have decided to erect four houses at Delph of stone construction, estimated to cost £514 per house.

SKEGNESS.—It is proposed to extend the existing convalescent homes at Skegness, at a cost of approximately £35,000. Plans have been drawn up by Messrs. J. Howitt & Sons, architects.

SPENBOROUGH.—Plans passed: Petrol-filling station at Bradford-road, Moorend, Cleckheaton, for the Cleckheaton Engineering and Motor Co., Ltd.; two houses in Church-road, Roberttown, Liversedge; house in Huddersfield-road, Liversedge. The M.H. has sanctioned the borrowing of £27,619 for the construction of a proposed new road from centre of Cleckheaton to Hightown.

STALYBRIDGE.—A start is to be made at once by the Stalybridge, Hyde, Mossley and Dukinfield Tramways and Electricity Board with the erection of a new generating station on the site of the old Hartshead printworks. The cost will be approximately £180,000.

STRETFORD.—The Ministry of Health has sanctioned the borrowing by the U.D.C. of £5,350, for the reconstruction of Stretford-road.—Plans passed: Workshop, Westinghouse-road, for Southern Oil Co.; house, Chester-road, for Dr. E. M. Greaves.

UXBRIDGE.—Plans passed by R.D.C.: House, Harefield Place Estate, for the Uxbridge & Harefield Builders, Ltd.; bungalow, Hillingdon Village Estate, for Mr. E. D. Rump; house, Swakeley's Estate, for Mr. A. E. Curnow; house, Uxbridge Common, for Miss Stanniford.

WEALDSTONE.—The sewerage works are to be extended, at a cost of £790.

WEST BRADFORD.—The Bowland R.C. have decided to proceed with the road improvement on the Clitheroe main road, estimated to cost about £1,500.

FIRES.

LIVERPOOL.—Damage estimated at £20,000 was done by a fire which occurred recently on the premises of Messrs. J. Blake & Co., Ltd., motor engineers, South Hunter-street, Liverpool.

ST. ALBANS.—An outbreak of fire recently, in a block of buildings forming the granary of Messrs. E. Dixon & Sons, caused damage estimated at many thousands of pounds.

Tenders.

Messrs. Mullen & Lumsden, Ltd., inform us that their tenders for the erection of two verandahs at the Reception Hospital, and provision of additional accommodation for nurses at the Hospital, at £1,333, and £5,378, respectively, have been accepted by the Surrey C.C., and not as given in our issue of last week.

Building in Australia.

The annual report from the Brisbane Corporation records the adoption of what is called the Million Loan Scheme for a variety of important works, including the following:—Widening Adelaide-street, £370,000; widening Ann-street, £93,000; new thoroughfare from Wickham-street, £150,000; central ferry across river, £30,000; swimming baths, £20,000; new quarries and plant, £25,000; municipal warehouse block, £48,000; new buildings rear of town hall site, £37,000.

The completion is reported from Brisbane of the first section—foundation, granite base, and retaining walls—of the new City Hall and Municipal Offices. The contractor was Mr. Arthur Midson, whose tender amounted to £119,870.

The Corporation has just made a contract for the superstructure with Mr. D. D. Carrick, at £506,375.

The report from Christchurch states the design of Messrs. Greenstreet & Anderson for the Municipal Offices was decided upon and the tenders of Mr. W. Williamson for £40,987 accepted. For the war memorial—a Bridge of Remembrance across the River Avon at Cashel street—Messrs. Gummer & Prouse, of Auckland, were the successful designers, and the tender of Messrs. D. Scott & Son, at £16,078, was accepted.

TO PUBLIC HOUSING AUTHORITIES, ARCHITECTS, BUILDERS, WATER ENGINEERS and others interested. An important Treatise on the use of Copper and Brass in Domestic Water Services has been published by the Copper and Brass Extended Uses Council, and copies may be had from the Secretary, Graham Squiers, F.C.A., King's Court Colmore Row, Birmingham.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquir

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fjettons, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose ..	9 15 0
Do. Bullnose ..	3 8 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire brick:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends ..	32 10 0
Headers.....	22 10 0	Two Sides and one End	33 10 0
Quoins. Bull-nose and 4½ in. Flats	29 10 0	Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand.....	15 6	" "
¾ in. Shingle for Ferro-Concrete	14 0	" "
½ in. "	15 0	" "
¾ in. Broken Brick."	10 6	" "
Pan Breeze	7 6	" "

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Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

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Ferrocrete per ton extra on above.....	0 10 0
Super Cement	4 8 0
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Keene's Cement, White.....	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime.....	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.....	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.....	2 11½
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.....	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.....	4 5
White basebed, 3d. per ft. cube extra.	

NOTE.—½d. ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

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Small random blocks, up to 10 ft. cube. Per ft. cube		7/-
Random blocks from 10 ft. and over	"	17/-
Sawn two sides	"	27/-
Sawn three or four sides	"	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

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6 in. sawn two sides landings to sizes (under 30 ft. super.).....Per Ft. Super	5 6
6 in. rubbed two sides, ditto..... "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... "	1 6½
1¼ in. to 2 in. ditto, ditto ..... "	1 4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks.....Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.).....Per Ft. Super	5 1½
6 in. rubbed two sides ditto ..... "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags..Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	33/6
¾	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches	per sq.
1	26/6	¾	17/6
1¼	33/6	¾	21/-
1½	38/-	1	26/-

MATCHINGS (BEST).

BATTENS

Inches	s. d. per 100 ft.
¾ × 2	2 6

SAWN LATHS.

Per bundle				0	2	8
Dry Wainscot Oak, per ft. super, as inch	0	2	0 to	0	2	6
¾ in. do. do.	0	1	6 to	0	2	0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9 to	0	2	6
Cuba Mahogany	0	3	0 to	0	3	6
Teak (Rangoon, Moulmein or Java), per cube	0	14	0 to		—	
American Whitewood planks, per ft. cube ..	0	12	0 to	0	14	0
Best Scotch Glue, per cwt.	4	10	0 to		—	
Liquid Glue, per cwt. ..	4	7	0 to	5	10	0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station.

Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12.....	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9.....	18 12 6
22 by 11.....	31 5 0	16 by 10	17 12 6
20 by 12.....	29 15 0	16 by 8	13 15 0
20 by 10.....	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
{ Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in...	13 10 0
⅜ in.	14 10 0	⅝ in. to 2¼ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up.	Fittings. ½"to¾" inclusive.	Flanges ¾"&up.	Flanges ½"to¾" inclusive
Black Gas....	50 %	50 %	47½ %	60 %	57½ %
Blue Water ..	45 %	45 %	42½ %	55 %	52½ %
Red Steam ..	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas ..	35 %	40 %	37½ %	50 %	47½ %
" Water.	28½ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.....	1/1¼	11d.	3¼d.
3½ in.....	1/2¼	1/0¼	3¼d.
4 in.....	1/4	1/1¼	3¼d.
4½ in.....	1/5½	1/4	4d.
5 in.....	1/7¼	1/5½	5d.
O.G. GUTTERS.			
3 in.....	1/6½	1/2¾	3¼d.
3½ in.....	1/6½	1/2½	3¼d.
4 in.....	1/7¾	1/4	3¼d.
4½ in.....	1/9½	1/6½	4d.
5 in.....	2/1¼	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1¾	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5¾
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	8 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars.....	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire " Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 10 0	..	13 10 0

METALS (*Continued*).

	£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0
Hoop iron, basis price	16 10 0
Galvanised	31 0 0
Soft Steel Sheets, Black— Ordinary sizes to 20 g...	15 0 0
" " " 24 g...	16 0 0
" " " 26 g...	18 0 0
Sheets Flat Best Soft Steel, C.R. & C.A. q Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0
Best Soft Steel Sheets, 26 g.	26 0 0
Cut Nails, 3in. to 6 in.	20 10 0

(under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suita plete houses, including all fittings, coats, and delivery to job, average pri to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe.....	

NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. cwt., 1s. 6d. per cwt. extra. Cut to sizes,

Old lead, ex London area, at Mills ..... per ton	30 0 0
Do., ex country, carriage forward ..... per ton	31 0 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BI IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
29/-	45/-	76/-	153/-	246/-

NEW RIVER PATTERN SCREW DOWN STO UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
41/6	62/-	92/-	174/-	300/-

NEW RIVER PATTERN SCREW DOWN MAI

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREW

½ in.	¾ in.	1 in.	1½ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 i
10/-	12/-	20/-	24/-	31/-

NEW RIVER PATTERN CROYDON BALL V

½ in.	¾ in.	1 in.	1½ in.	2
35/-	56/-	98/-	162/-	2

DRAWN LEAD P. & S. TRAPS WITH BR SCREW.

	1¼ in.	1½ in.	2 in.
8 lbs. P. traps ..	33/-	41/-	56/-
8 lbs. S. traps ..	35/-	45/-	66/-

COPPER—	£ s. d.
Strong Sheet ....per lb.	0 2 3
Thin " .... "	0 2 4
Copper nails .... "	0 2 3
Copper wire .... "	0 2 4
TIN—English Ingots "	0 2 4
SOLDER—Plumbers' "	0 1 2
Tinmen's ..... "	0 1 4
Blowpipe ..... "	0 1 5

PAINTS, &c.

Raw Linseed Oil, in pipes .....per gall	
" " " in barrels .... "	
" " " in drums .... "	
Boiled " " in barrels .... "	
" " " in drums .... "	
Turpentine in barrels ..... "	
" in drums (10 gall.) .. "	
Genuine Ground English White Lead, per (In not less than 5 cwt. casks.)	

GENUINE WHITE LEAD PAINT—

"Father Thames,"	"Nine Elr
"Park,"	"Supremus," "St. Pau
"Spedol"	and other best brands

14 lb. tins) not less than 5 cwt. lots per ton deliv

Red Lead, Dry (packages extra)....per	
Best Linseed Oil Putty.....per	
Filocol .....per	
Size. XD Quality.....	

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* The information given on this page h compiled for THE BUILDER and is copyri this list is to give, as far as possible, t of materials, not necessarily the highest o and quantity obviously affect prices—a f be remembered by those who make use of

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Aberdeen.—HOUSES.—The Plans Committee has passed plans for a villa in Queen's-road, estimated to cost £1,200, and a bungalow in Buros-road, to cost £800.

Dundee.—HOUSES.—The Works Committee has passed plans for property to be erected in the Murraygate, for Messrs. Woolworth.

Greenock.—BUNGALOWS—The Dean of Guild Court has passed plans for three bungalows at Inverkip-road.

Elderslie.—BUNGALOW.—The Buildings Committee of the Renfrewshire District Committee has passed plans for a bungalow at Glenpatrick-road, Elderslie, for Mr. R. Snodgrass.

Renfrew.—HOUSES.—The Board of Health has approved of the lay-out and plans for 60 houses to be built at Moorpark.

Kirkintilloch.—HOUSES.—The Dean of Guild Court has passed plans for the first instalment of the new housing scheme. The plans provide for five tenements of four houses each, eight of the houses being of two apartments and twelve of three apartments, with scullery and bathroom. The site is in Eastside and Kilsyth-road, and a new road is being formed connecting Kilsyth-road and Eastside.

Portsoy.—HOSPITAL EXTENSION.—The Campbell Hospital Board at Portsoy has decided to proceed with the extension of the hospital. The cost is estimated at £1,600.

Falkirk.—SCHOOL AND MILL.—The Property Committee of Stirlingshire Education Authority has made inquiries with regard to a site in Falkirk for a technical school.—The Dean of Guild Court has passed plans for a new grinding mill at the west side of Falkirk Foundry, Grahamston, for the Falkirk Iron Co. The cost is estimated at £3,500.

Glasgow.—VARIOUS.—The Dean of Guild Court has passed the following plans: The Glasgow Corporation, public baths and wash-houses, in Dobbie's Loan, at Wood-street, at an estimated cost of £21,627; shops and houses, at 3, Ell-road, Crosslee-street, Paisley-road, and Barlogan-avenue, at an estimated cost of £47,302; the Governors of the Victoria Infirmary, pavilion, operating theatres, &c., at hospital at Langside-road, at an estimated cost of £49,601; James Templeton & Co., carpet manufacturers, Greenhead, welfare block at factory, at an estimated cost of £14,355; James Bennie & Sons, Ltd., engineers, Govan, reconstruction of engineering works at Drumoyne-road; Smith (Glasgow), Ltd., alterations to Grosvenor Restaurant, Gordon-street; Adam Gibson, house and offices, at Helensburgh-drive, Jordanhill; and Dr. W. S. Aitken, house at junction of Tinto-road, and Kilmarnock-road, Newlands.

Perth.—HOUSES.—The T.C. has decided to borrow £30,500 for the erection of houses at Dunkeld-road, and the purchase of houses at Thimblerow to be demolished in connection with the improvement of insanitary areas.

CONTRACTS OPEN.

NO DATE.—**Rutherglen.**—PAVILION, &C.—Bowling green and pavilion at Farme, Rutherglen, for Miners' Welfare scheme, for which tenders will be issued shortly. Applications to be sent to Messrs. J. H. Allen & Sons, surveyors, 224, St. Vincent-street, Glasgow.

HOUSING

Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to July 31, 1924:—

	Completed	Under Construction.
1919 Act	22,480	2,830
Private subsidy scheme	2,324	—
Slum clearance schemes	507	1,640
1923 Act	487	4,113
	25,798	8,583

Of the total number of houses completed and under construction under the 1923 Act, 1,689 are by the local authorities and 2,911 by private enterprise.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Masons' Bricklayers' Plasterers' Labourers.
Aberdeen	1/7½	1/8½	1/7½	1/8	1/7½	1/7½	1/4½	1/0½
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/1½ to 1/2½
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/-½
Dundee	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8	1/7½	1/7½	1/6½	1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8	1/8	1/7	1/6½	1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½
Glasgow	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/4½	—	1/4	1/4	1/4½	1/4	1/4	1/- to 1/-
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/3½
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½

* The information given in this table is copyright. This table does not include all the alterations due to the agreement.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	1	1
Setting ordinary register grates and stoves	each	1	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"
Deal wrot moulded and rebated	per foot cub	
Plain deal jamb linings framed	per ft. sup.	1/8
Deal shelves and bearers	"	1/5
Add if cross tongued	"	2d.

STAIRCASES.

	1"	1¼"	1½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers	
Deal balusters, 1 in. × 1¼ in.	per ft. ru
Mahogany handrail; average 3 in. × 3 in.	"
Add if ramped	"
Add if wreathed	

FIXING ONLY IRONMONGERY (INCLUDING SCRE

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinge letting in to floo	
Casement stays	1/2		
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	pe
Plain compound girders	
Do. stanchions	
In roof work	

RAIN-WATER GOODS.

		3"	4"
Half-round plain rebated joints	ft. run	1/11	2/4½
Ogee Do. Do.	"	2/4½	3/1
Rain-water pipes with ears	"	2/9	3/7
Extra for shoes and bends	each	4/4	5/11
Do. stopped ends	"	1/11	2/4½
Do. nozzles for inlets	"	2/2	2/7

PLUMBER.

Milled lead and laying in flashings and gutters					per c
Do. Do. in flats					
Extra labour and solder in coated cesspools					eac
Welt joint					per ft.
Soldered seam					"
Copper nailing					"

		½"	¾"	1"	1½"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5
Do. service	"	1/8	2/2	2/7	3/10
Do. soil	"				
Bends in lead pipe	each				
Soldered stop ends	"	1/2	1/8	2/1	2/10
Red lead joints	"	11d.	1/-	1/3	1/11
Wiped soldered joints	"	2/10	3/6	4/-	4/11
Lead traps and cleaning screws	"				14/7
Bib cocks and joints	"	6/4	9/7	15/4	41/-
Stop cocks and joints	"	15/4	17/2	25/8	64/-

PLASTERER.

Render, float and set in lime and hair	per yard
Do. Do. Sirapite	"
Do. Do. Keen's	"
Add sawn lathing	"
Add metal lathing	"
Portland cement screed	"
Do. plain face	"
Mouldings in plaster	per 1 gi
One-and-a-half granolithic pavings	per yard

GLAZIER.

21 oz. sheet plain	per foo
26 oz. Do.	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
¼ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per yar
Knotting and priming	"
Plain painting 1 coat	"
Do. 2 coats	"
Do. 3 coats	"
Do. 4 coats	"
Graining	"
Varnishing twice	"
Sizing	"
Flatting	"
Enamel	"
Wax polishing	per foo
French polishing	"
Preparing for and hanging paper	per pie

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The

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PATENTS

ICATIONS PUBLISHED.*

L. Sleigh and A. S. Cheston: ing windows of vehicles.
B. Atkinson: Building-

Hastings: Decorated metal

W. White: Heating apparatus.
A. Ure: Fire-bars for kitchen like.
Dubar: Brick kilns.
Whiteley: Lettering of granite, and other memorials.
Tolmer: Preservation of wood.
. des Moteurs Salmson (Systeme Multiple woodworking machine.
Minache: Building material manufacturing same.
C. L. G. Fleischel and E. L. F. M. ving-machines.
Burton (W. H. Glover): Bitu- or similar substances or com-

O. Rivers: Door locks.
Hetherington: Joints for pipes

ville, Dundas & Whitson (D. uchanan): Manufacture centri- and columns.
Edwards: Furniture for sitting

H. Peters: Concrete mixing and ines.
Flavell: Castors for furniture.
Horton: Flushing tanks or er-closets.
C. R. Marks (Roth Akt.-Ges. und Maschinenfabriken, vorm. er Maschinenfabrik und Eisen- Ges. und Eisengiesserei und J. Roth Akt.-Ges.): Process for the preparation of clay for

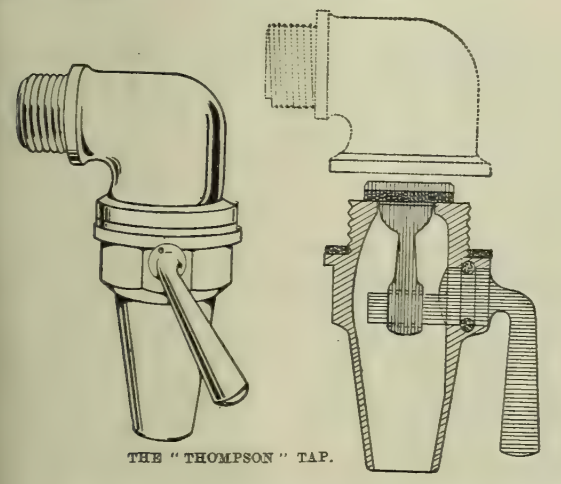
lications are now in the stage in to the grant of Patents upon them

215,216.—A. E. Alexander (West Gravitiser Corporation): Tilting tables.
215,218.—F. Bodson: Construction of buildings having cavity walls.
215,222.—G. Shimadzu: Paint.
215,235.—E. Alberry: Locks.
214,693.—L. D. J. Cornelissen: Domestic stoves or boilers.
214,699.—L. A. Holden: Process for the removal of the brown colouration in china clays.
214,773.—S. Kaye: Machines for erecting walls of brick.
214,779.—Babcock & Wilcox, Ltd. (Babcock & Wilcox, Co.): Cement kiln systems.
214,853.—H. Hounsell: Wood-planing and like machinery
214,854.—W. H. Tonks and W. Sparks: Locks.
214,868.—W. C. Lobb: Latch for doors.
214,890.—W. H. Parker: Chimney and ventilating-shaft tops.
214,902.—W. S. Peggs: Reinforcement for concrete.
214,910.—A. C. Scott: Wrappers for blasting charges.
214,924.—Soc. J. Cockerill and E. Ternstrom: Mechanical fuses for shells.
214,791.—C. Terry: Machines for moulding tiles.

NEW INVENTION

A New Tap.

In view of the Water Board's dictum concerning the use of economical water-taps, particular interest attaches to the "Thompson" patent water-saving tap, which was invented before the war, and is only now being put on the market. This bib-cock tap is composed of only three metal parts, with a special fibre washer and keep. Its construction is simple, and it is claimed to be drip-proof and fool-proof. The action is such that the water is cut off gradually, thus avoiding "hammering." A half-turn of the handle gives a full flow. Specimens may be seen at Captain Thompson's agents, Messrs. James Blackford & Sons, of 90, Cannon-street, London, E.C.4.



THE "THOMPSON" TAP.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
*** Denotes *accepted*. † Denotes *provisionally accepted*.**
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

BELFAST.—For the reconstruction of the Ballygomarten-road tramways, for the T.C.:—
*McKee & Son £187,949 15 4

BIRKENHEAD.—For resurfacing Greenway-road, for the T.C.:—
*Penmaenmawr & Trinidad Lake Asphalte Co., 9s. 3d. per yd.

BIRKENHEAD.—For making-up Woodsorrel-road, for the T.C.:—
*C. L. Warren Wallasey £1,165 9 10

BIRKENHEAD.—For making-up Speedwell-road, for the T.C.:—
*C. L. Warren..... £1,041 8 8

BIRKENHEAD.—For the erection of garage and store shed, for the T.C.:—
*J. Davies £11,645

BIRKENHEAD.—For extension of sewer in Bebington-road, for the T.C.:—
*C. L. Warren, Wallasey £957 19 6

BIRKENHEAD.—For additions to pumping station, for the T.C.:—
*J. Davies £2,220

BRADFORD.—For painting and cleaning of homes, for the B.G.:—
*H. Livesley £159 15

BRADFORD.—For painting and cleaning at Daisy Hill institutions, for the B.G.:—
*Robert Ashworth £334 19 11

BRAINTREE.—For erection of six type "A" houses, Cressing, for the R.D.C. Mr. E. O. Wheeler, surveyor, 71, Rayne-road, Braintree:—

Belcham & Sons, Kelvedon	£2,460	0	0
Brown & Son, Braintree	2,400	0	0
E. W. Valentine, Braintree	2,391	12	0
Key & Harrington, Braintree ..	2,370	0	0
A. Osborne, Braintree	2,319	15	6
Blade-Wenden, Witham	2,310	0	0
N. W. Taylor, Bocking	2,281	0	0
*P. C. Sayer, Great Totham	2,250	0	0

COLNE.—For bricklayers' and masons' work in connection with the extension of the filter house at Laneshaw Reservoir, for the T.C.:—
*Cross & Lawson, Colne.

COLNE.—For the erection of the proposed extensions at Bank House, for the T.C.:—
*L. Jordan, Colne £346

DOUGLAS, I.O.M.—Erection of 10 parlour houses and 10 non-parlour houses, at same prices as the tender for a previous 20 houses:—
*Creer Bros.

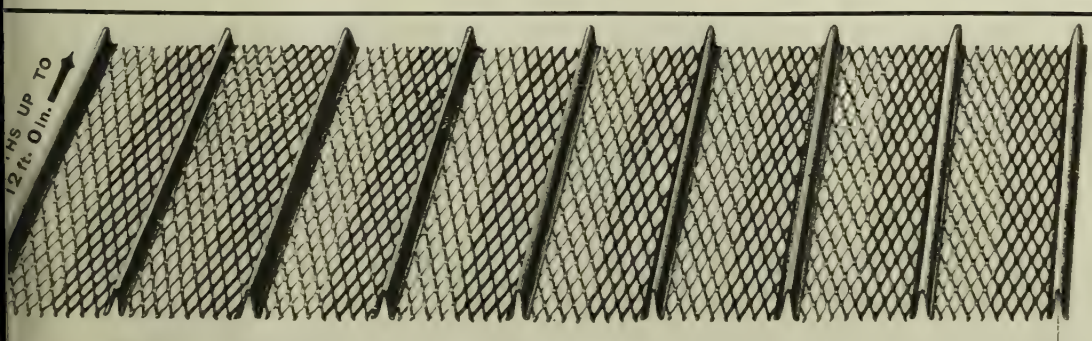
DUBLIN.—For painting work at Thomas-street Fire Station, and the Weights and Measures Office, for the T.C. The Supplies Dept., Exchange Buildings Lord Edward-street:—
Weights and Measures Office—
*A. Panton Watkinson..... £146 8 2
Thomas-street Fire Station—
*C. Jones & Sons..... 175 0 0

EASTBOURNE.—Extension to maternity home, for T.C.:—
*James Bodle, Ltd..... £2,270

EASTBOURNE.—Alteration to lodge at Sanatorium, for T.C.:—
*Miller & Selmes, Ltd..... £560

FORDEN.—For painting the Institute, for the Guardians. Mr. C. S. Pryce, Town Clerk, Montgomery:—
*B. Hamer, Welshpool £128

LEEDS.—For the erection of banking premises in Park-row, Leeds, for the Bank of Liverpool & Martin's, Ltd. Messrs. Kitson, Parish & Ledgard, architects, Leeds:—
*Armitage & Hodgson, Ltd., Leeds.



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LEEDS.—For the providing and laying of 2 in. granited asphalte paving upon a prepared concrete foundation, in Swinegate and Fish-street, for the Highways Committee of the Corporation. Mr. E. W. Cockerlyne, Engineer:—

*Tunstall's Seyssel & Limmer Rock Asphalte Co., Ltd., Leeds.



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CARPENTERS RD. STRATFORD LONDON E.15
Telephone: EAST 3771 (5 lines)
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LIVERPOOL.—For painting at Westminster-road police and fire stations, for the T.C.:—

*J. H. Taylor £241 4 6

LIVERPOOL.—For alterations and decorations at Drury Buildings, for the T.C.:—

*Clayton & Dorsman £440

LONDON.—For repairs, &c., at the infirm women's ward in Fulham-road, for the Guardians of the City of Westminster. Mr. W. J. Lickley, Guardians' Offices, Princes-row, Buckingham Palace-road, S.W.1:—

*G. Chappelow & Son, London.. £262 18 3

MAIDSTONE.—For the erection of houses, for the T.C.:—

R. C. Barney—
15 houses, concrete block construction £5,211 0
Do. brick construction 5,408 12
W. T. Burrows—
29 houses, concrete block construction 10,570 0
Do. brick construction .. 10,895 0
Do. in situ concrete 10,966 0
(Referred to Housing Committee.)

MUTFORD AND LOTHINGLAND.—For electric lighting installation at Workhouse and Infirmary, for the Board of Guardians:—

*C. C. Pudney & Co. £915 10 2

PAIGNTON.—For electrical installation at Isolation Hospital, for the U.D.C.:—

*E. M. Fawcett £249

POPHAM.—For erection of a bridge at Popham, near Newtown Bridge, for the Barnstaple and South Molton R.D.C.'s. Mr. W. S. Gardner, surveyor, Chittlehampton:—

C. W. Rice, West Buckland £297 0
*J. Holcombe & Sons, South Molton.. 228 13

PORTSMOUTH.—For painting work for the Royal Hospital Management Committee:—

*— Bevis £405 12 11

SHEFFIELD.—For the erection of 198 houses on the Manor Estate, for the T.C.:—

*W. Marlow & Sons £88,744

SHEFFIELD.—For erection of automatic telephone exchange at Sharrow, for the Commissioners of H.M.O.W., London:—

*Thos. Wilkinson & Son (Builders), Ltd., Sheffield.

STRETFORD.—For the erection of 50 houses, for the U.D.C.:—

*Grimshaw & Thomas, Ltd.—
30 houses Type "A" at £433 each £12,990
12 " " "Bn" at £445 " 5,340
8 " " "Bs" at £450 " 3,600
£21,930

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

I.—No. 4258. SEPTEMBER 12, 1924.

ADVERTISEMENT AND PROPAGANDA

THE architect does not advertise. This is a bald statement, but true. It implies much that is brave and dignified, but a danger lies in the righteousness of the Sadducee; he, anyhow, is not like the Pharisee—or one or two other architects—and he beats his In all professions, not only in architecture, if we are we must admit that there is a great deal of insincerity d behind noble sentiments, and that, if we are going to ge the spirit that rightly opposes personal glorification, t first free ourselves from cant. No central body and lation of rules as to etiquette can prevent the born ertiser from having his fling. The more rules and nces are framed, the more isolated and supreme his The booster has got to be accepted, but because we im so much let us not make the mistake of forestalling criticism on ourselves by beating our breasts too hard; he architect must not advertise, architecture needs all paganda it can get. There is a vast difference between ement and propaganda, and unless we boldly recognise nction, and encourage our authorities to speak out and p, a great opportunity will be wasted.

a curious paradox that, while architecture is increasingly l in the cultivated world, the architect has never been loyed. If all the qualified architects were to announce l strike, nobody, including the cultivated world, would air. "After all," even the latter would remark of a illusion, "Christopher Wren was not a qualified ." How then can the profession make good? Some- as got to show that it is indispensable. It is true that alues are being recognised, but it is also true that at of stringency cheapness has become a religion, and un- architect can convince people that his employment ite economy, builder, local authority, factory owner, l private client are not going to use him as he should At the moment it is idle to pretend that the majority possible patrons believe that it pays to get qualified the larger private client hardly exists, and with the of a few prosperous firms and public bodies there are who are prepared to pay for what is deemed to be a." This is an age of cheap literature and a generous in science and discovery. Architects must not be to go into the market-place and make people interested, e architects themselves, but in their wares. Archæ- historical architecture play a valuable rôle in culture, rbed as a hobby, they tend to defeat an interest work by placing architecture among the believed lost encouraging an affectation in the antique. The young women of to-day are the public of to-morrow, and d a splendid field for architectural propaganda. They ly read rubbish, as anyone familiar with bookstall can prove. A few might glance at a well-illustrated scribing a manor house and its history in Shropshire, ndred would respond to a vigorous article, such as e our Suburbs Awful?" "Wembley and its Ferro- " "Shadows in Building," "The Complexion of Brick While it might be argued that none of these points that employing an architect is an economy, they must niliarise ordinary people with the everyday significance ture, and to make them realise the nature of the erec- hich they themselves live. Only thus can the way be or the future and for the creation of an appetite for gs.

ld be unfortunate if those architectural writers who l to the layman were discouraged, either by feeling people had been doing the same thing—for in this market the workers do not detract from each other, they only create a further demand—or, which is a more serious danger, by the suspicion that such publicity is regarded as personal advertisement. We all know that publicity may become an agent for personal advertisement, and we have agreed that the booster will use any means to exploit himself, but a signed popular article, for example, is no more advertisement than a book, or a drawing of a building in the Academy or in the Press. To advertise, in its strict sense, is to pay for publicity. To write on an architectural subject is as much a normal professional activity as to give an opinion on the re-decoration of a house. It would again be absurd if an article should escape stigma because it is written for an exclusive section of the Press, while one that is definitely directed to a wider public should run the risk of being frowned upon as vulgar, if not definitely unprofessional. Such self-conscious nervousness will not keep the calling unspotted, but it will encourage hypocrisy. Architecture needs its reformers and its propaganda, and those who are sincere must not be scared away. The public need to be informed and instructed if the art is to be advanced in public estimation, and who is better able to perform this service than the architect himself? His executed work as an architect, moreover, while it should have an educational value to the public who may see it, cannot make such a widespread appeal as it does when published. The profession as a whole has now more opportunities for social meetings and corporate activities than it had in the more individualistic past, and we may be sure that the opinion of their fellows will be the most wholesome corrective to those tempted to uplift themselves rather than to serve their calling.

The intention of professional etiquette is that the profession should stand high in the public estimation, and architects cannot too scrupulously avoid interfering, by means of etiquette or otherwise, with the freedom of the client. Any interference with the client's selection of an adviser smacks so strongly of the less desirable traits of trade unionism that it only serves to irritate the public with the profession generally. To take a practical example. If a man builds a house to Smith's design and then wishes to add to it but does not like Smith, or has no confidence in him, ought another architect, Brown, to refuse the commission? If he does, the one certainty is that the client will not be bullied into employing Smith. He will do the obvious thing and avoid architects altogether. A profession should rely less upon rigid rules of etiquette than upon a high sense of honour among its members. The strictest rules can be evaded by those who are prepared to behave dishonourably, but a conscientious sense of honour cannot be evaded.

A measure of professional etiquette, conducted on the right lines, is not only desirable but essential. But as we have seen, it contains the germs of red-tape—creatures that must be kept strictly under control. In one of his earlier books Sir Arthur Conan Doyle introduced an irresponsible but brilliant young doctor in partnership with a prosaic individual. When the prosaic man remonstrated with some of the actions of his wild friend, the other would observe that professional etiquette was devised with the sole object of keeping the work in the hands of the older men, and he would add that when *he* became a well-established elderly gentleman with an assured practice he would be the pillar of etiquette in its strictest form. The author, no doubt, did not intend the sentiments of his characters to be taken too literally, but the wild man's complaint was not sheer nonsense, and in these days of unification it may hold a message for us.

NOTES.

New Methods of Building.

No time has been lost by the Ministry of Health in taking action on its promise to inquire into the possibility of using alternative and new methods of construction in carrying out its housing programme, and a Committee (see p. 412) has now been set up to report on the subject. While it covers many interests, we would have liked to have seen on this Committee a representative or two of those architects and builders whose chief business is the erection of the smaller type of house at the lowest possible cost, for while the systems used on large housing schemes are generally known there must be many methods of building in materials other than brick which have been carefully worked out and used for the erection of one or two cottages that could be successfully applied to larger schemes. No doubt, however, the Committee will investigate the methods practised by the smaller builder, and it is also to be hoped that inquiries will be made as to what is being done abroad. Attention will no doubt be concentrated on concrete as the alternative material most in use, but it cannot be said that concrete blocks, involving the employment of the bricklayer, are the last word in concrete cottage construction. Poured concrete is extensively used in America for house construction, and in Holland a porous concrete is being used which is claimed to be cheaper and more satisfactory than the dense concrete, or combination of gravel concrete and breeze concrete, generally used here.

Labour and Housing.

We note that the Committee includes two representatives of the building trade operatives. This is as it should be, for it is essential that any new departure should have the support and hearty co-operation of all concerned, but it is to be hoped obstacles will not be put in the way of the introduction of new methods or new materials on account of the effect they may have on labour already in the industry. Only last month the Merthyr Town Council received a request from the local operatives to stop building concrete houses, because that method did not provide employment for bricklayers, while Mr. Curtis Green, A.R.A., recently gave an instance of a case where the insistence of the trade unions on employing bricklayers for laying concrete blocks had unnecessarily driven up the cost, and continued: "Good houses can be economically built of concrete blocks provided the unions agree to the employment of semi-skilled labour." Whatever new material may be recommended for building the houses there will be enough employment and to spare for a considerably larger body of men than those already in the industry, apart from the agreement between the Government and the industry guaranteeing a fifteen-year programme.



Northfield Church.



Doorway, Northfield Church.

London Traffic and the River.

Of the many proposals for relieving London's traffic congestion, the suggestion for a road bridge along the middle of the Thames from London Bridge to Westminster Bridge can hardly be thought to be the best. It is probable the idea would be ruled out on the ground of cost alone, for although there would be no expensive land purchases involved an enormous number of piers would be required to carry such a road, and in addition to the roadway itself there would be the added cost of steel or reinforced concrete girders spanning from pier to pier and parapet walls. And what of the river traffic? Surely it would be necessary to compensate wharf owners above London Bridge if it were no longer possible for anything but barges to ap their premises, to say nothing of and electricity works above West who now unload coal direct fro which voyage between their wor the coaling ports. From the point of view the result would b trous. The magnificent vistas fr present bridges would be utterly des and at a time when some effort i made to preserve the beauties river by a few men of sound practi artistic taste with an eye to the of the future.

An Alternative.

Many other points o one in considering proposal. For insta already have in the Embankment a broad thoroughfa used to its fullest capacity, runni by side with the suggested new th fare for half its length. And woul use such a road if it were ava Owing to the curvature of the ri tween London Bridge and West the distance as the crow flies acros London from London Bridge to minster Bridge is very considera than would be the case of a road fo the river, and a great deal of passing from east to west already the river at Tower or London travels *via* Southwark-street, St street, and York-road, and cros river again at Westminster. It be found cheaper to construct direct thoroughfare from the south Tower Bridge to the south end o minster, passing through propert is not of great value at present, a not only providing a route whic attract traffic because it was the s but also open up a large area London which now includes a cons amount of slum property.



Northfield Church. (See p.

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port.

A PARAGRAPH in a contemporary, by its American correspondent, suggests that there are other factors to be red besides road improvements. s: "There is perhaps no greater than the claim that added transcilities will relieve congestion in business district, when the very ons that have brought about the ion are allowed to continue withatement or restriction. The unconstruction of high buildings er congest any system of transon that can be devised and con-d." May it not be that the central London has now reached as great estion as it will ever experience, higher buildings are permitted? ly there is no room for more gs, and the tendency all the time manufacturing concerns to move the country and for office premises oach further and further into the nd and to the north and south of y. Before any drastic steps are e would at any rate like to see the f the London Traffic Act which into force next month, for omnin unrestricted numbers, running n half full other than at morning vening rush periods, are unly the chief cause of the traffic and the reduction of these vehicles mber more in proportion to what ssary might afford a greater relief generally anticipated.

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ent.

THIS week representatives of the British and American Portland cement industries are celebrating the centenary of the invention of d cement, in 1824, by William to whose memory a tablet was last Friday in Leeds, his native It is not generally known, howhat the material invented by was what we now know as ground ic lime, which he called "Portland" because of its resemblance in o Portland stone. But it was who commenced the process of ment which in the course of a years has resulted in the Portland of to-day. In view of the highly methods of producing presentland cement, it is interesting to at in his original patent speciAspdin specified the use of scrapings accumulated in the rhood of lime kilns," and that nearly forty years after Aspdin's he strength of Portland cement days was only 198 lb. per sq. dern British Portland cement strength of 750 lb. in the same This year will probably also issue of a further revision of the tandard Specification for Portland n order to bring it into line with eased strength of present-day ompared with that manufactured when the Specification was last revised; it is anticipated that by increasing the strengths specified users of cement will be able to make considerable economies.



Photo: Mr. John E. Allcorn.

Interior of Burford Church.

Relief for Strikers.

THE Southwark Borough Council has felt the recent building strike seriously. Its institution was being altered when the strike commenced, and the Board of Guardians estimates the cost of housing the inmates elsewhere at £4,000. Further, the extra halfpenny an hour added to the building wages in accordance with the settlement of the dispute will increase the cost of the work by £500. The Clerk to the Board of Guardians states, however, that the total cost will be £5,050, the extra £550 representing relief distributed to the men on strike. We live in curious times when we make it possible for a body of men to cause us to lose large sums of money and at the same time help them for as long as they choose to hurt us. Southwark cannot complain of the expense it has been put to, but surely this granting of poor law relief to people on strike can hardly be conducive to a speedy settlement of industrial disputes.

The Value of Colour.

AT a roadside station the other day we heard a lady say to her friend, "What do you think of the colour scheme?" The question revealed the fact that people do take some interest in their surroundings, and in this particular case there was also indicated by the ironical emphasis of the question a sense of the incompetency of those responsible for this railway station colour scheme of raw cold green, dingy chocolate and stone colour. A vision of the fine effect of a whitewashed London was once indicated by Professor Lethaby—how big and fine it would look few of us realise—but it really is to be regretted that the value of colour on our health and well-being is not realised and acted upon. Good colour costs no more than bad, and even if our railway stations and public houses were reasonably well treated in colour life would be a more cheerful affair. It is the pervading dulness or vulgarity of our colour surroundings, in the common objects of our everyday life, which call so much for improvement, and the ease with which it might come about with the advice of so many available competent guides is clear enough to be seen.

A Scaffolding Collapse.

WHILE we shall not know the cause of the scaffolding collapse in which two men lost their lives at Westminster last week until after the adjourned inquest, it does bring home the rareness of such occurrences. At a time when so many City and West-End buildings are being put up, in most cases with speed of erection an important object, the industry is to be congratulated on the freedom from accidents which has been experienced during the past few years.



Photo: Mr. John E. Allcorn.

Brazenose College, Oxford.

GENERAL NEWS

Professional Announcement.

Mr. P. Oakes, architect and surveyor, has opened an office at 11, Terrace-road, Buxton.

Obituary.

The death took place recently of Mr. William Claessen, of Ceylon, architect. Born in Colombo, Mr. Claessen was articled to Mr. Edward Skinner, F.R.I.B.A., and was responsible for many important buildings in Colombo. He was a Fellow of the Society of Architects, a Member of the Institute of Structural Engineers, and a Council Member of the Ceylon Society of Arts.

The death occurred recently at his residence, in Myddleton-street, Carlisle, of Mr. Richard Nelson, aged 81, sculptor.

Building in South Africa.

H.M. Senior Trade Commissioner at Johannesburg has forwarded particulars of proposed public works schemes. The Municipal Council of Johannesburg, it is suggested, should commit itself to an immediate outlay of £1,340,000 on public works, to be allocated as follows: £500,000 on a new power station, £350,000 on a new gas plant, £250,000 on roads and sewerage, £120,000 on a new free library, and museum, £100,000 on the lowering of railway lines, and £20,000 on the layout of the western end of the Town Hall. Pietersburg municipality has decided to raise a loan of £55,000 to build a new Town Hall and for other reproductive work.

The Housing Act, 1924.

We have received from Messrs. Eyre & Spottiswoode, Ltd., a copy of a pamphlet entitled "An Explanation of the Housing (Financial Provisions) Act, 1924," by Mr. E. E. G. Williams, Barrister-at-Law. Copies can be obtained direct from the publishers, post free, 7d.

War Memorial, Largs.

In St. Columba's Parish Church, Largs, a memorial window and tablet were recently unveiled in honour of the men of the parish who fell in the war. The memorial consists of a stained glass window in the south transept and a bronze tablet affixed to the square stone pillar of the south transept arch. The window is by Mr. Douglas Strachan, LL.D., Hon. R.S.A. The tablet was designed by Sir Robert Lorimer, A.R.A., R.S.A., and executed by Mr. Charles Henshaw.

Central School of Arts and Crafts.

The Syllabus of the L.C.C. Central School of Arts and Crafts, Southampton-row, W.C.1, for the session 1924–5, has just been issued. Particulars are given of courses in architecture and buildings crafts, silversmith's work, stained glass and mosaic, painted and sculptured architectural decoration, book production, furniture, dress design, and engraving,

Instruction on Building Materials.

A series of lectures dealing with various building materials has been arranged by the Builders' Merchants' Alliance, to be given at the offices of the Alliance, Finsbury-court, E.C.2. Full syllabus may be obtained from the Secretary.

COMPETITION NEWS

Methodist Church.

Designs are invited for a Methodist Church, school house and manse, Sheffield. Particulars from Mr. T. A. Hardy, 24, Thornsett-road, Sheffield. (See our issue for September 5.)

Manchester Art Gallery.

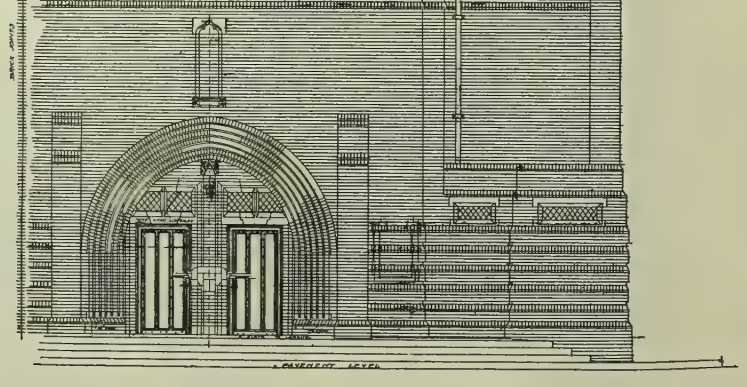
Designs for an art gallery for the Manchester Corporation. (See our issue for August 22.)

Masonic Memorial.

The sending-in day for this competition is May 1, 1925.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Ross-Smith Memorial (Sept. 30; Feb. 22). Public Baths, Newton-in-Makerfield (Sept. 30; July 11). London Hotel, banned by R.I.B.A. (Sept. 24; August 22). Harrogate Infirmary (Sept. 30; Aug. 29).



New Catholic Church at Northfleet: Portion of North-East Elevation of Tower.
SIR G. GILBERT SCOTT, R.A., Architect.

PARISH CHURCH, NOR FIELD, BIRMINGHA

THE Parish Church of Northfield is situated amidst elms and yews hundreds old, and makes a pretty picture on comi this ancient village. From the outsi tower is, of course, the dominating Built four-square, with buttresses on ea and of three "stories," it has a flat ro embattled parapets and an early G weather vane (so called) on an octagon standing some 22 ft. above. This tower i to be repaired preparatory to re-hangi bells. Originally there were five bells, 1730 they were re-cast by one Joseph Sn Edgbaston, and converted into six. The now again been re-cast and another bell i added. The history of Northfield goes b Saxon times. Then known as Nordfe Manor was before the Conquest held by A The records of Northfield in Domesday m a priest. It is practically certain, th that there was a church (probably a wood here during the time of the Saxon, Alwol

The earliest stonework is of Norman d which there remains notably the doorway north aisle, which is a good specimen of v the period. This doorway was removed the north wall of the nave, when the nort was added by G. F. Bodley about 30 yea

The chancel is a very good specimen o English work, with inside arcades alo north and south walls. The De Somery no doubt responsible for this work, a records show that the old leaded light tained their arms. Unfortunately none old glass appears to have been preserved. nave, south aisle, and south porch are later and in the Decorated style, the portion of the tower being added later st in the Perpendicular style. The porch ca notice in that it is in oak, a method of bu porches which was sometimes adopted that period.

Values of material things appear to undergone some serious changes in Nort as elsewhere. In 1291 an inquisition value of the Manor was taken before Ad Teshall, John de Middleton, and others. list appears: "a capital messuage wort [this was the manor house whose bu covered half an acre of ground and wa rounded with a moat and later by courtesy a castle]; 172 acres of arable land worth p 6d. yearly; two mills one worth £3 6s. 8 the other 20s., &c." By a rental made S ber 26th, 1549, the Manor was rat "£103 6s. 2½d., with 2 shillings for a po pepper, and two red roses."

The church contains one of the windows, about the purpose of which sc has been said and written. It is at preser in and has been so for many years, but traced on the outside. The restoration tower, under an order of the chancellor, about to be carried out before the bells re-hung. It is proposed to remove damaged stonework, to open up, rebo grout in all fissures and cracks due to sett and weather action. The worked stone belfry louvre openings, which are double face (three in the Decorated style and the Perpendicular style) will probably l be removed for the necessary repairs effected as so much of the stonework is d or missing. The oak beams and fram carry the bells will also require much att

The work has been entrusted to Mr. W Caple, F.R.I.B.A., of Birmingham, who us that the work will be started as arrangements are completed with th tractors.

Architect's Estate.

Mr. Francis Eldred Lodge Harris, A.R of Betchton Villa, Betchton, near San Cheshire (net personalty £1,428) £2,793





Winchester School War Memorial Cloisters.

MR. HERBERT BAKER, A.R.A., Architect. (*See p.* 394.)

CORRESPONDENCE

Skyscraper Church.

SIR,—Your editorial in the September 5 issue of *The Builder* on the proposed skyscraper church in New York interested me. I am a visitor from the United States and might add something to your comments. You were struck by an apparent absence of provision for Sunday school activities. The church in question is one which would, in Great Britain, be termed Non-conformist. The Sunday school, therefore, would quite likely hold sessions in the church auditorium, or perhaps in the room provided with stage and cinema.

The placing of a church in a skyscraper building solves the problem of the city church, which, while needed in a district less residential than business in character, because of the encroachment of business, cannot be continued by the sparse number of residents. A skyscraper can be financed with the ground-floor leased for retail business, and all floors above those required for the church and its activities leased for office purposes, or for use as a family hotel. The income will support the church and give it a good opportunity to do useful work, while relieving the officials from the disagreeable necessity of making appeals frequently for financial aid. It is, in fact, an endowed church.

Churches in the United States receive no state aid, all being supported by, more or less, voluntary contributions. A church in the heart of the business district, deriving a great portion of its support from offices and stores in the same building, has existed for many years in Chicago, I understand it has been enlarged recently, or, rather, a new and very much larger building has replaced the old one. A similar building exists in Syracuse, New York, being a combination of church, hotel, &c. A number of others have been planned and the question of financing is now being studied, one being a project to house an Episcopal Cathedral in Chicago. The basement of the building in New York, which was the subject of your editorial, will in no wise resemble a crypt. Space is too valuable. The presence of swimming tanks several stories above street level is not uncommon in the United States, the weight being so distributed by columns that very little rentable space is lost.

E. MCCULLOUGH.

Hopes and Fears for Architecture.

SIR,—The letter of "Isis" in your issue for August 22 exemplifies once more an attitude curiously common nowadays in communications to the press concerning current architecture. The criticism I have in view usually takes the form of deprecating the present-day use of mediæval or allied modes on account of the difference in modern modes of life. Now, without entering upon the merits of this contention, what I want to emphasise is a peculiarity common to most such expressions of opinion, namely, the strangely partial and one-sided application of the principle involved. While frankly adverse to the revival of the older native styles, they yet extend the approval of silence to the far greater anachronisms patent in the use of borrowed ones. The prototypes of our neo-classic edifices are, of course, not only more remote in point of time, but are also notoriously alien in their racial, religious and climatic origins. Moreover, these buildings offend not only by their greater incongruity, but at the same time by their greater numbers. Why, then, have our sensitive critics no word of condemnation for them? What is one to think of the sincerity and consistency of those who thus strain at the gnat while swallowing the camel?

To take the case of decoration, one must presume that these advocates of "Zeitgeist" in architecture would ban, for instance, the "Rose-en-Soleil" of a Plantagenet monarch, while condoning, to say the least, the winged sun-disc of Egypt—now almost a cliche of the latest design. Indeed, a building displaying the one will probably be ignored or attacked; that exhibiting the other will doubtless be eligible for the annual honours of the Institute. Surely the professional pose needs some explaining.

Meanwhile, a perverse public, unmoved, or repelled, by "Monumentalism" (convenient word!) insists on being drawn to traditional types—as evidenced, it may be recalled, among the friends and families of the working men engaged upon the "Liberty" Building itself, on its completion. W. RANDOLPH.

Professional Representation.

SIR,—I have been very cheered to see that in your issue for August 8 you say of housing: "but we have yet to see what a committee of non-party professional and business men of experience would submit upon the general principles underlying the idea of better housing." Whilst fearing that your view will not be popular at a time when, in particular with regard to housing, ignorance of the subject seems to be a sufficient qualification for speaking or writing with authority, yet it is encouraging to feel that you do not propose to allow the betrayal of the professional man to proceed unchecked.

So long ago as November 17, 1922, you wrote upon the subject of "The Outlook for the Architect," and therein stated there was "a lack of appreciation of an architect's services." In a subsequent issue (December 1, 1922), a correspondent, "Student," agreed with you in this, and asked, "But why is this?" He went further, and suggested as the answer "Because he is generally looked upon as an artist only and almost entirely unpractical." Quite so, but I would reiterate, "Why is this?" Are all architects artists? Are we to believe that in a section of the community numbering several thousands there are no energetic practically-minded business men? The assumption would be ridiculous. Why then have not the claims of the professional man been forcibly urged by these energetic practical men to be consulted upon those subjects upon which he has specialised? Has the way been blocked by the unpractical and artistic? Have the constitution and customs of representative bodies prohibited the practical man from coming to the fore?

Old-world platitudes about the education of the architect, at a time when the practically-minded have almost ceased to wonder if there is even an outlook for the architect at all, is not cheerful. H. BRYANT NEWBOLD.



Dalton-in-Furness War Memorial.
MAJOR C. OAKLEY, Architect.

BRIDGETON PUBL HALLS COMPETIT GLASGOW

THE notable enterprise shown by th body of Glasgow in making provision citizens is well illustrated by the recent p to erect halls suitable for general purpose district of Bridgeton, at a total cost of £ with accommodation in two halls for 9 350 sittings respectively.

The invitation to submit designs in c tion met with a gratifying response, nine schemes in all being received from archi all parts of the country. The assessor James Lochhead, F.R.I.B.A., and prem the value of £150, £100, £75, and £50, respe were awarded to the four leading compe

The author of the first premiated d illustrated in our last issue—Mr. C. Voysey, submits an excellent set of dr illustrating the dignified character of his This very appropriate dignity is achieve architectural treatment of a restrain simple character, adequately expressi purpose of the building, while having th of being comparatively inexpensive.

Two halls are provided, with their ma parallel. An admirably-placed buffet is sible from both halls, between which serves as a connecting link. An int point is the provision of an open cour affords light to the buffet and is inter serve as a lounge for smoking, &c. accommodation is well situated on a ground floor, while service lifts connect upper service room, which adjoins bot and buffet.

Top lighting is provided in both hal additional windows of the clerestory typ designer proposes to use the latter in c acting down draught by means of a s placed heating apparatus, which is to be low-pressure hot-water type throughc building. Extract ducts with electrically fans will provide efficient ventilation.

The construction generally is to be o resisting nature, the walls being of bri with steel stanchions carrying steel roof over the two halls. The gallery will ha frame cantilevers with ferro-concrete tre risers. All floors and flat roofs are t ferro-concrete or hollow tile, with the st of ferro-concrete. Hardwood dancing f battens and counter-battens will be pro the halls. Asphalt is to be used on the fl slates on the pitched roofs. The externa will be as recommended in the co namely, of brick or terra-cotta brick, wi dressings. Mention is made, in the report, of special "acoustic plaster" a dados to assist the acoustic tone in t Rather inadequate, and not too situated, the cloakroom accommod perhaps the weakest point in an other fully arranged design, the total probs of which has been estimated at £25,30

The design placed second is by M McNaughton & Son, and John Arth Bath-street, Glasgow, whose plan many points of similarity to that awar place, but the elevations are not so suc

The third premium is awarded to M Alison, 27, Kirk Wynd, Kirkcaldy, for which differs from the majority in principal façade is placed in Summer-s arrangement which, at first sight, woul rather better, affording as it does thoroughfare in dealing with the ass departure of a large audience. The cost of this design most nearly appro amount set forth in the conditions.

A well-balanced elevation is a featu fourth premiated design, the authors are Messrs. Harrison & Ash, 22, Ellis Newcastle-on-Tyne.

Other designs worthy of note include 26, 95, 35, 14, 50, and 65. In a large of cases there was a tendency amongst petitors to understate the probable co designs, and this fact no doubt ruled a few otherwise excellent schemes.

COVERY OF A XIVTH-CENTURY ROOF

By HERBERT SKYRME, M.S.A.

rrying out certain alterations and addi- what was thought to be an old farm some interesting discoveries have been at Wellbrook Manor House, Peter- Herefordshire. The plans show d house in the condition it was before alterations. The ground hows the sitting-room immediately he portion of the old roof above. This as divided off from the hall by a partition; there was nothing on this denote any connection with the fine f above; a modern grate had been n the old opening covering up all traces d fireplace that was afterwards found. upper floor was also divided by a lath and plaster partition which a granary on the one side and a bed- the other. Certain portions of the f were visible in this partition, and e removal of this and the false ceiling nuch more of the old roof was dis- ; a general view of the roof is seen photograph, which shows one of the rincipals (B on the plan), and gives a f the modern fireplace at the end of n, the chimney breast of which may built in between the curved brace of cipal (A on plan).

er find which came to light after the of the lath and plaster end of bed- o. 3 was the curious old framing (D), seen in the photograph, where a had been cut through to get to the other bedrooms; another modern partition can be seen on the other side, and on this being exposed a set of fine curved braces with framed timbers were found. I could find no traces of this having formed an exterior gable end to the building and it must have been a framed partition only. The other parts of the house appear to be of the same period, but have much plainer roofs.

On reference to the plans showing sections of the roof it will be noted that the main uprights to principals A and C continue from the cross collars of roof to the ground floor below, and one upright I traced intact hidden behind a lath and plaster partition in sitting room as shown on the ground plan marked "X."

There is no doubt that originally there was no bedroom floor; it has every appearance of a modern insertion. The roof formed a great hall to what was once an old manor house. The thick walls are of stone and brick of modern construction, probably seventeenth century, as portions of the old oak timber framing which originally formed the walls of the original building are still in position and may be seen in the photos.

There was an old fourteenth-century fireplace found in its original position in bedroom No. 2. One photograph gives a general view, and the other fuller details of the peculiar shaped cap to the side jambs. The modern brickwork has been removed, revealing the old stone back and sides of the recessed fireplace. An exterior view is also given of the stack, which has a modern top added to prevent downdraught.

In the gable end of dining room and bedroom traces of the old framed timber were discovered. This was found covered with lath and plaster but we were unable to expose it as it was much decayed, worm eaten, and past repair, and we had to cover it up again with lathing and re-plaster.

The old roof, I may add, has scarcely been touched by any new work; only the necessary repair work has been carried out, and every care was taken to preserve it so as to leave it in its original condition. Unfortunately we were unable to remove the middle floor, which would have entailed the outlay of a large sum, as the remaining walls were not strong enough to carry the roof if the intermediate floor had been removed, but there is nothing to prevent this being done at any future time if wished.

For the photographs accompanying the drawings the architect is indebted to Mr. Alfred Watkins, F.R.P.S., Hereford.



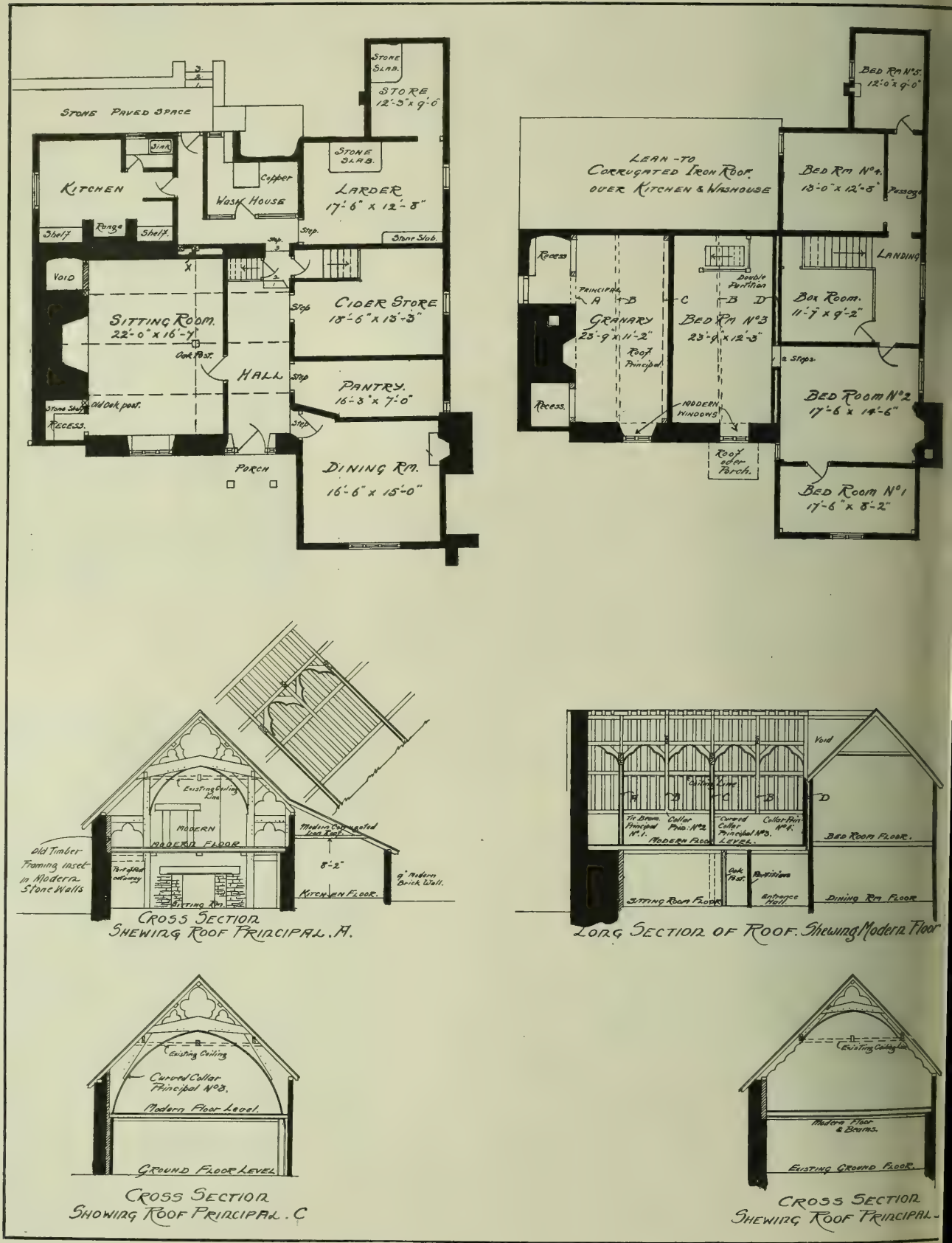
OLD STONE CHIMNEY STACK CONNECTED WITH BEDROOM NO. 2.



MAIN ROOF PRINCIPAL: "B" ON PLAN.



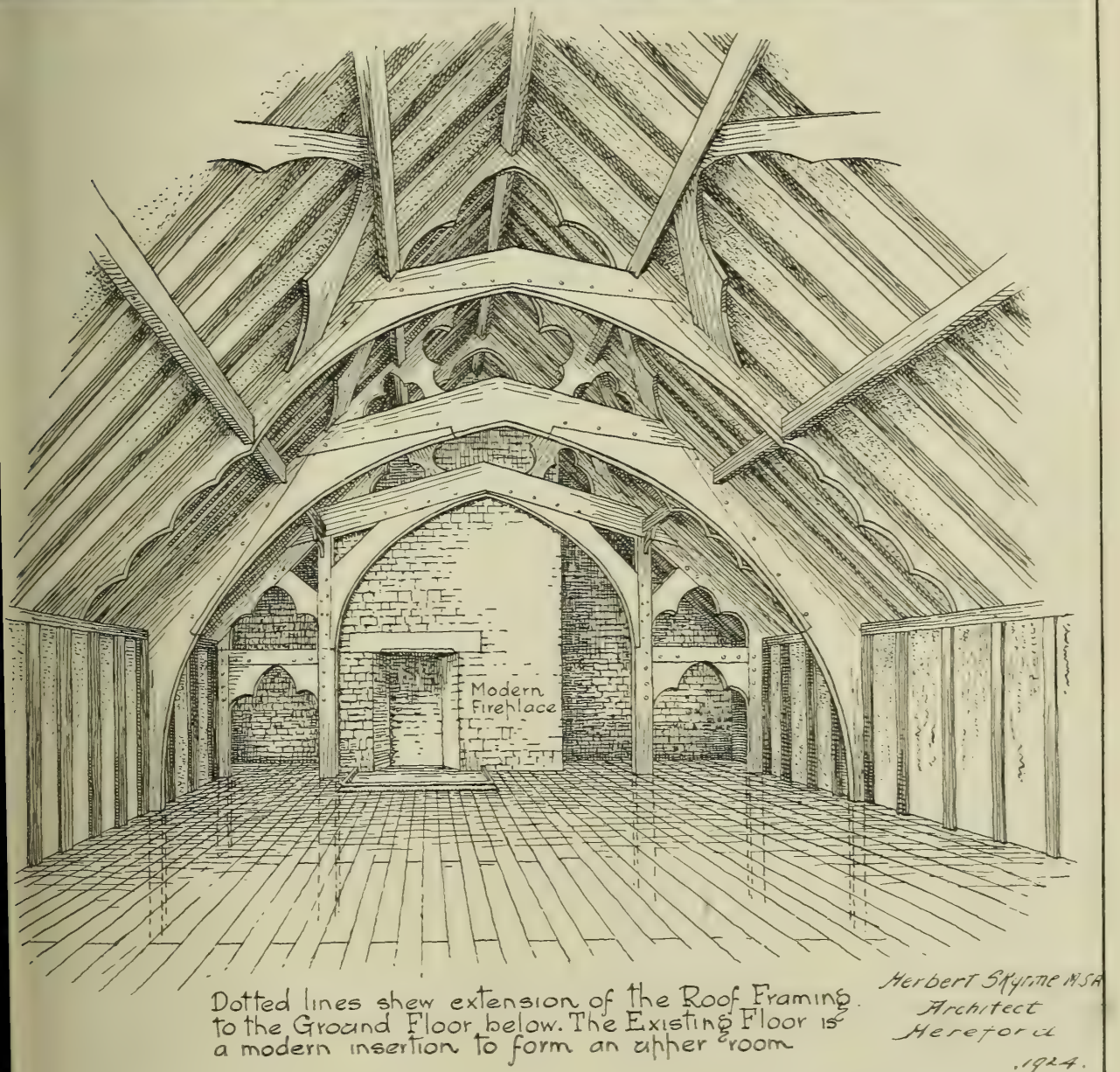
PORTION OF OLD STONE FIREPLACE, BEDROOM NO. 2.



Alterations to Wellbrook Manor House, Peterchurch. MR. HERBERT SKYRME, M.S.A., Architect. (*See p.* 391.)







Left—General View of Old Stone Fireplace in Bedroom No. 2

Top Right—Portion of Framing, "D" on Plan.

Below—General View of Old Oak Roof.

Alterations to Wellbrook Manor House, Peterchurch. Mr. Herbert Skyrme, M.S.A., Architect. (*See p.* 391.)

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ILLUSTRATIONS.

Catholic Church, Northfleet.

This church, which stands on a commanding site overlooking the Thames, consists of nave, with aisles, chancel, with side chapels, and western tower, in the lower part of which is placed the organ gallery; while the vestry accommodation is situated at the east end of the building. The church is built of Crowborough bricks, the roof being covered with dull red pantiles. A noticeable feature in the design is the frank use of reinforced concrete lintels, both over windows and doors, and also over some of the openings of wider span, which are accordingly square-headed, instead of being of arched form.

The interior of the church is plastered, except as regards piers, responds and quoins, &c., which are of Crowborough bricks. The builder was Mr. J. B. Lingham, of Northfleet.

The architect is Sir Giles Gilbert Scott, R.A.

Whitton Grange.

This house stands on an attractive site overlooking the village of Rothbury and the Coquet Valley. A small Victorian house originally stood on this site, but this was taken down and its only pleasant feature—the coursed stone walling—reused in the new house. The contours of the site are largely responsible for the lay-out of the garden, the ground rising steeply from the south-west and north-west. The walls are faced with local stone, and the roof is covered with "Pricelly" slates.

Messrs. Mauchlen & Weightman, of Newcastle-on-Tyne, are the architects.

Bank, Amesbury.

This Bank has been built adjoining an old flint and stone chequered house which was used as the bank manager's house. It has been built of local flints and Chilmark stone with hand-made sand-faced tiles on the roof.

The general contractors were Messrs. Mussell-white & Son, of Basingstoke. The bank fittings were made by Messrs. Elliotts Moulding & Joinery Co., Ltd., of Newbury. The principal sub-contractors were: Messrs. Thos. Elsley, Ltd., metal fanlights; Messrs. W. Aumonier & Son, stone carving; Messrs. James Gibbons, Ltd., door furniture; Messrs. The Art Pavements & Decorations, Ltd., floorings; Messrs. H. Pontifex & Sons, Ltd., sanitary fittings. Mr. Edward Maufe, F.R.I.B.A., is the architect.

Ashford Lodge, Halstead.

This house takes the place of a former house, which was completely destroyed by fire, the wall of the garden front of the new house being built on the old line; the new building, however, is considerably longer than the old, but less in depth. The entrance hall is panelled, and the ceiling has a heavy oak beam and oak exposed joists. The floor is of parquet. On the ground floor there are four entertaining rooms, kitchen, and the usual offices. On the first and second floors there are nine bedrooms, two bathrooms, and large store and tank rooms. There is extensive cellerage in the basement.

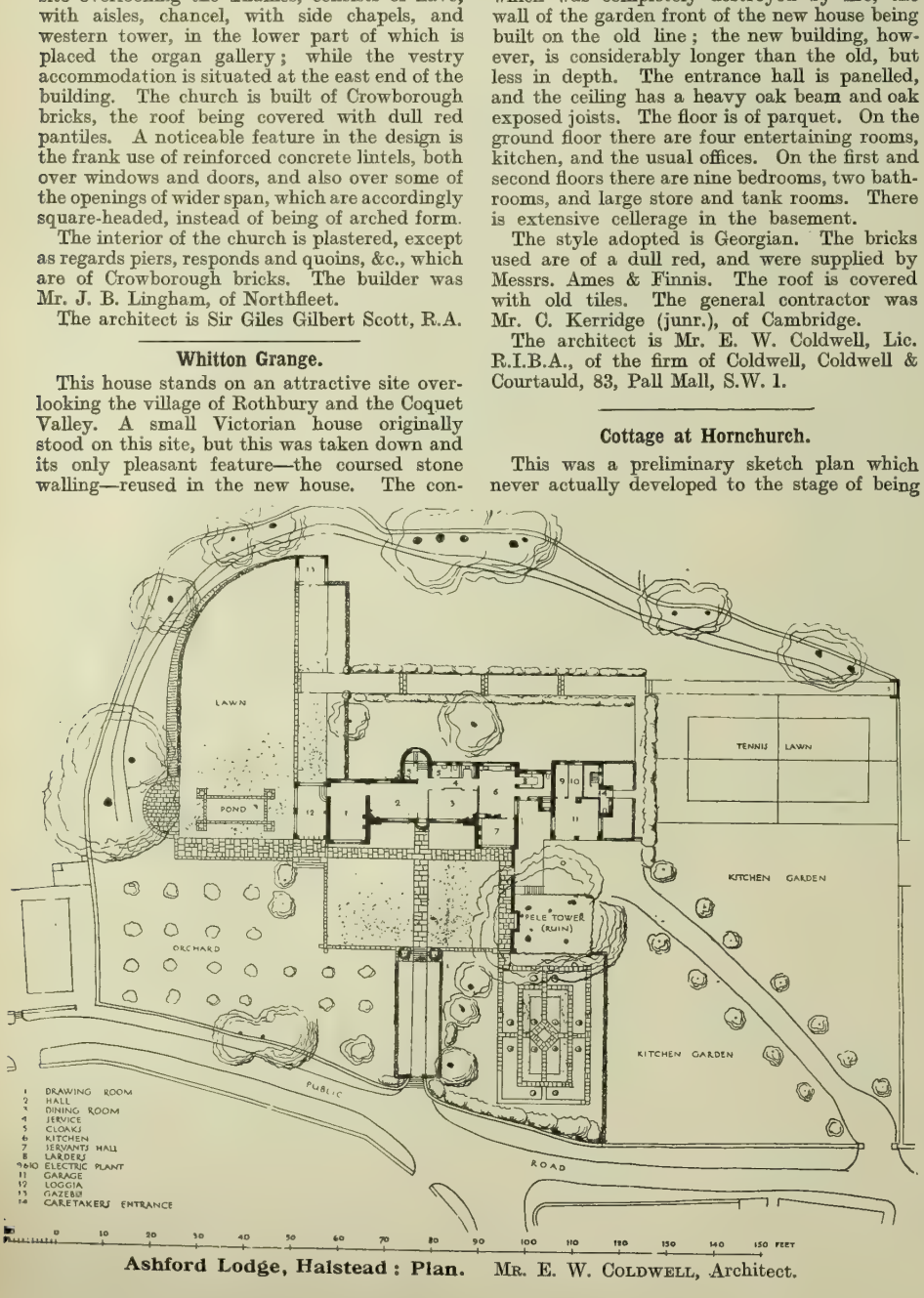
The style adopted is Georgian. The bricks used are of a dull red, and were supplied by Messrs. Ames & Finnis. The roof is covered with old tiles. The general contractor was Mr. C. Kerridge (junr.), of Cambridge.

The architect is Mr. E. W. Coldwell, Lic. R.I.B.A., of the firm of Coldwell, Coldwell & Courtauld, 83, Pall Mall, S.W. 1.

Cottage at Hornchurch.

This was a preliminary sketch plan which never actually developed to the stage of being built, owing to unforeseen difficulties wit intended site. It attempts to meet wha fairly frequent condition, where a client rather more accommodation in the bed than in the sitting rooms, and the old dev overhanging the upper story is adopted, has this practical advantage as well a picturesque effect. In the plan the only fe which suggests comment is the omission usual partition cutting off a narrow passa give separate access to the second sitting the gain in spaciousness compensating fo slight loss of privacy in the living room. proposed to build the walls of narrow r coloured bricks and to tile the roof and hanging walls, all external woodwork be English oak left clean from the tool. The of the building was intended to be of the sim relying on proportion and workmanship than on any applied decoration.

The design is by Mr. A. Edgar Ber (Messrs. Baillie Scott & Beresford).



Ashford Lodge, Halstead: Plan. MR. E. W. COLDWELL, Architect.

Winchester School War Memorial Cloi

The cloisters at Winchester School recently been erected. to the design o Herbert Baker, A.R.A., as a war mem The contractors were Messrs. Holloway Ltd. Hopton-Wood stone, supplied by Hopton-Wood Stone Firms, Ltd., was us the fifty-two columns with their capitals bases, and also for the panels on whic names of the fallen are inscribed.

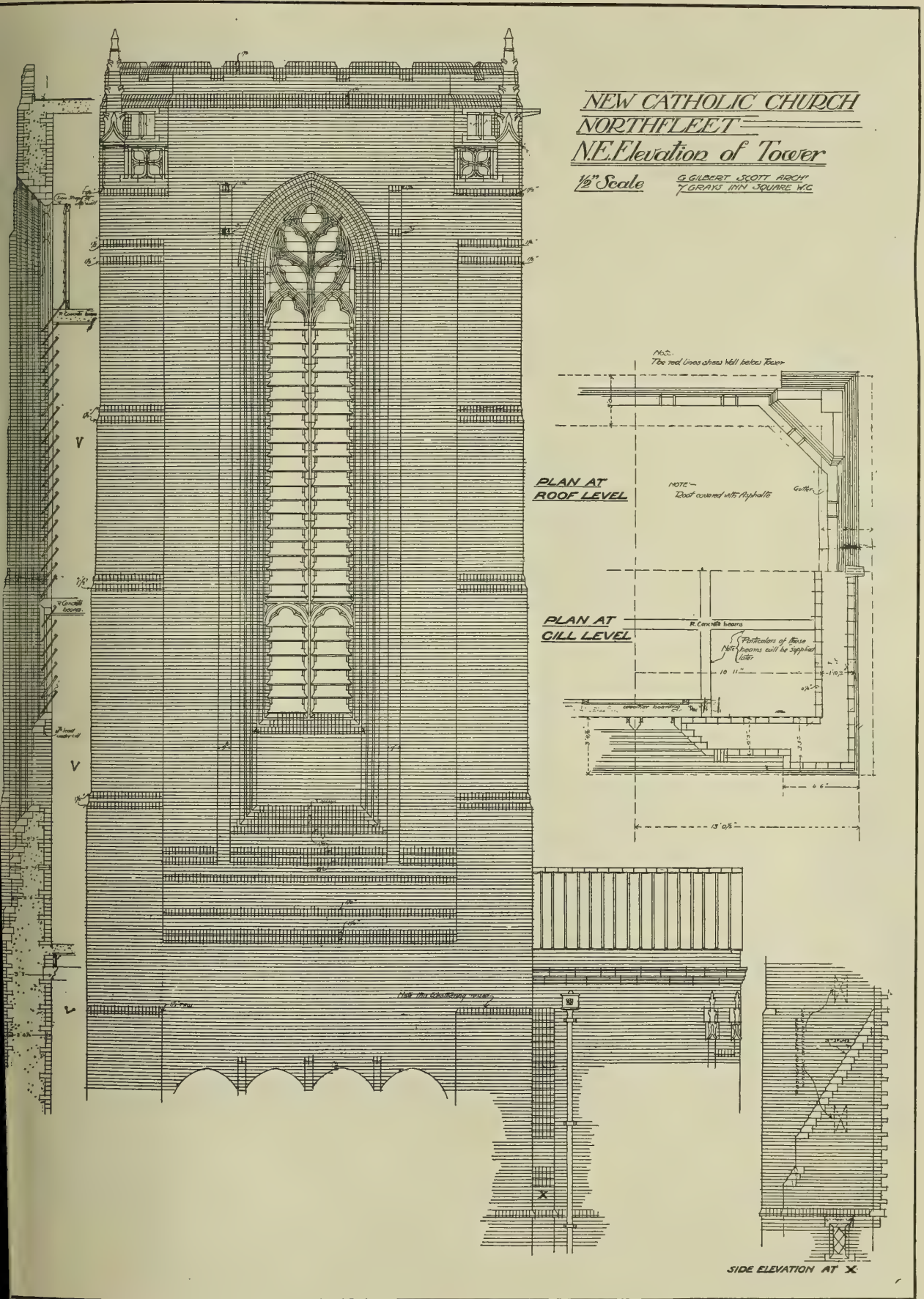
Empire Theatre, Tientsin.

The Empire Theatre, Tientsin, is the portion yet completed of a scheme compr in addition to the theatre, a restaurant, hall, and club premises, for which the de of Mr. Horace G. Turner, A.R.I.B.A. (M Hemmings & Berkley) were accepted in petition. The construction is of brick, finished externally in granite plaster; reinf concrete floors and balcony. The theatr be used chiefly for cinematographic p mances; it has a fully equipped stag theatrical performances with scenery doc dressing rooms complete. The whole sc will be heated by hot water from one house situated at the rear. A sunken roo also been placed in the rear for storage of in hot weather.

Sports Pavilion at Paisley.

The pavilion built for Messrs. Clark & Ltd., at the Anchor Thread Works, P stands in the middle of the recreation gr and is approached through wrot-iron gat along a carriage drive bordered by ornar grounds, laid off in flowering and other s The pavilion has broad terrace steps o north and south elevations, where spec can command a view of the complete grounds during fine weather. At the each terrace is a spacious verandah with columns up which creepers are trained to The two main gables are built of rub several varieties of stone of diverse co the walls under the verandah are of Rave rustic brick with very wide and deep The gables above verandahs are of half- work. The roof is covered with red sand hand-made tiles. The ground floor accom tion is shown on the plan. On the uppe is a gymnasium 60 ft. long × 38 ft. lit by roof lights and dormer windows. A club room and committee room lead gymnasium, access to these rooms being also through the corridor at each end gymnasium. A ladies' dressing room lavatory and similar rooms for men als off the gymnasium. A committee roo secretaries' office complete the upper accommodation. In the basement are lav accessible only from the outside, the l chamber and drying room, stores for car cleaner and gardener, and storage spa general use.

Messrs. Abercrombie & Maitland, of 1, C place, Paisley, are the architects.



Sir G. Gilbert Scott, R.A., Architect. (*See p.* 394.)



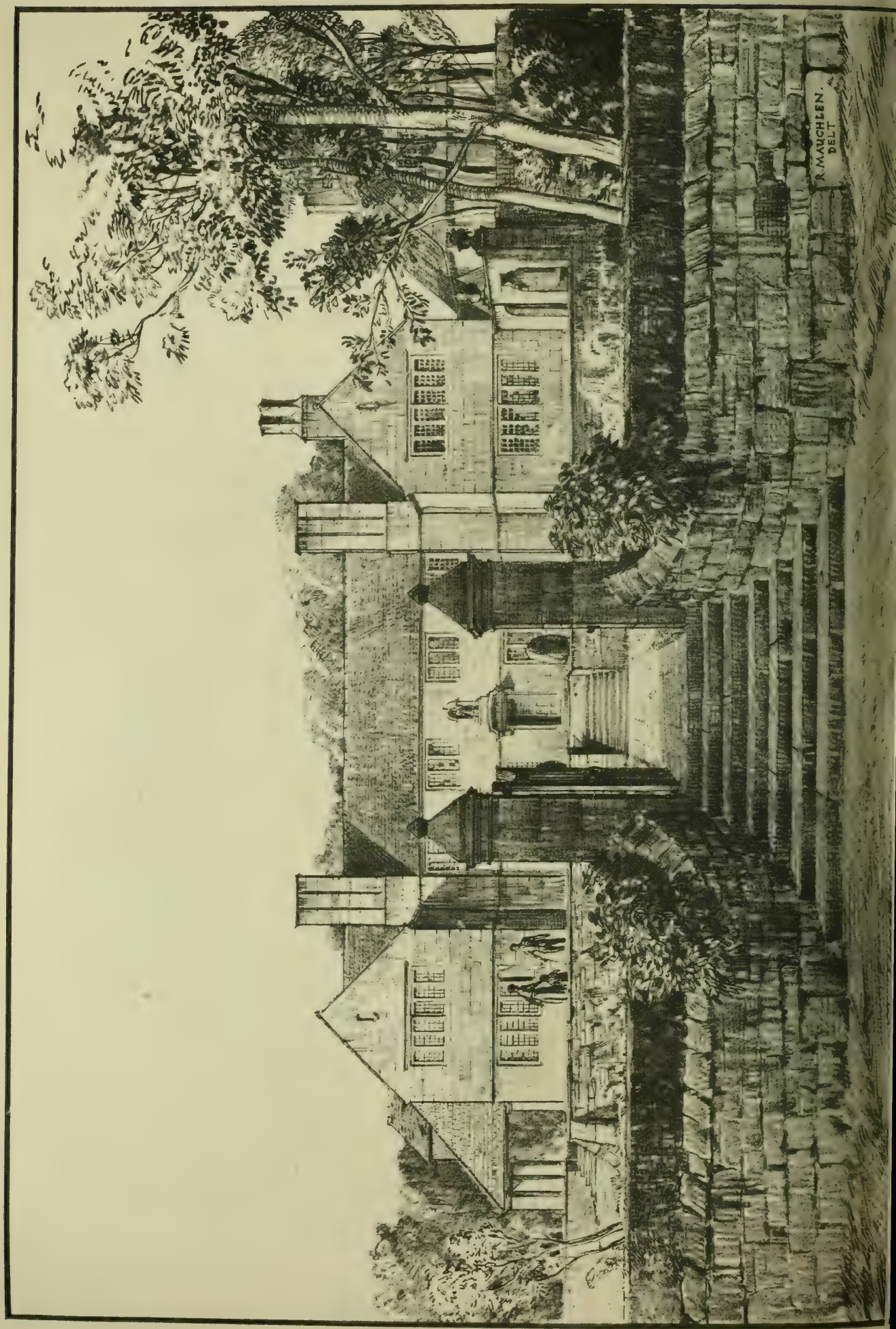
The Entrance to the Building Pavilion, British Empire Exhibition.

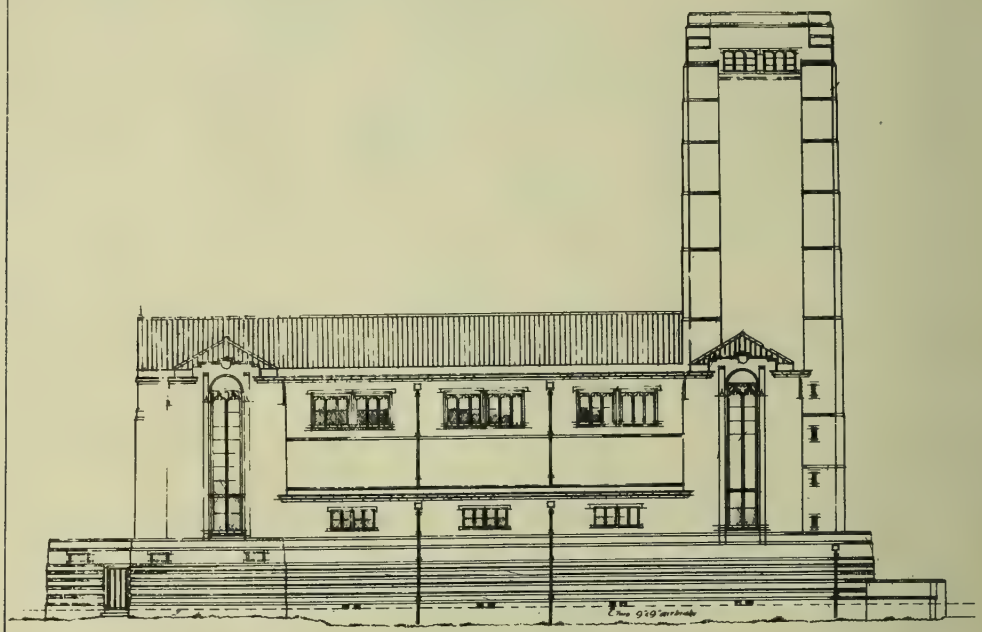
MR. E. VINCENT HARRIS, F.R.I.B.A., Architect.



R.A. Exhibition, 1924.

Cottage at Hornchurch, Essex.

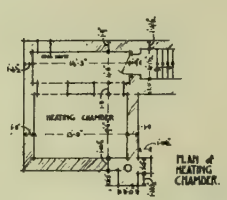

R. MAUCHLEN.
DELT

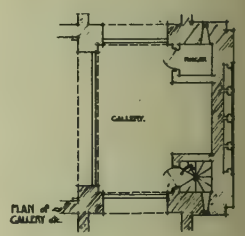


◇ S.E. Elevation ◇

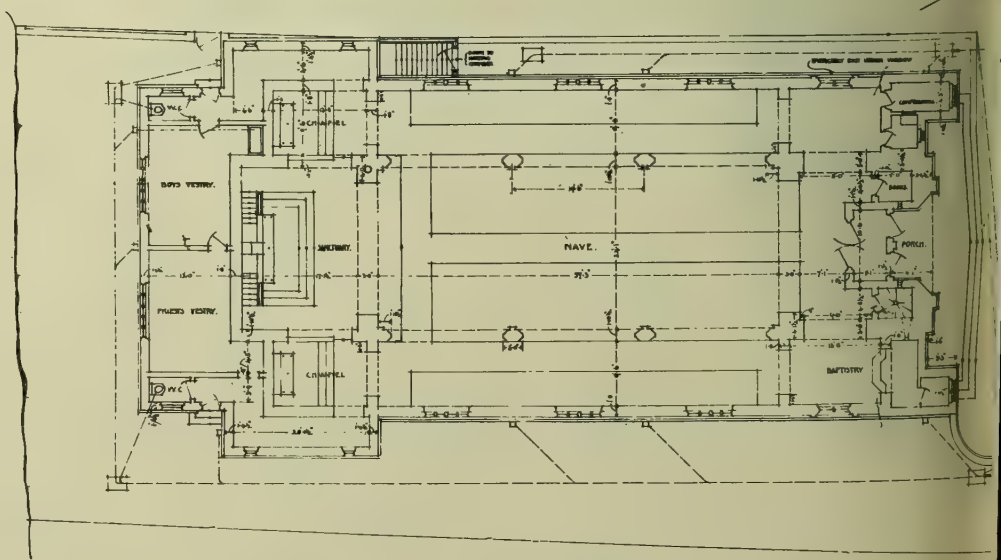
◇ Portion of ... Showing ...

◇ S...





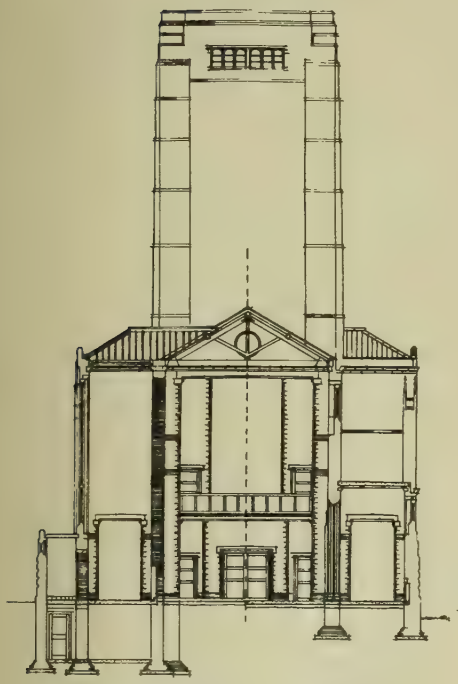
CHURCH PATH.



◇ Ground Floor Plan ◇

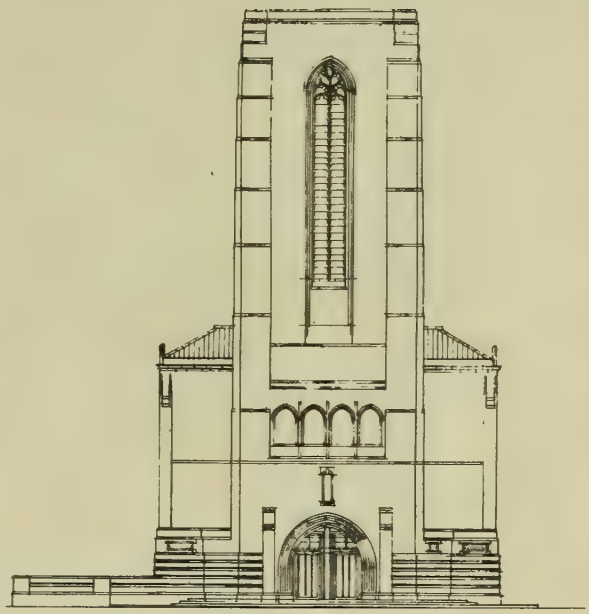
NEW · CATHOLIC · CHURCH ◊ NORTHFLEET

Scale ⅛ Inch to 1 Foot.



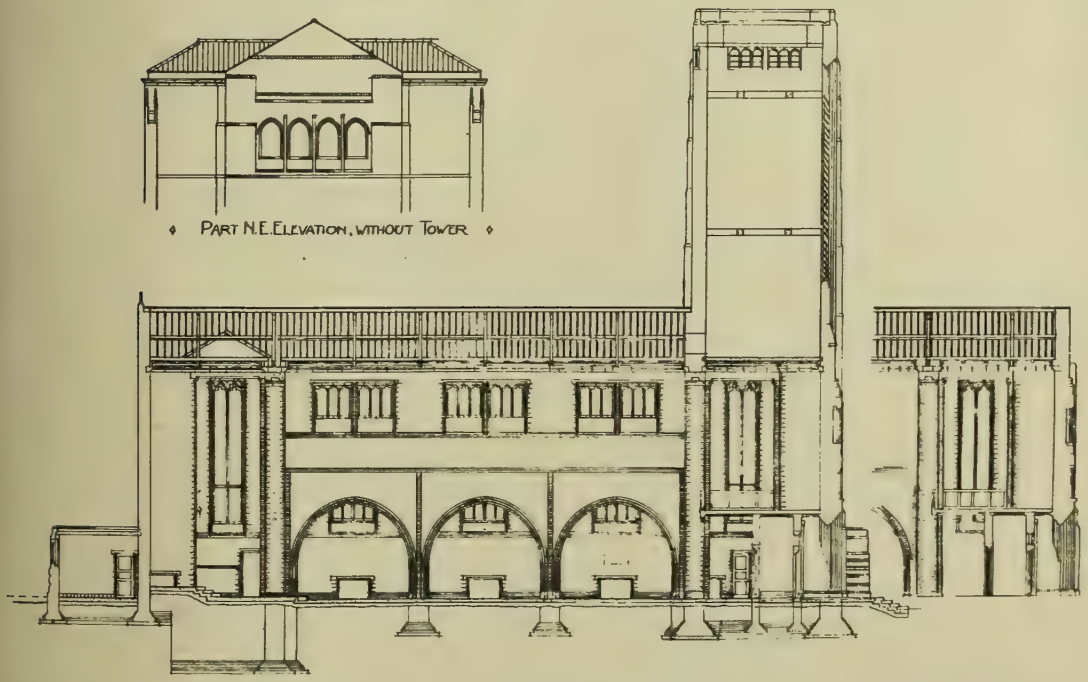
Half Thro. Sanctuary Half Thro. Nave.

◊ CROSS SECTION. ◊



◊ N.E. ELEVATION ◊

◊ PART N.E. ELEVATION, WITHOUT TOWER ◊



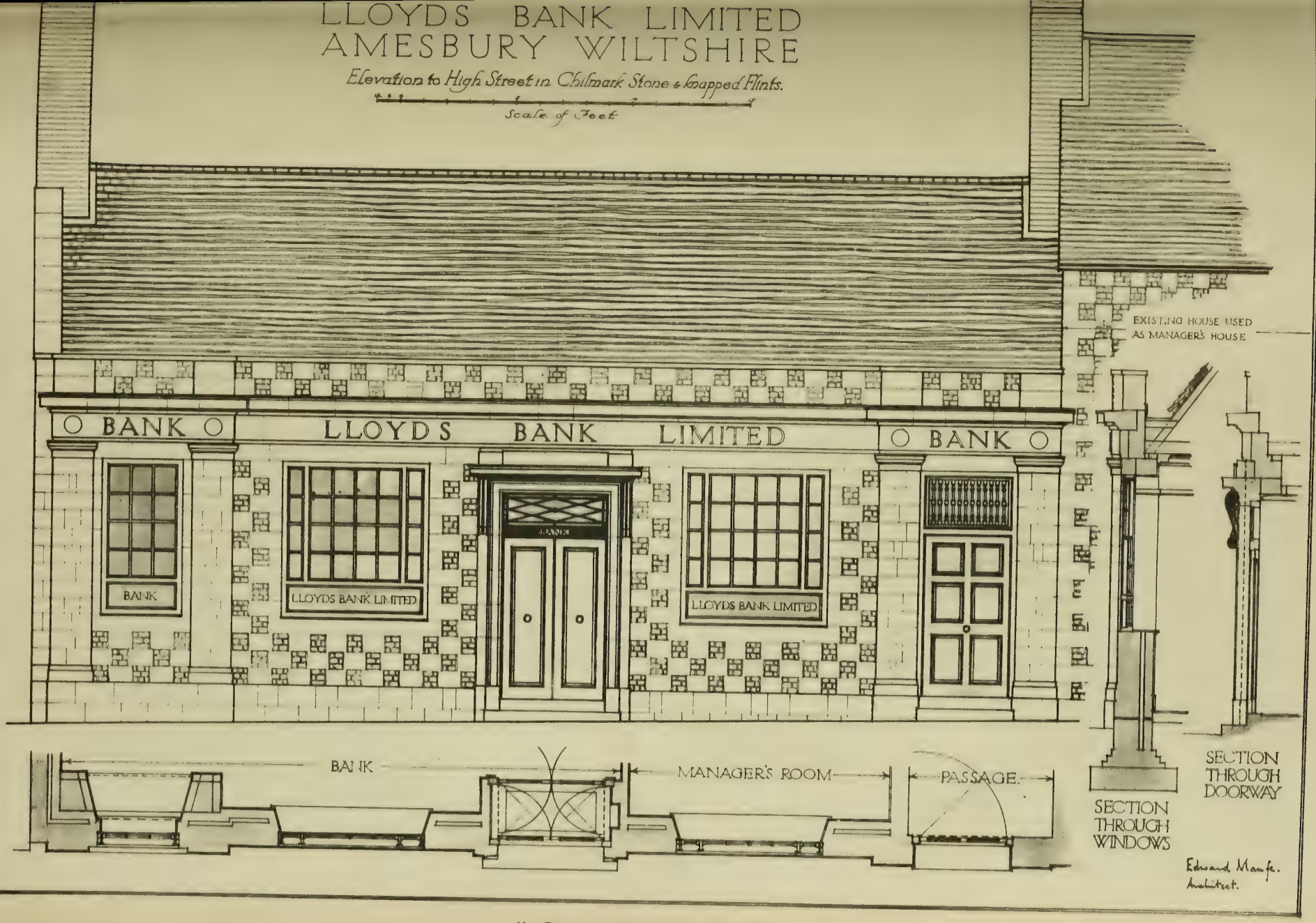
◊ LONGITUDINAL SECTION ◊

◊ PART LONG. SECTION WITHOUT TOWER

LLOYDS BANK LIMITED
AMESBURY WILTSHIRE

Elevation to High Street in Chilmark Stone & knapped Flints.

Scale of Feet



MR. EDWARD MAUFE, F.R.I.B.A., ARCHITECT.



R.A. Exhibition, 1924.

Mr. E. W. Coldwell, Lic.R.I.B.A., Architect.



EXTERIOR.



ENTRANCE HALL.

mpire Theatre, Tientsin. MR. HORACE G. TURNER, A.R.I.B.A. (Messrs. Hemmings & Berkley), Architect. (*See p* 394.)



PROSCENIUM.



BAR.

Empire Theatre, Tientsin.—MR. HORACE G. TURNER, A.R.I.B.A. (Messrs. Hemmings & Berkley), Architect.

ORHAM CASTLE, NORTHUMBERLAND

By WILLIAM HARVEY

Lr on the south bank of the Tweed at a that seems to have been fortified in both n and Saxon times, the Norman castle rham, in the county of Northumberland, as one of the most important strong- of Northern England. It was an e centre of military operations from its l foundation by Bishop Flambard, of m, in 1121, until the union of England cotland under one crown diminished the f fortifications upon the border. It is e, too, that changes in the manner of ting war had thrown the castle out of consideration before this time, and its later years of occupation it was ly regarded rather as a barracks than defensible fort. The castle en several times subjected to demolition, and abounds in ces of restorations and addi- executed in the fashions of nt periods. The original work to have been substantial, and hstanding a report that the had been *Prostratum et dis- ad terrum* by the Scots, a part of the existing walling is rman character, with inser- of later masonry in the sur- of doors and windows. The parts of the castle are claimed he authorities as original, and ir partially dismantled state most interesting example of andard of building craft in d at a comparatively early The planning of the building the older fashion in vogue the Byzantine science of for- on, introduced with the return e Crusaders to England, had t about a revolution in the lay out of ve works.

Norham Castle the keep, a great rect- r tower, ninety feet high, stands upon a mound overlooking a steep gulley slopes down towards the river Tweed he North. Both the mound, and the n the distance are shown upon a print a view of the castle from the south-east ppeared in 1680. (See Fig. 1.) he north-west of the keep lay the Inner or upper enclosed courtyard surrounded ick and high curtain wall joined to the t its north-east and south-west corners. Figs. 5 and 6.) Beyond this on the vest was the Outer Bailey, enclosed by in wall of greater length, which joined ep at a point in its wall near the ast corner (see Fig. 5), and returned t the Inner Bailey curtain on the north side near the river. The inner court was not only separated from the outer by walls upon its southern and western sides but by a deep ditch which, while it doubtless increased the difficulty of attacking the inner court, had the disadvantage of curtailing the accommodation in the Outer Bailey.

These dispositions take advantage of the lay of the land in that the east wall of the keep that is not protected by the curtain walls, is erected upon a bank so steep as to forbid the near approach of the military engines of an attacking force. The defect which the plan of Norham has in common with other Norman castles is that the outer curtain wall was only defensible as a separate work, for the part of



FIG. 4.—INTERIOR OF FIRST FLOOR, WEST ELEVATION; BROKEN STAIR WELL BETWEEN WINDOWS.

the garrison posted upon it could not obtain any very great assistance from the defenders of the inner wall of the keep. The philosophy of the defence seems to have been to reckon upon the possible invasion of the outer court by a hostile force and to dispose the inner works so as to make the winning of it a hard bargain for the invader. This process is reported actually to have happened in the time of Edward II when the Scots were forced to retire after having stormed the outer court and held it without making further progress during three uncomfortable days and nights.

Repairs now being executed by H.M. Office of Works Historic Buildings Branch have included exploratory excavations among the piles of débris in the inner court and adjoining the curtain walls and gates of the castle. These excavations have the double purpose of revealing the nature of such work as remains hidden below the present ground surface and of clearing away the unsightly masses of rubble that encumber the site. At the time of my visit the excavations were far from complete, but had already revealed the foundations of many subsidiary buildings in the Inner Bailey which must have considerably improved both the accommodation and the comfort of the garrison. It is not yet possible to state which of these buildings were in use from the time of the castle's foundation, but the inner side of the curtain wall was probably built against at a very early date to give more space than was available in the restricted quarters of the keep where the thick walls took up a great deal of the area of the plan. (See Fig. 2.) The need of additional room accounted for an alteration which is supposed to have been made by Bishop Pudsey, 1158-1174, when two upper stories were added to the top of the keep. This had at first only comprised three stories, of which the uppermost constituted the State apartments, while the first floor contained the main entrance, reached from the exterior by a stair or gangway from the Inner Bailey. Entrance to the ground floor is obtained at present by means of a breach in the south wall, where an original loophole has been enlarged by pulling down masonry from its jambs and from below its cill. Signs of a door jamb still exist at the north-west corner, the smaller of the two parallel vaulted of the keep at ground level, and another opening remains at the south-west, giving access to chambers into which the ground story has been divided. These rooms retain the major part of their vaulting and are planned upon a generous scale. That upon the north (see Fig. 3) is approximately 58 ft. in length by 20 ft. in width, with a semi-eliptical barrel vault springing 10 ft. from the floor and rising to a height of about 9 ft. above its springing. The setting out of the vault is not absolutely regular, partly owing, perhaps, to the manner of its construction and in part to the movements in the walls of the castle since its erection, occasioned by the wear and tear of 800 years and the state of partial demolition in which they exist at present. Interest is given to these early barrel vaults by the introduction of minor vaults which intersect their surfaces at right angles and give additional headroom to the arches above doors and loopholes in the walls of the chamber

The surfaces of all these vaults were almost certainly brought up to a smooth surface at the time of their construction, but the pointing material has since fallen away exposing the large rubble slabs used as voussoirs. The groin lines are among the worst preserved

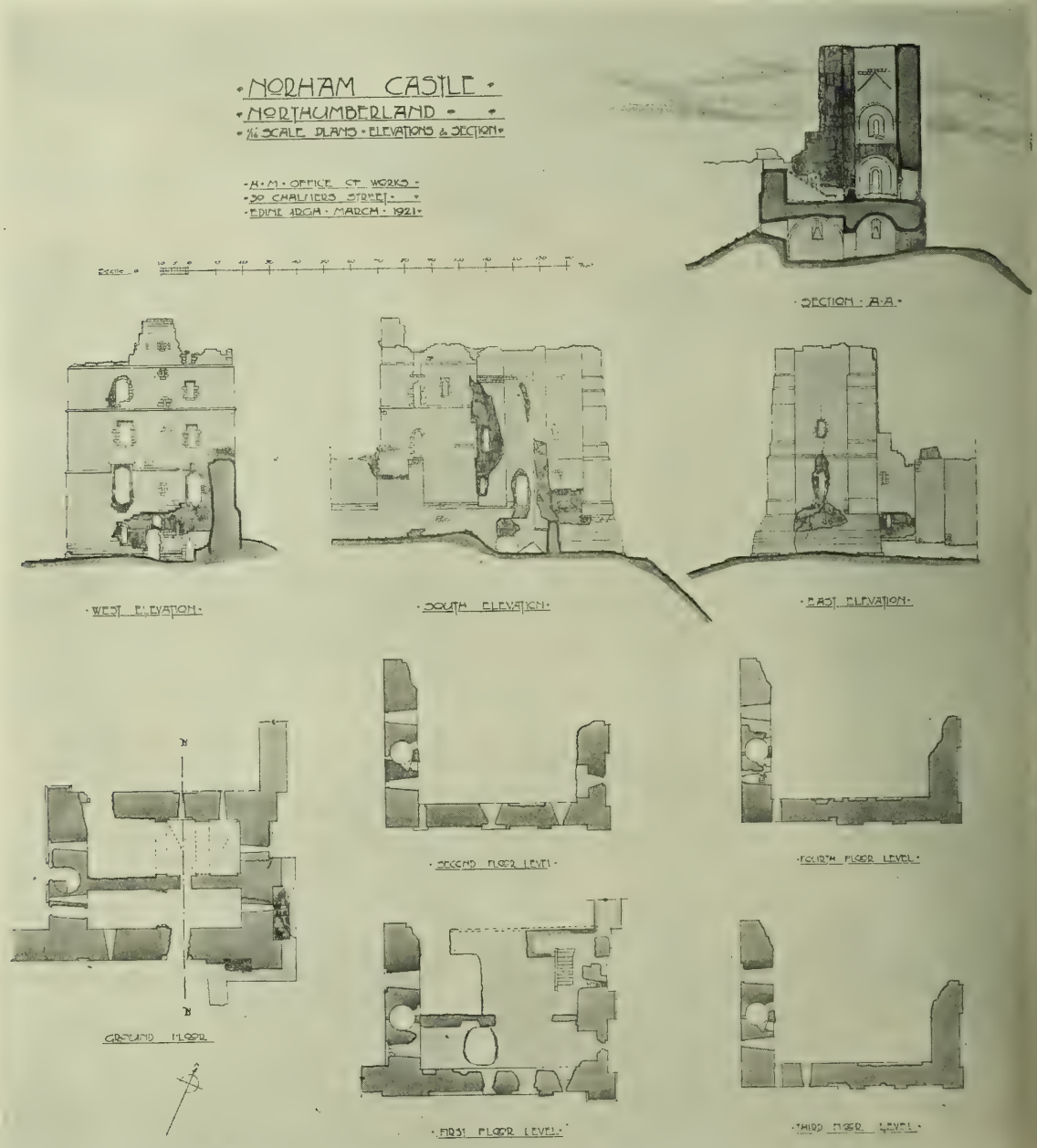


FIG. 1.—PRINT OF THE CASTLE IN 1680, SOUTH-EAST VIEW.

parts, for, being difficult to construct neatly in rubble, the proportion of packing out in mortar and small stones was greater at these places than elsewhere. The fall of the mortar has left the groins in an apparently precarious state, but they are not the only weak points. The loss of the superficial mortar from the vault has been followed by the fall of the stones themselves in some parts and repair is urgently necessary if these most interesting records of the past are to be preserved for future study. Repair will not be easy, for the dilapidated condition of the vault would have been sufficient to have condemned it to demolition at the hands of a Victorian restorer. A more enlightened estimate of the importance of conserving every vestige of ancient work governs the theory of the subject at the present time, and every effort will be made to retain the existing stones in position and accessible to inspection without the addition of an unpleasant array of disfiguring props or a network of steel, such as was resorted to in many monuments before H.M. Office of Works demonstrated the possibility of a more refined method of conservation.

A series of processes has been devised by the Historic Buildings Branch by which the monuments may be maintained by inconspicuous means, and dilapidated and dangerous vaults have been treated and put into sound structural condition by an ingenious process of successively cleaning out the several joints of the stonework little by little and inserting Portland cement mortar into the cavities and driving it by special tamping tools well into the heart of the work. The process is difficult and would be dangerous in inexpert hands, for it is not easy to support an irregular rubble vault upon a temporary centre in such a way as to permit of access to its soffit, but by no other method can such excellent results be obtained. On completion of the repairs the old rubble voussoirs are still obviously original work preserved in its old position, insertion of mortar material has been kept down to the minimum, and where new stones have necessarily been added the masonry is built in general harmony with the remainder, but with sufficient difference of technique to permit a careful investigator to be quite certain as to the limits of old and new. The cement packing is never allowed to appear on the surface, which retains its time-worn character and its interesting play of light and shade i broken texture of the masonry. Harm maintained in the shadowy joint line pointing the work in lime water made coarse pebbly sand, such as was used in t work.

How the Norman builders were enab build groined vaults which, though som irregular, have yet proved capable of en 800 years of rough usage is illustrated by paring such ruins as remain at Ne Castle with the castles and churches structed by the Crusaders in Palestine with the modern house-building in country where similar vaults are still in day use. The unequal curvature in the and vaults at Norham suggests that our n of constructing rigid triangulated t centres could not have been employed to in their erection, and it is possible th more direct method still retained in th may have been used. In that case th cesses would have been as follows. Th closing walls of the compartment would been built first with the rounded lines proposed intersections of vault and wall n upon them by a ledge for the reception



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FIG. 2.

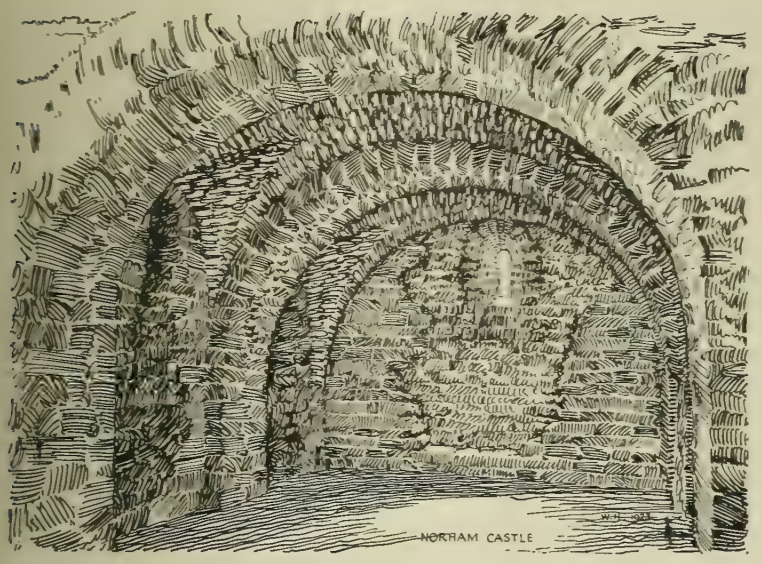


Fig. 3.—Vault in Northern Room of Ground Floor.

of the vault. Beyond the ledge the wall
l be carried up for a few courses in order
ure that sufficient weight existed to abut
reen vault. Any cross arches would be
ructed upon centres formed of any con-
nt building material piled up dry in the
of a rough wall with the upper surface
lled to the desired form in loam worked
a sort of mud-pie by the builders' hands
eet.

ording to the material and method em-
d in each centre, more or less settlement
take place as the voussoirs were laid.
hick joints of lime mortar permitted of
considerable adjustment as the centre
d under the weight, and the flattening at
own and bulging at the haunch charac-
c of Norman arches, including those in
round-floor vaults of Norham Castle,
come about without being specially de-
d as a refinement and, on the other hand,
nt betraying by fractures that any ex-
e settlement had taken place. The
pt to build arches of approximately semi-
ar curve lent itself to this process of
ng and bulging, and the Normans failed
over the secret of modelling their centres
e thimble contour, approximating to a
atenary curve, that has been used in the
rom time immemorial in connection with
uctions for which non-rigid centres are

For the continuous barrel vaults of rubble and mortar, somewhat similar centres must have been formed. The loss of the original surface at Norham prevents the possibility of any serious conjecture as to the material with which the centre was covered. This may have been earth-supported upon piles of brushwood as in Palestine, though in the Norman undercroft at Westminster Abbey irregular undulations in the surface of the vault suggest that rounded planks or half pine trunks may have been used as the upper part of the centre, the under part of which was of non-rigid character. In any case, the groins of the vault would be represented by sinkings or valleys in the centre, and would be far more conveniently and speedily arrived at in the process of modelling than by elaborate geometrical construction in the setting out, and the wasteful process of cutting squared timber to the curve. These are processes introduced after the practice of vaulting for ordinary building purposes had died out, and, except where justified by the repetition of the same vault, they add excessively to the cost of this splendid form of building.

So much has been written concerning the fine structural economy exhibited in a later style of Gothic vaulting and its abutment, that it is of interest to note that its elements appear in the arrangement of these two vaulted chambers. Considerations of vault management have been allowed to affect the plan throughout. By dividing the breadth of the building instead of its length, two vaults of conveniently small span were obtained, with the ensuing advantage that height could be kept reasonably low and the centres proportionately small and easy to handle. The partition wall, too, which is hardly thick enough to stand the thrust of either vault alone, is economically used to support the springing of both in such a position that their opposing thrusts practically neutralise one another (see Fig. 2). These considerations became still more forcible in connection with the vaults of the first floor, for, at a greater height from the ground, it was imperative that the spans should not be excessive, or the massive side walls of the keep would have been provided with a disruptive force ready to assist any enemy who should undermine their bases. The vaults of the first floor have fallen, and of the partition wall only fragments remain. The springing for the transverse arches was arranged upon corbels in the walls, to still further reduce the span and assist in the thrust management. Articulation is carried somewhat further than in the lower story, for the window openings are larger and would have involved something like concentration of pressure upon the piers between the windows. At a higher level an inclined weather-moulding exists upon the inside of the east wall of the second story, and seems to indicate that formerly a timber roof was used here, as pressure from vaulting would have been difficult to control at this height above the ground. The positions of floor beams are also indicated at two levels near the top of the building for the two stories added by Bishop Pudsey. Access to the various levels of the keep was obtained by means of a spiral stair in the west wall (see Fig. 4). The diameter of the staircase varies from 8 ft. at the top to nearly 10 ft. at the foot, giving more room than is usually associated with stairs of this sort.

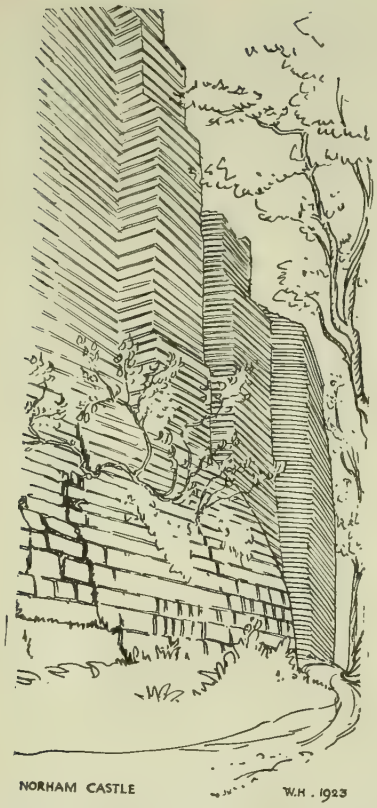
The parallel chambers into which each floor was divided were served by separate doors from the staircase, one being placed to the



Fig. 5.—South Elevation.



Fig. 6.—West Elevation.



SHOWING MODERN MASONRY PARTING FROM THE WORK IT WAS INTENDED TO UPHOLD.

north and one to the south side of the central partition wall.

Sanitary accommodation seems to have been provided by means of small wooden chambers projected out from the wall faces on brackets, with access from the interior of the tower by means of small doorways pierced in the upper parts of the walls. As time progressed these provisions were augmented by a new latrine in a separate building, on the west side of the great tower.

The tendency of writers to exaggerate the primitive aspect of life in former times receives a check in the facts that are brought to light by further research, and the newly discovered out-buildings include fireplaces and bakehouses that suggest a considerable degree of comfort.

On the exterior of the eastern side of the keep is an instance of the difficulty of the efficient repair of an ancient structure. New stones had been inserted at some former repair in the slope guarding the foot of the wall. The new patches had shrunk and bushes were growing in the cracks between the old and the new work.

REGIONAL PLANNING IN WALES

WALES not only contains some of the finest natural scenery in Great Britain, but, unlike the Lake District, industrialism also reaches in South Wales its high water mark. This volume* deals largely with the urgent necessity for protecting natural amenities from the inroads of thoughtless development. The introductory notes include an appeal for adequate regional planning in the area that will be affected by the Severn Barrage. Mr. H. M. Vaughan contributes a powerful indictment against the tyranny of the advertiser. In answer to the query *Cui bono?* he asserts that "The only gainers from this continued and deliberate vandalism will be a small influential class of persons who have recently discovered that trees and streams rocks and landscapes own some financial which can, by advertisement, be transm into hard cash. It is this group of exploi who are really the worst offenders in this sistent destruction and disfigurement of countryside, and these people are to be f mainly in our own public bodies. From newspaper reports it will be seen that appeal to a public body on the ground o picturesque or the historical is invari turned down, usually amid roars of igno laughter." Mr. Mortimer Wheeler m much the same complaint, "Before we stones at North Wales, however, let u member that the Great Western main lin Monmouthshire brings hundreds of passe daily to the gates of a fine mediæval c which, battered and bricked up almost be recognition, is now a home for steam m go-rounds and a monument of civic ignor and indolence." Mr. Craven Llewellyn u the afforestation of colliery tips by plan the birch and the Scotch fir. Mr. Try Edwards contributes a review of recent l ing and town-planning literature; Mr. A Lloyd some notes on Welsh town plann and the producers are to be congratul upon an excellent all-round issue.

* THE WELSH HOUSING AND DEVELOPMENT YEAR BOOK, 1924. (Cardiff: The Welsh Housing and Development Association.) 1s. 6d. net.

NEWPORT (ESSEX) GRAMM SCHOOL AND MEMORIAL HA

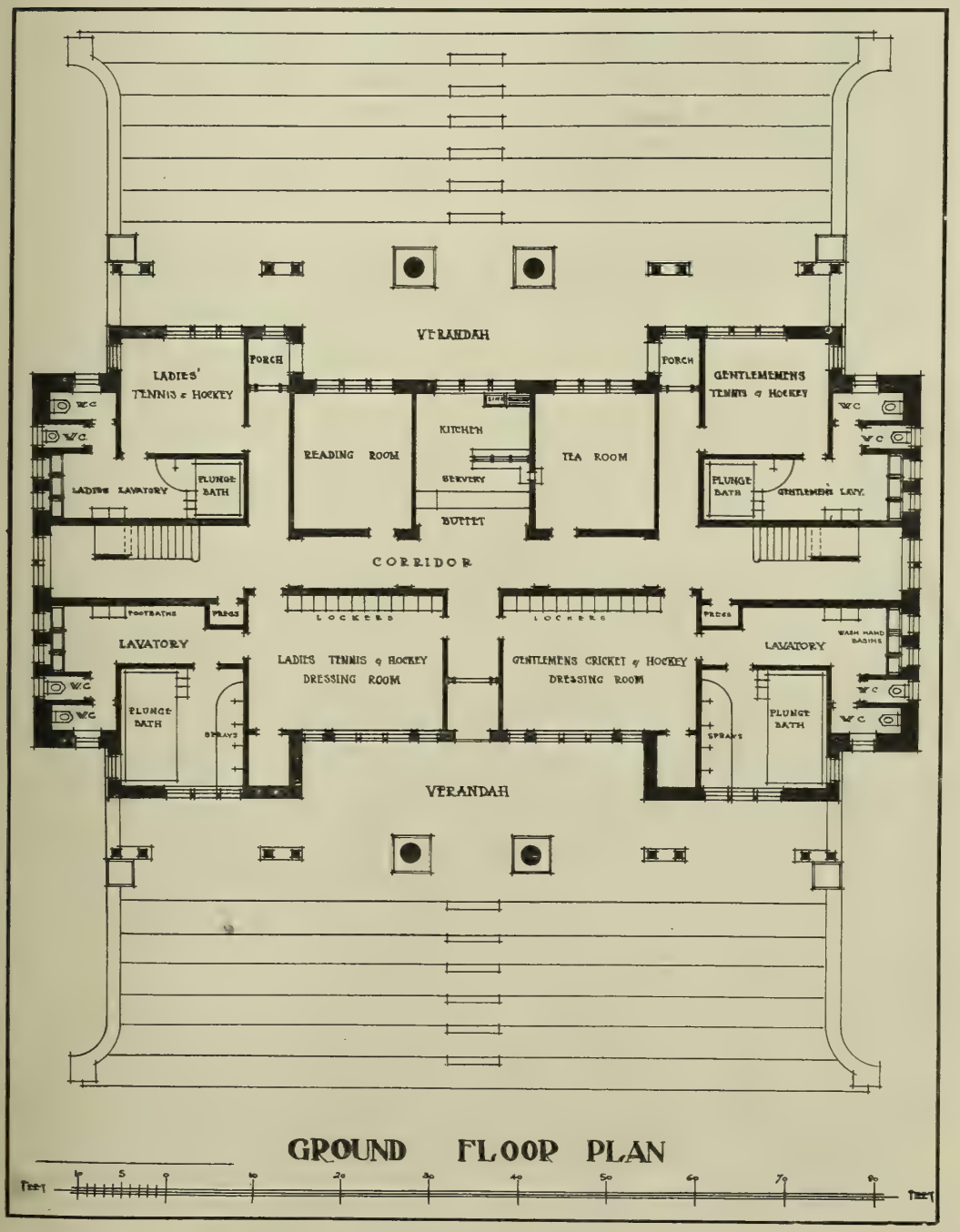
THIS memorial hall was built from f subscribed by the Old Boys, and formed of a general scheme of enlargement of school, of which it will be the central fea when completed. The drawing was exhib at the Royal Academy in 1923. The tractor for the work was Mr. C. Kerridge (Ju of Cambridge. The architects are Messrs. W Kieffer & H. S. Fleming, of 83, Pall Mall, S.



Newport (Essex) Grammar School, Alterations and Additions: Memorial Hall.

MESSRS. W. J. KIEFFER & H. S. FLEMING, Architects.

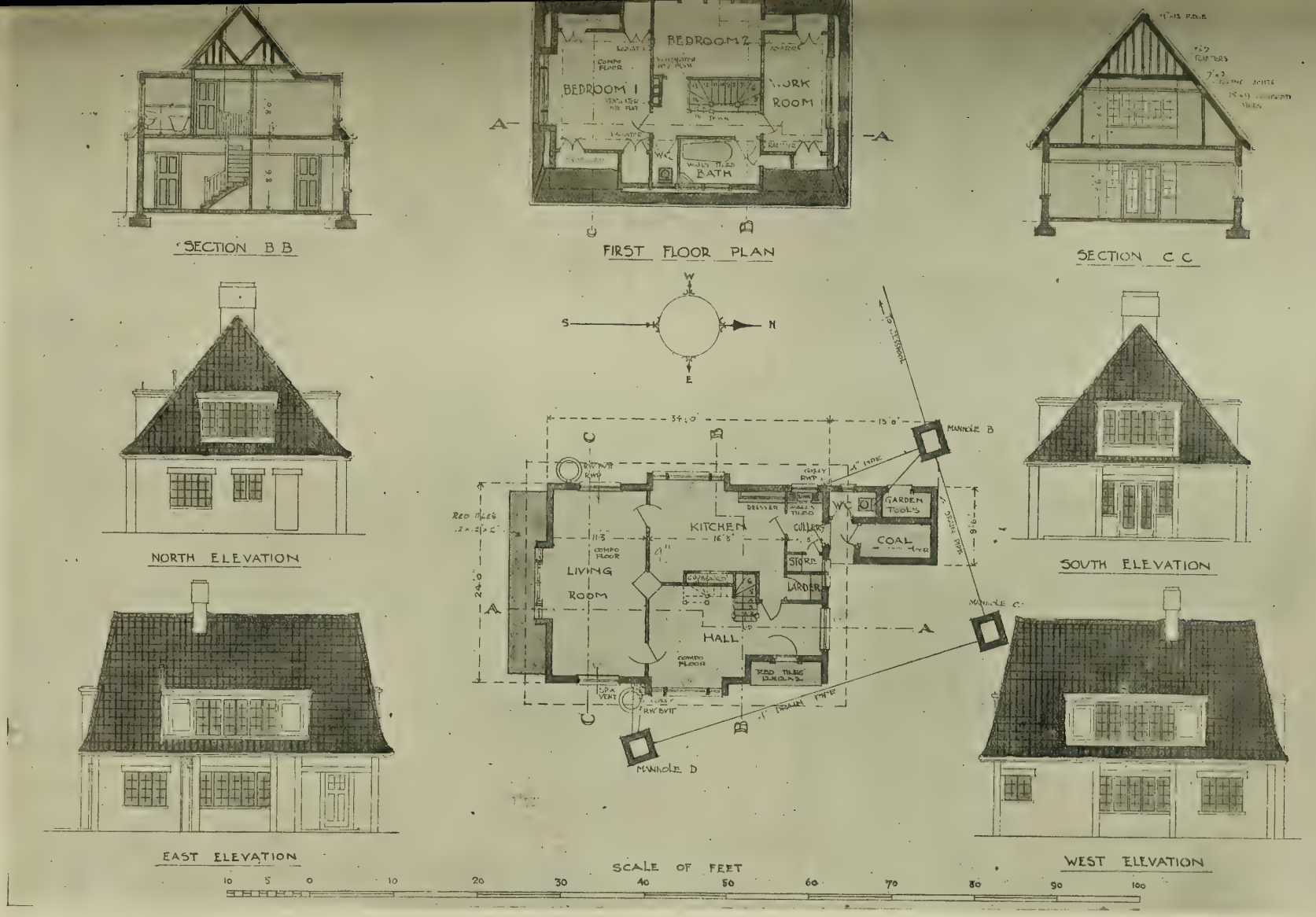




Sports Pavilion at Paisley.

MESSRS. ABERCROMBIE & MAITLAND, Architects. (*See p.* 394.)

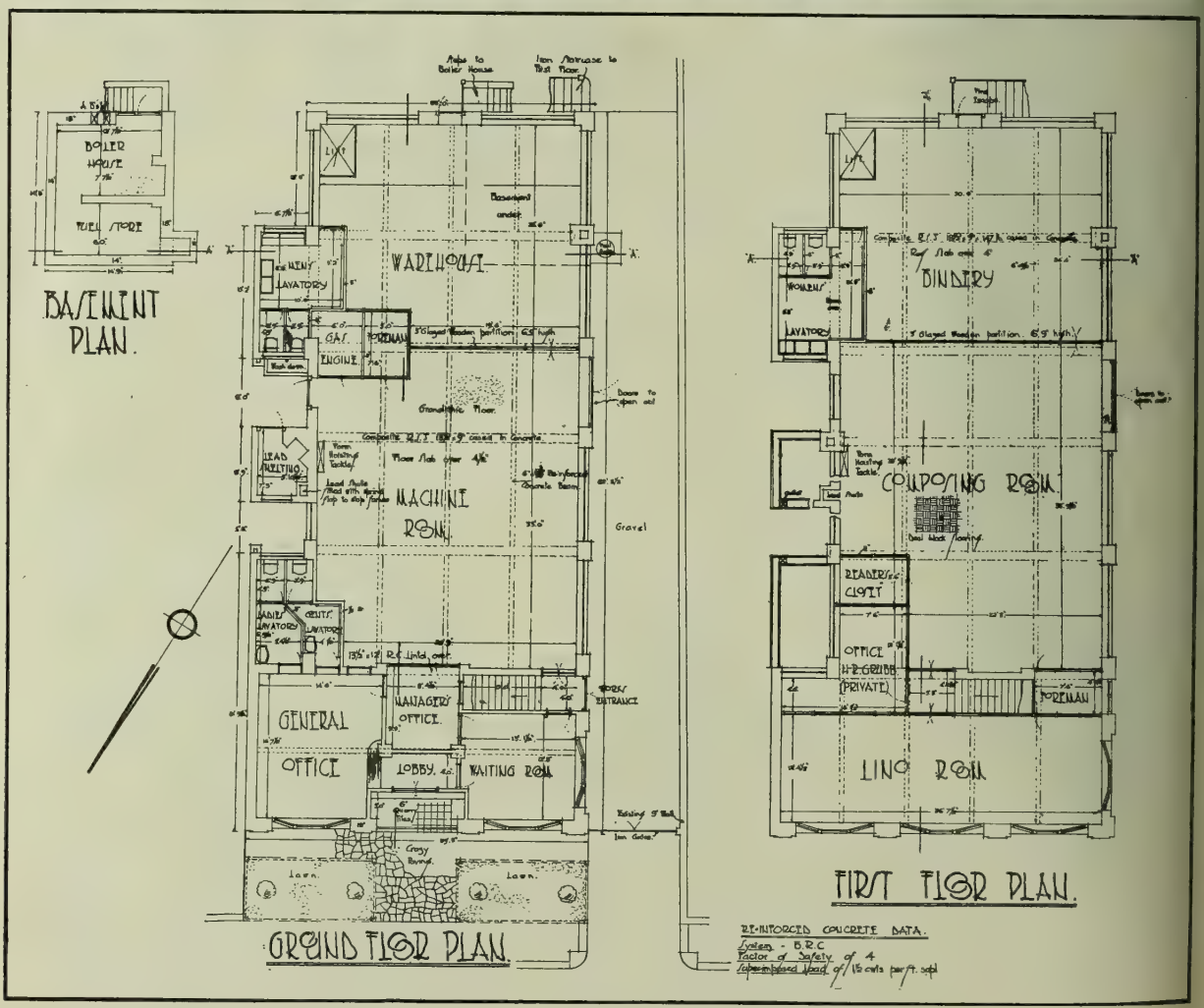
SOUTH ELEVATION
FIRST FLOOR PLAN
BEDROOM
BEDROOM
LANDING
BEDROOM
PASSAGE
W.C.
NORTH ELEVATION
GROUND FLOOR PLAN
LIVING ROOM
DINING RM
HALL
WORKROOM
W.C.



Cottage, Chaldon Mount, Chaldon, Surrey. MR. HORACE G. TURNER, A.R.I.B.A., Architect.

[This cottage is constructed of brick walls and reinforced concrete floors. The roof is of tiles. There is only one fire, which is used for cooking and heating; it can be turned to be seen in the living room or the hall. Radiators are placed in all the rooms, including the bedrooms, and so heat the whole cottage.]





New Printing Works, Croydon. MR. F. SUTTON SMITH, Architect.

The front of this building is in Epsom red facing bricks, with stone dressings supplied by the Patent Impervious Stone Co. The piers are in Southwater engineering bricks in cement, and the remainder of the walls in Warnham common pressed bricks. The first floor and roof are of reinforced concrete, reinforced with B.R.C. fabric. The roof is similar to floor, in order that another story may be added later. The offices and first floor are finished with wood blocks and the remainder of ground floor and basement with granolithic paving. The chief feature of the design is that there are no columns to support the floor or roof, thus giving more room for large machinery. Another feature is all partitions are removable, being wood glass panels, whereby when a department g or diminishes the partition can be m accordingly. All windows are Crittall's "F tia" sashes. Messrs. Alfred A. Secrett, of Wallington, were the builders.

BOOK REVIEWS

nal Architecture in the West of England. y A. E. Richardson and C. Lovett Gill. London: Ernest Benn, Ltd.) Price 42s.

TE rightly, the authors of this work have to regard the architecture of England the regional, rather than from the county, of view. They are a little unfortunate, er, in their title; not only are their refer- almost exclusively confined to the south- but they very properly keep within on which, owing to its sea-faring history, anite, its red sandstone, and, generally, its ar detachment from the rest of England, most decided character of its own. Its nth and seventeenth-century architecture us indications of a direct relation with , Holland and France, whilst the eighteenth ry is exceptionally rich in finished examples architecture and architectural engineering period, such as a capital city like Dublin linburgh might well be proud of. It has been a sailor's county, and its long ation with the Navy, which is sheltered rovisioned here, makes it a place of retire- both for officers and men, and there doubt but that it was owing to the vast of money that were spent on the Navy, ularly at Plymouth, that such eminent ects as Foulston, and such capable eers as Rennie were attracted to a locality , otherwise, was far and remote. Foulston r Plymouth what the Woods did for Bath Grainger for Newcastle—his work is later that of the Woods and consequently of , rather than of Roman derivation, but not been for one or two fine interiors, like roprietary Library at Plymouth, one would had to regard his work as sterile, unin- ing and lacking in everything but style. it certainly had, but it was a cold style. me as the unfortunate link between the cised Italian of the seventeenth and early enth century and the resuscitated Italian rhaps, Nash, and certainly Barry, Walters rick, and a nineteenth-century school. In orks of Charles Fowler, as illustrated in Lower and Higher Markets at Exeter, we more original treatment. The common- proportions of Foulston are bettered by uition, a natural treatment of the problem, refinement of detail that compels us to and admire.

later work of Rennie, as seen in his Victualling Yard at Stonehouse, affords excellent example of engineering archi- e or architectural engineering of which e in so great need to-day. It is not, of , like Blenheim, a great architectural or is it a sedately disposed example of the of a great architect, like Greenwich, but big commercial building, designed by an er, and with pretensions to architecture, ter example exists in the country.

authors have approached their subject he right standpoint—the regional and the c. Their extraordinary knowledge of untry, and their wide studies of the archi- of the period, enable them to rush us he ground with a breathless enthusiasm ill not allow us to lay down the book he whole of their discoveries are revealed. from their scholarly references to the more ant architectural examples from towns xeter, Plymouth, and Truro, they take recesses of the country and, showing us raphs and sketches, describe endless les of minor works, which form, perhaps, ost useful and charming chapters in the Of particular interest is a house at h by Nash; stone houses from Truro, 1882, not those dated 1805, which never to have appeared. In the Isles of Scilly arming little houses which remind us of les we have seen in the Channel Islands. eem to have the same aptitude for im- ng detail, but at the same time retaining mple breadth. The porch over low entry, Town, St. Mary's, in the Isle of Scilly, s all that we mean.

book suggests that there is still room for other works on Regional Architecture in other areas of England. It was a happy idea to present the architecture of South West England to us in this way.

A Short History of Hampton Court to the death of Charles I. By Ernest Law, C.B. (London: G. Bell & Sons, Ltd.) Price 6s.

It occasionally occurs that an old house has been so closely associated with the distinguished persons by whom it was built and occupied that its history is largely identified with the histories of those persons. The history of the place can be understood only by following the lives of the successive persons who owned it. When this is so, as is the case with Hampton Court, the danger of paying too much attention to the personal aspect to the neglect of the other is obvious, but when a just balance is maintained between the two a vivacity is imparted to the narrative which assures the attention of the reader, and therefore assists in the assimilation of the instruction given. The author of this work has been successful in maintaining this balance, and has so treated his subject that while his material bears the very impress of documentary foundation the narrative throughout preserves the absorbing character of a fascinating novel.

The manor of Hampton, which is mentioned in Doomsday Book, was acquired by the Knights Hospitallers of St. John of Jerusalem in the thirteenth century, and was occupied by a preceptory of sisters of the order until 1514, when it was leased to Wolsey, then Archbishop of York. Wolsey, who was then rapidly rising in wealth and power, had taken great pains to secure a healthy spot near London, and having acquired this site proceeded to erect upon it a palace which ranked among the first in Europe. Its rich decoration and sumptuous furniture, its splendid tapestries, which were changed once a week, its lavish accommodation for guests and retainers called forth not only the satire of the Cardinal's enemies, but the wonder of the foreign ambassadors who waited upon him. Wolsey's sanitary arrangements were on a most advanced scale. Pure water was brought from Coombe Hill, about three miles away, in two lead pipes which were carried under the Thames above Kingston bridge; baths and other conveniences were installed, and the drainage system was so excellent that it was not necessary to interfere with it until



South Porch of Notre Dame, Dinant.

From a water-colour by Mr. John Keppie, A.R.S.A., F.R.I.B.A.

[This porch is an interesting example of Belgian Gothic of the thirteenth century. The building is situated on one side of the Grand Place, leading to the bridge from the town to the opposite bank of the Meuse. Both bridge and cathedral were destroyed by the German bombardment at the beginning of the war.]

1871. On the acquisition of the palace by Henry VIII extensive additions were made, the great hall with its magnificent roof built, and much decorative work carried out. Henry also obtained the fee simple of the manor from the Knights Hospitallers.

The author's narrative of Wolsey and of Henry VIII and his successors, as connected with the palace, is well written and contains many references of great interest, such as the Christmas masques and plays conducted in the great hall. The volume is profusely illustrated throughout with good drawings, photographs, and reproductions from old prints, and there is an appendix of historical notes on the opening of Wolsey's rooms.

The Church and Parish of St. Dunstan in the East. By ARTHUR G. B. WEST, M.A. (Rector). (Simpkin, Marshall, Kent & Co., Ltd.). Price, 2s. 6d.

To all who love their London—and they must include the vast majority of us who have the privilege of working or living here—the landmarks which distinguish our city and are closely connected with its history and mark its progress are invaluable possessions. It is obvious that in the process of time, the advent of new requirements, the inevitable change of circumstances, and the general process of decay must often necessitate the reconstruction, or perhaps the entire removal, of some of our cherished monuments; but while such drastic measures are inevitable in secular buildings of continuously changing uses, it is only in extreme cases that they are applicable to a church, the purpose of which is constant. The church of St. Dunstan in the East is one of the nineteen churches recommended for suppression by the Commissioners of 1919. They advised, it is true, that the tower of St. Dunstan's should be allowed to remain, but, apart from the religious side of the question, one need only point to the forlorn aspect of the tower of St. Mary Somerset, in Upper Thames-street, and similar examples, to realise the effect of such a policy. Wren's tower at St. Dunstan's, with its fine stone crown, is of similar character to that of the old church of St. Mary-le-Bow destroyed in the Great Fire, and is a priceless heritage.

The handbook by Mr. West is a valuable contribution to our knowledge of parochial history, and consists largely of extracts from the Vestry books and churchwardens' accounts of the parish. We could wish that, in a work of this restricted size, many of the extracts were eliminated, so that space might have been found for a fuller description of the successive churches and of the ancient parochial buildings, as the title seems to suggest. But some of the extracts here given are of great value, as for example, that of the Indenture specifying the terms and extent of the contract for the enlargement of the church in 1382. The account of the penance imposed on and performed by Lord and Lady Strange, in 1417, following on a fatal strife in St. Dunstan's church, in which they were implicated through their servants, throws a most vivid sidelight on the history of the period, "that their servants in dresses betokening shame and penance should walk before the Parson of St. Dunstan's from St. Paul's to St. Dunstan's church; then the Lord Strange bareheaded, and his wife barefooted; Reginald Kenwood, Archdeacon of London, following them; and at the hallowing of the Church, the lady should fill all the vessels with water and also offer an amount of ten pounds. And the Lord Strange should offer a pyx of five pounds."

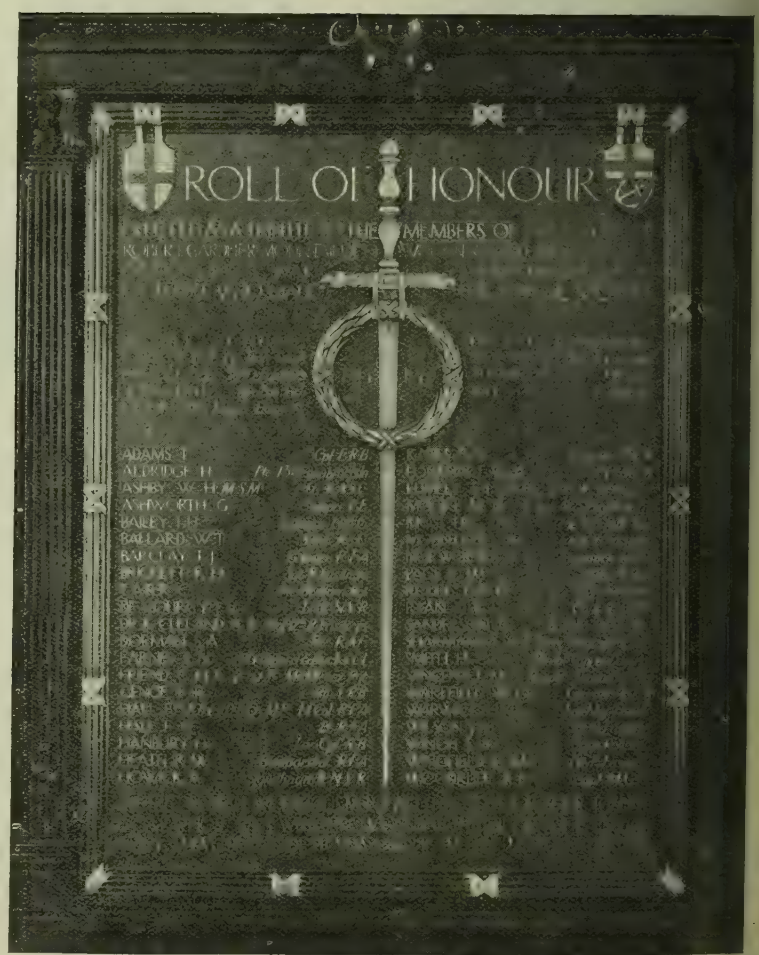
Four appendices at the end of the book are devoted to the monuments in the church, a list of Rectors, the communion plate, and a description of the organ.

Old English Furniture: I, The Oak Period, 1500-1630. By J. T. GARSIDE. (B. T. Batsford, Ltd.) 10s. 6d. net.

Mr. J. T. Garside's book—Section 1, The Oak Period, 1500-1630—is a useful and welcome addition to the rapidly growing literature on furniture lore. We understand from the title-page that it is for the use of collectors, designers and students, and that the writer is lecturer on the history of furniture and decoration at the Regent-street Polytechnic. We think the students must be happy in their professor. Mr. Garside has done so well in this first section that we feel sure he might have done better had he thought fit to elaborate his subject more freely. Terseness is a virtue often more honoured in the breach. For example, in figures 47 and 48 we are introduced to "dressers" of the late seventeenth and early eighteenth centuries, as distinguished from the earlier "court cupboards" and "dressoirs" of Tudor days, and the author's general remarks upon dressers and their history are contained in seven lines of type neatly centred in an otherwise blank large octavo page. The two dressers exemplified are of the type with unenclosed lower sections, and the author might with advantage have introduced us—textually, at least—to the eighteenth-century type with enclosed cupboards—the last word in movable-dresser space economy and the actual progenitor of to-day's kitchen fixture. It may be objected that this would infringe too much upon the subject-matter of the volumes to follow; but on such subjects one cannot, or should not, work in watertight compartments. The section devoted to tables, giving eleven examples from the Tudor trestle and melon-bulb leg to the gate-legs of Jacobean times, is quite comprehensive and helpful; and so also with armoires, court cupboards, chests, and chairs.

In the preface the writer says that he "has arranged the material on such a system as to be readily accessible for reference purpos at the same time has tried to keep hi theme—the evolution of design—always to the reader's mind. With this end i all the illustrations have been carefully c and reproduced in line, thus giving de and emphasis, and showing constructive q of design rather than mere pictorial That particular form of illustration—lin have been the author's original intentio nevertheless, eighteen of the plates are duced from photographs and they are done that very little definition or em is lost.

The illustrations exhibit good judgm selection. Therein we have—in line an good definition—some three or four h details of carvings, turnings, and applie ments, which occur in the make up or mentation of old English oak furniture. actual or approximate, is appended to each and we can trace, at a glance, the evo or perhaps involution, of the baluster ta of 1697 from the "cup and cover" of and the deeply carved "melon-bulb" of We can trace English panelling from th fifteenth century "linen folds" and "p mins" right through the "Romayne" lions and conventional floral designs Renaissance to the inlays, geometrical n ings and split-balustrades of the seven century. The oak tree is indigenous to o and old oak furniture is typical of the stout heart of our forbears; it is likeable stuff, a more we see it or read of it, the better we



A City War Memorial.

MESSRS. BOURCHIER, TATCHELL & GALSWORTHY, FF.R.I.B.A., and MR. G. C. WILSON, A.R.I Architects.

[This roll of honour has been erected at Ocean House, London, E.C., to commemorate a members of the house of Messrs. Robert Gardner, Mountain & Co. who served in the war names on the right and left of the laurel wreath are those who made the supreme sacrifice lettering is incised on a mahogany panel, the names of the fallen in red and the rest of the let in gold. The heraldic shields are those of the City of London and Lloyds. The whole construction and carving is the work of Messrs. G. A. Brown, from the design of the architec

AUCTIONEERS' AND ESTATE AGENTS' INSTITUTE CONFERENCES

ptember 2 the delegates to the London of the Auctioneers' and Estate Agents' were received by the Lord Mayor at ldhall.

ptember 3 the Conference was formally t the Kingsway Hall, with an address President, Mr. Charles Osenton. The s taken by Mr. J. Herbert Hunter, rman of the London County Council, ended a welcome on behalf of the f London.

course of his address the President n regard to the executive group—the the builder's merchant, and the work-, the builders of the new housing would probably be, not the speculative who used to supply the people's needs, but the large contractor as to build the houses for the l authorities. With regard to althy competition must be maintained, profits at a reasonable level. Again, ght be done to lessen the expense of particularly in the standardisation of tion, and in the employment of s specially arranged to minimise the of labour involved in such construc- fter all, however, the builder was de- on the other two members of his e group—the merchant and the work- h of whom presented considerable diffi- Prices of materials were awkward to they had an uncomfortable habit of o meet the contemplated building of the municipal authorities, and sub- peared to be a rich dressing, which ed a luxuriant growth. This state of as bad, and contributed largely to the st of building. Some measure of must be exercised over materials to prices becoming unduly inflated. At he time it was a difficult process, with some danger. Mr. Wheatley's on was to have prices fixed by the f Trade, and, if manufacturers would at those prices, to give the Minister occupy the works and to produce the at a fair price. Something was said mpensation, but there was neverthe- ggestion which sounded unpleasantly fiscation. In any method of control- es, the arrangements would obviously be safeguarded with the very greatest t the remedy should be worse than the

nstitute, which was not founded until r incorporated until three years later, he time of the amalgamation in 1912 ly muster a combined total of 2,800, ad nearly 5,500 members, the great them engaged in general practice in ency, constituting a homogeneous and ody thoroughly representative of real nterests. The magnitude and com- f the interests directly or indirectly in real estate made the proper con- their business a matter of public and they owed it therefore to the com- o strive to put beyond question the n of their profession for integrity and . Their examination system ensured ng test of technical knowledge, and a most comprehensive educational r the training of their juniors.

largely to the enthusiasm of Sir Wells, and the generosity of the agri- uctioneers, whose aid alone rendered ne practicable in their day, they had College of Estate Management a school well worthy of the recognition rought them in the grant, by the University, of a special degree in anagement.

ld like to say one word about their itute building. It occupied one of sites that could have been found for whole of London, and it possessed in istinction and dignity which rendered worthy of its prominent place amidst the many notable buildings in its immediate vicinity. They should be proud in their possession of it, and he thought their pride would be shared by the architects whose skill and taste had given them such a headquarters for their members.

At a general meeting of members at the Kingsway Hall on September 4, Mr. J. Geo. Head (Past-President) read a paper on "Housing—the Common Task." In the course of his remarks he said there was little need to apologise for bringing forward the subject of housing, since it figured more largely in the public interest than any other, even in this time of serious and numerous problems. It might be said to hold the public attention on every side. It invaded every area, political, judicial, financial, domestic and social; Parliament was constantly occupied in attempting to solve its problems; the Law Courts were kept busy interpreting the complicated Acts which were passed, and adjusting as far as possible differences which inevitably arose between the various parties affected by the legislation; by-elections were fought on housing as the predominant issue, and the newspapers were full of articles, reports and correspondence on every aspect of the matter. For these reasons the subject of housing was forced upon their attention, even though they might not belong to that very numerous class of persons who were personally effected by the existing conditions. The whole problem was one of great intricacy, and it was useless to underrate the difficulties with which the authorities were confronted.

The trouble might be stated simply—there were not enough houses to go round. The remedy, however, was by no means simple. In fact, it was a problem of the most complicated order, the solution of which was a matter of very great difficulty. In the first place, shortage had not always been present. In 1908, for instance, the state of things then existing was depicted by the following quotation from a paper on "Giant London," given by the writer before the Surveyors' Institution: "Large numbers of premises were vacant in every locality, and there are suburban roads where house-agents' boards are almost as plentiful as chimney pots. In 1901 there were 15,000 houses empty in the County of London; in 1907 the number had increased to 41,600, and according to a leading daily paper in the Spring of 1908 it exceeded 50,000."

Nowadays, the number of empty houses was negligible, and an advertisement of a house to let produced a queue of applicants. The reason for so great a contrast was, of course, to be found in the relation of supply to demand. In 1908 the surplus was attributed to over-production. Since then production had not kept pace with demand; indeed, they had had a falling production, and at the same time the demand had increased rapidly. In order to cope with the normal pre-war increase in population and other causes, about 70,000 houses were required every year, so that the construction of new houses to that figure would have kept things level in ordinary circumstances. But the production had fallen far below that standard.

In estimating the needs of the nation in the matter of additional dwellings, it would first be necessary to see whether anything could be done to increase the capacity of the houses which already existed. This had been done in other countries, particularly, it was said, in Germany, where the sub-division of existing accommodation had been carried out in an uncompromising manner. The authorities there, having first of all ascertained the capacity of every house, apportioned out the rooms to those in need of dwellings, on the basis of the minimum amount of accommodation necessary for each person. But without proceeding to such extreme measures it might be possible to stretch somewhat the existing accommodation, as follows: First, attention should be directed to those thousands of buildings, existing in London and elsewhere, which were designed and built to suit conditions which had passed away. They were large roomy houses, having several floors, which were quite unsuitable for modern requirements, which were expensive to maintain, and which, except for the present shortage, would be untenanted in large numbers or be let at very cheap rents.

The problem, therefore, narrowed itself to this—"How to provide the new houses." Successive Ministers of Health had made many attempts only to find themselves impaled on the horns of a dilemma. Houses did not grow; they had to be built, and they cost money in large sums. There were only two agencies capable of producing them—one of those agencies was private enterprise and the other was public authority. In normal conditions the vast majority of dwelling-houses were produced by private enterprise. Before the war, 95 per cent. were so produced, public authorities, philanthropic and other societies being responsible between them for only the remaining 5 per cent. Hence it was abundantly clear that private enterprise was by far the most potent agency, and that if conditions could be so arranged as to utilise its energies they would be on the shortest road to getting the houses. This had been done in part. Subsidies were offered which enabled private builders to put up houses even when the cost of building was higher than it was now, and to sell them at prices which occupiers could afford to pay. Even now that those subsidies had been reduced, houses were springing up in large numbers all over the country.

But—and here came the crux of the difficulty—those houses all belonged to one of the two great classes into which the required houses were divided; they were practically all to be sold to occupiers. True, that was a great help, because not only did every house built and sold for occupation provide another home, but it generally freed one for occupation by someone else. Nevertheless, it left the second class of house untouched, viz., the house which was built and sold for the occupation of other than the purchasers. This was not only by far the larger class numerically, but it was also the class of the inhabitants which were least able to take care of themselves. The people who inhabited the houses in this class, including all those who could not afford to buy their houses, were dependent on the protection of the Government, and in their interest the authorities had decided to retain the restrictions still longer. The result of this step was practically to exclude private enterprise from erecting or buying houses for the occupation of others. Could one really expect anything else? When an investor realised that rent was restricted; that the owner could not get possession even from a bad tenant; that the procedure even for the recovery of rent in arrears was so slow as to be practically inoperative, was it strange that he was alienated from that class of investment? Nor was it to be expected that he would be reassured by the fact that new houses were themselves excluded from the restriction, so long as the speeches of any of those who supported the restriction conveyed the idea that not only was this form of legislation directed against property owners at present, but that the campaign would be intensified in future.

The second agency capable of producing houses was the public authority. Parliament could undoubtedly produce the required houses through the medium of public authority. The precedent had been set, and during the last few years over 250,000 houses had been built by them, all belonging to the second, or letting, class. But many disadvantages had revealed themselves in the course of the undertaking. From circumstances inseparable from public undertakings under those conditions, the buildings were specially costly to build, ranging from £1,000 to £1,250.

In the evening the conference held a banquet at the Hotel Cecil. The following days were devoted to excursions to various places of interest.

A SCOTTISH APPRENTICE SPEAKS HIS MIND

[Although we do not necessarily agree with all that is said in this contribution, we print it because it no doubt gives an idea of what many architectural assistants are thinking.—ED.]

WE young men have been remarkably docile until quite recent years. We have accepted the condition of things as they are with a stoicism either superhuman or supremely simple. It depends on the individual. There was always the voice of authority speaking with the ponderous gravity of age and a ripe experience. But the question is being asked among us in whispers:—"Is it authority, beneficent and wise, that is speaking now?"

Authority, in its established institutions, cannot blame us if the very recent examples of its indecision and divided counsels in face of our critical problems are driving us to impatience and a passionate criticism. The question has evolved itself into the following terms, and it is better it should be frankly stated and openly discussed.

"Is the young man getting his sporting chance of a fair field and no favour?"

The practical answer to that question has been translated into definite action. In our own, as in most other professions, there is a union—which is as yet the only representative vehicle for the expression of the aims and aspirations of the young and necessarily struggling professional worker. I say deliberately it is unfortunate that the bizarre conditions of our times have made such a step necessary in any profession, with its unfortunately intense pre-occupation with the subject of "wages." That is not the chief end, and should not need to be even one of the chief aims of a great art. The creative labourer in a sane society would be ten thousand times worthy of his hire. While the great problems so vitally affecting us as men are being discussed over our heads, and perhaps for that very reason left unsettled, we look forward mournfully to a dreary round of donkey-work up the back-stairs. We are assistants, and doomed, so we are warned, to remain assistants. Hence our pre-occupation about the size of that, to us, almost microscopic "Minimum Wage." To such a pass has come the great art of architecture.

We play glibly and uncertainly with the conventions—what Stevenson so aptly termed "the petty artificialities." Where are the pioneers? Where, to-day, is that spirit of enterprise and initiative that made our western civilisation the keystone of progress? It is certainly not with the creative artists, where it should be. It is more likely to be found to-day with the whole host of ephemeral workers that are the peculiar offspring of our age.

I could submit more patiently to an era of sky-pilots than sky-writers such as we are tending to. The age of sky-pilots at least produced cathedrals, while we architects are at a loss before the aeroplane, though it is, after all, merely a habitation that has taken the air, and has still to come down to the earth again. A study of the orders will not produce an æsthetic concept for that; nor for the automobile that is only a habitation on wheels; nor for the whole host of purely ephemeral habitations that our hectic age is producing without our aid, and that shriek for some expression of their purpose.

Before all the tremendous developments of almost superhuman activity to-day, we architects grumble about an overcrowded profession, because we have forgotten the intrinsic function of our art, which is to clothe the crude works of material minds with their essential spiritual significance. The orders of architecture will not do that in our day; but it is our day we must serve, and inspire, and express.

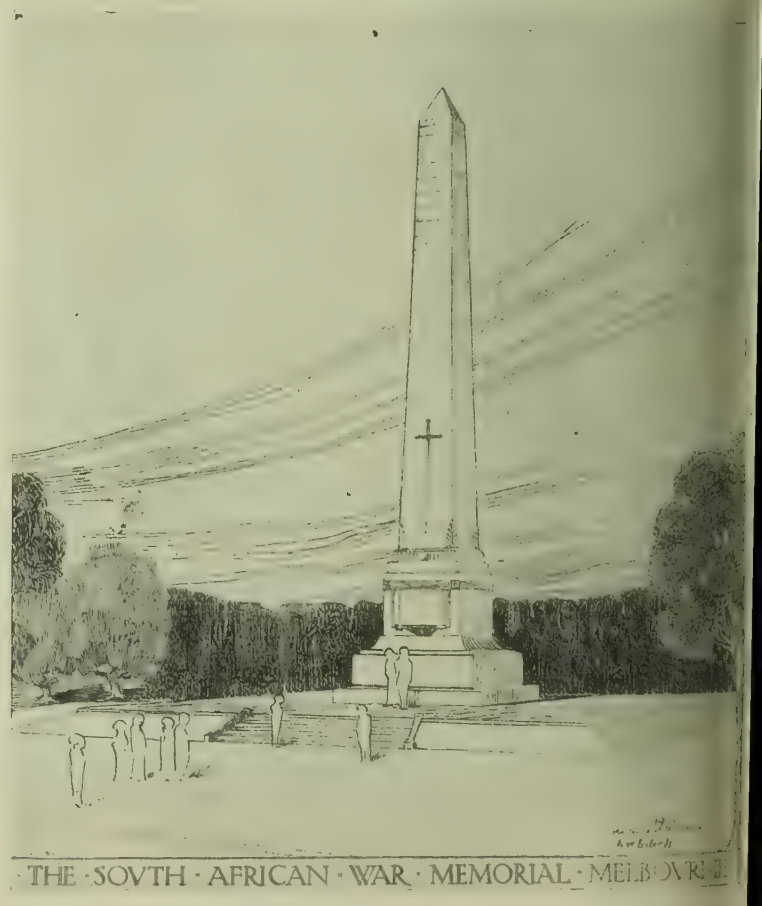
We must face the brutal facts. They are not encouraging. It means throwing our dreams through the window. Stand up, dear misguided fellow devisor of castles on paper, and take a good look through that same window. See that ugly row of jerry-built houses across the street? They are overcrowded with harassed, hardworking fellow citizens. See that gaunt ugly pile of factories in the distance? The majority of your fellow citizens work in such places. On all sides of your window you can almost hear that cry—not, mark you, for merely beautiful buildings, but for convenient buildings. Your long-suffering fellow citizens are crying out for decent houses to live in comfortably; for decent places to work in efficiently; and for decent places to play in. There, in simple terms, lie your prospects—yours and mine.

Whether these places remain as heretofore, resting on the earth; or take, as they have done, to running on it; or flying over it, or under it; or to sailing on the seas—all this, I submit, has only widened the field of our opportunities; if we can only widen our outlook to them. Oh, but this isn't architecture! Alas for our age and our education! Are we going to follow in the wake of the copybook dilettante in the futile battle of the styles, and leave the practical solution of these modern problems to the engineer, the estate agent, and the jerry-builder, all because Vitruvius and Vignola never heard of them? What we call a profession is overcrowded because we have failed to advance with the times.

Had the engineers worried about their dignity, and as narrowly defined their purpose, they would still be occupied with roads and bridges, and grumbling about their lack of opportunities. They have been too busy developing their inventions (some of them should be ours). They do not mistake the means for the end and make a fetish of their drawings. They are not artists. Ah, what a nice thing it is to be an artist after all. . . . Thus ruminating we continue to attempt to imprison this go-ahead twentieth century into the form centuries that have passed.

I am convinced that if we young r begin to think more about our work about accepted opinions, and the definitions and ideas we have inherit the past, there will be fewer of us as the doormats of City board-rooms vestibules of Council chambers as t avenues of progress. We may even make designs merely. We may becom tects really and truly and produce b which is what the public are crying for are to become masters in this sphere of we must exercise our statesmanship a lead. Governments, institutions, and have a notorious knack of following the whether they be artists or scientists. going to be precious little demand for to public libraries, and the kind of arch we have been taught to produce. T reason why we should walk down our ugly streets with our brows in the simply will not pay either in terms (which is supposed to talk) or in salvatio still quietly nags at our conscience).

If we are true to our calling, we wil to create lasting works; but, as we m in an age that shows a childish passion ephemeral, we must put our pride a conventions behind us and go on something that will shelter mankind fr elements, striving as best we can to exp poetry of our human needs in this our diverse and capricious mood. That prospect which faced the first architect the problem that must face the last. stand before some of our new build begin to wonder if we are not going to last.



[This design was selected by public competition for the Victorian State Memorial who fell in the Boer War, and commemorates the first occasion on which Austral forward in appreciable numbers to take part in England's wars. The site is an triangle, facing St. Kilda-road, one of Melbourne's most beautiful boulevards. The used is Victorian grey granite, a somewhat similar stone to that of the Rubislaw Quarries. A but slightly coarser in grain. Its height is approximately 80 ft., and weight 300 tons. The a are Messrs. Irwin & Stevenson, AA.R.I.B.A., of Melbourne.]

ARCHITECTS' AND UILDERS' INQUIRY BUREAU

are glad to give questions and answers not accept responsibility for contributed especially on legal matters.

we appeal to our correspondents to their queries on paper of a size easily nd written as legibly as possible, or still, in typescript?—Ed.

The Possible House.

LY TO MR. EDWARD A. JOLLYCE.]

For some years the Ministry of Health power to authorise the relaxation of by-laws in favour of approved methods ruction, but the initiative thereon has been left with the local authority. there have been signs that the Ministry giving more active encouragement in ction.

from such regulations as that requiring ing up with brickwork of half-timber hich, if bricknogged, is in itself a very resister of fire, the by-laws themselves n a very fair minimum standard of onstruction, and something more than mism of patentees is required to give ion for their relaxation.

ooks for a very active campaign of n and enterprise, either on the part ickmakers or some other body, to bring k-built house once more to the fore- the best and cheapest form of con- that it naturally is, when free from influences.

will be far better than flooding the with houses built in untried methods ful fate.

"CONSERVATIVE."

Distemper and Asphalte.

[REPLY TO "CITY."]

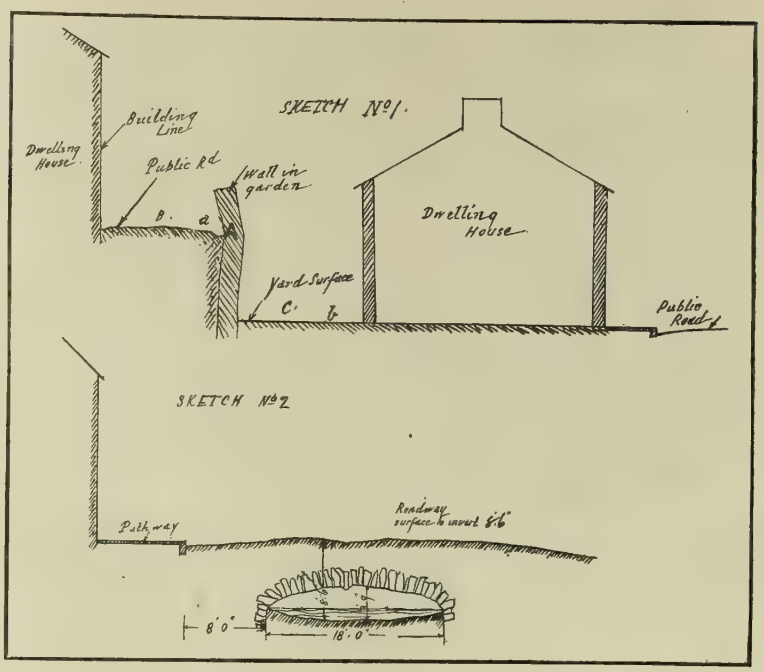
have not previously heard of a ase to that quoted by "City." Rock is composed of nearly pure carbonate mpregnated with about 10 per cent. al tar-bitumen, and it should not be le to what I should look upon as in application of a lime slurry.

y the asphalte is artificial, and this is ss satisfactory. An improper mixture liable to combine with the lime and e the blisters. It would be well to advice of a good firm of asphalte s.

"DOUBTFUL."

Boundary Walls.

Who is responsible for the repair of a s wall, Sketch No. 1, (*a*) dividing the d (*b*) from the yards (*c*) of a range of houses; assuming failure of wall to be) scour from rain or surface water on rdinary traffic on road; (2) time and to weather or natural decay; (3) the of youngsters loosening and removing the public side of wall? How may walls ositions, the repair of which the local (a County Borough) is responsible stinguished from those which are to ined by the private individual? If ons were reversed, that is, assume (*a*) surface of a private garden, and (*b*) e road, how would this affect the



No. 2 shows a section through an arch ubble masonry beneath and parallel ublic road. The arch is failing, and 10 yds. run has to be made good, uld be diverted. The position is the rise and fall of the tide, but eriods of five hours would be obtained rise and fall of tide. During this flow of from 6 in. to 12 in. would continue through arch. The side walls or abutments are bad, and the partial repair of the arch is not possible as it is too bad. This is only a section of the arch, which is a long one. (1) What do you consider the most economical means of carrying this section of roadway; (2) what R.S.J. and concrete would you suggest for such a span (a steam road roller will pass over it); (3) what constants would you adopt for labour on such an arch in (4) brick (5) in stone rubble?

"BOUNDARY WALLS."

Pipes.

[REPLY TO MESSRS. SHAW & STABLES.]

SIR,—The writer has laid pipe lines in tropical countries to convey drinking water, which had to be kept cool and fresh. It was ordinary ball and socket clay pipe unglazed, with tight joints. Water percolated through the shell and was evaporated by the sun; this evaporation having the effect of cooling the water that was flowing through the pipe. The inside temperature was controlled by the rapidity of the evaporation, this in turn being influenced by (*a*) the air temperature, (*b*) the porosity of the pipe, and (*c*) the head which through pressure would increase the loss through the porous walls.

The air temperature, of course, depends upon sunlight and exposure. The porosity of the clay can be controlled in manufacture. It tends to diminish with length of service if the water contains silt or mud. The head can be governed by using glazed pipe for all portions of the pipe line lying more than five ft. below the hydraulic gradient, and burying such portions of the line, the unglazed portions being uncovered, or very lightly covered with soil. The loss of water through evaporation necessary to appreciably cool the water in the pipe is considerable.

"ENGINEER."

Laying of Bricks.

[REPLY TO MR. A. E. FLOWER.]

SIR,—Mr. Flower seems to have misread Mr. Wenning's suggestion. The wall proposed was not built solid in brick on edge, but with a 3 in. cavity, viz., in two 3 in. shells, and there would thus certainly be a saving in material.

"M.A."

[REPLY TO "TRADITION."]

SIR,—With reference to *The Builder*, of the 5th inst., I beg to invite "Tradition's" attention to the fact that it is not necessary to throw the entire weight of the superstructure upon the inner shell.

In the case of one of the systems of building cavity walls, the reinforced concrete piers—to which the outer (concrete) and inner (breeze) slabs are secured with bolts and nuts—have corbels projecting on the inner side to take the wall plates. It will be seen, therefore, that the piers take practically the whole weight o the superstructure in addition to the slabs (outer and inner shells).

W. F. KENNELLY.

Composition Floors.

SIR,—What is the best treatment for a special, jointless, composition floor, the surface of which is crumbling, leaving underneath a whitish powder, as though the composition were disintegrating? The flooring, which was supposed to have been made up from deal sawdust and is buff colour, has been laid for just over three years, during which time it has been polished regularly.

"KERB."

Cement Wash.

SIR,—We should be glad to know if any of your correspondents could inform us of a satisfactory way to mix cement wash for colouring old external cement work.

We have tried killing the cement and mixing it with soft soap.

"G. O. M."

Carmarthenshire War Memorial.

The County War Memorial was recently unveiled at Carmarthen by Colonel J. V. Campbell, V.C. The memorial was designed by Sir Goscombe John, R.A., and is situated on a pedestal of Scotch granite in front of the Carmarthenshire Infirmary. The contractor was Mr. Henry Evans, Brisken House, Llandilo, and Mr. E. V. Collier, M.S.A., Carmarthen, was the architect.

Bartlett School of Architecture.

The prospectus of the Bartlett School of Architecture, London University, for the session which begins on October 1, has just been issued. The courses of study include (1) The B.A. (Architecture) Degree Course, (2) The Diploma Course in Architecture, (3) The Certificate Course in Architecture, (4) The Advanced Design Course, (5) The Atelier, (6) Evening Courses in Design of Buildings.

THE BUILDING TRADE

TRADE UNION CONGRESS

THE fifty-sixth Trade Union Congress opened at Hull on the 1st instant. Mr. Purcell's presidential address covered a wide field, including questions in connection with the treaty with Russia and the London Conference, and other political matters with which, in these pages, we are not concerned, but the whole of his address was strongly "anti-capitalist," and we cannot but regret that, however ardently he feels that the "working classes" are alone fit to rule, he should have spoken so extravagantly as he did of what he termed "the class engaged in exploiting and profiteering." That, at any rate, is not the class the capitalist represents in this country, and when Mr. Purcell said, as reported, in general terms, "they have been known to jeer and laugh at the ignorance, the poverty and misery of their victims," he should at least have specified the persons he said he had known to be guilty of such extraordinary conduct. It is the custom of Labour leaders to speak as though labour alone considered anyone but themselves, but a year like the present marked by strikes, authorised and unauthorised, hardly supports their contention.

Mr. Purcell is reported to have expressed his views as follows: "It is our task to capture every legislative and administrative position, leaving what we do not want and have no use for to the other parties." This may be a wholly justifiable ambition but it hardly savours of that vision of true democracy that has been portrayed to the nation since the war.

In industrial matters Mr. Purcell had little to say. He welcomed the recent report on the building industry as an historical industrial document, "taking stock of the needs and requirements of the community and forming a complete census of the capacity of the building industry with a practical and workmanlike survey of the changes in organisation, equipment, and power needed to get the required results," and he recommends a "similar stock-taking in relation to other industries."

Again, on unemployment the President had no suggestion to make. He said unemployment pay was no cure, and is reported as having said, "Relief work, digging holes and filling them in again, is no remedy; emigration offers no way out; additional training in other industries and every such method will not cut out this cancer in our social system." What is the remedy, then? Mr. Purcell replies, "Our great and glorious task is to deal with the problem of poverty at its roots, and to solve it by bringing about a more equitable distribution of the wealth produced by the labour of our class." Again, we are offered the same panacea as before, but when that wealth is thus distributed what is to become of it? If it is used profitably it will again become capital and the world will go on as before; but if it is spent upon luxuries and pleasure, or in any way unproductively, then the very means relied upon at present by the class Mr. Purcell is speaking for, now being spent upon remedial legislation, will have been dissipated and other sources of assistance save universal taxation will have been removed. This is a point so often ignored by the school Mr. Purcell represents, but it cannot for ever escape their attention and should be carefully considered by them. Taxation supports building schemes and unemployment and countless other undertakings, but the bulk of the taxation is paid by the capitalist, and in his absence these projects and others such as the minimum wage will depend upon two considerations—increased production by labour, involving increased hours and a less high standard of living, or increased taxation on labour, which will savour of the policy of making them replace much of the wages they earn.

Capital to this country has become like the air we breathe and escapes the attention of those who are modelling the industrial system, their lungs filled with this unthought-about element. Remove that element and an entire change must come over all industrial conditions. The means of relieving unemployment must be not the distribution of existing wealth, but the creation of new wealth, and that is the real problem to be solved.

The proceedings on industrial matters appear to have taken a second place, and at any rate are very briefly reported. Perhaps the most important resolution carried was one which, framed on similar lines, had been rejected at the Congresses of the past two years, which would compel the trade unions to keep the General Council informed in all disputes. The Council would then not intervene without request, unless there appeared no prospect of a settlement, in which case it would intervene and report to Congress if the unions refused its assistance and advice. If invited to intervene the Council would organise all "moral and material support" on behalf of the unions. This resolution was carried on a card vote of 3,608,000 in favour and only 259,000 against it.

The resolution next in importance was that relating to what is now termed the "Industrial Workers' Charter," which was carried unanimously. Much of this charter is what used to be the formal resolution moved year after year at all Congresses calling for the nationalisation of the land, mines, minerals and railways; but at various Congresses and at the present meeting it has gradually expanded and now embodies the extension of State and municipal enterprise for the provision of social necessities and services, participation of the workers in the control of industry and its management, a 44-hour week, a legal minimum wage, provision of adequate maintenance for the unemployed with training centres for juveniles and adults, proper and adequate housing accommodation for the people, full educational facilities provided by the State from the elementary schools to the universities, adequate maintenance and compensation in respect of industrial accidents and diseases, State pensions for all at the age of 60, and pensions for widowed mothers and dependent children. The resolution also pledged the Congress to a vigorous campaign throughout the country in support of the objects of the "charter." The remedial legislation upon which we pride ourselves as a nation pales before this "charter." It ignores the Workmen's Compensation Acts, the Old Age Pension Acts, the Unemployment Insurance Acts, and the National Insurance Act, and calls for State aid in every possible relationship and condition. The present Government is already alive to the difficulties attending a minimum wage, for it involves in many industries either a subsidy or protection, and any Government which is in power soon gets to know that "State aid," coupled with capital levies, or the abolition of capital, must mean in the long run nothing more nor less than taxing the worker to maintain himself.

This "charter" leaves nothing for a man to do on his own behalf, but from 18 to 60 to live in a subsidised house and supply himself with food, if he works in strictly limited hours at an occupation of his own selection, and then to look to the State for all beside. Mr. Pollitt, criticising the Government on their conduct in the building dispute, is reported as having said, "Unless the Government are prepared to use the whole resources of the State solely in the interest of our class there will be a strong possibility of their being a Labour Government no longer after the next election." These ideas are not Mr. Pollitt's alone, for all the resolutions have the same savour that Government and the State must to a great extent maintain the workers. We are constantly told that it is the younger members of the trade unionists who "get bitten" with these doctrines, and it seems only right to warn those younger members that such a policy will bear most heavily on themselves. They are the sons of fathers who have lived under the old traditions, who have worked to maintain themselves a families, and in many cases by caref have started their sons on a higher p that on which they themselves ent No State can maintain its populati State funds alone. A time comes when must be oppressive, or labour must and it is not entering into the region to point out this fact to the younger who may live to experience the involved by what, when it is only may appear attractive. The fact nation can only in the long run be m by productive trade has a bearing on less drastic and comprehensive th incorporated in the "Industrial Charter," as it arises in relation to minimum wage and the fixing of wage what the value of the work produced but an arbitrary standard of living. A but unproductive wage can only be m temporarily, and a standard of living be raised by increased exertion or productivity or output. A subsi State-aided wage where it exceeds of the work produced becomes at onc upon the resources of the State, and a of living may exceed the amount tha provided by the exertions of the wag The standard of living, therefore, if to be regulated in regard to that, confined to reasonable necessities, attainment of luxuries and amuseme be left to the extra exertion of the The Industrial Workers' Charter do with an incentive to the individual to his own condition, and a too high sta living if it be taken as the unit on whi are fixed may have the same effect.

There is little in the proceedings as that calls for comment in our pages, note that a resolution was referred General Council suggesting an amen the Workmen's Compensation Acts, a report has not at present been given hope to notice this subject as soon as is available.

BUILDINGS MATERI COMMITTEE

BEFORE Parliament adjourned the Go accepted a motion in the House of Lor inquiry into the various alternative m house building, and the Minister of H accordingly set up a Committee with t ing terms of reference:—

"To inquire and report as to new or methods of construction which are o available for the building of houses working classes and to make recomm as to the organisation required for see adoption and use of approved new ma methods by local authorities and oth or persons providing such houses."

The Committee will be constituted as Sir Ernest W. Moir, Bart. (Chairm Frank Baines, Sir Charles T. Ruthe Harry Barnes, Mr. John A. Brodie Coppock, Mr. E. R. Forber, Mr. G. H H. J. C. Johnston, Lt.-Col. Cecil P Mr. W. H. Nicholls, Mr. A. G. White, Whyte, Mr. J. Wilson.

The Secretary of the Committee w T. H. Sheepshanks, of the Ministry o Whitehall, S.W.1, to whom all commu should be addressed.

Newcastle-Gateshead Bridge.

At a meeting in Newcastle recently Mayor of Newcastle intimated that a had been received stating that the Go would grant 65 per cent. towards the new high level bridge between New Gateshead, the total cost of which is at £970,000.

RS OF LABOUR IN UILDING INDUSTRY

putes Committee of the National ding Trades Employers have issued ng reply to a statement that "the e employers who threatened to lock peratives who refused to work more urs was in direct violation of the e settlement." :—

3 of the terms of settlement of reads as follows :—

f Labour.—That the working hours alt with forthwith as outlined in ued on June 16, 1924 (a copy of pended hereto). But in any event in those localities that have agreed hours by mutual consent under the e Constitution) the summer working be 46½ per week as and from the ent of official summer time, 1925. of June 16 referred to above reads and was jointly issued by the and Operatives' National Secretaries. cessary that the disagreements with e summer working hours should be thout further delay. The Joint Committee, therefore, requests that are differences still outstanding the yers and operatives meet within to consider same. Failing agree- e 1 of the National Working Rule as to summer hours shall become

lowing, therefore, sums up the posi- National Agreement confirming the rd provides that 46½ hours per week ked in summer time. One variation ved, *i.e.*, if employers and operatives or area mutually agree to maintain rs week they may do so. If not, bly 46½ hours is the standard ek. We cannot too strongly insist ave thus been two opportunities for ifficulty to be adjusted, *i.e.*, at the and of August. Nothing, therefore, tify a refusal to operate the exact f the Agreement."

thern Polytechnic Institute.

pectus of the Northern Polytechnic epartment of Architecture, Survey- ding), Holloway, London, N.7, has sued for the session 1924–5. The cial lectures have been arranged :— tober 6, "L.C.C. Housing," Mr. G. rest; October 27, "The Preserva- nt Monuments and Historic Build- ank Baines; November 20, "Tem- ldings," Mr. Percy C. Culver; "Town Planning and Development struction of the Devastated Areas," . L. Cart de Lafontaine. nuary 22, "Experimental Science ," Dr. R. E. Stradling; February estminster," Mr. Herbert A. Cox; The Development of Carpentry in Mr. Martin S. Briggs; March 30, Building Construction," Mr. T. P.

Wollaton Hall.

n Corporation has decided to buy ll (the seat of Lord Middleton) and 300 acres for £200,000. In view of the National Housing Association to erect 4,000 houses on the land, kly rental of 10s. or to become the ne tenant in 21 years at a rental of week. The houses would each entrance hall, parlour, large living- room, three bedrooms, bathroom th 600 yards of land to each house. Mr. A. Middleton the return to es would be £60,000 per annum.

soval Mansion Destroyed.

h broke out recently at Hereford- ompletely destroyed Letton Court, ansion between Hereford and Hay. damage alone amounts to thou- ds.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur :—

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

*For rates of wages in the Building Trade in Scotland, see page 421.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

✱SEPTEMBER 12.—**London.**—DEMOLITION.—The demolition of Nos. 9, 11, and 13, Ebury-street, and Nos. 11 and 12A, Victoria-square, for proposed extension of hotel. Deposit £2. Messrs. J. S. Paul & Son, 31, Bedford-row, W.C.

SEPTEMBER 13.—**Dewsbury.**—ALTERATIONS.—For joiners' works necessary in the proposed alterations at the Public Library. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

SEPTEMBER 13.—**Hebden Bridge.**—PAINTING.—For painting of 36 houses, for the Hebden Bridge Industrial Co-operative Society, Ltd. General Office, Crown-street, Hebden Bridge.

SEPTEMBER 13.—**Litherland.**—WALLS, &C.—For the erection of boundary walls, gates, &c., for the U.D.C. Mr. Geo. Ponsford, Surveyor, Council Offices, Seftonroad, Litherland.

SEPTEMBER 13.—**Oldham.**—WALL.—Erection of boundary wall at Watersheddings Recreation Ground, for the T.C. Borough Engineer, Oldham.

SEPTEMBER 13.—**Rufford.**—CONVERSION.—For conversion of Rufford Hall, Rufford, into Pulmonary Hospital, for the Lancashire C.C. County Architect, Mr. Henry Littler, 16, Ribblesdale-place, Preston. Deposit £2.

SEPTEMBER 13.—**Wandsworth, S.W.18.**—ALTERATIONS AND EXTENSIONS TO BATHS.—(*a*) Alterations and extensions at Tooting Public Baths, Tooting High-street; and (*b*) alterations at Balham Public Bath, Elmfield-road, Balham, for the Wandsworth B.C. Mr. E. J. Elford, Borough Engineer, 215, Balham High-road, S.W.17.

SEPTEMBER 13.—**Wednesbury.**—ADDITIONS.—For alterations and general overhaul of Myvod House, Wood Green, and the erection thereto of a new wing. Mr. Arthur Booth, Borough Engineer, Town Hall, Wednesbury. Deposit £2.

SEPTEMBER13.—**Wellsbourne, Mannamead.**—ALTERATIONS.—For structural alterations and repairs. Messrs. D. Ward & Son, 11, The Crescent, Plymouth.

SEPTEMBER 15.—**Airth.**—HOUSES.—For the erection of eight houses at Airth, for the Stirling C.C. Messrs. A. & W. Black, architects, 5, King's-court, Faikirk. Deposit £1 1s.

✱SEPTEMBER 15.—**Barry.**—CLUB.—Erection of new club and institute for the Wyndham Conservative Club and Institute, Barry, Ltd. Architect, Mr. E. F. Richards, 68, Clive-road, Barry Island. Deposit £2 2s.

SEPTEMBER 15.—**Birkby.**—HOUSES.—For erection of two semi-detached houses. Messrs. R. Birtley & Son, 53, Church-street, Whitehaven.

SEPTEMBER 15.—**Carlisle.**—WALLS, &C.—For the construction of new masonry and concrete retaining walls and the necessary filling to form the new approach at the south end of St. Nicholas Bridge, for the T.C. Mr. Henry C. Marks, City Engineer, 18, Fisher-street, Carlisle. Deposit £2 2s.

SEPTEMBER 15.—**Evesham.**—ADDITIONS.—For alterations and additions to kitchen and laundry at Poor Law Institution. Mr. R. J. Atkinson, Union Offices, Evesham. Deposit £2 2s.

SEPTEMBER 15. — **Halifax.** — ALTERATIONS.—For alterations to Brearley's Warehouse, Bull Green, for the T.C. Borough Engineer, Crossley-street, Halifax. Deposit £2 2s.

SEPTEMBER 15.—**Hemsworth.**—HOUSES.—For the erection of 18 houses at Highfields, for the U.D.C. Mr. A. Wright, Surveyor, Council Offices, Barnsley-road, Hemsworth, near Pontefract.

SEPTEMBER 15.—**Hereford.**—CONVERSION.—For converting the present Isolation Block into an operating Theatre, for the General Hospital. Messrs. Nicholson & Clarke, architects, Cathedral Chambers, King-street, Hereford. Deposit £5.

SEPTEMBER 15.—**Horncastle.**—ALTERATIONS.—For alterations at maternity ward, of the workhouse, for the B.G. Mr. J. E. Chatterton, Clerk, Union Offices, Horncastle.

SEPTEMBER 15. — **Horncastle.**—PAINTING. — For painting exterior of workhouse and hospital, for the B.G. Clerk, Union Offices, Horncastle.

SEPTEMBER 15. — **Hull.** — ROOF.—For re-covering Market roof, for the T.C. City Engineer, Hull.

SEPTEMBER 15. — **Macclesfield.**— ADDITION.—For addition to mill at Grosvenor-street, for Messrs. Neckwear, Ltd., silk manufacturers. Messrs. Whittaker & Bradburn, architects, 19, King Edward-street, Macclesfield. Deposit £2 2s.

SEPTEMBER 15.—**Manchester.**—CAR SHED, &C.—For (*a*) erection of cable shed, residence, &c., including foundations, steelwork, &c.; (*b*) street work for above. Mr. S. L. Pearce, Manager, Electricity Department, Town Hall, Manchester. Deposit £2 2s.

SEPTEMBER 15.—**Margate, Kent.**—SWIMMING BATH AND BUILDINGS.—Erection of a block of bath buildings, including a large swimming bath at Margate, for the Committee of the Royal School for Deaf and Dumb Children. Mr. H. Carter Pegg, 35, Parliament-street, Westminster, S.W.1. Deposit £1.

SEPTEMBER 15.—**Newmarket.** — HOUSES. — Erection of 12 brick and slated houses at the Rows, Newmarket, in the County of Suffolk, for the Newmarket U.D.C. Mr. W. H. Eley, Assoc.M.Inst.C.E., Godolphin House, Newmarket.

SEPTEMBER 15. — **Pontyclun.**—ALTERATIONS.—For alterations and additions to Miskin Manor, Pontyclun, for Sir Rhys Williams, Bart. Mr. A. Lloyd Thomas, architect, 23, Gelliwastad-road, Pontypridd.

✱SEPTEMBER 16.—**Birmingham.**—HOUSES.—For the erection of 18 parlour type and 49 non-parlour type houses on the Shaftmoor Farm Estate, Hall Green; 82 parlour type houses on Tyburn-road, Erdington; 52 non-parlour type, 60 non-parlour type, and 76 non-parlour type houses on Fernbank Estate, Alum Rock, for the City of Birmingham Public Works and Town Planning Committee. Mr. Herbert H. Humphries, M.Inst.C.E., The Council House, Birmingham. Deposit £1 1s.

SEPTEMBER 16.— **Brighton.**—INTERNAL REPAIRS AND DECORATIONS.—Execution of works comprising internal repairs, decorations, painting, &c., at the Poor Law Institution, Elm-grove, Brighton, for the Guardians of the Brighton Parish. Mr. E. Wallis Long, architect, 6, Old Steine, Brighton.

SEPTEMBER 16.—**Coventry.**—SCHOOL.—Enlargement of Stoke Park Secondary School, for the T.C. Education Department, Council House, Coventry. Deposit £1 1s.

SEPTEMBER 16.—**Dewsbury.**—WALLS.—For the erection of entrance gateposts and palisade walls at Earlsheaton Park. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

SEPTEMBER 16.—**Hampton.**—HOUSES AND NEW MORTUARY.—(*a*) Erection and completion of 31 houses with concrete blocks on the Priory-road site, Hampton (contractors may tender for a part or the whole number of houses); (*b*) new mortuary at Rose hill, Hampton. Mr. Sidney H. Chambers, Surveyor to the Council, Public Offices, Hampton, Middlesex. Deposit £2 2s.

SEPTEMBER 16.—**Lathom and Burscough.**—HOUSES.—For the erection of six pairs of cottages, for the U.D.C. Mr. T. Burrows, surveyor, Burscough Bridge.

SEPTEMBER 16.—**Newbiggin.**—HOUSES.—Erection of 66 "A" type houses, for the U.D.C. Mr. Robert Appleby, Surveyor, Council Office, Newbiggin-by-Sea.

SEPTEMBER 16.—**Portsmouth.**—CLUBHOUSE.—For erection of clubhouse at Eastney Golf Course, for the T.C. Borough Engineer, Portsmouth.

SEPTEMBER 16.—**Sherburn Hill.**—HALL.—For erection of a concert hall at Sherburn Hill, in connection with the Miners' Welfare scheme, for the Sherburn Hill Colliery Welfare Committee. Mr. F. Charlesworth, Heather View, Littletown.

SEPTEMBER 16.—**South Crosland.**—COUNCIL OFFICES.—For the new Council Offices, for the U.D.C. Mr. G. V. Baxter, Solicitor, 15, Lion Chambers, Huddersfield.

SEPTEMBER 16.—**Walton-le-Dale.**—HOUSES.—For the erection of 12 houses on each of their housing sites, at Lostock Hall, Bamber Bridge, and Higher Walton. Mr. W. S. Woodcock, Clerk, Council Offices, Bamber Bridge, near Preston.

SEPTEMBER 17.—**Alloa.**—POST OFFICE.—For the erection of a post office at Alloa, for H.M. Commissioners of Works. Architect, H.M. Office of Works, 4–5, Drumsheugh-gardens, Edinburgh. Deposit £1 1s.

SEPTEMBER 17.—**Bolton-upon-Dearne.** — PAVILION, &C.—(*a*) Erection of sports pavilion, bandstand, shelters, boundary walls, &c., and (*b*) digging and planting of trees, and laying of cricket and football grounds and cinder racing track at Bolton-upon-Dearne in connection with Miners' Welfare scheme. Messrs. Garside & Pennington, architects, Ropergate, Pontefract.

SEPTEMBER 17. — **Bradford.** — ALTERATIONS.—(1) Alterations to caretaker's house, Drummond-road School, (2) extensions to boiler-house, Textile Department. City Architect, Town Hall, Bradford.

SEPTEMBER 17.—**Cinderford.**—SCHOOL.—Erection of new County Mining School at Cinderford, for the Gloucestershire Education Committee. Mr. R. S. Phillips, County Education Architect, Shire Hall, Gloucester. Deposit £5 5s.

SEPTEMBER 17.—**Dewsbury.**—WALL.—For re-building about 320 lineal yards of fence wall between Ravens Lodge and Ravenshouse-road, for the T.C. Mr. H. Dearden, Borough Engineer, Town Hall, Dewsbury.

SEPTEMBER 17.—**Duns.**—POST OFFICE.—For the erection of a new post office at Duns, for H.M. Commissioners of Works. Architect H.M. Office of Works, 4–5, Drumsheugh-gardens, Edinburgh. Deposit £1 1s.

SEPTEMBER 17.—**Green Hammerton.**—REPAIRS.—For alterations and repairs to farm buildings and houses at High Farm and Low Farm, Green Hammerton, near York, for the West Riding C.C. County Land Agent, County Hall, Wakefield. Deposit £1.

SEPTEMBER 17.—**Lanchester.**—HOUSES.—For the erection of 18 houses, for the R.D.C. Mr. J. J. S. Barker, Clerk, Union Offices, Lanchester.

SEPTEMBER 17.—**Near Bridgend.**—BUNGALOW.—For erecting a bungalow near Bridgend. Messrs. P. Thomas & Sons, architects, Bridgend.

SEPTEMBER 17.—**Ogmore Vale.**—REPAIRS.—For the external painting and repairs to roofs and floors, at the Ogmore Vale Workmen's Hall and Institute. Mr. W. T. Springall, Architect's Department, Co-operative Wholesale Society, Ltd., St. Mary-street, Cardiff.

SEPTEMBER 17.—**Pontardawe.**—HOUSES.—Erection of 10 houses at Alltycham site, Pontardawe, for the R.D.C. Mr. E. D. Jones, M.S.A., Architect to the Council, Pontardawe. Deposit £2.

SEPTEMBER 17.—**Watford.**—HOUSE.—For the erection of a dwelling house at the Waterworks, Watford fields, for the T.C. Mr. D. Waterhouse, Borough Engineer, Municipal Offices, 14, High-street, Watford. Deposit £1 1s.

SEPTEMBER 18.—**Chelmsford.**—HOUSES.—tion of 50 houses on the Boarded Barns est T.C. Mr. E. J. Miles, Borough Engineer, Deposit £2 2s.

SEPTEMBER 18.—**Darlington.**—HOUSES.—tion of 32 houses, for the Durham Cou Villages, Ltd. Mr. S. Wilkinson, archite Rly., York.

SEPTEMBER 18.—**Dewsbury.**—HOUSE.—of house, Wakefield-road, Dewsbury. Mes & Fox, architects, Corporation-street, Dew

SEPTEMBER 18.—**Dundee.**—EXTENSION.—sions to engine room and switch house a station, for the T.C. Mr. D. H. Bisho Dudhope Crescent-road, Dundee.

SEPTEMBER 18. — **Manchester.** — CONCRESSES.—For the construction of concrete for supporting a steel lattice bridge at St Manchester Gas Committee. Mr. J. H. Sil tary, Gas Department, Town Hall, Manche

SEPTEMBER 18.—**Melrose.**—DEMOLITION.—lition of the Abbey House, Melrose, for t sioners of H.M. Works. H.M. Office of Drumsheugh-gardens, Edinburgh.

SEPTEMBER 18.—**Wayland.**—HOUSES.—of four houses in Brandon-road, Watton, for Mr. C. Whitworth, Housing Surveyor, Watt

SEPTEMBER 18.—**Worthing.**—PIER PA CONSTRUCTION OF THE PARADE BANDSTAN pier pavilion, consisting of light steel-fram forced concrete building on screw piling, extension of entrance to pier to provide sea modation for about 1,200 people (Contract B, The reconstruction of the parade bands sure, consisting of a light steel and reinfor structure and screw pile foundation to pro accommodation for about 2,200 people (Con for the Corporation of Worthing. Borough Office, Municipal Offices, Tudor Lodge, C Worthing. Deposit £3 3s.

SEPTEMBER 19. — **Acton.** — CONCRETE WOOD BLOCK PAVING, PAINTING AND DEC (*a*) Improvement of Acton-lane, (*b*) fe bridge, Acton-lane (contractors are to be duly to execute ferro-concrete work on the System), (*c*) new foundation and wood bloc The Avenue, Bedford Park, (*d*) painting and houses on the East Acton housing estate for t of Acton. Borough Surveyor's Office, Offices, Acton, W.3. Delivery of Tender and (*c*) not later than 3 p.m. on September not later than 3 p.m. on September 15, 192

✱SEPTEMBER 19.—**Durham.**—COTTAGE H Erection of a cottage hospital on a site at S Stanley, S.O. Co. Durham, for the Mine Fund Committee, Holmside and South Moo Mr. James E. Fairley, Colliery Offices, S Stanley S.O., Co. Durham.

SEPTEMBER 19.—**Guildford.**—ADDITIONS. erection of a new staff dining-room and oth the Institution, Warren-road, for the Guardians. Messrs. Norris & Shattock, arc High-street, Guildford.

SEPTEMBER 19.—**London.**—DEMOLITION demolition of Nos. 9, 11, and 13, Ebury Nos. 11 and 12A, Victoria-square, for prop sion of the Goring Hotel. Messrs. J. S. P 31, Bedford-row, W.C. Deposit £2.

SEPTEMBER 19.—**Near Aberystwyth.**—REI For repairing and pointing the church wall ing portions of the same at St. John's Chu Ystwyth. Mr. Hugh Lewis, Church-terra Ystwyth, near Aberystwyth.

SEPTEMBER 19.—**Portsmouth.**—CONVEN construction of underground convenience Golf Course, for the T.C. Borough Engi mouth.

SEPTEMBER 19.—**Walsall.**—HOUSES.—F tion of 20 parlour type houses, in pairs, faci road; 20 non-parlour type houses, in five bl facing the Ring-road, and 60 non-parlour in 15 blocks of four, facing Love-lane exten Taylor, Borough Engineer, Council Hou Deposit £1.

SEPTEMBER 20.—**Dewsbury.**—MORTUAR erection of a mortuary at Whitley Grange the T.C. Mr. H. Dearden, Borough Eng Hall, Dewsbury.

SEPTEMBER 20.—**Earlsheaton.**—SHED.—trades in erection of shed, Providence heaton. Messrs. Holtom & Fox, archite tion-street, Dewsbury.

SEPTEMBER 20.—**Friern Barnet, Lond** HOUSES.—Erection of 32 houses for the F U.D.C. Mr. F. P. Kindell, Engineer and the Council, Council Offices, The Priory, F road, Friern Barnet, N.11. Deposit £2 2s

SEPTEMBER 20.—**London, W.7.**—DEAL Providing and laying a new deal floor fo Hall at the Central London District Schoo avenue, Hanwell, W.7. Mr. George P. Mo the Managers, Central London District Sc ford-avenue, Hanwell, W.7.

SEPTEMBER 20.— **Warwick.**— HOUSI of 41 houses (32 parlour and 9 non-parlou the Emscote site, Warwick, for the W Messrs. Francis P. Trepess & Son, 1, C Warwick. Deposit £1 1s.

SEPTEMBER 22.—**Bristol.**—SUB-STATIO tion of one underground sub-station a Buildings, for the T.C. Mr. H. Faraday Engineer and General Manager, The Exc street, Bristol. Deposit £2 2s.

SEPTEMBER 22.— **Crowmarsh.**—HOUSI erection of 10 houses at South Stoke, marsh R.D.C. Messrs. J. G. T. West & So

SEPTEMBER 22.—**Cudworth.**—OFFICES.—tion of offices for yardmaster, &c., at the London & North Eastern Railway Co. Wilkinson, architect, N.E. Area, at York

PTEMBER 22.—**Kent.**—PAINTING.—Outside paint- of police stations at Canterbury, Malling, Knock- Northfleet, Sevenoaks, and Tonbridge, for Kent ding Joint Committee. County Architect, 86, k-street. Maidstone.

SEPTEMBER 22.—**Leek.**—HOUSES.—Erection of ouses in various blocks on the Housing Estate ttsville, Leek, for the Leek U.D.C. Mr. W. E. ham, Surveyor to the Council, Town Hall, Leek.

PTEMBER 22.—**Lichfield.**—HOUSES.—For the erec- of 20 non-parlour type houses with works rage and water main, for the T.C. City Surveyor, P. A. Benn, F.S.I., Guildhall, Lichfield. Deposit

PTEMBER 22.—**Northampton.**—HOUSES.—Erec- of 18 type B3 (parlour) and 16 A3 (non-parlour) s on the Abington Lodge Farm Estate, for the ng and Town-Planning Committee of the County gh of Northampton. Mr. Alfred Fidler, M.Inst. Borough Engineer, Guildhall, Northampton. sit £5 (crossed cheques made payable to "North- on Corporation").

PTEMBER 22.—**Warrington.**—RETAINING WALL.— he construction of a piled retaining wall in rein- d concrete about 700 ft. long alongside Knutsford- and on the bank of the River Mersey, for the Mr. H. W. Fitzsimons, 39, Victoria-street, minster, S.W.1. Deposit £3 3s.

TEMBER 23.—**Chesterfield.**—CONVENIENCE.—For rection of underground conveniences in New- e, for the T.C. Mr. Vincent Smith, Borough eer, Chesterfield.

TEMBER 23.—**London, S.W.**—FOUNDATIONS.— uction of foundations for five blocks of dwellings e East Hill Estate, Wandsworth, for the L.C.C. rchitect to the Council, The County Hall (Room), Westminster Bridge, S.E.1. Deposit £1 1s., le to the Cashier.

TEMBER 23.—**Portsmouth.**—Extension of Em- ent Exchange, for the Commissioners of H.M. , &c. Contracts Branch, H.M.O.W., King s-street, London, S.W.1. Deposit £1 1s.

TEMBER 23.—**West Cornforth.**—SCHOOL.—Erec- f West Cornforth new Infants' Council School, for m C.C. Mr. F. Willey, F.R.I.B.A., 34, Old Durham.

TEMBER 24.—**Doncaster.**—HOUSES.—For the n of 400 houses, for the T.C. Mr. R. E. Ford, ng Surveyor, 3, Priory-place, Doncaster.

TEMBER 24.—**Folkestone.**—ADDITIONS.—For ons to the Corporation Offices, at 11, Church- for the T.C. Mr. A. E. Nichols, Borough eer, Corporation Offices, Folkestone. Deposit

TEMBER 24.—**Manchester.**—Extension of Em- ent Exchange, Aytoun-street, for the Com- ers of H.M. Works, &c. Contracts Branch, .W., King Charles-street, London, S.W.1. t £1 1s.

TEMBER 25.—**Newmarket (Kilkenny).**—SCHOOL.— n and furnishing of National School, for Com- ers of Public Works. Parochial House, New- , Ireland.

TEMBER 26.—**Bridlington.**—ALTERATIONS.—Ex- s and alterations to Masonic Hall, Bridlington. R. Earnshaw, Architect and Surveyor, Cliff- Chambers, Bridlington. Deposit £2 2s.

EMBER 26.—**London, S.E.1.**—POLISHED PLATE —Polished plate glass required by the Director- l, India Store Department, Branch No. 58, ere-road, Lambeth, S.E.1. Tender forms ob- e from above.

EMBER 26.—**Neath.**—HOUSES AND SEWERS.— n of 50 houses (parlour type) on the Brynhyfryd- orth) site, Briton Ferry, also for stoneware pipe n connection with the above. Borough Engi- wyn Hall, Neath. Deposit £3 3s.

EMBER 26.—**Tully.**—SCHOOL EXTENSIONS.—For ons to Tully National School, for Commissioners ic Works. District Office of Works, Galway,

EMBER 29.—**Dublin.**—CONVERSION.—Conversion k N at Keogh (late Richmond) Barracks into 60 nd (*b*) of blocks F and J at the same Barracks flats, for the Commissioners of Public Works. J. Healy, Secretary, Office of Public Works,

EMBER 29. — **Leicester.** — PUMPING STATION IONS.—For the extensions of the Abbey Pump- ion, engine house, pump basement, &c., for the r. E. G. Mawbey, City Engineer, Town Hall, er.

TEMBER 29.—**Staines.**—COTTAGES, DRAINS, &C. ion of two five-roomed cottages of similar ith the construction of the necessary drains, &c., eton Reservoir Works, both in the parish of , near Staines; also for the construction near e cottages of the superstructure only of a house imately 28 ft. by 14 ft. by 13 ft. high to roof or containing venturi meter recorders for the litan Water Board. Office of the Board, Chief r's Department (Room 201), New River Head, y-avenue, Clerkenwell, E.C.1. Deposit £5.

MBER 30.—**Barry.**—READING-ROOM.—For the of a branch reading-room at Barry Island, for C. Mr. E. R. Hinchsliff, F.S.I., Public Offices, Deposit £1 1s.

TEMBER 30.—**Coventry.**—PAINTING, &C.—For nal painting on the housing estates, Radford- ondon-road, and Gorton-road, for the Com- rs of H.M. Works. Contracts Branch, H.M. Works, King Charles-street, London, S.W.1. £1 1s.

MBER 30.—**Maidenhead.**—HOME.—For the erec- children's home at Cannon Court-lane, Furze ar Maidenhead, for the Board of Guardians. Albury, Rising & Morgan, 154, Friar-street, Deposit £1 1s.

EMBER 30.—**Saffron Walden.**—LAUNDRY EX- &C.—For the extensions to laundry and other works at Saffron Walden Hospital. Messrs. rard, Keay & Gimson, Architects, 6, Millstone- ester.

★OCTOBER 1.—**Burnley.**—TELEPHONE EXCHANGE.—For the erection of telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

★OCTOBER 1.—**London, N.1.**—ALTERATIONS AND ADDITIONS.—Alterations and additions at the Electricity Station, Eden-grove, Islington, N., and for alterations and conversion into offices and garage of No. 2, Burnard-place, Eden-grove, Holloway-road, Islington, N.7, for the Metropolitan Borough of Islington. Mr. C. G. E. Fletcher, Town Clerk, Municipal Offices, Tyndale-place, Upper-street, N.1.

OCTOBER 3.—**Long Eaton.**—HOUSES.—Erection of 54 non-parlour houses, for the Long Eaton U.D.C. Mr. H. Raven, C.E., Architect, The Hall, Long Eaton. Deposit £5 5s.

★OCTOBER 14.—**Guernsey.**—HOUSES.—Erection of 40 houses in Collings-road, and 10 or 12 houses at Sausmarez Mill, St. Martin's, for the States Committee for Homes for Workers, States of Guernsey. States Office, Guernsey, or at the office of Mr. Sydney Newcombe, architect, Greve d'Azette, Jersey.

NO DATE.—**Castleford.**—HOSPITAL.—Erection of hospital at Hightown, Castleford, for the Castleford, Normanton, and District Cottage Hospital Committee. Mr. R. A. Easdale, A.R.I.B.A. (late Arthur Hartley), Architect and Surveyor, County Chambers, Castleford. Deposit £1 1s.

NO DATE.—**Diss.**—BUILDING.—Erection of a building on ground adjoining Baptist Chapel, Diss. Mr. Wm. J. Morley, Secretary to Building Committee, 9, Mount-street, Diss.

NO DATE.—**Felixstowe.**—HOUSE.—Erection of residence, High-road, Felixstowe. Mr. H. C. Scaping, L.R.I.B.A., Architect, Court Chambers, Grimsby, Lincolnshire.

NO DATE.—**Hemsworth.**—REPAIRS.—For repairing property damaged by fire at 117, 119, Kirkby-road, Hemsworth. Mr. D. Oates, Fidling Farm, Brierley.

NO DATE.—**South Blair.**—HOUSES.—For the erection of 12 miners' houses, for the Hirst Coal Co. Mr. A. Stewart, surveyor, 261, West George-street, Glasgow.

FURNITURE, MATERIALS, etc.

SEPTEMBER 13.—**Merthyr Tydfil.**—SUPPLIES.—For supply to the B.C. for six months a store of building materials. Borough Engineer, Town Hall, Merthyr Tydfil.

SEPTEMBER 15.—**Bromley.**—MATERIALS.—For supply of highway materials to the R.D.C. Mr. L. O. Wall, Park House, Beckenham-lane, Bromley, Kent.

SEPTEMBER 15.—**Fleetwood.**—MATERIALS.—For supply of second-hand tram rails, reinforcement steel, drain and sewer pipes, and concrete flags. Surveyor, Town Hall, Fleetwood.

SEPTEMBER 15.—**Maesteg.**—MATERIALS.—Supply of various materials, to the U.D.C. Mr. Samuel J. Harpur, Surveyor, Council Offices, Talbot-street, Maesteg.

SEPTEMBER 17.—**Dublin.**—SUPPLIES.—Supply of building materials, timber, cement, slate, stone, for the Commissioners of the Union. Master of the Workhouse.

SEPTEMBER 20.—**Stafford.**—MATERIALS.—Supply of stores and materials for six months, to the T.C. Mr. W. Plant. Surveyor, Stafford.

SEPTEMBER 22.—**Westminster.**—WOOD BLOCKS, &C. —Supply of cement, sewerage and drainage (minor works), and wood paving blocks, for the C.C. Mr. John Hunt, Town Clerk, Westminster City Hall, W.C.2.

SEPTEMBER 25.—**Dublin.**—BUILDING MATERIALS.—For building works and supplies in the Dublin district for alternative periods of six and twelve months, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin. Deposit £1.

SEPTEMBER 27. — **Bucklow.** — GRANITE SETTS.—Supply of granite setts, broken granite, tarred macadam, chippings, slag, and cinders, for the R.D.C. Mr. R. C. Cordon, Surveyor, 25, Station-buildings, Altrincham.

ENGINEERING, IRON AND STEEL.

SEPTEMBER 13.—**Methley.**—BRIDGE.—For the partial demolition and reconstruction of Methley Bridge, which carries the Leeds and Barnsdale main road over the River Calder, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

SEPTEMBER 15.—**Southampton.**—BRIDGE.—For reconstruction of Cobden Bridge in reinforced concrete, for the T.C. Mr. H. W. Fitzsimons, 39, Victoria-street, S.W. Deposit £5 5s.

SEPTEMBER 15.—**Stockport.**—SEWAGE WORKS.—For the construction of aeration and pyramidal tanks and other works at the Stockport Sewage Works, for the T.C. Mr. Herbert Hamer, Surveyor, Town Hall, Stockport. Deposit £5 5s.

SEPTEMBER 15.—**Whickham.**—STEEL BRIDGE.—For reconstruction of portions of the Sands Steel Suspension footbridge, for the Blaydon and Whickham Urban District Councils. Mr. Thos. Fenbow, Surveyor, Council Offices, Whickham, co. Durham.

SEPTEMBER 16.—**Goole.**—GAS PLANT.—For the erection of retort house, foundations, horizontal retort bench, coal and coke handling plant, telpher, electric generating set, and four cast-iron purifiers, at the Doyle-street Gasworks, for the U.D.C. Mr. Arthur F. Yates, Engineer, Gasworks, Goole.

SEPTEMBER 16.—**Walsall.**—RETORT HOUSE.—For reconstruction of horizontal retort house, &c., for the Gas Committee. Mr. E. Davies, Manager, Gasworks, Walsall. Deposit £5 5s.

SEPTEMBER 17.—**Haslemere.**—PUMPING MACHINERY. —For the supply and erection of two 50 b.h.p. semi-Diesel, cold starting, four-stroke, cycle type, heavy oil engines; two turbine pumps, oil storage tanks, &c., for the U.D.C. Mr. C. A. Best, Surveyor, Council Offices, Haslemere.

SEPTEMBER 19.—**London.**—STEELWORK.—For supply of structural steelwork for underframe shop, for the South Indian Railway Co. Secretary, 91, Petty France, S.W. Charge £1.

SEPTEMBER 22.—**Plymouth.**—BRIDGE.—For the taking down and removal of a bridge to be placed across the Burrator Reservoir, situated about 12 miles from Plymouth, for the T.C. Mr. Frank Howarth, Water Engineer, Stonehouse, Town Hall, Plymouth. Deposit £2 2s.

SEPTEMBER 22.—**Warrington.**—BRIDGE.—For the reconstruction of Black Bear Bridge in reinforced concrete, crossing the Bridgewater Canal in one span of 28 ft., including the provision of approach retaining wall, &c., for the T.C. Mr. H. W. Fitzsimons, 39, Victoria-street, Westminster, S.W.1. Deposit £3 3s.

SEPTEMBER 27. — **Folkestone.** — CONSTRUCTIONAL STEELWORK, STEEL CASEMENTS, AND PATENT GLAZING CONTRACTORS.—(*a*) The supply and erection of cast-iron columns, steelwork in curved roof trusses, &c.; (*b*) steel casements; (*c*) patent roof glazing at the Concert Hall in Marine Gardens, for the Borough Corporation of Folkestone. Mr. A. E. Nichols, M.Inst.C.E., Borough Engineer and Surveyor, Corporation Offices, Folkestone. Deposit £3 3s.

SEPTEMBER 29. — **Rochford (Essex).** — ALTERATIONS, HEATING AND HOT WATER.—Competitive tenders from contracting engineers, for the proposed alterations and additions to the heating and hot water supply services and boiler plant at the Rochford Union, for the Guardians. Mr. F. Broadhurst Craig, 1, Fitzroy-street, London, W. 1; and 22, Cooper-street, Manchester. Deposit £5 5s.

SEPTEMBER 30.— **Trowbridge.** — ROAD PLANT. — Supply of (*a*) 12 two-ton (British make) petrol lorries, side tippers, hand-operated; (*b*) four five-ton tandem quick reverse rollers, steam or internal-combustion engines; (*c*) tarspraying machines, minimum 500 gallons capacity; (*d*) six bituumen boilers, to the Wilts C.C. Mr. J. G. Powell, County Surveyor, Trowbridge.

OCTOBER 4.—**Llangeinor.**—FENCING.—Erection of 190 lineal yards of unclimbable wrought-iron fencing at Reservoir at Llangeinor, for Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, engineers, 23, Gelliwastad-road, Pontypridd. Deposit £2 2s.

OCTOBER 6.—**Dundee.**—ESPLANADE, &C.—For construction of a sea wall or bulwark extending to 3,200 ft., and 1,000 ft. of breakwater in rubble; also 1,300 ft. of 32 in. diameter outfall sewer, with reinforced concrete piles and groynes, for the T.C. Mr. George Baxter, City Engineer, 91, Commercial-street, Dundee.

OCTOBER 28.—**Wellington, N.Z.**—BRIDGE SPANS.—For plate girder spans for Wairoa, Rangitaiki and Awakeri bridges, for N.Z. Public Works Board. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

NOVEMBER 3.—**Sydney, N.S.W.**—BRIDGE SPANS.—For metal work for superstructure of bridge, at Tom Ugly's Point, for Department of Public Works, Sydney. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

SEPTEMBER 13.—**Bootle.**—ROADS.—For making up back roads, for the T.C. Borough Engineer, Town Hall, Bootle.

SEPTEMBER 13.—**Lifton.**—DRAINAGE.—For connecting about 70 houses at Lifton, Devon, with the main sewer. Messrs. Parkes, Lees & Roseveare, architects, Launceston.

SEPTEMBER 13.—**Reigate.**—ROADS.—For the resurfacing of Frenches, Woodlands and Earlswood-roads, Redhill, with tarviated slag macadam. Mr. Fred T. Clayton, Borough Surveyor, Municipal Buildings, Reigate.

SEPTEMBER 13.—**Wolstanton.**—ROAD.—Construction of new road from Wolstanton to Chesterton, for the U.D.C. Mr. Arthur Cotton, Surveyor, Council House, Wolstanton. Deposit £2 2s.

SEPTEMBER 13.—**Yeovil.**—DRAINS.—For the construction of 219 lineal yards of 9 in. and 392 lineal yards of 6 in. subsoil drains, and 50 yards of 6 in. surface water drains at Cemetery, for the Joint Burial Committee. Borough Surveyor, Yeovil.

SEPTEMBER 15.—**Bognor.**—ROADS.—For construction of 7,100 sq. yds. of reinforced concrete carriageway, &c., for the U.D.C. Mr. J. Draper, Surveyor, Bognor. Deposit £1.

SEPTEMBER 15. — **Bournemouth.** — ROADS. — For making-up Ripon-road (second portion), for the T.C. Mr. F. P. Dolamore, Borough Engineer, Town Hall, Bournemouth. Deposit £1 1s.

SEPTEMBER 15.—**Cheadle.**—WATER SUPPLY.—For laying water mains, constructing reservoir, &c., at Alton, for the R.D.C. Messrs. Willcox & Raikes, 63, Temple-row, Birmingham. Deposit £5 5s.

SEPTEMBER 15.—**Eccles.**—ROADS.—For making up various back passages within the Borough, for the T.C. Mr. Thomas S. Picton, Surveyor, Town Hall, Eccles. Deposit £1 1s.

SEPTEMBER 15.—**Hastings.**—ROADS.—For widening of Red Lake, and new road across allotments to the "King's Head," Winchelsea-road, Ore, for the T.C. Mr. Philip H. Palmer, Engineer, Town Hall, Hastings. Deposit £2.

SEPTEMBER 15.—**Hastings.**—SEWER.—For construction of pay entrances and sewer at Pilot Field, for the T.C. Mr. P. H. Palmer, Borough Engineer, Town Hall, Hastings. Deposit £1.

SEPTEMBER 15.—**Hornsey.**—ROADS.—For making-up Woodside-avenue, Lauradale-road, Midhurst-avenue and Montenotte-road, for the B.C. Mr. E. J. Lovegrove, Borough Engineer, Town Hall, Highgate.

SEPTEMBER 15.—**Whitley and Monkseaton.**—ROADS. —For making-up various streets for the U.D.C. Mr. A. J. Rousell, Surveyor, Whitley Bay.

SEPTEMBER 15.—**Worsborough.**—ROADS.—For kerbing, channelling, paving and making-up of Buckingham-street and Vernon-street, Birdwell, for the U.D.C. Mr. T. Shield Council's Engineer and Surveyor, Saville House, Worsborough Bridge. Deposit £1 1s.

SEPTEMBER 16.—**Kilmarnock.**—ROADS.—For the completion of certain roads at Scott-road housing scheme, for the T.C. Mr. William Dunbar, Burgh Surveyor, Market Bridge, Kilmarnock.

SEPTEMBER 16.— **Leeds.**— PLUMBING.— For the execution of plumbing repairs on the several housing estates, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds.

SEPTEMBER 17.— **Norwich.** — SEWERS, DRAINS, MANHOLES.—Construction of stoneware pipe sewers, drains, manholes, &c., at the Saint Andrew's Hospital, Thorpe, Norwich, for the Committee of Visitors. Mr. G. S. Smith, Architect and Surveyor, Saint Andrew's Hospital, The Close, Thorpe, Norwich. Deposit £3 3s.

SEPTEMBER 17.—**South Mimms.**—SEWER.—For construction of 1,000 yards of 9 in. stoneware pipe sewer. &c. Surveyor, Offices, Potters Bar.

SEPTEMBER 17.—**Southport.**—ROADS.—For making-up Delamere-road, Halifax-road, and Fairfield-road, Ainsdale, for the T.C. Mr. A. E. Jackson, M.Inst.C.E., Borough Engineer, Town Hall, Southport.

SEPTEMBER 17.—**Wembley.**—SEWER.—For the construction of 270 lineal yards of 15 in. stoneware pipe surface water sewer, for the U.D.C. Mr. C. R. W. Chapman, Engineer, Council Offices, Wembley, Middlesex. Deposit £2 2s.

SEPTEMBER 18.—**Bury.**—SEWER.—For construction of concrete pipe sewers, for the T.C. Mr. J. A. Settle, Borough Engineer, Bury. Deposit £2.

SEPTEMBER 18.—**Hendon.**—ROADS.—For (1) Church lane, Edgware (Section 1)—Widening and improvement; (2) Southfield Park, Pinner—Kerbing, tarpaving and making-up street, for the R.D.C. Mr. H. W. Rackham, Surveyor, Council Offices, Stanmore. Deposit £3 3s. each work.

SEPTEMBER 18.—**Maesteg.**—PARK.—For the excavation and laying-out complete of the first portion of the park, Neath-road Welfare Scheme. Mr. Samuel J. Harpur, Surveyor, Talbot-street, Maesteg. Deposit £2 2s.

SEPTEMBER 19.—**Middlesex.**—ROADS.—For construction of 5.72 miles of road works, being Section 2, Contract 3, of the Barnet by-pass road, for the Middlesex C.C. Mr. A. Dryland, County Engineer, Guildhall, Westminster, S.W. Deposit £21.

SEPTEMBER 19.—**Worthing.**—WATER MAINS.—For laying 2⅛ miles of 14 in., 1 mile of 9 in., and ¾ mile of 6 in. cast-iron socket pipes and providing and laying about 500 yards of 9 in. stoneware pipes (Contract No. 3), and the supply of about 365 tons of 14 in. diameter, 130 tons of 9 in. diameter, and 55 tons of 6 in. diameter cast-iron socket pipes (Contract No. 4). Water Engineer, Municipal Offices, Tudor Lodge, Worthing. Deposit £3 3s.

SEPTEMBER 21.—**Greenwich.**—ROADS.—For the forming and paving of Sections 2 and 3 of North-street, Charlton, for the B.C. Borough Engineer, Town Hall, Greenwich, S.E.10.

SEPTEMBER 22.—**Bentley-with-Arksey.**—ROADS.— Reconstruction of about 4½ miles of Great North road, Doncaster and Tadcaster section, for the West Riding County Council. Two contracts. West Riding Surveyor, County Hall, Wakefield. Deposit £1 each contract.

SEPTEMBER 22.—**Birstall.**—MAIN ROADS.—Reconstruction of about 1¾ miles of the Leeds and Birstall and Birstall and Huddersfield main roads, for the West Riding County Council. West Riding Surveyor, County Hall, Wakefield. Deposit £1 for each (two) contract.

SEPTEMBER 22.—**Nottingham.**—APPROACH WORKS.— For construction of embankment, &c., for the South Approach-road, for the C.C. Mr. J. C. Haller, County Surveyor, Shire Hall, Nottingham. Deposit £3 3s.

SEPTEMBER 23.—**London.**—FOUNDATIONS.—For the construction of foundations for five blocks of dwellings on the East Hill Estate, Wandsworth, for the L.C.C. Architect, County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £1 1s.

SEPTEMBER 24. — **Broadmoor.** — Drainage works at the Broadmoor Asylum, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 24.—**Northumberland.**—ROADS AND BRIDGES.—For road widening and road diversion works, &c.; also for proposed new bridge works at Felton and Glenshotten. Mr. J. A. Bean, County Surveyor, Moot Hall, Newcastle-on-Tyne.

SEPTEMBER 24.—**Wood Green.**—ROADS.—For works of private street improvements in Solway, Saxon, Paisley and Thirlmere-roads, for the U.D.C. Surveyor, Town Hall, Wood Green, N.22. Deposit £1 1s.

SEPTEMBER 25.—**Lambeth.**—ROADS.—For the following:—(*a*) Making up of Felsberg-road, (*b*) laying bituminous paving in Dante-road, (*c*) taking down and rebuilding two bays and piers of boundary wall at Lambeth Cemetery, for the B.C. Mr. Osmond Cattlin, Borough Engineer, Town Hall, Brixton Hill, S.W.2.

SEPTEMBER 27.—**Middleton.**—WATER MAIN LAYING. —For piping-in the open Goyt along Mill Dam Side, Middleton, including the construction of a small storage tank; laying new cast-iron water mains, and adjusting existing water mains, &c., for the T.C. Borough Engineer and Surveyor, Town Hall, Middleton, Lancs.

SEPTEMBER 27.—**Reigate.**—SEWER.—For sewer extensions in Balcombe-road, Horley, for the R.D.C. Mr. F. E. Traviss, Sanitary Surveyor, 48, High-street, Reigate. Deposit £2 2s.

SEPTEMBER 29.—**Carlisle.**—SEWERS.—For the construction of a concrete and brick settling tank, the laying of about 100 lineal yards of 9 in. stoneware pipes and other incidental work at Stainton, for the R.D.C. Mr. J. C. Boyd, engineer, 18, Bank-street, Carlisle. Deposit 10s. 6d.

OCTOBER 3.—**Cylla and Deri Valleys.**—SEWERAGE WORKS.—For carrying out, for the Gellygaer U.D.C., of the construction of about 11 miles of 15 in., 12 in. and 9 in. diameter glazed stoneware and cast-iron pipe sewers, together with manholes, storm overflows, gauging chambers, and other incidental works. Messrs. Wilcox & Raikes, 63, Temple-row, Birmingham. Deposit £7 7s.

OCTOBER 6.—**Beckenham.**—ROADS.—For the widening of Upper Elmers End-road, for the U.D.C. Mr. J. A. Angell, Surveyor, Beckenham. Deposit £2.

OCTOBER 20.—**Fermanagh.**—ROADS.—For construction of roads, for the C.C. Mr. J. P. Burkett, County Surveyor, Enniskillen. Deposit £5.

NO DATE.—**Castle Donington.**—ROAD WIDENING.— For widening and re-surfacing certain district roads for the R.D.C. Mr. F. Halladay, Surveyor to the Council, Castle Donington.

NO DATE.—**Penclawdd.**—RECREATION GROUND.— Construction of recreation ground at Penclawdd. Messrs. Morgan Davies & Partners, 62, Wind-street, Swansea.

NO DATE.—**Rumney.**—ROAD.—For the formation of Wembley-road proposed to be constructed from Rumney Hill to the Church-road, Rumney. Messrs. Henry Budgen & Co., 95, St. Mary-street, Cardiff. Deposit £2 2s.

NO DATE.—**Stretford.**—BRIDGE.—For reinforced concrete bridge. Surveyor, Stretford Council Offices, Old Trafford.

Competitions.

(*See Competition News, page* 388.)

Auction Sales, Tenders, etc.

SEPTEMBER 16.—**Hendon.**—Mr. George Weston, F.A.I., will sell, at the Old Welsh Harp Hotel, Hendon, thirty-five plots of freehold building land situate in the main Edgware-road, almost opposite the Old Welsh Harp Hotel, Hendon. Auctioneer, 10, Sutherland-avenue, Paddington, W.9.

SEPTEMBER 16.—**London, N.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of C. Hale & Co., upon the premises, Elkhorn Works, Cleveland Gardens, St. Ann's-road, builders' stock rain-water and sanitary goods, large quantity of ironmongery, paints, &c., and Crossley gas engine. Auctioneers, 15, Newington Green, Islington, London, N.16.

SEPTEMBER 16.—**London, S.W.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, timber, fittings and building materials, at 255, Clapham-road. Auctioneers, 365, Norwood-road, S.E.27.

✱SEPTEMBER 16.—**London, W.**—Messrs. F. H. Clark will sell at the Central Stores Depot 401 (adjoining Airship Shed), Wood-lane, Wormwood Scrubbs, Shepherd's Bush, close to Wood-lane Station, huts, building material and fittings, to be sold without reserve. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

✱SEPTEMBER 18.—**Banbury, Oxford.**—Mr. F. H. Clark will sell at Station-road, near Banbury Station, G.W. Railway, new and second-hand timber and building materials. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

✱SEPTEMBER 22.—**Kent.**—Messrs. C. E. Clark in conjunction with Messrs. Fox & Mainwaring, will sell, without reserve, at the Cattle Market, Edenbridge, Kent, prime new timbers and builders' effects. Auctioneers, Beddington House, near Croydon.

✱SEPTEMBER 24.—**Beckenham, Kent.**—Messrs. Baxter, Payne & Lepper will sell, with possession, at the Mart, 155, Queen Victoria-street, E.C.7, seven blocks or 53 plots of freehold building land possessing important frontages to the main Croydon road and Whitmore-road, on the Eden Park Estate, Beckenham, Kent. Auctioneers, Beckenham and Orpington, Kent, and 14, Sackville-street, W.1.

SEPTEMBER 24.—**Clacton-on-Sea.**—Messrs. Knight, Frank & Rutley will sell, in conjunction with Messrs. Edwin J. Gilders & Co., by direction of Mr. Arthur Webster, Alton Park Estate as a whole or in lots, at the Royal Hotel. Auctioneers, 20, Hanover-square W.1.

✱SEPTEMBER 24.—**London, E.C.4.**—Messrs. Cuthbert Lake & Sutton will sell, at the Mart, 155, Queen Victoria-street, E.C.4, 24 acres of freehold building land, Alperton, Wembley, just off main Ealing-road, and part of Manor Farm. Auctioneers, 9, Stone Buildings, Lincoln's Inn, W.C.2.

✱SEPTEMBER 27.—**Lincolnshire.**—Messrs. Escritt & Barrell will sell, at the Estate Sale Rooms, Elmer House, Grantham (unless previously disposed of by private treaty), the valuable freehold brickworks and premises, including Hoffman kiln, machine shed and power house, fitter's shop and offices, &c., the whole extending to an area of 11 acres, 1 rood, 29 perches (more or less). Auctioneers, Elmer House, Grantham.

PRELIMINARY ANNOUNCEMENT. — **London, W.**— Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

Public Appointments.

✱SEPTEMBER 17.—**Maidstone, Kent.**—Architectural Assistant required in the office of the County Education Architect (Mr. W. H. Robinson, F.S.Arc.), by the Kent Education Committee. Mr. E. Salter Davies, Director of Education, Springfield, Maidstone.

✱SEPTEMBER 19.—**China.**—Clerk of Works China required immediately; 5 years' agreem second-class travelling. Director of Works, Office of Works, Storey's Gate, Westminster, S. stating age and full particulars of experience, q fications, and Naval or Military service during the

✱SEPTEMBER 19.—**London, S.W.11.**—General man required to act, under the general direction control of the Borough Engineer and Surveyo supervise the erection of a new library building req by the Battersea Borough Council. Mr. Edwin A Town Clerk, Town Hall, Battersea, S.W.11.

SEPTEMBER 24. — **Middleton, Lancs.** — Surv Assistant in the Borough Engineer and Surve Department required by the Town Council of Middl Mr. J. P. Walmsley, Town Clerk, Town Hall, Middl Lancs, endorsed "Surveying Assistant."

SEPTEMBER. — **London, S.E.1.** — (*a*) **Lecture Architecture and Building**; (*b*) **Instructor in B work, required by the Governors of the Borough technic Institute, for two evenings a week.** Mr. Bispham, Principal, Borough-road, London, S.

SEPTEMBER.—**Wimbledon, S.W. 19.**—Evening turer in (a) Surveying, (b) Brickwork and Mason the Standard of Grade 1 City and Guilds Syllabus. Principal, Technical Institute, Wimbledon, S.W.

✱OCTOBER 14.—**Auckland, New Zealand.**—Pro of Architecture required by Registrar, Auckland U sity College, Auckland. London Agent of the U sity of New Zealand, J. W. Joynt, M.A., 88, G street, W.C.1.

✱NO DATE.—**London, S.W.1.**—Temporary Engineering Assistants required for Govern Department. Joint Substitution Board (Treasur Ministry of Labour), Montagu House, Whitehall, S.

✱NO DATE.—**Whitehaven.**—Clerk of Works re in connection with the construction of Council h scheme, comprising about 100 houses, roads, & the Whitehaven R.D.C. Mr. Wilfrid J. G M.Inst.M.C.E., Engineer and Surveyor, Union Whitehaven.

DOMESTIC SANITATIO

THE title given to this publication* in form of the author's lectures upon "San Science" does not fully evidence the sco the work, as, in addition to dealing with materials, fittings, construction, and testi house drains and all the necessary appurten both below and above ground, it also inc chapters upon rainfall, climate and geo institution and school sanitation, refuse tructors and appliances, lighting, warmin ventilation. The chapters upon "Dra Materials and Fittings" and "Water C and Slop Sinks" are particularly lucid, an pros and cons for the use of certain fittin well reasoned out. Conservancy system explained in detail in a manner that w readily understood by students.

The space allotted to "House Planning so very cramped that we consider a g service would have been derived by dev the whole section to the planning of "A ments Containing Sanitary Fittings," espe as the plans illustrated are not examples o planning and sound construction. We a opinion that authors dealing with s sections of architectural and building would be well advised to confer with an arc before publishing plans and construc details, in order to avoid discrepancies whi apt to be misleading to general students. are numerous illustrations throughou book, but many of these would have ga usefulness to students had they been dimensioned.

The last and, withal, shortest chapter sanitary surveys, and forms a logical, alt much abbreviated conclusion. Througho work there is the all-important ring of pr experience. Students who have at lectures delivered by the author will undou find this book very helpful in refreshin memories, and it will also be appreciat others who desire a small and concise book on the subject.

We consider, however, that before th edition, the chapters upon "Planning D Systems" and "Sanitary Building Co tion" in particular, might be revise advantage, and that the value of thi would be greatly increased by the addi chapters dealing with "Septic Tanks an Beds," "Rain Water Storage Ch (Brick and Concrete)," "Garage Dra "New Materials used for Rain-water "Gutters." &c.

* DOMESTIC SANITATION AND HOUSE DRAINA Henry C. Adams. M.Inst.C.E. (London: 1, B street, W.C.2.) Price 10s. 6d. net.

OSED NEW BUILDINGS & OTHER WORKS *

lists care is taken to ensure the accuracy of the information given, but it may occapen that, owing to building owners taking the responsibility of commencing work are finally approved by the local authorities, "proposed" works at the time of have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. District Council; R.D.C. for Rural District Council; E.C. for Education Committee; ard of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

—Plans passed by T.C.: Extension to atre in connection with the St. Swithin e. 56, St. Swithin-street; bungalow, l. for Mr. Leslie Edwards, *per* Mr. T. S. rchitect; two bungalows, Burns-road, B. M'Leish and Mrs. M. J. Mathieson, ur C. Bruce, architect; two houses, e, for Mr. John Reid, *per* Messrs. Suther- architects; two houses, Broomhill-road, Lumsden, *per* Mr. T. Scott Sutherland,

Plans passed by R.D.C.: House near Dr. Smart; house for the Coal Company Shilbottle; house at Butts, Warkworth, hompson.

'he M.H. has sanctioned a loan of £195 ction of a new main sewer near Altofts passed by U.D.C.: Two houses, n, for Messrs. S. & H. Lucas.

.—Negotiations are proceeding with cheme for a new secondary school for enton and Droylsden.—Plans passed by , Stamford-road, for Mr. R. Dimsdale.

—Concerning an application by the T.C. borrow £18,000 for sea defence works, to confer with representatives of the

ICK.—Funds are being raised by the the Parish Church towards the cost of posed new church estimated at £30,000.

E.—Plans passed by T.C.: Bulk spirit . goods yard, for Shell-Mex, Ltd.; house ill, for Mr. A. Fawell; house, Cross- or Mr. Lanham.

he T.C. are making application for sanc- £5,750 for the purpose of certain exten- ns, etc., to be carried out at the electri-

The U.D.C. have been notified by the approve of a loan of £7,287 being raised e of various road repairs.

.—The T.C. is considering a scheme to es and to apply for sanction to borrow houses and £14,219 for the sewering in n the scheme. The Council has also r work, including water main renewal. and stores are to be erected £3,000 for the gas department at oad depot. A third sludge lagoon is ted at the Alwen works, at a cost of ks Superintendent and the B.S. are to he provision of a ladies' convenience h, a shelter and extra convenience for ling greens, Birkenhead Park. Water re proposed at a cost of £3,000. About d at the Dell, Rock Ferry, are to be 7,570, for housing and other municipal B.S. is negotiating with Messrs. Wain- egarding the construction of a proposed tween Norman-street and Bidston- Estates Committee has agreed to sub- s to be erected at Bidston-avenue by nwright & Sons. Amended plans in n the St. Peter's School scheme have to the B.E. Subsidy grants totalling osed for houses to be erected by the ead Houses, Ltd., which is developing nity of Price-street.

—Negotiations are taking place by the the acquisition of land for a proposed en Aqueduct Hotel and Nuttall-street.

—The Corporation have resolved that made to the M.H. for the sanction to wing sums: £14,763 for the construction road on the western boundary of the or the construction of a 50 ft. loop r the construction of a new 50 ft. road; onstruction of a 40 ft. entrance road ndary of new Park; £5,700 for the liverting of the main dyke and water- through the Park; £2,288 for the nd off Vicarage-lane for the purposes round.

Parks Committee of the T.C. has er by Lord Leverhulme to give £5,000 of the erection of a refreshment room Leverhulme Park in accordance with e been prepared by Messrs. Bradshaw, New workshops are to be erected for lcon-yard for the wheelwrights and epartment. Messrs. Kellett, Ellis, rs, mining engineers, Wigan, have t as to the stability of the site of the ions at the Hacken sewage works. quiring premises in Bridgman-place Bradford in connection with a proposed River-street. Efforts are to be made at Hall-i'-th'-Wood for a proposed lackburn-road to Bury-road, the T.C. hat part of the land would be suitable ction has been given to a loan of onstruction of a reinforced concrete H. has acquiesced in the Corporation idise a further 150 houses.—Plans ridge, Halliwell Mills, for Messrs. aw, Ltd.; sub-station, Bertha-street mmittee; new pipe store, Chorley-

* List of Contracts, Competitions, etc.

street, for Messrs. Bridson & Sons, Ltd.; pavilion, Church-road, for Smithills Tennis Club; reconstruction of Mission room, Foundry-street, for Foundry-street Mission; four houses, Green-lane, for Messrs. J. H. Coope, Ltd.; two houses, St. Michael's-avenue, for Messrs. E. & S. Street; lay-out plan, off Melbourne-road, for Mr. Robert Bolton; two houses, Carlton-road, for Messrs. W. Gornall & Sons, Ltd.; 21 houses in Maple-avenue and Chorley-road, for Bolton Modern Building Co., Ltd.; house, Wigan-road, for Mr. W. H. Smith; streets and levels, Bayswater-street, for Bridgwater Estates, Ltd.

BOSTON.—Approval has been given by the M.H. to the borrowing by the R.D.C. of £9,000 for the erection of 22 additional houses.

BRADFORD.—The M.T. has sanctioned a loan of £14,589 for the reconstruction of the tramway track in Halifax-road. The Electricity Commissioners have sanctioned loans of £150,000 for mains and services, and £20,000 for a sub-station. The T.C. has accepted an offer by Messrs. Franklands, Ltd., to bear the cost to the extent of £3,000 of the construction by the Corporation of a drainage outlet from the company's premises to the public sewer in Thornton-road. The M.H. has sanctioned a loan of £6,300 for works of sewerage. The T.C. proposes to arrange with the West Riding Land Co., Ltd., for the reservation of 156 acres at Wyke and Shelf as an open space under the town-planning scheme. The City Engineer is to demolish premises in Thornton-lane and erect three lock-up shops at a cost of £740. Estate development schemes as follows have been sanctioned: Coniston-grove for Mr. C. Dennison: Hayworth-road for Mr. J. Gray; North-road, Wisbey, for Mr. A. E. Akeroid; Stoney-lane for Eccleshill Workmen's Club; Lister-avenue for Mr. S. Webster; Mayo-avenue for Mr. T. Hoare; Wyke-lane for Mr. J. Sharpe; Toller-lane for Mr. W. Rawnsley; Norman-avenue for Mr. J. H. Smith, Wheatlands-crescent. The E.C. is considering a request for the establishment of day classes in connection with ceiling plaster decorative and figure work, the estimated cost, including the provision of hutment, being £865.

BRILLINGTON.—Plans passed by R.D.C.: Bungalow at Barff Farm, Hunmanby, for Mr. C. Nicholls; bungalow at Sewerby, for Mr. J. T. Martlock.

BRISTOL.—Carlton House is to be adapted at a cost of £695 as a remand home. The purchase of eight acres at Bedminster Down for £1,000 for allotments is recommended.

BURLEY-IN-WHARFEDALE.—The Council has approved of a scheme for the erection of 20 houses of the non-parlour type, at an estimated cost of £545 per house. Application is being made to the M.H. for sanction to borrow £11,000 to cover the cost of erection, making of the roads, sewers and other items.

BURNLEY.—The Corporation had agreed to purchase 50 acres of land not built upon at the Palace House site for £8,000. The T.C. have been recommended to purchase land for widening Todmorden road near Hand Bridge for £1,560. Proposals have been made in regard to the War Memorial for the erection of a monument in Towneley Park. A design and scheme estimated to cost £5,000 has been submitted to the T.C. For the layout of the land adjoining the Memorial to be undertaken by the Corporation, the B.S. estimates the cost at £700. The Improvements Committee are to submit a scheme for the construction of a new bridge in Yorkshire-street and the widening of the bridge near the Parish Church. The Housing Committee are asked to consider the possibility of proceeding with the Finney Gate clearance scheme and the B.S. was instructed to report on the proposed new arterial road from Padiham road to Colne road.

BURTON-ON-TRENT.—The T.C. is applying for sanction for the erection of houses on the Wellington-street site.

BURY.—The War Memorial Committee have decided to erect the Central War Memorial in a corner of the Parish Churchyard.

BUXTON.—At its next meeting the T.C. is to discuss the provision of a swimming bath at a cost of £12,000, exclusive of site.

CARLISLE.—The T.C. is purchasing property in Milbourne-street, required for the widening of Caldew Bridge. Plans passed: Grand stand, Warwick-road, for Mr. H. E. Scarborough, architect, for Carlisle Rugby Football Club; new out-patients' department, Cumberland Infirmary, for Mr. S. W. Black, architect; four houses, Blackwell-road, for Mr. A. Heedless.

CARMARTHENSHIRE.—The reconstruction of Carmarthen Town Bridge, at an estimated cost of £45,000, with incidental road work, is to be undertaken by the C.C., the Carmarthen T.C. and the G.W.R. Co. Grant of 65 per cent. of cost is promised; the Ammanford U.D.C. is to undertake private street works; the County E.C. is to erect a new school at Penybank.

CASTLEFORD.—Plans have been prepared for the erection of a proposed cottage hospital at Hightown, for the Castleford, Normanton, and District Cottage Hospital Committee. The architect is Mr. R. A. Eastdale of Castleford, and tenders are being invited.

CHADDERTON.—The Lancashire E.C. is conferring with the local authorities regarding a proposal for a new secondary school.

CHESTER-LE-STREET.—The R.D.C. has resolved to apply for sanction to build an additional 20 houses at Edmondsley.—Grants are to be sought from the Unemployment Committee in respect to the following works, for which loans of £50,260 will be necessary Fatfield-road widening, Portobello-road widening, Birtley–Ouston-road widening, proposed new road from Lumley Second Pit to Houghton Gate; proposed new road between New Lambton and Gill-crescent; road protection at Riverside-road, Fatfield; and proposed new road at Birtley–Blackfell.

CLAYTON-LE-MOORS.—A scheme is to be undertaken by the Council for the sewering from Sparth-road to Hyndburn Bridge.

CLOUGHTON (E. YORKS).—The Adult School Guest House Association propose to erect nine houses at an estimated cost of £500 per house.

CROMPTON.—A scheme is to be prepared by the Housing Committee of the D.C. for the erection of 18 to 25 houses on a site acquired for £300 between Frazer-street and Glebe-street. A sub-committee has been formed to negotiate the purchase of land at Scowcroft, adjoining land now belonging to the Council, for extension of the existing housing site.

DARLINGTON.—Plans passed by the T.C.: Church Hall and Sunday School, at Elmfield-terrace; house, Leafield-road, F. Clark & Son; two bungalows, Yarm-road, T. Boyd; lay-out of new streets, Cleveland-avenue. F. Clark & Son.

DERBY.—An inquiry has been held into Corporation's application for sanction to a loan of £21,000 for a new wholesale market.

DEWSBURY.—Plans passed: Baker's store at Huddersfield-road for Mr. H. Almond; conversion of club premises into houses at Moor End-lane for Messrs. J. Tattersfield & Son; reconstruction of the Wesleyan Centenary Sunday School, Wellington-road; house at Wakefield-road for Mr. J. Hamer; sports pavilion at Oxford-road for Mr. H. Cullingworth; and two houses at Wakefield-road for Messrs. S. Booth and H. Holdsworth.

DEVONPORT.—A new Catholic school for girls to be built will cost £3,000.

DONEGAL.—The water supply scheme for Ballybofey and Stranorlar is to cost £16,790.

DUDLEY.—The T.C. has appointed Mr. W. Quance, of Smethwick, as deputy housing director and architectural assistant. It is proposed to purchase 18 acres at Netherton from the Earl of Dudley at the price of £4,000 for a housing site. The surface water sewer from Wolverton-road to Birmingham-road bridge is to be relaid. For relief of unemployment, schemes have been prepared for the reconstruction of the road from Grazebrook Crossing to Nertherton at a cost of £24,000, and further levelling of the Woodside housing site at a cost of £2,000.—Plans passed by T.C.: Mrs. R. Musty, conversion of warehouse into two lock-up shops, Dixon's Green; Mr. C. H. Lloyd, two houses, Dixon's Green, Dudley; Messrs. Bournehills Colliery and Fire Clay Co., conversion of offices into house, Darby End, Netherton, Dudley; Messrs. J. Hanson & Sons, rebuilding the Three Crowns Inn at corner of High-street and Stafford-street; Raybould, Whitehouse & Co., Ltd., new warehouse, Wellington-road.

DUKINFIELD.—The Surveyor has been instructed to prepare a scheme for the reconstruction of Sandy-lane.

GATESHEAD.—The T.C. has decided, in view of the M.H.'s refusal to sanction a larger sum, to make application for sanction to borrow £50,000 for the erection of 100 houses on the Carr Hill Estate.

GLAMORGANSHIRE.—The Glamorgan Main Roads Committee stated that the Western Section Committee was to collaborate with the Neath R.D.C. in diverting the main road at Briton Ferry so as to cross the Neath River and join the road at Jersey Marine.—The Abercrave and District Miners' Welfare Association is to erect a central workmen's hall, to seat 800, and estimated to cost about £5,000. Grant of £1,000 has already been made from the Central Fund and a freehold site has been procured.

GLOSSOP.—The further widening of Newshaw-lane is proposed. A paddling pool is to be provided alongside Glossop brook, with necessary fencing and walling. A loan of £13,900 has been obtained for water supply and sewerage. A committee is considering the provision of slipper baths in the centre of the town. Various repair works are to be carried out at Wood's Hospital. The Council has passed plans prepared by the Borough Surveyor for a meter house at Swineshaw reservoir.

GOLBORNE.—It is expected that in the near future efforts will be made to inaugurate a scheme for a new church for All Saints.

GREAT HAYWOOD.—Plans for the extension of St. John's Schools by the provision of an extra classroom and a cloak room have been approved by the Stafford E.C.

HAMPTON HILL.—The congregation of the Sacred Heart and St. Mary's Magdalene are raising funds for the erection of a permanent church on a site they have acquired.

HAZEL GROVE.—Funds are being raised by the parishioners of the Norbury Parish Church to defray the cost of the erecting a new chancel, etc.

HEMEL HEMPSTEAD.—Planns passed by R.D.C.: Bungalow at Scatterdell-lane, Chipperfield, for Mr. Roberts; bungalow at Scatterdell-lane, Chipperfield, for Mr. Shillabeer.

HETTON.—The U.D.C. has obtained sanction from the M.H. for the erection of an additional 36 houses on the Hetton-road site.

HORBURY.—Plans passed: House in Regent-street for Mr. H. Benn; bungalow off Regent-street for Mr. W. G. Chamberlain; house off Regent-street for Mrs. Felton; and two houses off Regent-street for Miss Felton and Mr. J. W. Rigg.

HORSFORTH.—Plans passed by U.D.C.: Lay-out plan of Green Emmett Estate; house and shop for Mr. J. W. Pass; pair of houses at Outwood-lane for Mr. J. Cryer; pair of houses in Victoria-drive for Mr. J. B. Lee; pair of houses in Stanhope-drive for Messrs. W. Ratcliffe & Co.

JARROW.—An inquiry has been held into the application of the T.C. to borrow £13,350 for carrying out a portion of the scheme for conversion to water carriage of sewerage in the borough.

KIRKHAM.—Plans have been approved by the Fylde R.D.C. for the erection of eight houses. The Council have agreed to make up a length of road from the borough boundary to Elaine-avenue.

LANARKSHIRE.—The E.C. has decided to purchase property in Mitchell-street, Glasgow, for the purposes of conversion into Central Education Offices. The reconstruction work is estimated to cost £18,860.

LANCHESTER.—A proposal is on foot for the erection of a large new central hospital for the area covered by the Lanchester Joint Hospital Board.

LEEDS.—The Watch Committee has passed plans for alterations at the Sheepscar Police Station, to cost £380. The M.H. has sanctioned the scheme for the adaptation of premises in Alexander-street for art gallery and library purposes, at a cost of £4,700. The T.C. is to borrow £19,000 for the construction of a section of the Ring-road from Tongue-lane to Smithy Mills-lane, including the provision of a surface water sewer. Sanction is to be sought for a loan of £24,000 or the purchase of land required in connection with the construction of the Middleton light railway and for a highways depot. Relief schemes proposed include a sewer in Stanningley-road, and the widening of Middleton-road. The M.H. has sanctioned a loan of £2,436 for the construction of a ladies' convenience at Roundhay Park. The M.H. has sanctioned the purchase of Chapeltown barracks at a cost of £12,120. A new road is proposed from Roundhay-road to Chapeltown-road through the barracks site. A substation is to be erected at Old-lane in connection with the power supply for the Middleton light railway. The Health Committee is to seek an alternative site for a sanatorium. The Sewerage Engineer has reported that Mr. D. Davidson has carried out his agreement for the preparation of drawings and specifications in connection with his system of reinforced concrete for cylinder foundations and floors at the low level tanks at Knostrop. A sewer is to be constructed, at a cost of £700, for property at Armley Heights and Lower Heights. Plans have been prepared for a golf course at Meanwood. Plans have been passed for the lay-out of the Kirkstall Estate by Messrs. Hill & Sons. It is proposed to widen Whitehall-road, Farnley, to 100 ft. Land is to be scheduled in the Gledhow Valley town planned area for open spaces. Land at Beeston is to be acquired for a recreation ground. Land is to be purchased in Roman-avenue for street improvements. The City Engineer has been authorised to report as to additional sites for housing purposes. The City Engineer has prepared plans in connection with the extension of the art gallery into the premises acquired from Edmondson's Warehouse, Ltd. Tenders are also to be obtained for the following works at the Meanwood-road Baths: Relining and making watertight large swimming bath.

LEVENSHULME.—Funds are being raised for the enlargement of St. Peter's School.

LLANELLY.—The Carnegie Trust has agreed to the B.C.'s proposal that the library to be erected shall be a joint building with the proposed new Council swimming baths.

LUTON.—The M.T. has decided to make a grant towards the road works in connection with the George-street widening. The B.S. has prepared further plans for an improvement in Dunstable-road, to cost £450.—Plans passed by T.C.: A. Catlin, four houses, Biscot-road; F. C. Lane, eight garages, South-road; N. Hill, four houses, Lincoln-road; C. Timpson, two houses, Stratford-road; R. V. How, four houses, Holland & Cavendish-roads; J. Tomkins & Sons, four houses, Colin-road.

MALDEN (SURREY).—The Surveyor has submitted to the U.D.C. plans of the proposed war memorial and lay-out of the site in front of the Council Offices. The Council proposes to undertake the preparation of the site at a cost of £137. A loan of £4,641 has been sanctioned for street improvement works in Kingston-road. The Council is to confer with Messrs. Woodruffes on behalf of the Gower Estate, and Mr. S. E. Parkes, Motspur Estate, in regard to certain objections to the town-planning proposals. The Council is to seek sanction to include eight houses at Idiston-square, for Messrs. Leather & Sons. The Surveyor is to report on the cost of providing recreative facilities at the Kingston-road Recreation Ground. —Plans passed: House, Coombe-lane, for Mr. J. A. Hunt; house, George-road, for Mr. H. Bailey; house, Presburg-road, for Mr. R. Lewis; house, Traps-lane, for Mr. H. Bailey; house, Idminston-road, for Messrs. A. F. & J. Leather; four houses, Selwyn-road, for Mr. E. Hayes; four houses, Chestnut-road, for Mr. A. Thomas; five houses, Connaught-road, for Messrs. H. F. White & Son; house, King's-avenue, for Mr. A. Windsor; house, Blakes-lane, for Modern Homes, Ltd.; six houses, Malden-gardens, for Mr. F. C. Stredder; house, Westbury-road, for Mr. F. C. Stredder; house, Lynton-road, for Mr. J. Atkins; three houses, Malden Hill, for Mr. J. H. Palmer; house, Blakes-lane, for Messrs. Parkes & Co.; house, Coombe Hill-road, for Messrs. Bailey & Dudley; four houses, Idminston-road, for Mr. Stoneley; sub-station, Coombe Warren, for Wimbledon Corporation Electricity Dept.

MANCHESTER.—Messrs. W. Timpson, Ltd., boot manufacturers, 35, Corporation-street, have secured premises No. 33 adjoining, which are to be adapted as an extension. Messrs. Smith, Hill & Co., have secured Mynshull House as new shop and warehouse premises. The United Kingdom Life Association, Ltd., have acquired buildings in Princess-street, for new office premises.—Plans approved: Dedication plans for new back street, Waterloo-road and Barrow Hill-road; four houses and shops, Waterloo-road, Hightown; new bakehouse and shop, Waterloo-road; house, Sherdley-road, Crumpsall; bungalow, Moston-lane. The Corporation has received sanction to borrow £2,000 for structural improvements to the Every-street Council School, £1,273 for conversion of Varna-street Municipal School into a District Central School, £477 for fixtures and fittings in connection with these schemes. Application is to be made to borrow £1,750 for renewal of the Females Wash Baths at Osborne-street Baths.—The Corporation Town-Planning Committee has passed plans as follows: Twenty houses, Egerton-road; motor bus depot, Parr's Wood-lane, Didsbury; street plan, Rectory-avenue, Didsbury Park Estate; 40 houses, Crossley-road, Burnage.

MIDDLESBROUGH.—The M.H. held an inquiry into an application by the T.C. to borrow £104,845 to cover the estimated cost of construction of new sewers.

MONMOUTHSHIRE.—The M.H. has agreed to the extension of the Bedwas and Machen subsidiary sewer by the U.D.C. at cost estimated at £2,168; the Gellygaer U.D.C. has been informed that the grant for the Bedlinog recreation ground layout from Miners' Welfare Fund, has been increased to £1,500; the Newport B.C. is taking steps to alter the building line on the north side of Clarence-place so as to provide a 70 ft. roadway; the directors of the G.W.R. Co. have approved the proposed arrangement for the further widening of the station approach to give a 50 ft. wide road.

MONTROSE.—The directors of Montrose Royal Infirmary have decided to apply their share (£500) of the gift of £1,000 which is being made to Montrose by Sir James W. Warrack to the provision of a new operating theatre.

MOSSLEY.— The Housing Committee of the D.C. have approved the erection of 74 houses on the Fox Platt estate.

NEATH.—The Glamorgan Public Health Committee is to erect a new isolation hospital, in conjunction with the Neath B.C.

NELSON.—The Memorial Hospital Committee were desirous of proceeding with extensions and alterations and that the B.S. had been authorised to have the necessary plans specifications and estimates, &c., prepared. The B.S. submitted plan and estimate of the alterations required at the Public Library for adapting the premises to the open access system. The Water Engineer having submitted a report on the condition of Shuttleworth Pasture Farm House to the Water and Baths Committee together with an estimate of the cost of making the premises reasonably fit for habitation. The Chairman and B.S. reported on an interview at the M.H. with reference to the erection of public abattoirs. The sub-committee again inspected the plans submitted by the B.S. and his estimate of the cost of alternative systems of erection, and it was resolved that inquiries be made. The sub-committee having considered a plan showing proposed method of repair required at Ogden Filter House to counteract the effect of the subsidence, it was resolved that the plan be approved. The Sewerage and Streets Committee resolved that tenders be obtained for carrying out the necessary works in Townsley-street and St. Paul's-road.

NEWCASTLE.—The Corporation Libraries Committee proposes to build a branch library containing lending and reference libraries, ladies', children's, and staff rooms, and offices, at a total cost of £13,075, at Scotswood.

NEWPORT (ISLE OF WIGHT).—The Board of Trade has consented to the erection of the proposed new swing bridge at the entrance to the town quay. The T.C. proposes to seek the provisional order necessary to carry out the scheme for the removal of the cattle market, now in St. James's-square to another site. Plan passed for office in Trafalgar-road, for Mr. S. E. Tomkins, architect.

NEWPORT (MON).—Plans passed: Six houses and shops, Commercial-street, for Messrs. Page & Lawrence; bungalow, Acacia-avenue, for Mr. J. W. Holmes; house, St. Julian-road, for Messrs. Graham Hitchcock & Co.; warehouse, Corporation-road, for Mr. A. E. Sheppard; shop premises, Caerlion-road, for Co-operative Society. The Borough Engineer has been instructed to prepare a scheme showing the most desirable way of utilising the site at the junction of Shaftesbury-street with Newport Bridge-approach, and to discuss with the M.T. the question of the widening of Shaftesbury-street. The M.T. has intimated that it has been agreed with the G.W.R. and the Ministry that no further steps should be taken regarding the proposed new road bridge over the River Severn until the results of investigations being made into the question of the Severn barrage scheme had been received. The Watch Committee is considering a proposal to erect houses or flats for policemen on land at the rear of Maindee Police Station. The Parks Committee is considering the acquisition of 16 acres of land for the extension of Coronation Park.

NORTHFLEET.—In connection with the proposed provision of a public landing-stage, the U.D.C. is suggesting alternative sites on the Robbins Branch and at the bottom of Lawn-road. The Surveyor has agreed with the Kent County Architect upon the improvement of Rose-street.

NOTTINGHAM.—On the Wollaton Estate which the T.C. has decided to purchase it is proposed to erect several thousand houses; the National Housing Association is in negotiation with the Council on the subject.

OGMORE.—The Ogmore and Garw U.D.C. has passed plans for layout of recreation ground at Caedu and has applied for grant from Miners' Central Welfare Fund; the Council is to obtain a loan for erection of 20 houses at Llangeinor and is to construct a new road, Blackmill—Llangeinor.

OLDHAM.—The T.C. Health Committee has again considered the question of providing a children's hospital at Westhulme, and given instructions for Messrs. C. T. Taylor & Roberts, architects, to prepare plans and estimates for consideration by the Committee at an early date. A pavilion is to be erected at the Watersheddings Recreation Ground. Part of Westwood Park is to be laid out as a playground. The levelling of the playground and other work at the Heron-street School is proposed, at an estimated cost of £5,000 The subsidy was voted for five houses to be erected in Rippenden-road, for Mr. Isaac Barber. Plans passed: Two new vestries, St. Mary's Catholic Church, for the Trustees; transformer house, Lowside Brickworks, for Messrs. Smethurst, Ltd.; paint warehouse, Taylor-street, for Mr. J. Fielding.

OSSETT.—Plans passed by T.C.: Vill for Miss R. Nettleton; house, Run Mr. H. Long.—The T.C. is negotia Horbury U.D.C. as to the proposed i Sowood-road to the Horbury boundar

OTLEY.—The Council is to submit to ment Grants Committee a scheme for t of a road from Leeds-road through va Ilkley-road.

OXFORD.—Greyfriars House is to b cost of £250 as offices for the M.O.H supporting the proposal of the Admi Radcliffe Infirmary regarding the provi culosis sanatorium at Manor House, He T.C. is offering the Headington R.D.C water supply to Old Marston, a sc estimated to involve a cost of £1,700. Hostel, Benson-place, for Lady Margar Northmoor-road, for Mr. C. Wright; Albion public-house, Hollybush-row, Brewery; house, Lonsdale-road, for Mr. house, Abingdon-road, for Mrs. Tow Bartlemas-road, for Mr. G. Simmons.

PAISLEY.—The plans have been pass of Court Guild of a number of houses t the instance of Paisley Corporation and in Espedair-street. Six three-s are to be built in Barterholm-road and a similar type in Espedair-street. T approved of the plans of ten semi-detac be erected in Kingsburgh-drive by M Urie & Sons, builders, Paisley.

PENYBONT.—The M.H. has agreed authorising an additional 50 houses. I the Council: Two houses at St. Bride's J. Thomas; bungalow at Pyle for house at Lareston for Mrs. Jones; ho for Miss Rees.

PERSHORE.—Plans of a bungalow at for Monsignor Newsome have been ap R.D.C.

PLYMOUTH.—Elphinstone barracks adapted, at a cost of £1,600, for tem accommodation. The T.C. has had san £8,906 for the purchase of land for school, and £1,130 for the purchase o extension of the technical school. Th pital Committee is negotiating for land of additional accommodation.

PONTEFRACT.—Plans passed: Lay-o land in Chequer Field-lane for Messrs. & Son; house in Gipsy-lane for Mr. A. in Sheepwalks-lane for Mr. J. Betteri in Green-lane for Mr. P. Clayton; an Sheepwalks-lane for Mr. J. W. Beec has been instructed to prepare plans of the cost of widening to 50 feet the po gate between Mill Hill-road and Gillyga has sanctioned loans of £140 for constr sewer in Railway-avenue and of £40 conversions in various thoroughfares.

PONTYPRIDD.—The U.D.C. is confe Rhondda U.D.C. with the view to the joi of a new road at cost estimated to a £50,000.

ROCHDALE.—The T.C. have decided of land on the corner of Ajax-street and should be levelled for use as a children It is proposed that provision for childre should be made on the Turf Hill and estates of the Corporation. A scheme sideration for laying out the slope i Technical School, estimated to cost £5,

ROSSINGTON.—The P.C. are urging R.D.C. to erect 30 more houses in the vi who are not employed by the colliery

SALFORD.—The T.C. Baths Committ the appointment of Mr. C. Swain, of architect and quantity surveyor in c the proposed erection of baths and Hodge-lane. A special Committee Expenditure recommends the establishm ment for the combined purchase of st the various departments of the Corpo of £2,580 is to be sought for the wide road. Sanction is to be sought to th an additional 50 houses.

SCARBOROUGH.—At the annual m Harbour Commissioners, a proposal w increasing of quay accommodation deepening, at a cost of £72,000.

SHENLEY.—Barnet R.D.C. has deci plans for sewering Shenley, and to ap to a loan. The cost is estimated at £15 to be prepared for 70 houses to be ere road, Furze-hill, London Colney and Ri

SOWERBY BRIDGE.—Plan approv Shed at Rose Hill works of Messrs. Surveyor is to prepare plans for lay-o site.

SPALDING.—Except for the omissio tions, the U.D.C.'s sewerage scheme ha by the M.H. As modified, the sch £50,000.—The U.D.C. have been Anglo-Scottish Sugar Beet Corporatio them in the choice of a site, suitable ments of a sugar beet factory.

STALYBRIDGE.—The E.C. has decid site near Grey-street for a new ele Amended plans prepared by the B.S. out of houses on the Hague site in con proposed rehousing scheme are to the M.H. for confirmation.

STRETFORD.—Plans passed by U.D.C Burleigh-street, for Mr. Fred Thorpe; John's-road, for Mr. T. Hames; two h grove, for Messrs. Smith & Allcock; Farm, Barton-road, for the trustees of Estate; billiard hall, Broady-street, Jones; retort-house, &c., Longfor Stretford & District Gas Board; sewe Turn-bridge, Trafford Park, for Traff

ises, Erlington-avenue, for Mr. Douglas
ms have now been agreed to in
ith the construction of Park-road and
oad East and the bridge across the Bridg-
The estimated cost totals £47,000.
s to be made for consent to a scheme for
of portions of Trafford Park-road at a
0. Various street improvements works
ied out at a total cost of £10,400. It is
establish an open-air school in Longfield
ovements are suggested in the lay-out of
k.
N.—The T.C. Developments Committee
ing the purchase of the whole of the Ford
comprising about 175 acres, for housing,
d industrial purposes.
.—Plans approved by R.D.C.: Bunga-
Snelling at Rugden; bungalow for H. M.
oodchurch.
—The R.D.C. proposes the extension of
Branston-road in consequence of building

.—The B.G. has approved of a scheme
sion of the sterilising room and the pro-
urgeon's dressing room at the Infirmary
heatre. The estimated cost is £360.
is to lay a sewer in Horbury-
t of £3,000. The Housing Committee is
scheme for erecting houses. The B.S.
ed to prepare a sketch plan showing a
provement at the corner of Westfield-road
's North. Negotiations are proceeding
sition of land in Elm Tree-street for an
—Plans passed by T.C.: Messrs.
Hartley, house off Ivy-lane, Stanley-road,
veson; Mr. H. Hampshire, house in Cross-
Newbald & Hartley, two houses in
for Mr. W. A. Marston; Mr. H. Dobson,
Horbury-road for the Misses C. and L.
nd Mrs. H. Wainwright; Messrs. New-
ey, bungalow in Thornes-road for Mr. G.
Mr. W. H. Ogden, four houses in St.
for Mr. J. Wild; Mr. W. H. Ogden,
Horbury-road, for Mr. F. Clark; Mr.
house, St. John's-avenue.
-DALE.—A plan was approved by the
rection of a Recreation Hall in connection
Patrick's R.C. Church. The provision of
main from School-lane Waterworks to
voir in Gough-lane is under consideration.
TH.—Sir James and Lady Carmichael, of
ll-place, Kingston, have given £10,000
cost of erecting the William Shepherd
ng at the Bolingbroke Hospital, Wands-
n. The cost of this wing (fully equipped)
o £60,000.
—Plans passed by T.C.: Six houses,
th-road, for F. W. King; house, Cassio-
enue, for F. W. Brett; pair semi-detached
en-lane, for C. Swain; house, Gammons-
Beck; house, Cassiobury-drive, for W. C.
houses, Eastbury-road, for H. Ferrett;
-lane, for E. G. Larkin; six houses,
, for A. J. Eldridge; house, Cedar-road,
udd; laundry, Hagden-lane, for Watford
y Co.; four pairs of houses, St. Albans-
empster & Williams.—The M.H. has
loan of £946 for the erec-
house for the superintendent at the
on. Despite the absence of a grant, it
proceed with the scheme for constructing
wers on the Wiggenhall estate. The
rian has been asked to prepare a scheme
brary at North Watford.
TLEPOOL.—Plans passed by the T.C.:
onian-road, for W. G. Bee; house,
d, for J. L. Fairless: eight cottage
ehill-gardens and Elmwood-road, for
ol War Memorial Committee; house,
d, for Miss Graham; cottage, Station-
arew, for J. McGowan.—The Borough
prepared lay-out and detail plans for
a number of houses to complete the
rate, and the authority has resolved
ation to the M.H. for their consent to
59 houses, in Chatham-road.
new pavilion is to be erected in Mesnes
iew of straightening and developing of
end of Gidlow-lane, the Corporation
tee have agreed with Mr. W. Highton
e house and farm buildings known as
arm and 25 acres of land for the sum of
has been acquired by the Corporation in
district for the proposed public baths.
T.C. has come to an agreement with
.D.C. regarding the drainage of parts
Clifton. The T.C. is considering the
emises in St. Saviourgate for housing
following unemployment schemes
ided upon: Construction of bathing
arth, at a cost of £1,659; construction
the pond at Fairfield sanatorium;
15 in. sewer from Tang Hall Estate
ry; construction of concrete wall to
Huntingdon-road, to Yearsley Bridge;
w road at Campleshon retaining wall
path in Huntingdon-road; concrete
ss. Islands-road; culverting of parts
and Osbaldwick becks; construction
s the Ouse at Clifton Scope. The
has been instructed to invite tenders
n of a top bedroom and a bath-room
is estimate of the cost being £250.
by T.C.: G. B. Matthews, five
ine-street; St. Stephen's Orphanage,
apel, The Mount.

FIRE.

Messrs. Tebbut & Garret's factory at
ster, was completely destroyed by fire
ge estimated at over £20,000 was

PATENTS

APLICATIONS PUBLISHED.*

206,482.—L. Fitte: Paving blocks.

215,407.—H. R. Giles (W. F. Isaacs, G. A. Kilburn, and S. L. White): Disinfectant supply apparatus for flushing systems.

201,880.—Naamlooze Vennootschap Glasfabriek "Leerdam" Voorheen Jeekel, Mijnssen & Co.: Process for preparing stone-like material.

215,438.—J. Woods: Suspended arches, more especially for furnaces.

215,440.—D. Mackenzie and G. S. C. Barron: Air-heating apparatus for heating and ventilating halls, rooms, ships and the like.

215,464.—F. B. Bigelow: Arch constructions for furnaces.

215, 468.—H. F. Slater: Shop window.

215,529.—L. B. Tickle and H. J. W. Barnes: Construction of edging-strips for the borders of gardens and paths.

215,538.—A. Drummond: Rotary cement-grinding and like apparatus.

215,553.—A. J. Thurley: Adjustable single-lever pipe and nut wrench with ratchet-like control.

215,563.—A. R. Magnall: Earth-boring apparatus.

215,578.—H. Morris, Ltd., and J. A. Butterworth: Elevating trucks.

215,585.—Furness Metal and Wire Works, Ltd. and J. Neal: Chimney and ventilating-shaft tops.

203,680. — Daimler-Motoren-Ges.: Window, door, and like fastenings.

215,681.—H. W. Snelling: Means for holding fencing wire to concrete posts.

216,179.—Vickers, Ltd. (Mascarenhas et Cie): Collapsible boxes or box lids.

216,184.—B. Rathmell and W. T. McIvor: Construction for heat insulation.

216,185.—J. Turner: Dowels and sockets.

216,223.—S. May: Cold-water storage cisterns.

216,224.—O. G. R. Becker: Construction of machine for finishing woodwork by glass-papering.

216,232.—E. Bommer: Spring hinges.

216,245.—S. C. Meadows: Composition suitable for making or waterproofing roads.

216,276.—J. G. Machin: Chimney cowls.

216,288.—S. H. Tigg: Folding boxes.

216,311.—J. W. Lindberg: Locks.

216,320.—W. Schonfield: Window fasteners.

216,341.—Educational Supply Association, Ltd., and H. Woolard: Sliding and folding partitions and doors.

*** All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.**

NEW COMPANIES.

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

ANGLO-ITALIAN ARTISTIC MARBLES, LTD. (198,400). Registered June 3. 131, Duke-street, Liverpool. Alabaster and marble importers, and general merchants. Nominal capital, £1,000.

ALBERT CHUCK & Co., LTD. (198,399). Registered June 3. Builder and contractor. Nominal capital, £2,500.

HODGSON, NELSON & SCOTT, LTD. (198,353). Registered May 31. Beetham-road, Milnthorpe, Westmorland. Builders and contractors. Nominal capital, £3,500.

F. J. HEPPLE, LTD. (198,286). Registered May 29. 40, Dunn-street, Scotswood-road, Newcastle-on-Tyne. Builders and contractors. Nominal capital, £2,000.

SMITH & JONES, LTD. (198,293). Registered May 29. Builders and contractors. Nominal capital, £2,000.

CHARLES BRYER & SON, LTD. (198,254). Registered May 28. 34, Friarn-street, Bridgwater. Builders, contractors, plumbers, sanitary engineers, and decorators. Nominal capital, £3,000.

W. TURPIN, LTD. (198,274). Registered May 28. 12, Livingstone-road, Teignmouth, Builder and contractor. Nominal capital, £2,500.

SPAUNTON QUARRIES, LTD. (198,272). Registered May 28. Catter Bridge, Kirbymoorside, York. Quarry owners. Nominal capital, £25,000.

BROWNING, JONES & MORRIS, LTD. (198,299). Registered May 29. Builders' merchants, exporters and importers, builders, and general contractors, &c. Nominal capital, £40.000.

LOWER UPNOR QUARRIES, LTD. (198,235). Registered May 27. Lower Upnor Quarries, Lower Upnor, Rochester, Kent. Sand merchants, manufacturers of bricks, tiles, pottery, and ceramic ware. Nominal capital, £1,100.

MORGAN & EDWARDS, LTD. (198,184). Registered May 24. 32, Alfred-place, Tottenham court-road, W.C. 1. Building contractors. Nominal capital, £3,500.

W. E. WALSHAM, LTD. (198,221). Registered May 26. 82, Argent-street, Grays, Essex. Builder, contractor, and joinery manufacturers. Nominal capital, £6,000.

C. R. DAWSON & Co., LTD. (198,055). Registered May 20. Timber merchant and builders' merchant. Nominal capital, £2,000.



Office Building, Leyton. MR. J. WINKLE, Architect.

[The fronts of this building are in Bath and York stone. The rendering above and the main entrances are in "Atlas" white cement, executed by the Grano-Metallic Paving & Plastering Co., Ltd.]

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquir

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Pettons, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose ..	9 15 0
Do. Bullnose ..	3 8 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire bricks:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends ..	32 10 0
Headers	22 10 0	Two Sides and one End	33 10 0
Quoins. Bullnose and 4½ in. Flats	29 10 0	Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand.....	15 6	" "
½ in. Shingle for Ferro-Concrete	14 0	" "
¼ in. "	15 0	" "
½ in. Broken Brick.....	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to 51/- alongside at Vauxhall in 80-ton lots.		£3	3 6
Ferrocrete per ton extra on above.....		0 10	0
Super Cement		4 8	0
Roman Cement		8 15	0
Parian Cement		5 15	0
Keene's Cement, White.....		5 15	0
" " Pink		5 10	0
Plaster, Coarse, Pink		3 0	0
" " White		3 12	6
" Fine		5 12	0
Sirapite, Coarse		3 9	0
" Finish		3 17	0
Grey Stone Lime		2 11	9
Chalk Lime		2 11	9
Best Ground Blue Lias Lime.....		2 4	6
Hair		17 0	0
Granite Chippings		1 12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.....	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.....	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.....	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.....	4 5
White basebed, 3d. per ft. cube extra.	

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides ..... "	27/-
Sawn three or four sides ..... "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

	s. d.
Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super.).....Per Ft. Super	5 6
6 in. rubbed two sides, ditto..... "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... "	1 6½
1½ in. to 2 in. ditto, ditto ..... "	1 4
HARD YORK—	
Delivered at any Goods Station London.	
Scappled random blocks.....Per Ft. Cube	3 3
6 in. sawn two sides landing to sizes (under 40 ft. super.).....Per Ft. Super	5 1½
6 in. rubbed two sides ditto ..... "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags..Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
6 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 4½	25 0
2½ × 7	24 0	3 × 4	24 10

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅜	21/-	1¼	33/6
½	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
⅜	17/6
½	21/-
1	26/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle				0 2	8
Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2	6	
⅜ in. do. do.	0 1 6	to	0 2	0	
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2	6	
Cuba Mahogany	0 3 0	to	0 3	6	
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0	to	—		
American Whitewood planks, per ft. cube ..	0 12 0	to	0 14	0	
Best Scotch Glue, per cwt.	4 10 0	to	—		
Liquid Glue, per cwt. ..	4 7 0	to	5 10	0	

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12.....	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11.....	31 5 0	16 by 10	17 12 6
20 by 12.....	29 15 0	16 by 8	13 15 0
20 by 10.....	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &C., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ½ in...	13 10 0
⅜ in.	14 10 0	⅝ in. to 2⅞ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up.	Fittings. ⅜"to¼" inclusive.	Flanges ¾"&up.	Flanges ⅜"to1" inclusive.
Black Gas....	50 %	50 %	47½ %	60 %	57½ %
Blue Water ..	45 %	45 %	42½ %	55 %	52½ %
Red Steam ..	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas ..	35 %	40 %	37½ %	50 %	47½ %
" Water.	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1⅜	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5⅜
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

	£ s. d.		£ s. d.
IRON—			
Common Bars.....	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	..	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 10 0		13 10 0

METALS (*Continued*).

Steel Bars, Ferro-Concrete quality, basis price	13	0	0
Hoop iron, basis price	16	10	0
" Galvanised	31	0	0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g...	15	0	0
" " " 24 g...	16	0	0
" " " 26 g...	18	0	0
Sheets Flat Best Soft Steel, C.R. & C.A. q			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24	10	0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21	0	0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21	10	0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23	10	0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23	10	0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24	10	0
Best Soft Steel Sheets, 26 g.	26	0	0
	20	10	0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)			

METAL WINDOWS—Standard sizes suitat plete houses, including all fittings, p coats, and delivery to job, average pric to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe.....	
NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2	
Old lead, ex London area, at Mills ..... per ton	31 0 0
Do., ex country, carriage forward ..... per ton	32 0 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
29/-	45/-	76/-	153/-	246/-

NEW RIVER PATTERN SCREW DOWN STO UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 i
41/6	62/-	92/-	174/-	300/-	58

NEW RIVER PATTERN SCREW DOWN MAI

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREW

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in
10/-	12/-	20/-	24/-	31/-

NEW RIVER PATTERN CROYDON BALL VA

¼ in.	⅜ in.	1 in.	1¼ in.	1
35/-	56/-	98/-	162/-	22

DRAWN LEAD P. & S. TRAPS WITH BR SCREW.

	1¼ in.	1½ in.	2 in.
8 lbs. P. traps ..	33/-	41/-	56/-
8 lbs. S. traps ..	35/-	45/-	66/-

COPPER—	£ s. d.
Strong Sheet ....per lb.	0 2 3
Thin " .... "	0 2 4
Copper nails .... "	0 2 3
Copper wire .... "	0 2 4
TIN—English Ingots "	0 2 4
SOLDER—Plumbers' "	0 1 2
Tinmen's ..... "	0 1 4
Blowpipe ..... "	0 1 5

PAINTS, &c.

Raw Linseed Oil, in pipes .....per gall	
" " " in barrels .... "	
" " " in drums .... "	
Boiled " " in barrels .... "	
" " " in drums .... "	
Turpentine in barrels ..... "	
" in drums (10 gall.) .. "	
Genuine Ground English White Lead, per (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT—	
"Father Thames," "Nine Elm	
"Park," "Supremus," "St. Paul	
"Spedol" and other best brands 14 lb. tins) not less than 5 cwt. lots per ton deliv	
Red Lead, Dry (packages extra)....per	
Best Linseed Oil Putty.....per	
Filocol .....per	
Size. XD Quality.....	

{*Concluded on next pag*

* The information given on this page ha compiled for THE BUILDER and is copyrig this list is to give, as far as possible, th of materials, not necessarily the highest or and quantity obviously affect prices—a fa be remembered by those who make use of

URRENT OF MATERIALS (*contd.*)

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
as ..	3½d.	32 oz. fourths	8½d.
....	4½d.	32 „ thirds	10½d.
as ..	5d.	Obscured Sheet, 15 oz.	4d.
....	6½d.	„ 21 „	5½d.
as ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
....	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

ccording to size and substance for squares tock.

OLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
ate	4½d.
lled	5½d.
illed	5½d.
olled, Oxford Rolled, Baltic, Oceanic. Stippolyte, and small and large	
white	6½d.
, tinted	9d.
heet	6d.
olled Cathedral	5½d.
do.	7½d.

Plate is same price as rough rolled.

VARNISHES, &c.		Per gallon. £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
Carriage	ditto	1 4 0
.....	ditto	1 12 0
h	Inside	0 18 0
aper	ditto	0 18 0
Cabinet	ditto	1 2 6
Flatting	ditto	1 0 6
Oak	ditto	0 18 0
Drying Oak	ditto	0 19 0
Varnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
Gold Size		0 10 0
Japan		0 10 6
hogany Stain (water)		0 12 0
Black		0 7 6
.....		0 14 6
atent)		1 5 0
Brush Polish		0 17 0
rs in Terebine		0 9 0
Enamel		0 7 0

OBITUARY

took place recently of Mr. Walter ing Director and founder of Messrs. rood, Ltd. Mr. Jones was born in ceeded to the business on the death

The inventor of many improve- hot-water heating industry, Mr. ll known for his public and com- ties. In 1899 he was President of on of Heating and Ventilating d in the following year was elected e Institution of Mechanical Engi- as the author of many pamphlets subjects, and under his guidance ood's developed an entirely new reatment of sewage under the title Sludge."

as occurred of Mr. Thomas Taylor, and contractor, of Holly House, Pontypridd. The late Mr. Taylor he biggest figures in contractors' n Wales. For many years he was d at one time chairman, of the D.C.

THE SCOTTISH BUILDER

SCOTTISH SANITARY INSTITUTE

At the jubilee Congress of the Incorporated Sanitary Association of Scotland, held recently at Aberdeen, the following resolutions were re-affirmed by the meeting. The first expressed approval of the movement for the training, examination, and national registration of certified plumbers as calculated to secure the efficiency of the sanitary arrangements of dwellings, and so promote the public health and safety of property. The second reaffirmed a resolution passed last year, that the Bill of Lord Novar in relation to smoke pollution should be amended in terms of the recommendations of the Departmental Committee appointed by the Minister of Health.

Lord Lister Memorial.

The statue of Lord Lister which has recently been erected in Kelvingrove Park, Glasgow, will be unveiled on September 17. The statue was cast from the work of Mr. G. H. Paulin, A.R.S.A., by Messrs. M'Donald & Creswick, Ltd., bronze-founders, Edinburgh.

NEW BUILDINGS IN SCOTLAND

Paisley.—Houses.—The T.C. has acquired a large tract of ground at Bartenholm for the erection of 42 houses.

Govan.—Houses.—The Glasgow Corporation proposes to build some experimental houses on ground at Langlands.

Dunfermline.—Post Office.—The postal authorities have acquired from the Dunfermline Palace Kinema, Ltd., ground at the rear of the office, in order to provide further post office accommodation. The purchase price was £1,200.

Aberdeen.—Shed.—The Burgh Surveyor has received instructions from the Tramways Committee to obtain tenders for the erection of a shed in King-street to accommodate 24 cars. The Burgh Surveyor's estimate is £13,800.

Auchinleck.—Cottage.—At a meeting of the County Road Board the Ayr District Committee was instructed to spend £550 for the purpose of erecting a roadman's cottage at Auchinleck.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-layers' Labourers.	Plas-terers' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0¼	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/7½	1/6½	1/6½	1/7	1/6	1/6	1/6½	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/5	1/0	
Lanark	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/5½	1/2½	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Wishaw	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 413.

PPER for ROOFING

PPER for GUTTERS and DOWN PIPES

PPER as a Covering for DOMES, PINNACLES, etc.

Architect or Contractor should miss seeing the indications of the of Copper in Building, shown upon Stand 237, Palace of Engineering, sh Empire Exhibition, by the Non-Ferrous Metal Trades Joint Exhibit mittee. Booklet on Application.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"	1
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/8	
Deal shelves and bearers	"	1/5	
Add if cross tongued	"	2d.	

STAIRCASES.

	1"	1¼"	1½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers		e
Deal balusters, 1 in. × 1¼ in.	per ft. run	
Mahogany handrail; average 3 in. × 3 in.	"	
Add if ramped	"	
Add if wreathed	"	

FIXING ONLY IRONMONGERY (INCLUDING SCREW

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges	
Casement stays	1/2	letting in to floor	
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	per
Plain compound girders	"
Do. stanchions	"
In roof work	"

RAIN-WATER GOODS.

		3"	4"	
Half-round plain rebated joints	ft. run	1/11	2/4½	3
Ogee Do. Do.	"	2/4½	3/1	3
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3
Do. nozzles for inlets	"	2/2	2/7	3

PLUMBER.

Milled lead and laying in flashings and gutters	per cw	
Do. Do. in flats	"	
Extra labour and solder in coated cesspools	each	
Welt joint	per ft. r	
Soldered seam	"	
Copper nailing	"	

		½"	¾"	1"	1½"	2
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					
Bends in lead pipe	each					3/
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/
Red lead joints	"	11d.	1/-	1/3	1/11	2/
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/
Lead traps and cleaning screws	"				14/7	19/
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard s	
Do. Do. Sirapite	"	
Do. Do. Keen's	"	
Add sawn lathing	"	
Add metal lathing	"	
Portland cement screed	"	
Do. plain face	"	
Mouldings in plaster	per l girt	
One-and-a-half granolithic pavings	per yard s	

GLAZIER.

21 oz. sheet plain	per foot s
26 oz. Do.	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
¼ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per yard	
Knotting and priming	"	
Plain painting 1 coat	"	
Do. 2 coats	"	
Do. 3 coats	"	
Do. 4 coats	"	
Graining	"	
Varnishing twice	"	
Sizing	"	
Flatting	"	
Enamel	"	
Wax polishing	per foot s	
French polishing	"	
Preparing for and hanging paper	per piece	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment c percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The wi

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TENDERS.

nications for insertion under this heading should ssed to "The Editor," and must reach him not n Tuesday evening.

es *accepted.* † Denotes *provisionally accepted.*
es *recommended for acceptance.*
es *accepted subject to modifications.*

.—For extension of electricity works, for the

ncellor & Sons £34,250

INGHAM.—For erection of 65 houses at th-road and Slade-road, for the T.C, ubbings, Sutton-in-Ashfield.

ON.—Painting the Moss Hall Branch Library, .C. :—
Smith & Son.

ON.—Erection of sub-station for T.C. :—
. Z. Seddon.

FORD.—Painting at James-street Market, .C. :—
Engineer £1,600

TOL.—Erection of houses on housing estates, —
Hancock & Sons £2,520
ner & Co. 4,200
nard & Thompson 1,680
. Miller 2,100

LEY COMMON.—For erection of two shops es on the Housing Estate, for the T.C. Mr. rman, Town Clerk, Municipal Offices :—
t, Widgery & Ecott, Bromley £1,585

OCK.—For 50 parlour type houses, for the —
ickering, Wednesfield..... £25,250

OCK.—For the improvement of Anglesey- dnesford, for the U.D.C. :—
rew Blair, Lyell & Co., Birmingham £1,369 14 9

ISLE.—Formation and construction of foun- for new electricity generating station at olme, for T.C. :—
erod & Son £11,322

ISLE.—Levelling and paving Thornton-road, —
gan & Cleghorn, Newcastle-on- ne £1,386

RAINE.—Accepted for alterations to Rath- age Hospital :—
am Douglas, Coleraine .. £4,732 0 7

E.—For erection of 20 houses on the Alton- e," for the T.C. Mr. E. G. Timbrell, Buildings :—
ease, Crewe £11,490 0 0
nith & Sons, Crewe 9,792 13 4

BURY.—For the construction of equalising Mitchell Laithes sewerage works, for the Committee of the Corporation :—
ell & Sons, Ltd., London..... £6,436

STER.—For erection of an omnibus shelter ories in Waterdale, for the Public Health of the Corporation :—
r Bros., Doncaster.
of tender withdrawn by Messrs. Thomson

M.—For the rebuilding of the Durham spital wall, for the T.C. :—
tt, Ltd..... £849 13 4

M.—For levelling work at Wharton Park, . :—
Wardlaw £329

Y.—For erection of eight houses, with water ge for the U.D.C. :—
ffley, Middleton £6,089 14

P.—Asphalting Queen-street and Hollin- for T.C. :—
hepherd & Sons, Ltd., Rochdale.

FORD.—For work at the Mobberly sewage orks, for the Bucklow R.D.C. :—
Hayes & Son, Stockport £1,521

—Painting exterior of municipal buildings, —
later £366

—For the reconstruction of The Cross el. in South Accommodation-road, for t. Coope & Co., Ltd., Burton, brewers. & F. Mosley, architects, Wormald-row,
Pearson, Sheepscar, Leeds.

SOROUGH.—For the erection of 16 houses erbrook site, for the D.C. :—
i & Preston, Ltd., Littleborough.

LONDON.—For the reconstruction of the North Fulham Police Station. Mr. G. Mackenzie Trench, A.R.I.B.A., architect and surveyor. Quantities by Messrs. Thurgood, Son, & Chidgey, 18, Adam-street, W.C. :—

Patman & Fotheringham, Ltd.	£2,701 0
W. J. Dickens	2,612 10
F. G. Minter	2,570 0
Lole & Co.	2,518 0
Adamson & Sons	2,484 0
Myring & Sons	2,443 0

LUTON.—For execution of private street works, for the T.C. :—

*S. A. Smith—Mansfield-road	£1,890 0
*W. Thompson—Shaftesbury-road	192 0
Portland-road	899 10

MALDEN.—Repairs and decoration at Council houses, for Maldens and Coombe U.D.C. :—
*G. Tiller £360

MALDEN.—Private street works, for Maldens and Coombe U.D.C. :—
‡J. Mowlem & Co., Ltd..... £4,862

MANCHESTER.—For the laying of 44 in. cast-iron pipes, Thirlmere fourth pipe line, for the Waterworks Committee :—
*E Nuttall, Sons & Co., Ltd., Manchester.

MANCHESTER.—For painting exterior of Victoria Baths, for the Baths and Washhouses Committee :—
*John Gibbons & Sons, Ltd., Oldham.

MANCHESTER.—For painting the exterior of Gorton Baths, for the Baths and Washhouses Committee :—
*Horrocks & Hogg, Manchester.

MANCHESTER.—For extensions to the kitchen at Monsall Hospital, for the Public Health Committee :—
Forshaw & Co., Gorton..... £450

MANCHESTER.—Tenders submitted for the D.I.C. new office block, Cross-street. Messrs. J. C. Prestwich & Sons, architects, Leigh :—

W. Moss, Ltd., Liverpool	£40,150 0 0
J. Dickinson, Ltd., Bolton	39,075 0 0
W. Thorpe, Ltd., Manchester	39,060 0 0
J. Byrom, Ltd., Bury	38 650 0 0
C. Macfarlane, Ltd., Manchester	38,560 0 0
Tinker & Young, Ltd., Manchester	38,495 0 0
S. & J. Smethurst, Ltd., Oldham	38,309 9 6
G. & W. Smith, Ltd., Manchester	38,100 0 0
H. Matthews, Ltd., Manchester	37,457 0 0
C. H. Normanton, Ltd., Manchester	37,308 0 0
W. Townson, Ltd., Oldham	36,630 0 0
J. Laing, Ltd., Carlisle	36,500 0 0
W. Thornton, Ltd., Liverpool	36,462 0 0
J. Gerrard, Ltd., Manchester	35,500 0 0
R. Carlyle, Ltd., Manchester	24,726 0 0

MARPLE.—Construction of tarmacadam drives, bowling green, and croquet lawn at Nob Top Sanatorium, for the Salford T.C. :—
*George Roylance, Higher Broughton.. £2,017

METROPOLITAN ASYLUMS BOARD. — The following tenders have been received for various works :—

Tooting Bec Mental Hospital extension—Slating works.

H. P. Smith, Ltd.	£1,246 0 0
Wm. Way	1,070 0 0
W. T. Lamb & Sons	1,000 0 0
H. E. Wyatt	983 2 6
Hall & Co., Ltd.	975 0 0
J. Williams & Co.	932 4 9
Roberts, Adlard & Co.	930 0 0
J. J. Etridge, jun., Ltd.	920 0 0
Young & Son, Ltd.	876 7 6
J. Macquire	855 0 0

All of London.

South-Western Ambulance Station—Erection of new offices.

J. Darch, Ltd.	£549 0
H. H. Hollingsworth & Son	535 0
A. H. Inns, Ltd.	522 0
W. J. Maddison, Ltd.	498 0
J. L. Catterall & Sons	454 10
W. Simms	442 15

All of London.

Princess Mary's Hospital for Children—Extension of verandah floors.

	Reinforced concrete floors.	Seigwart fireproof floors.
C. H. Boyd & Son, Ltd., London	£972	£1,072
Baker & Sons, Garden-row, Margate	1,192	1,264

Mead Works—Erection of boundary wall.

W. Walkerdine, Ltd., London	£1,131
C. H. Boyd & Son, Ltd., London	923

The Downs Hospital for Children—Road repairs.

L. Terry & Co., Ltd., Wrotham, Kent	£2,059 10 0
Chittenden & Simmons, Ltd., Maidstone	1,565 0 0
A. C. W. Hobman & Co., Ltd., London	1,202 17 1
Swinford, Powell & Morrison, Ltd., Woking	1,200 0 0
J. Wainwright & Co., Ltd., London	1,023 16 8
G. Neal, London	(Incomplete)

Queen Mary's Hospital for Children—Cleaning, painting and repairs.

MacVay, Gurney & Co.	£1,235 0 0
M. Greenwood & Son, Ltd.,	1,156 0 0
C. H. Boyd & Son, Ltd.	1,072 0 0
J. S. Fenn	1,047 0 0
Norfolk Decorators, Ltd.	1,018 12 2
J. Hocking & Co.	917 0 0
A. Soden	860 0 0
F. Kinnaird	723 18 8

All of London.

Princess Mary's Hospital for Children—Cleaning, painting and repairs.

M. Greenwood & Son., Ltd., London	£1,040 0 0
Baker & Sons, Garden-row, Margate	796 0 0
C. H. Boyd & Son, Ltd., London	772 0 0
Norfolk Decorators, Ltd., London	678 14 5

Leavesden Mental Hospital—Painting and repairs.

Norfolk Decorators, Ltd., London	£950
J. C. Rackham, Harrow Weald, Middlesex	760
J. Dennis, 23, Victoria-street, St. Albans	675
E. Stevens, Warwick-road, St. Albans	500

Fountain Mental Hospital—Cleaning, painting and repairs.

R. Bowran & Co., Ltd.	£795 6 8
G. Chappelow & Son.	499 11 10
MacVay, Gurney & Co.	495 0 0
E. Proctor & Sons.	420 0 0
L. Kazak.	398 0 0
A. Soden.	382 3 0
A. H. Inns, Ltd.	360 0 0

All of London.

South-Eastern Ambulance Station—Cleaning, painting, and repairs.

E. Dyke, Greenwich	£259 10 0
C. H. Boyd & Son, Ltd., London	216 0 0
Strock & Co., Ltd., Blackheath	213 10 0
D. C. Bowyer, Belvedere.	211 10 0
J. Hocking & Co., Charlton	211 0 0
W. Simms, London	187 5 0
Norfolk Decorators, Ltd., London	168 19 1

Paddington Casual Ward—Cleaning, painting and repairs.

Banham & Cox	£327 0 0
W. Lay & Son.	175 0 0
J. Darch, Ltd.	170 0 0
C. H. Boyd & Son, Ltd.	162 0 0
Perry Bros.	137 0 0
Norfolk Decorators, Ltd.	134 1 2

All of London.

St. Luke's Hospital—Cleaning, painting and repairs.

D. Leighton & Son, S. Lowestoft	£430 10 0
R. C. Todd & Sons, S. Lowestoft	423 18 0
Norfolk Decorators, Ltd., London	360 14 10

Darenth Training Colony—Painting works and repairs.

G. E. Wallis & Sons, Ltd., Gravesend	£8,182 7 1
T. Carr, London.	7,380 0 0
F. Kinnaird, London.	6,739 10 7
E. Proctor & Sons, Plumstead	5,630 0 0
J. S. Fenn, Woolwich.	5,378 5 3
J. Hocking & Co., Charlton.	4,514 0 0
D. C. Bowyer, Belvedere.	4,489 4 8
L. Kazak, Hampstead	4,487 15 0

MITCHAM.—For erection of a store depot, for the U.D.C. Messrs. Chart, Son, & Reading, architects and surveyors, Union Bank Chambers, Croydon :—

H. Bacon & Son, Coulsdon	£9,267
J. W. Ellingham, Ltd., Dartford	8,981
Wm. Akers & Co., Ltd., S. Norwood	8,944
J. Elliman & Son, Ltd., Beckenham	8,943
H. Taylor & Son, Epsom	8,692
†H. Hann, Collier's Wood	8,688

NEWCASTLE (STAFFS.).—For alterations at the Institution Hospital, for the B.G. :—

J. Cooke	£560 0 0
S. Heath & Son	525 5 8
Cummings & Son.	470 0 0
G. Scott & Sons.	445 0 0
J. Bennett.	389 0 0
*Patterson & Hall	369 10 0

NEWPORT (MON).—Laying 6 in. main in Malpas-road, for T.C. :—
*Unit Construction Co., Ltd..... £1,100

OSSETT.—Painting Southgate School, for E.C. :—
*Harry Atkinson £257

PLYMOUTH.—Construction of sewers and cutting and ballasting roads on North Prospect housing estate, for T.C. :—
*A. J. Steer, Ltd..... £15,716

PORTSMOUTH.—Four blocks of flats, Moulin-road. Mr. S. E. White, architect, Southsea :—

Tanner Bros., Southsea	£13,370
F. Biers, Ltd., Portsmouth	12,469
E. & A. Sprigings, Portsmouth	12,145
Light & Flowers, Portsmouth	11,997
John Lay & Co., Portsmouth	11,884

PORTSMOUTH.—For rebuilding 58–60, Unicorn-road, for Mr. C. Birch. Messrs. Vernon, Inkpen & Rogers, architects, 40, Commercial-road, Portsmouth :—

Jas. Crockerell, Southsea	£1,552
F. J. Privett, Southsea	1,547
John Lay & Co., Portsmouth	1,537
Jno. Croad, Portsea	1,475
Tanner Bros., Southsea	1,472
Samuel Salter, Southsea	1,438
*John Harding, Southsea	1,355

ROYSTON.—For erection of four houses and making roads and sewers, for the U.D.C. Messrs. Dyson, Cawthorne & Coles, architects, Barnsley :—

*Glew Bros., Royston—
Houses £1,618
Sewers, &c. 270

SADDLEWORTH.—For the erection of four stone houses at Delph, for the D.C. Mr. G. B. Howcroft, architect, Oldham :—

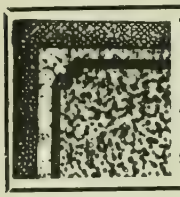
Building—
*J. H. & A. Winterbottom.

Plumbing—
*H. Mellor.

Painting—
*H. Whitehead.

SALFORD.—For painting of Maternity and Babies' Hospital, Pendleton, for the T.C. :—

*W. Walton £593



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SMETHWICK.—Tar spraying and repairing roadways, for Messrs. Chance Bros., Ltd. :—

*George Macdonald, Hunt & Co., Ltd., Harborne.

STRETFORD.—Erection of wall and lay-out of Chapel Green, for the U.D.C. :—

*W. Robertson & Son £335 14

STRETFORD.—For railings and gates for Chapel-lane improvement, for the U.D.C. :—

*Humphries, Jackson & Ambler £105

STRETFORD.—For construction of convenience in Town Hall basement :—

W. Thorpe & Son £400

STRETFORD.—For road and sewer work for 50 houses on Seymour-grove site, for the U.D.C. :—

*G. Clarke & Sons £892 2 6

STRETFORD.—For painting of houses on several estates, for the U.D.C. :—

*J. Hartland—54 houses £146 18
*T. Summers—84 houses 265 0

STRETFORD.—For sewering of Park-road, for the U.D.C. :—

*Bethell & Son £882 5 6

SUNBURY-ON-THAMES.—For erection of 12 houses in Charlton-lane, Upper Halliford, for the U.D.C. Mr. H. F. Coales, Council Offices, Green-street, Sunbury :—

*W. A. Annett, Walton-on-Thames.... £5,160

TRING.—For repair of cottages, for the R.D.C. :—

Hedges & Sons £254 0 0
A. Underwood 210 0 0
J. T. Brooks 183 0 0
*F. W. Brandon 164 5 6

WALLASEY.—For repainting roof steelwork at boiler house of the Electricity Department, for the T.C. :—

*J. Houston, Birmingham £111

WALLASEY.—For erection of 56 houses, Poulton-road and Surrey-street housing site, for the C.B. Borough Engineer, Town Hall, Wallasey. Quantities by Messrs. W. M. Law & Son, 51, North John-street, Liverpool :—

*Selwood, Lloyd & Co., Birkenhead £27,828 15
Subject to approval of M.H.

WATFORD.—For reconstruction of weir in Cassiobury Park, for the T.C. :—

*G. B. Hersey & Co. £245 11

WATFORD.—Reconstruction of roads, for T.C. :—

‡Chas. Ball £12,669

WILLESDEN.—For extensions to the works of the British Thomson-Houston Co., Ltd., of Rugby :—

*The Cleveland Bridge & Engineering Co., Ltd., Darlington.

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WOODFORD.—Construction of new ... ot her work at eastern sewage works, for U...

‡W. & C. French ..... £

WOODFORD.—Sewerage works in Snak... U.D.C. :—

‡W. & C. French .....

WOODFORD.—Drainage and constructi... paths on the Chigwell-road, for U.D.C. :—

*G. J. Anderson .....

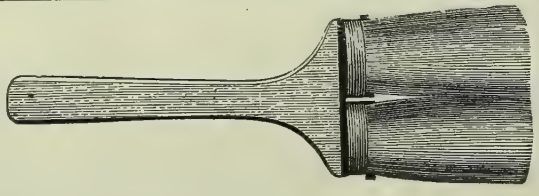
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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VII.—No. 4259. SEPTEMBER 19 1924.

BRITISH INSTITUTE OF INDUSTRIAL ART

THE establishment of a small permanent exhibition in the North Court Annex of the Victoria and Albert Museum by this Institute inaugurates a further step in the development of its work. The British Institute was incorporated in 1920, under the es of the Board of Education and the Board of Trade, he object of promoting closer relationship between art dustry. This object, which is a variation of one more ic with which it started, that of improving the standard ish craftsmanship, no doubt includes the same hope, tablishes it on a more practical basis. It is associated ims with the Design and Industries Association and the Arts Association, embracing among its Fellows and tes many artists and craftsmen.

Institute has held exhibitions at the Museum from time over the last few years, and they receive an nce both from the fact of the exhibitions being held National Museum and under Government auspices. These ions in calling attention to the importance of art in y, of the value of sound methods in production, inter- t a time when it is of national importance to pay n to these things. Its existence argues in the most way the need of improvement, for if there were nothing with industry there would be no need for such an ion. Moreover, it serves a very useful purpose in g those barriers between industrial production and art re so unnatural and misleading, and which have led gard art as something outside of life when, as a matter there can be no healthy national life without the union wain. Beauty emerges as the natural outcome of work e. It is not art that is far from us, but ourselves who rom art, inasmuch as it does not penetrate our industries, meate our life. But a movement such as this has to facts of the situation and recognise the difficulties its work. A conflict has existed between industry and they have been through such misunderstanding nce with each other. It existed because, as the result dustrial revolution, the methods of trade seemed wholly to art and the artist directed his labours elsewhere. w better understood that industry directed only by and economic considerations tends to deteriorate relationships no less than the quality of industrial . It has consequently fostered the unrest and dis- that menace Western civilisation to-day, and taking the s out of his work the workman tends to turn his ness against society. The importance of art to industry e understood on the economical implication of such only, but by recognising that beneath these lies the eed to create a content for the worker and restore that what he produces, which would fill his mind to the of too great dependence on political change. For n the work of this Institute is to be welcomed, because lence of the recognition by the State of the necessity ser relation between art and industry, and of the ring in an unconverted industrialism. In our trouble towards art as that endowment which unites life in industry. When we controlled the markets of the thout the competition which now exists to so much extent, we were tempted to make quantity our aim, fits became the leading motive. Now that other the East as well as the Occident, have largely owing come able to produce for themselves, our position onger on this supremacy of supply to the same extent, the quality of our industries which will tell. And it he quality of our manufactures shall now be such set a standard for the rest of the world that will present markets, and encourage the creation of new us.

g to the exhibition itself, we need not complain of the haracter of its beginning, for there is real charm tle show. It is not representative in any national her what is seen is a small collection of the work of a group of artists and craftsmen round which it has hitherto moved. It will be a very difficult task to draw in sufficient fresh blood to make it more than what it is at present—an exhibition of the work of certain craftsmen and artists—and we feel that the recurrence so often of the names of the same artists is a source of weakness rather than strength. But it should be understood in justice to the aim of this Institute that the present exhibition is not in itself permanent, but a nucleus formed from which to start. The work exhibited will be replaced by other work, and therefore there will always be movement and variety, the work being shown in rotation.

The exhibits include textiles, pottery, printing, silver and goldsmiths' work, illustration, modelling, bookbinding and other crafts, many of the examples being of considerable excellence.

It is perhaps unlucky that the British Institute of Industrial Art has been inaugurated at a time when there is a tendency to distrust organisations to promote art—the belief being that the tendency of organisation is to promote the average rather than the best; but this should not prevent us from recognising that there is a real place for such an Institute if it keeps this danger fully in mind and therefore avoids the pitfalls in its way. If it recognises the dangers it will preserve its independence from groups or special interests which may endeavour to make use of it. Its privileged situation in the Victoria and Albert Museum confers a prestige on what is shown there, and this might create ill-feeling unless care is taken to preserve its own aims. It is no doubt very difficult to draw the line as to what is entitled to exhibition, either at one end or the other. If it is seen to yield to the pressure of firms or individuals anxious to secure the *éclat* of such exhibition for their work it will lose the adherence of the better kind of craftsman and create division under which it will disappear. We believe that this is recognised by the authorities of the Institute, and therefore we are justified in hoping that it will go forward in the development of its aim of promoting closer relationship between art and industry.

It is a welcome fact that the manufacturer is now much more ready to recognise the assistance he can obtain from the artist, and though our retail shops reveal how much there is to be learnt—how much still to be unlearnt—in regard to what is fit and becoming in design, form and treatment, he is readier now to seek aid, an aid which the Institute is well enabled to supply for him. For the education of the manufacturer is no less necessary on the side of art than on that of science, and he has in the past pursued the one to the neglect of the other. The better knowledge of the craftsman in the methods of the manufacturer is no less required. The Institute will help to bring them together and we already see approximation towards this better state of things.

The mistaken aim of novelty for its own sake, the desire to dazzle and catch the eye of the customer has led to extravagance of form, over-ornamentation and the strident effects of flamboyant pattern; but we have only to look at examples of textiles or pottery, as shown at this exhibition, to see that through the ordinary channels of manufacture a better standard is being introduced.

On the whole we are inclined to be hopeful that the British Institute of Industrial Art, which now that it is no longer aided by a Government grant rests on public appreciation of its usefulness for support, will secure the support to which its aims entitle it. Manufacturers have been supporting the movement, and have been ready to keep it going, and we hope that this support may be continued to its work, for the benefit to our industries may be considerable.

But nothing is effected of much service to the nation without some sacrifice. It is not enough that we should seek economic advantage in improvements because we see a further means of profit in making use of art. The good must be sought for its own sake because the claims of our common nature no less than our obligation as citizens directs us to have an ideal for our work as part of our love of country and of its good example to the world.

NOTES.

London Traffic and the River.

ONE of the finest things London can boast of is the flowing of the Thames through its midst. Even as it is now, with all the drawbacks of ugly buildings and bridges, the river forms the centre of fine views such as few cities in the world can show. The possibilities of riverside development and beautiful bridges are so great that were they made into realities no city could compare with London for the beauty and dignity of its central area. Yet this great asset in the amenity of a great city is being constantly assailed and it is not unlikely that it will some day be very seriously impaired. We have been treated to all sorts of suggestions for destroying or impeding the fine perspective of the river by viaducts, bridges and railways. It has been suggested that a viaduct might traverse its length and it is proposed that the winding of the river might be entirely done away with by a straight-cut canal on the south side and the river turned into a great roadway. We are not lacking in ingenuity, but we are sadly lacking in perspicuity. We may not be in imminent danger of seeing our fine river bed turned into a sunken roadway ; we may yet be saved the horrors of elevated railroads. We may escape this, that, and the other misfortune, but why cannot we insist on having some adequate controlling authority which will save London from its haphazard growth and with the best available wisdom direct its growth and development ?

The Palace of Avignon.

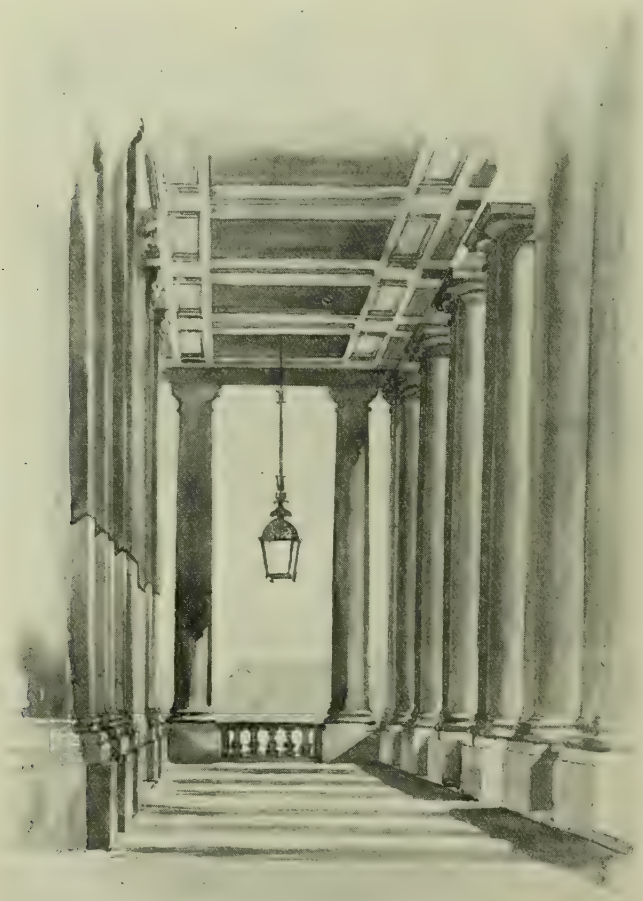
THIS great mediæval monument, which has been subject to so much neglect on one hand and vandalism on the other, is now occupying the attention of the French people, and there is a growing demand for its restoration. We are told that the noble Tour de la Garde-Robe, built by Clement VI in 1342–43, is giving way and leaning against the neighbouring Tour des Anges. When we come, however, to consider what should be done in the present circumstances we are at once up against the problem of what is possible or desirable. It is stated that the aim of the restorers "obviously ought to be to make the building as nearly as possible what it was in its period of glory"—and "common is the commonplace." What a fallacy lurks in such a statement, suggesting as it does that, in order to preserve its original character, we should blot it out still further. For this is what making the building as nearly as possible what it was inevitably means. When shall we recognise that to make a building what it was in the fourteenth century, we are in the twentieth, is whol possible? All we can do, so far as vation is concerned, is to rep reverently as possible what is p of repair, and if rebuilding is a quired for modern purposes, fran recognise that it replaces the ancien with modern work of its own cha Wren's Chapter House at Lincoln dral is very much more wholesom would have been any Gothic substitute.

Violletle-Duc.

VIOLLET-LE-DUC, in posing during his li the restoration of the of Avignon "to the in which it was left in 1376 by G XI," expressed a view which, in h time, he was able to enforce with fatal injury to those ancient bui in whose so-called restoration h concerned. We can hardly bring ou to believe, with the knowledge gained of what such restoration that the Palace of the Popes at A will now be left to suffer the same f

An Ealing Disfigurement.

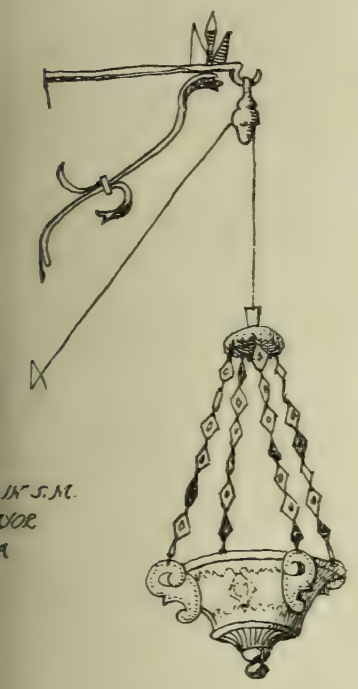
THE provision for g safety in regard to traffic is not to b regarded, but surely, must have large refl mirrors at difficult street turnings, reasonable consideration for the l in which they are placed should a borne in mind in justice to thos have to endure them. There ha erected recently on the old gre Ealing a great hoarding, consist two large mirrors directed either above and below each of whi advertisement is prominently dis May we appeal against the use made of these mirrors also to int advertising into situations which at any rate be secure from them spot on which this particular abomi is erected has for background the ol sheltered green and "Walpole B built by Sir John Soane, now the Library. There is so little left from commercial defacement in the that we might have been spare further outrage. Ealing, owing to want of public spirit in the l suffers much defacement in its pro sites through the encroachments advertiser, and we should like local committees formed in pa districts to watch over the amenit bring pressure to bear in defence decencies of appearance that sho secured to our towns. Could Scapa Society help ?



Colonnade at Painted Hall, Greenwich.
From a Drawing by MR. H. T. REES.

The York School of Glass Painting.

WE have received of a lecture giv Mr. J. A. Know stained glass, whi been reprinted from the *Journal* British Archæological Society, an



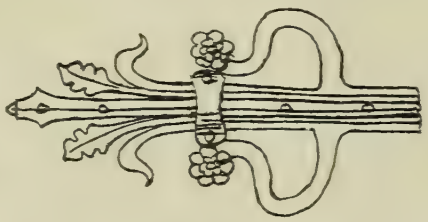
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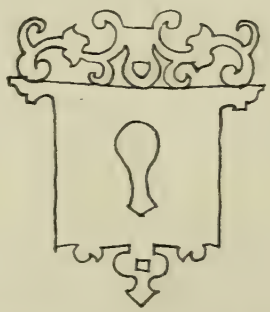
ten with a considerable knowledge
subject, more from the point of
f the archæologist than the artist.
owles approaches the subject with
eshing absence of superstitious
p of the past, and is ready to banter
old painters with methods and
s not always of the most exalted
piring kind. We find his account
more human and interesting on
t of his doing so. The old glass
ry well speak for itself, and is not
to suffer any declension in our
iation because we find the old
at times working from old cartoons
ften repeating the same figure.
n nature is not very different at
me, and we get tired of that
ss exaltation of the past at the
f the present. We are not less
iative of mediæval achievement
e of this desire to do justice to the
, and when stained glass is ap-
ed as an art, with the first-hand
y of treatment necessary to this,
compare with the glass of any
period, and it is not too much to
ith the new impulse now directing
stained glass of our own time will
any which has gone before.
who speak of glass only as a sur-
re surely quite out of touch with
work of the present, which exhibits
qualities and developments from
glass of great promise to the
f the art.

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tion
rt.

THE account in a contemporary of the work of a small society of painters located in the country makes reference tendency of groups of artists to rural districts, and expresses the at it must not be mistaken for a of our native arts, &c., "which be brought about by any overhead , but can only proceed spontaneously from changes in the whole conduct of industry not likely to occur." But where, then, are changes to begin? May not such movements be the forerunners of change? In order to obtain the best crops for agriculture the seed is brought from a distance. The spinning industry of South Wales was begun by Protestant refugees. It was the Flemings who brought the woollen industry to Oxford and Gloucester. Was it not the Huguenots who started the silk industry in the Eastern counties? Why is it any more "overhead" to hope that the settlement of artists and craftsmen in rural districts would give a new impulse to art and life? It was the Spanish sailors wrecked from the Armada who taught the women of the Fair Isles to knit in coloured patterns. But not to multiply instances we may ask why revival should not be possible for the countryside through the new impulse brought by artists and craftsmen? With much in the account





HINGE & SCUTCHEON AT JEREZ.

to which we refer it is possible to find agreement, as when the writer states, "it is clearly to the advantage of any neighbourhood to have artists among its population and to enjoy opportunities of seeing their work; and on the other hand the artists themselves are likely to benefit by close contact with rural pursuits and the simpler kind of people."

The Mistake of Encouragement.

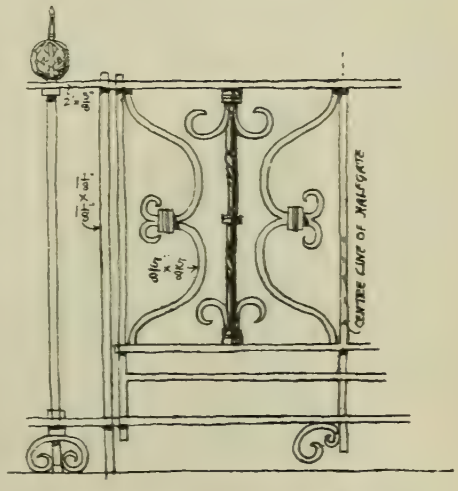
ANYTHING like organised encouragement of such a movement as this of the craftsman working in the country is opposed to its best prospects, and therefore likely to injure it; it is more likely to divert it from really wholesome growth and draw the shadow of dilettantism over it. It is much better that such a movement should be left to develop on itself, and the fatal tendency to form further societies avoided. The artist or craftsman settled in the rural districts is best left alone quietly to shape his own life and work, which prompt him to seek a greater freedom for his labours, a less artificial contact, simpler surroundings, and reduced expenditure, so directing his influence towards changes in the conduct of industry by the better example of his own work.

Friction in the Building Trade.

A PAST PRESIDENT of the National Federation of the Building Trades Employers asks some pertinent questions in the letter which appears on p. 429 this week. He asks why the trade should still be disturbed on the question of working hours during legal summer time, seeing that not only did Sir Hugh Fraser's award, which was agreed to by both sides, include a provision for 46½ hours per week, but the recent strike and lock-out settlement confirmed it. It cannot be said that 46½ hours per week during summer time are too long, and there is little doubt that a great many operatives are willing to accept such a week, and yet we find this question of hours constantly raised by a section of the operatives to whom the 44-hour week has become something of a fetish, and who seem to pay less attention to the substance than the shadow.



WALL BRACKET S.M.L. MAYOR RONDA



S.M. LA MAYOR RONDA CHOIR GATE.

Some Details of South Spanish Architecture.

From sketches by MR. P. M. STRATTON, A.R.I.B.A. (*See p.* 430.)

GENERAL NEWS

Professional Announcements.

Messrs. Ross & Briggs have removed to Eldon Chambers, 73, Manningham-lane, Bradford.

The Cambridge University School of Architecture has moved from 75, Trumpington-street to 1, Scroope-terrace, Cambridge (a little south of the Fitzwilliam Museum and beside the Engineering Laboratory). Mr. Theodore Fyfe's offices are now at 1, Scroope-terrace, telephone 237 Cambridge, as before.

Concrete Houses.

Leicester City Council recently accepted the tender of Messrs. Henry Boot, London, for building 1,500 concrete houses, at a cost of £735,000.

Instruction in Building.

The London County Council has recently issued a pamphlet (Privileges of Citizenship Series, No. 6), which gives details of the various centres at which building instruction can be obtained. Copies can be obtained from the Education Officer, The County Hall, Westminster Bridge, S.E. 1.

New Church, Abercarn.

A new church is being erected at Abercarn, at an approximate cost of £12,000. The edifice will consist of a nave and aisles 90 ft. long and 53 ft. wide, and will seat upwards of 600. There will be vestries to the south of the chancel, and a tower 60 ft. high is provided for. The architect is Mr. J. Coates-Carter, Prestbury, Glos.; and the contractor, Mr. W. Ewart Evans, Newport.

The Institution of Public Lighting Engineers.

The first annual meeting of the Institution of Public Lighting Engineers will take place at Glasgow on September 16 and 17. On the first day the President, Mr. Langlands, will give his presidential address, and the following papers will be read during the meeting: Mr. E. G. Stewart, "Street Lighting and Visibility"; Mr. R. B. Mitchell, "Electric Mains for Street Lighting." The subject of a paper by Mr. T. Hayden Harrison will be announced later.

Llanvaches Memorial.

Llanvaches Memorial Hall was recently opened by Sir Garrod Thomas, M.D. The memorial hall has been added to the existing chapel, which dates from 1639. Built at a cost of £750 to the designs of Mr. Frank S. Swash, F.R.I.B.A., Newport, it gives seating accommodation for about 1,200, and, in addition, there is a ministers' vestry, with access to the chapel, and a retiring room. The work was carried out by Mr. H. P. Huckson, Penhow.

University of Manchester.

The prospectus of University Courses in the Municipal College of Technology, Manchester, Session 1924–5, has just been issued. It gives particulars of courses in mechanical engineering, electrical engineering, sanitary engineering, applied chemistry, textile industries, printing and photographic technology, building, mining, mathematics and physics. The building section includes structural iron and steel work; masonry and concrete work; together with reinforced concrete and instruction in standard specifications and the reasons for their use.

City and Guilds of London Institute.

The programme of the City and Guilds of London Institute (Department of Technology) has just been issued for the session 1924–5. It gives particulars of some eighty subjects, including manufacture and technology of pigments, paints and varnishes; iron and steel manufacture; metallurgy of non-ferrous metals; electrical engineering; metal plate work; plumbing; mechanical engineering; carpentry and joinery; brickwork; masonry; plasterers' work; painters' and decorators' work; builders' quantities; and structural, heating and ventilating engineering.

The Technical College, Cardiff.

The prospectus of the Technical College, Cardiff (Department of Architecture and Civic Design), has just been issued for the session 1924–5. The Head of the Department is Mr. W. S. Purchon; lecturer, Mr. R. H. V
assistant lecturer, Mr. Lewis John. The e
examiner is Mr. Paul Waterhouse.

Students in the department of archi
attend courses of instruction in other
ments as follows: Drawing of orn
antique and life, Mr. W. Jagger; me
and material testing, Mr. A. W. Lov
the chemistry of building materials, Mr.
Webb; applied mathematics, Mr. A. B

The Department is recognised by the
Institute of British Architects, which
exemption from its own intermediate ex
tion to students who pass successfully t
the three years' full-time (day) course.
time students in the department are elig
the "Archibald Dawnay" Scholarship
candidates for these scholarships are nor
by the various recognised schools of archit
the final selection being made by the B
Architectural Education of the R.I.B.A

COMPETITION NE

New Freemasons' Hall, Bradford.

Mr. W. A. Ross, of Messrs. Ross & Brig
been awarded the first premium in the co
tion for the New Freemasons' Hall, Bra

Concrete Cottages.

Designs for cottages of concrete constr
Prizes of 30 guineas and 15 guineas for th
designs and, in addition, the successful
tect will be paid architect's fees for w
drawings and details, but will not be re
to superintend erection. Particulars
Messrs. G. & T. Earle, Ltd., Wilmington,

Other Competitions.

Other competitions still open includ
following (the dates given are, first the send
date, and second the issue of *The Bui*
which full particulars were given):—Ross
Memorial (Sept. 30; Feb. 22). Public
Newton-in-Makerfield (Sept. 30; Jul
London Hotel, banned by R.I.B.A. (Sep
August 22). Harrogate Infirmary (Sep
Aug. 29). Manchester Art Gallery (no s
in date announced; Aug. 22). Mason
(May 1).



Dalston "Victory" Hall, near Carlisle. MR. H. E. AYRIS, Architect. (*See p.* 435.)

ORRESPONDENCE

Friction in the Building Trade.

Sir Hugh Fraser's Award included a pro-
hat during legal summer-time the work-
s should be 46½ per week (that is to say,
ing the period indicated workmen should
ork at 5.30 p.m. summer-time, or 4.30
e) unless by mutual local agreement
employers and employed 44 hours per
ere maintained throughout the year.
tional Representatives on both sides
statement at the foot of that Award
themselves to loyal observance although
party got all they wanted.
e settlement of the recent strike and
the above regulation was reiterated
firmed.
then, is the trade still disturbed on that
? The national leaders on both sides
ed; I do not think I am exaggerating
say that (in London at all events) more
per cent. of the workmen are not only
but glad to "make hay whilst the sun
and take home an extra 3s. or 4s. per
ring the long days.
eve the explanation of the mystery may
l in the fact that the tail often wags the
small minority overawes the great
y. It is not an unusual experience that
workmen may be working on a building
edly and satisfactorily, and, say, two more
n workmen may be added to the staff in
expedite the work, with the result that
increase of workmen the output is
ned; the two control the twelve, and
evelops into constant friction.
not write dogmatically, but I believe that
gnosis of the situation is not far wrong.
what similar situation may often be dis-
in political and other spheres. "Forty-
urs" is a fetish with some men; it cer-
as the glamour of numerical alliteration
here is no more magic in "forty-four"
forty-six or forty-two.
re glance at a chart demonstrating the
duration of daylight in this country
out the year should convince any sane
hat in open-air trades, such as building
ing, it would be sheer stupidity to
to maintain the same working hours in
as in winter months.
ituation is mysterious. When an award
that in summer-time an extra half-hour
should be worked for five days a week
n at noon on Saturdays is untouched)
accredited representatives on both sides
their loyalty to that award, why is it
sistent resistance is allowed to prevail
the operatives? Either they are
against their own appointed leaders, or
ieve, with or without reason, that their
really look with favour on their deli-
epudiation of agreements made on their

ier case it means an end of trade agree-
reference or otherwise. In 1914 Brit-
ved, once and for all, that the treatment
ments as mere "scraps of paper"
ver be endured. By trade agreements
bly observed the British workman has
way from oppression to the advan-
position in which he stands to-day, and it
ill day for him when he wilfully scraps
reements by deliberately making them

PRESIDENT OF THE NATIONAL FEDERA-
ON OF BUILDING TRADES EMPLOYERS.

"Atlantis."

Professor Lethaby's article on "Animal
om Asia to Central America and North
in your issue for August 29, comes
ely with the publication of Mr. Lewis
book, "The Problem of Atlantis."
erested in the subject will find in this
reat deal of relevant matter.
or Lethaby refers to Dr. S. G. Mosley,
can authority, as saying, "any attempt
ks to establish direct cultural connec-
tion between the Maya and any old-world civilisation is quite at variance with the results of modern research. And yet the superficial similarities are such as to win for this exploded hypothesis new adherents." Professor Lethaby's comment to this, that "it was just these 'superficial' similarities that independently convinced me that not only Indian and Chinese, but Hellenistic art also influenced the development of ancient American culture . . ." exactly bears out Mr. Spence's theory, the result of what must have been years of patient research by him, as every aspect of the subject is viewed most meticulously.

The "Log Letters of the *Challenger*" (1877 edition, Macmillan & Co.) contains a valuable chart of soundings of the mid-Atlantic bed, which go to prove that the lost continent of Atlantis was no myth. This chart closely follows the conjectural map of Atlantide made by Gattefossé.

Mr. Spence's passages relating to the architectural side of the problem are enlightening from the point of view of the history of building in ancient Central America, Hellenistic Greece, Egypt and Babylonia; particularly as he has been guided by facts and not romance which, until lately, seems to be coupled with the word "Atlantis."

A. ARCHER-BETHAM.

London.



[This fine old barn at Ablington is so admirable in its general proportion and effect that it is difficult to believe at first sight that it is not an old church with double transepts.]

Modern London.

SIR,—London is a wonderful town—in fact it is not only beautiful, but the envy of all nations—and yet while we casually walk its busy thoroughfares, feeling a sense of pride in the fact that we are British and that all London, end to end, belongs to us Britishers, we seldom if ever, allow our thoughts to seek out the master minds who have created for us this wonderful city.

In all, a city is created by the buildings which it possesses, without which the very constitution of a city is lost—in fact, a city is solely constituted of buildings large and small.

Do we, as we walk from Piccadilly-circus to Oxford-circus, ever turn our attention to the magnificent buildings which flank us right and left? We know they are there and we have a feeling that everything is very wonderful, but few of us take the trouble to stand for a few minutes and observe the architecture of new London and to seek out the architects who have so endowed the city with all this recently-acquired richness. The art of an architectural building is, if not greater, at least equal in beauty and refinement to its sister art at Burlington House. We would only too willingly take the trouble to spend a day, maybe a week, in Burlington House to admire the work of our great brush artists, which I will admit are worthy of the greatest admiration; yet why cannot we see and appreciate more sincerely the art that presents itself to us in practically every street and turning in London in the form of architecture?

In a building the good proportion of each component part, one to the other, the general massing of the larger features, the purity and the restraint in embellishment are all elements acquired from an artistic architectural master mind.

We do not all realise that architecture is perhaps the greatest art of our time; in fact, it constitutes our daily environment and has held its position in the realms of art from the days of early Greece; we have the rise of Greek architecture which developed into a style beyond criticism. We next have the Roman period, which took up the art of Greece and finally developed it in accordance with their own requirements that it completely l-st the purpose for which it was intended, and then we have a relapse only to be followed by the rise of the Byzantine style in the East. After this we have the dark ages, when the world struggled to create a new style, until we eventually arrived with Gothic, which culminated in our great mediæval cathedrals, of which practically every detail we can trace back to Rome.

Then we have a departure from vertical to horizontal again, which naturally arose in Italy, the seat of the old Roman Empire, under the control of Brunelleschi, which commenced the Renaissance style and reached a climax in this country under Sir Christopher Wren and Inigo Jones. Since that time we passed through many years of darkness and only now are we beginning to see a light upon architecture which promises to outshine the grandest period the world has known, and I think I do not suggest too much when I appeal to the public to try and observe the beauty around them with a little keener eye and develop an interest in architecture which I am sure is worthy of us all.

Hornsea. B. J. A. SMITH.

Studentship for Archaeology.

A two years' studentship of £250 per annum, for the purpose of archæological exploration in the Greek Islands has been awarded by the University of Oxford to Mr. Humphrey G. G. Payne, son of the late Mr. E. J. Payne, the archæologist.

SOME DETAILS OF SOUTH SPANISH ARCHITECTURE

By P. M. STRATTON, A.R.I.B.A.

The function of these details is to form a contrast in their richness with the plain wall surface. In Spanish walls the voids are set far apart and in total superficies are much less than the solids. Wall, as plain wall and nothing else, is valued. In reaction, or to satisfy an opposite instinct, Spanish decorative work is almost wholly a matter of line, or of such opening out and intricate piercing of surface as to be a matter of linear effect. The lacework is an example; the combs and mantillas tell the same tale. The ironwork is a net of fancies; and there is hardly a building without ironwork, as in balconies, grilles or gates, or delicate escutcheons on massive doors. The balconies are of all ornaments the most characteristic; they are supported on iron brackets or occasionally on clumsy stone corbels. Tiles, coloured on the undersides, form the floors of the balconies, and here stand flower pots. The grille of the balcony is occasionally waist high, but generally covers the whole window and round the top of it runs an iron band to tie it into the wall. Roof tiles cover it. Scrolls decorate the grille at top and bottom, or in the centre, and these are formed by turning the bars round and beating the ends thin. Even the openings on the upper stories of new flats have grilles to their windows, For they are not to protect the Spanish women from too ardent lovers, but rather to express their worthiness of being guarded.

Down a plain whitewashed street, whose flat walls are relieved by an occasional balcony and by slightly overhanging eaves, the outer door to every house or set of flats is open and gives a sudden picture into a patio. These courtyards are quite small, from 10 to 18 ft. square. Often the view from the street is through an inner door of open ironwork, or under an arch, or across the lower steps of a flight of stairs; patterned tiles line the walls of the entrance. The patio is green with vine and palm, or there is a well with pots and a beam across to hold the chain, or a branch of wrought iron holds it. Round the patio run arches on Doric capitals and shafts, to form verandahs and covered passages where dark women sit and work; or the doorway of a poorer house will frame a picture of a bareheaded peasant woman hanging her clothes to dry in the sun; in another there will be only a wide low passage and a stair with pretty iron balusters. Always there is a sense of fitness and of good planning; and there is a conception of building as a frame to proud and stately humanity.

In doors to the poorest homes the simple things, as knockers and nailheads, will be taken and made much of. The escutcheons of locks, the handles, are made lovely with an untiring perception, as though the smiths always worked for their friends. Especially there is a feeling for "weight." Even the very thin iron often used for fanlights and grilles does not look mean, for compensation for its thinness is given by closer spacing.



A TYPICAL PATIO.

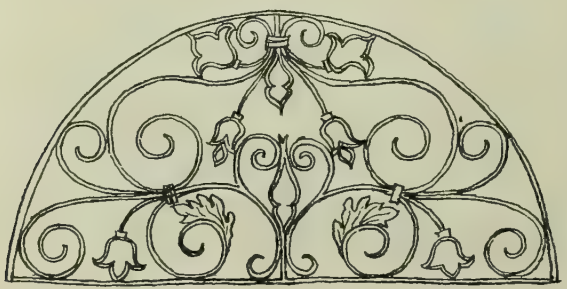
The intellectual note of French work and of some English craftsmanship is absent; all is direct, at worst sketchy, at best lyrical, like a song or an old dance, as the two lamp brackets from Santa Maria la Mayor at Ronda.

The colour effects originally were similar in scale and to some extent in pattern; they were derived from Byzantium and Persia, sometimes direct and sometimes through the Moors of North Africa. The colour was applied to tile-work of floors and walls or to panels of the ceilings. It was simple decoration on flat surfaces, without constructional "value." Later during the Baroque period of the seventeenth century a development took place, and plain tiles inlaid in stucco were used to emphasise construction, especially outside on the roofs and fronts of Seville churches. A dark blue is the main colour, on a grey stuc red, yellow, green and white are som mingled with it. The sky being usually the blue tiles seem necessary to draw the down into the buildings. They prevei contrast between sky and tower or dome too strong. In London spires Wren parallel thing; he opens his work where or cloud is seen through holes in the The increase in the voids gives a lighter

than at Seville, where the play is of colc the solid and where the mass of spire pierced and monumental.

Royal Institute of British Architect

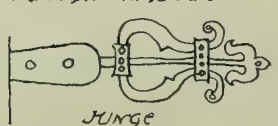
The R.I.B.A. statutory examination f offices of District Surveyor under the L Building Acts or Building Surveyor under authorities will be held at the R.I.B.A., L on October 22, 23 and 24. Applicatio admission to the examinations, accom by the fee of £3 3s., must be received R.I.B.A. not later than October 4. Full p lars of the examinations and application can be obtained from the Secretary, R.I.


FANLIGHT ALGECIRAS


NAILHEAD

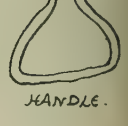

BUNKER


KNOCKER


JUNGE


SCUTCHEONS




HANDLE.



South Court, Chalet Du Bois, Le Touquet.

Mr. A. B. Llewelyn Roberts (Messrs. Collcutt & Hamp), Architect. (*See p.* 434.)

THE NEW LIBRARY BUILDINGS FOR THE CITY OF EXETER

THE important question of a new library building has for a long time been considered by the Governors of the Albert Museum, the Town Council, and the citizens of Exeter, and recently some definite progress has been made in selecting the site and approving the design for the new building.

At present the library is housed in the Albert Museum in Queen-street, which was originally designed for a general museum, a library, and an art school, and since 1865–6—when it was erected—the activities of the three departments have been conducted under the one roof.

Time after time the building has been enlarged but as rapidly grew inadequate for the work, and so has at last become totally unsuitable—that is, the library portion of it—from the necessity of more book accommodation and the proper working of it from the readers' and borrowers' point of view.

At last the library is to have a home of its own and soon the art school, it is expected, will follow. The whole of the building then, perhaps enlarged and rearranged, will be devoted to the purposes of the museum—and for that alone—and then the extra space so allotted will not be too ample for the growing collections it will be essential to exhibit.

Another important consideration was the necessity for providing at once very safe accommodation for the splendid and unrivalled records and muniments the city possesses. It was essential that these should be placed in the library buildings for safe keeping and adequate display as well as with suitable accommodation for students studying them.

Exeter—certainly one of the most historical towns of the West—requires a library building worthy of the fine collections already in its possession and which no doubt as time goes on will rapidly be added to. It is a great educational centre. The University College of the South West of England is situated on the outskirts of the city at Streatham Hall—and the new building has already been designed for it—and there are other training colleges and noted schools in and about its neighbourhood.

These institutions made great use of the facilities offered by the library authorities, and when the more ample accommodation that is to be provided in the new buildings is recognised more use still will be made of them.

The selection of the site has been a difficult one, but after many attempts at a decision the garden and site of Rougemont House have been adopted. The garden of this house, now used as a museum, surrounds the great wall of the old Castle of Rougemont and was formerly the ditch around it. The very fine Tower of the Keep, altered by William the Conqueror, still dominates the fine surroundings. Hardly a more beautiful or suitable site could have been selected. The difficulty has been to adapt a plan for the library with its surroundings.

At present the main approach to it is from the High-street, by Castle-street—a very narrow and mean street—which for years has called for amending. On the small scale plan a widening has been suggested. In scheming such an important building as the new library the possible future surroundings call for careful consideration, and it is suggested that a balancing building for administering the work of the county should be erected on the other side of the widened Castle-street, which leads beyond to the important county buildings within the castle walls. Such a building is now a necessity, and in it could be housed all the departments that are now spread about the city in various unsuitable buildings, and the county records and muniments and library could be adequately accommodated. The city and county would then be very markedly associated in the great effort of preserving their priceless and historical manuscripts. It will be seen on reference to the plan that the building is divided into two blocks, one facing Castle-street and the other the garden. The axis of each block is governed by the plane desired for each of these groups, a low block connecting them. The accommodation asked for by the library committee has been amply provided for and the future requirements have been kept well in the foreground. A plan that could be easily and gradually enlarged and the whole scheme thus—perhaps slowly—completed has been worked on. At present only a portion is to be built, but when the whole is finished the building will have accommodation for a really great collection of manuscripts, records and books, and very ample working space for the student. This completion may not be for a generation, but it will have been well thought out and the foundations laid.

The plans here illustrated plainly show the accommodation and arrangements provided. On the lower floor of the front block are placed—to the right—the muniment rooms; and to the left the newspaper and magazine reading rooms; the staff enclosure connecting by a corridor on either side with the garden block, which contains the lending library, staff rooms,



Photo: Mr. John E. Allcorn.

Ceiling at Coleshill, Oxfordshire.

and the work rooms. On one side of the lending library is the lecture hall with the study rooms; and on the other the children's library, with its reference and lending rooms.

The muniment wing is to be a fireproof one, with just one small entrance near the service counter. Its windows face towards the small formal garden and Castle-street. It consists of the large muniment room (planned centrally), the inspection room, and the exhibition room. Galleries are placed over certain portions of these rooms to give more adequate storing accommodation.

The children's library and the lecture hall are placed at each end of the garden block respectively. Each has a separate outside entrance, as well as staff entrances from the lending library. The approach to the children's library is through the small formal gardens, which, in summer, could be used for reading purposes.

The main floor of the building is reached by a flight of granite steps with other flights within the building. Here a large central hall is arranged with the following rooms around it: The librarian's, the committee room—and the large special collection room balancing it—various study rooms, and a manuscript room, and a local records room. The staff enclosure is centrally placed exactly over the one be and is connected with it. Beyond is the refe library, occupying the whole width and of the garden block. The book stack placed on the inner side of this block, ar ends are so arranged that they can be us special collections. Bridges separate from the central area. A gallery surroun whole of this room, which is clearly on the upper floor plan.

Below the stack on this main floor is ar stack over the whole length of the le library, but only over the work rooms an rooms of the floor below.

The upper floor of the front block is arr as a gallery for the display of drawing prints, with a small "Exeter" room o west side. Staff rooms and print rooms o the angles of this block.

On the south side is shown the se service building. Here will be the h chamber, fuel stores, caretaker's qua work rooms, bindery and garage, with a adjoining for the use of motors.

The first portion it is proposed to buil cost, it is estimated, £45,000; and to this sum the Carnegie Trustees have gene promised £19,000. The total cost is esti at about £75,000.

An attempt has been made to kee design of the exterior small in scale as manded by the surroundings. The ex Rougemont House is placed rather too ne tower of the old Castle, and the mass side elevation is too great as well as too n be quite happy. The pavilions of the pro new garden block at this north end of th are so arranged as to allow the ruins of this fine tower, as well as the adjoining great w the castle, again to dominate the whol as well as the new building. These new b will be kept lower than the existing Rouge House.

The side elevation to the front block is divided architecturally as to lesser length; and the main entrance front an long façade to the garden are similarly tr In all cases a vertical line is aimed for ir of a horizontal.

Internally, the top lighted entrance hall its vaulted ceilings and galleries, afford room for the display of books and print drawings of local interest—either in show or hanging on the walls.

The large window over the porch, wit smaller side ones, will light the staircases their landings and half landings, and s form a pleasing feature of the interior.

The great Reference Room is excepti well lighted along the whole of its lengt ends by large windows overlooking the g

The galleries, with their simple railing panelled book case ends, should be an inter feature of the interior of this spacious r room.

Little has yet been decided as t materials to be used. The local bricks ge are not pleasing either in regard to text colour. They look red, hard and rav would clash badly with the delightful g surroundings. The local white stones, s Beer and Salcombe, are hardly suital exterior work as so well illustrated l Cathedral and the Guildhall. The very be "volcanic trap" stones found in the bourhood, such as Thornton and Pocom Poltimore, are extremely difficult to quar expensive to work—so costly as to mak use in a large modern building prob It is suggested that a mottled-brown b used for the general facing and a dull r sparingly used for the quoins and jambs windows and other openings. Certain p will be built of Portland stone, such cornices, plinths, and strings, and th granite for the outside steps and ma lower entrances.

The architect is Mr. Sidney K. Gree F.R.I.B.A., of Exeter, and 11, Gray square, London, W.C. 1.

THE COMPLEAT ARCHITECT

By DUDLEY HARBRON.

XVI.—Design.

object of our endeavours is to render es creditable exponents of our art. The beauty, as beauty, is like the pursuit of low of ourselves. The representation of without the employment of a language hnique is not so efficient a means of con- our intention as is the barking of dogs. m a sincere realisation of the need for ge and a grammar of art that the artist so arduous an apprenticeship and so an overhauling of his working opinions. e conception to the execution is only half arch; the artist leaves off there—at stone. The completion of the fabric e performed by the recipient, without has no existence. For this reason, the nt interest of the man in the street is sary.

and other philosophers have devoted ds of pages to the consideration of the of beauty, and still we are as far as m the solution of its processes. The reation cannot be reconstructed, even uld discover the receipt. The positive readily isolated by detaching one by negatives which obtrude between the on and its realisation, or which may be in the incomplete or impure conception. —or beauty—should remain after ugli- been removed. How, then, does the roceed to reject the negative qualities that the positive may solely remain? ively, is it possible to employ only eans and forms which have æsthetic ion? It is, indeed, only by some such that he can hope to anticipate the ho will, in the reverse order, commence olish the artist's presentation of his on. In so far as the representation is ble is the critic compelled to approval. ic is not anxious to help the artist; ccupation is with the public. The the faculties of the mind are called into the inception and planning of a con- -memory, will, instinct, reason and In turn, they are influenced by environment and acquirement, whose l force tinge and complete personality. great artist is simply ego, and no ing work of art is less than universal. vidual, however eminent, is less important than humanity. Only when in his own personality he embodies mankind is he of the first order. There are degrees of beauty; if there were not life would be very monotonous. The subject as well as the form contribute to the classification of a work of art. A bride-cake has not the permanence of a cathedral. Pure art is useless except as æsthetic experience. A monument is the nearest approach which architecture makes to this seemingly unsatisfactory realm.

In considering architecture it is difficult to disentangle the creative from the expressive, they are so close upon the heels of each other. An architect does not conceive a bank entire in a moment of inspiration, and yet in realisation it may not fall short (excepting its subjective limitations) as a work of art. The plan, the mass, may be resolved in an instant, after prolonged consideration and experiment.

A work of art requires an antecedent history of thought and study. One would have imagined that this was sufficiently obvious, were it not for the widespread idea that the act of creation was the formulation of something out of nothing. The architect commences to design a building as an artistic problem. To solve the problem requires the full employment of all his faculties. In as much as they are equal to the demands of the subject will his solution be acceptable. It does not matter how we get the requisite knowledge, so long as we get it; having obtained it it is not so important that we should keep it as that we should know how to employ it. All knowledge is useful if we use it.

It is interesting to consider in what order he considers the subject; a systematic method of approach, if such can be constructed, would be very helpful to the student. We all have to evolve our own, as I have never seen any sequence set down on paper. In the first place it is necessary to realise all those requirements actual and potential of the particular problem with which we have to deal. These are the fundamental considerations no matter what the nature of the subject requiring a solution. It requires a knowledge of individual and social conditions, modes of life—in work, relaxation, or recreation—processes of manufacture or merchanting, viewpoint of employer and employed, indeed, so much of the complicated machinery of civilisation as is contained in and impinges on the theme. It is the same process of precedent, of intelligent anticipation in varying degrees of difficulty, but in all cases it is requisite and desirable that we should learn all that there is to learn before we can attempt an essay in the second stage of composition. This next step consists in so disposing inanimate matter in such shapes and formations as will conveniently clothe and dispose the humanity for whose use and occupation it is intended. Length, breadth and height of the whole and component parts, have in addition to be determined—when the second merges in the third stage—the nature of the material in which the theme has to be carried out. This is chiefly determined by the permanence of the theme, so that the clothing shall last so long as the idea which it enshrines shall be satisfying. Quantity as well as quality of material are contributory to the realisation of the imperishable. The whole has then to be reviewed from the appreciation of the need of providing conditions congenial to the development of man—air, light, and warmth, not only for ourselves, but for our neighbours—for it is the design of habitations which we are considering not tombs. Lastly, (though in actuality there is no lastly, the whole must be judged in relation to outlay. Do benefits bearing any reasonable proportion or relation to the expenditure of labour, time, material and money accrue? Has or will any man suffer or be degraded by the diversion of his energy upon a needless project, or any part or portion thereof? Should the truth answer to this searching examination in all its stages and in all its parts, we shall have reached to as near perfection as such imperfect creatures are ever likely to arrive. The compleat architect will be rewarded by complete architecture.

New Books.

Messrs. B. T. Batsford's list of autumn announcements includes: "English Decoration and Furniture of the Early Renaissance," by Margaret Jourdain; "The Human Form and Its Use in Art," by F. R. Yerbury and G. Montague Ellwood; "The Story of Architecture," by P. Leslie Waterhouse; "The Cathedral Churches of England," by Helen Marshall Pratt; "Colour Schemes for Modern Interiors," by well-known Continental architects and designers; "Regulations of the London County Council Relating to Structural Steel Work (London Building Act Amendment, 1909), and to Reinforced Concrete, 1916," by Ewart S. Andrews; and "Structural Design in Steel Frame Buildings," by Percy J. Waldram



New Premises of the Hong Kong and Shanghai Banking Corporation, Hankow.

Messrs. Palmer & Turner, Architects.

[This new building is of reinforced concrete construction, faced with granite from the quarries at Tsing Kang. Spacious verandahs are provided for use during the summer.]

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ILLUSTRATIONS.

Library Buildings, Exeter.

The new library buildings for the city of Exeter are described on p. 432. Mr. Sidney K. Greenslade, F.R.I.B.A., is the architect.

Barclays Bank.

This building, at Nos. 80 and 81, Fleet-street, has been erected at the corner of Fleet-street and Salisbury-court, for Messrs. Barclays Bank, Ltd.

The banking premises occupy the whole of the basement and ground floor except the portion required for the entrance and staircase to the offices above. The banking hall is 46 ft. by 41 ft. clear span entirely free from stanchions, four of the floors over being also similarly free from stanchions.

The walls of the hall are lined all round with a panelled mahogany dado with a marble skirting and marble architraves around the radiator recesses. Above the dado the walls are panelled in plaster finished a cream tint. The counter is in mahogany, also with a marble skirting. The counter grilles, with the glazed panelled fronts to cashiers' desks, are in solid bronze. The floor of the public space is black and white marble.

The managers' and waiting rooms are panelled in mahogany up to frieze height.

The street entrance to the offices over the bank is lined with marble, and the walls of the main staircase and corridors with Medmenham tiles.

Both elevations are faced throughout above the plinth with Portland stone, the plinths and architraves to entrances being faced with polished grey Aberdeen granite. The roof is covered with Westmorland slates, with ornamental copper ridges and hips.

The contractors are Messrs. Allen Fairhead & Son. The sub-contractors are as follows:—Steel construction: Messrs. Sanders & Forster, Ltd.; concrete flooring: Messrs. The Siegwart Fireproof Floor Co., Ltd.; granite, marble paving and wall linings: Messrs. Fenning & Co., Ltd.; Portland stone: Messrs. F. J. Barnes, Ltd.; marble terrazzo staircase paving: Messrs. Malcolm Macleod & Co., Ltd.; artificial stone: Messrs. The Patent Victoria Stone Co., Ltd.; tile wall lining: Messrs. The Art Pavements & Decorations, Ltd., and Messrs. Carter & Co. (London), Ltd.; hot water heating: Messrs. Stitson, White & Co.; electric lighting: Messrs. A. F. Goodwin & Co., Ltd.; electric light fittings: The Edison Swan Electric Co., Ltd.; wrought ironwork: Messrs. Hill & Smith, Ltd.; passenger and hydraulic lifts: Messrs. Aldous & Campbell, Ltd.; metal windows, lift enclosure and bronze counter grilles: Messrs. The Crittall Manufacturing Co., Ltd., and The Crittall Freeman Bronze, Ltd.; copper work: Messrs. F. Braby & Co., Ltd.; asphalte work: Messrs. Thomas Faldo & Co., Ltd.; decorative plaster work: Messrs. F. De Jong & Co., Ltd.; ironmongery: Messrs. Carter & Aynsley, Ltd.

The clerk of works during the erection of the greater part of the structure was Mr. B. S. Ravenscroft, and during the remainder until completion, Mr. J. C. Swallow, A.R.I.B.A.

The architects are Messrs. C. J. Dawson, Son, & Allardyce.

The Chalet du Bois, Le Touquet.

This drawing illustrates the garden court at the house recently carried out for the Rt. Hon. The Earl of Dudley, K.C.M.G. The materials used are red brick and stucco for the walls and hand-made tiles for the roof. The piers to the garden pergolas are constructed of roofing tiles with oak beams over.

The general contractors for the work were Messrs. J. W. Falkner & Sons, of London, and the firm responsible for the heating installation was Messrs. James Gray, Ltd., of Chelsea. The garden work was carried out by Messrs. Jas. Cheal & Sons, of Crawley, in conjunction with the architect, Mr. A. B. Llewelyn Roberts (Messrs. Collcutt & Hamp), 126, Wigmore-street, W.1. The perspective drawing is by Mr. Kenneth Anns.

Cottage at Elstead, Surrey.

Beautifully situated on the edge of a heather-grown common and flanked by woods, the original cottage consisted of a living room, scullery and large larder on the ground floor with three bedrooms on the first floor. The entrance was direct into the living room and the building was very damp, the walls and floors having been built direct upon the earth without surface concrete or damp courses. The roof was also overgrown with ivy and in an unsound condition. The necessary work of renovation was therefore considerable; old floors being taken up, a surface water drain being made under the entire length of the building, waterproofed concrete being laid over the floor area and horizontal damp courses being inserted in all the walls.

The original living room was converted into a dining room, the old fireplace being opened up, and the old larder was incorporated, thus giving extra light and a view of the common at the back of the house. A new library has been planned at one end of the building with two bedrooms and a bathroom over. All the woodwork in the library and new joinery work in the dining room is of well-seasoned oak, hand-worked where possible, including ex ranges of bookcases and other library A porch has also been added, and the old has been converted into a serviceable with the necessary offices adjoining. In stone paving and a low dwarf wall now su the house, and the well head forms a fea the stone flagged informal garden. Dull coloured bricks, harmonising with the work, and dark brown plain tiles have bee

Messrs. Glazier & Ellis, of Elstead, were the builders, and Mr. K. M. B. Cros (Messrs. A. W. S. & K. M. B. Cross), architect.

"Warden," Surbiton.

This house is in course of erection at Su and the contractors are Messrs. Limpus of Kingston-hill, Kingston-on-Thames.

The walls are faced in multicolour hand-made bricks; 11 in. hollow walls ar the bays and windows being in oak, wit casements and lead lights by Messrs. & Co.

All the joinery is being made by Messrs. H Hill. Among the other sub-contractors are T. S. Knight & Sons, of 222, Great Por street, W., who are carrying out the hot services, and Messrs. Bratt, Colbran & Co., Mortimer-street, W., are supplying the places, etc.

The architects are Messrs. H. F. Murre R. M. Pigott, AA.R.I.B.A., of 35, Bedfor W.C.1.

House at Oxford.

Planned for erection on a site commanc fine view of Oxford, this house is design provide the required accommodation moderate cost consistent with convenien service and the use of sound materials. cavity walls are faced with multicol sand-faced bricks, the quoins being en with dark-red facing bricks of simila ture. The roof is to be covered with red hand-made sand-faced plain tiles; al side woodwork is to be painted white, incl casements and frames, and the front door be painted a fresh green with moulded arch and hood painted white.

Mr. K. M. B. Cross, M.A. (Messrs. A. and K. M. B. Cross), is the architect.

St. Luke's Church, Maidenhead.

This chapel was built as a Lady Cha the church and also as a war memoria forms a continuation of the north aisle church and is built in Chilmark stone; th boarding is painted blue with white stencilled with patterns of vine and flow colours, the principals and purlins being i The floor is concrete covered with Rub in squares. The east window, in su



Photo: Mr. E. J. Strange, F.I.O.B.

Arlington National Cemetery, Washington, U.S.A.: Interior View (Built of White Marble).

, is by Mr. A. K. Nicholson, 105, Gower-. 1. The altar and altar rails are oak umed, with limewood carving applied e ground, made by Messrs. Bowman & Stamford. The altar cross is of silver ry inlaid and precious stones. The ks are of silver with enamelled coats the work of Mr. Bray, 2, Sandeland-.C. 1. The altar linen and dossal are Beckh, of 20, Thurloe-place, S.W. 7. nded to panel the walls in oak with a loured and gilt oak reredos at a future he general contractors were Messrs. Son, of Castle-hill, Maidenhead, and itects Messrs. Cheadle & Harding, quare, Lincoln's-inn, W.C. 2.

Pantiles," Lyndale, Hampstead.

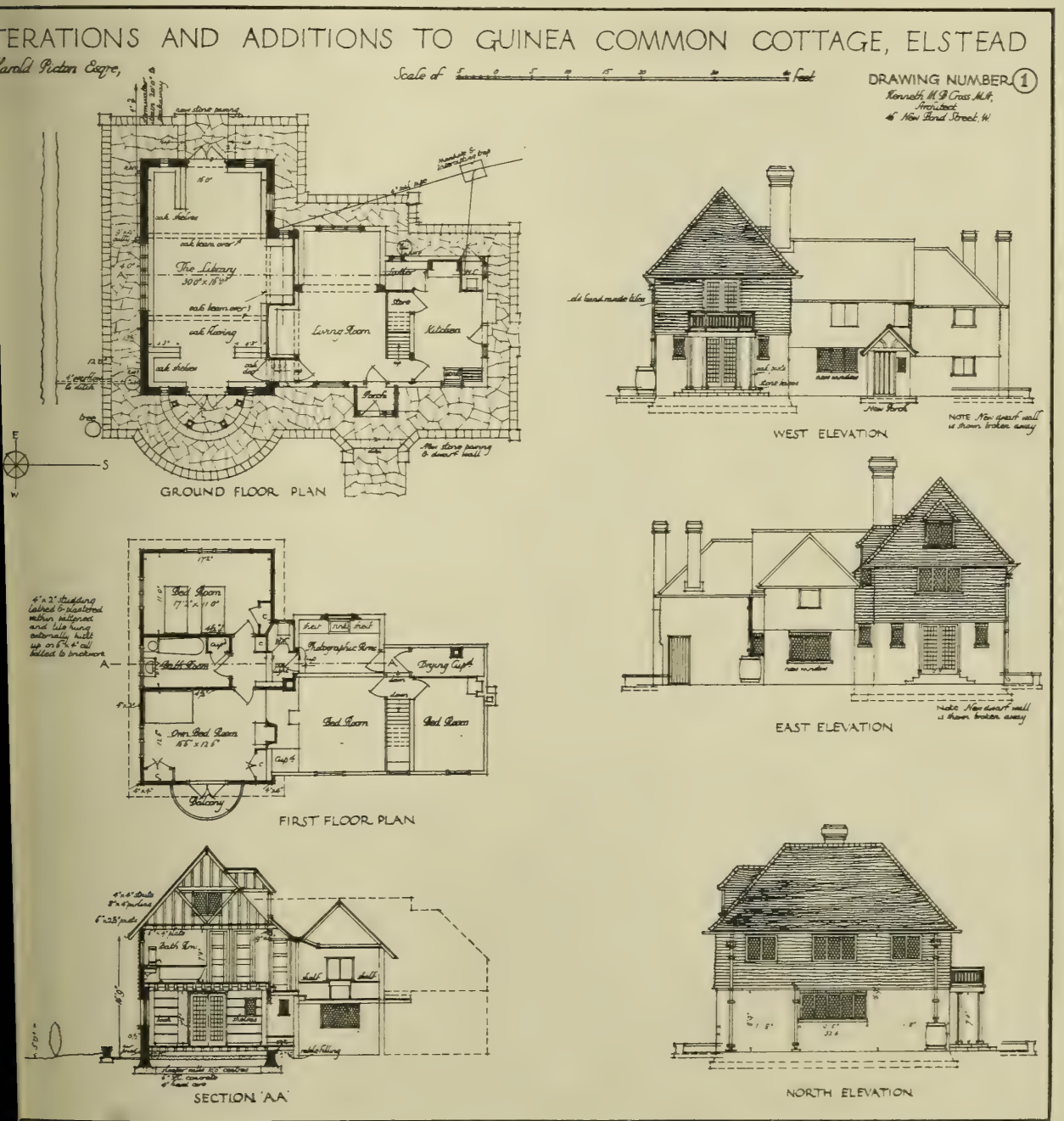
ouse is built of hand-made multi-sand-faced bricks, pointed in cement, le creasing. The roof is covered with pantiles. The house was designed with a view to being run with the minimum of domestic help. Access to all parts is obtained from a central octagonal hall. The drawing-room is a large room on the first floor with good views; this obtains additional height by running up into the roof and showing the rafters. The floor is of Jarrah. The contractors were Messrs. Foster & Dicksee, of Rugby; Messrs. Cheadle & Harding, of 2, New-square, Lincoln's-inn, W.C.2, are the architects.

Dalston Victory Hall, near Carlisle.

This hall has been built and completely equipped under the direction of a representative local committee. It has a good dancing floor, and is lighted by acetylene gas and warmed by low-pressure hot-water apparatus. The builders' and plasterers' work was executed by Messrs. J. & R. Bell, the facing bricks being Whitehaven and Sandysike. The joiners' work, including a bold open timbered roof, was executed by Messrs. Craig & Macdonald, who used Columbian pine for the internal joinery. The plumbers' work was executed by Messrs. Harrison Bros., who also carried out the heating and lighting work. The slating was carried out, in strong Cumberland and Westmorland green slates laid in diminishing courses, by Mr. John Hewitson, and the painting and glazing was executed by Messrs. R. S. Kirk & Son. The cost was about £3,000, and the aim throughout has been to provide a completely fitted-up hall, with club rooms, &c., yet not to depart from the village feeling. The architect is Mr. H. E. Ayris, of Carlisle.

Whitton Grange.

The title and name on plan on page 394 of our last issue should have been: Whitton Grange: Plan. Messrs. Mauchlen & Weightman, Architects.



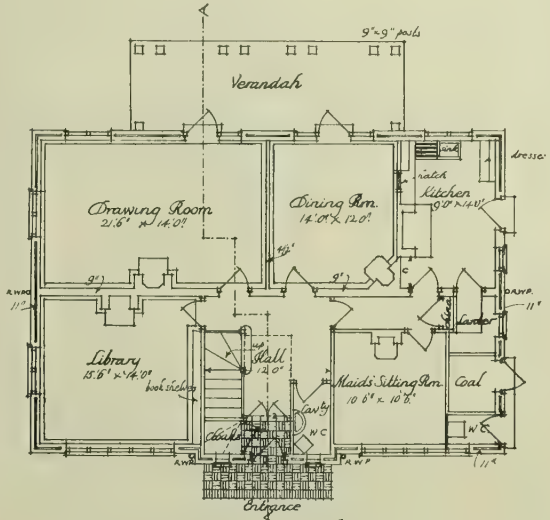
Alterations and Additions to Cottage at Elstead, Surrey.

Mr. K. M. B. Cross, M.A. (Messrs. A. W. S. & K. M. B. Cross), Architect. (*See p.* 434.)

HOUSE AT OXFORD

for Professor R.A. Peters.

Scale of 0 5 10 15 20 30 40 feet



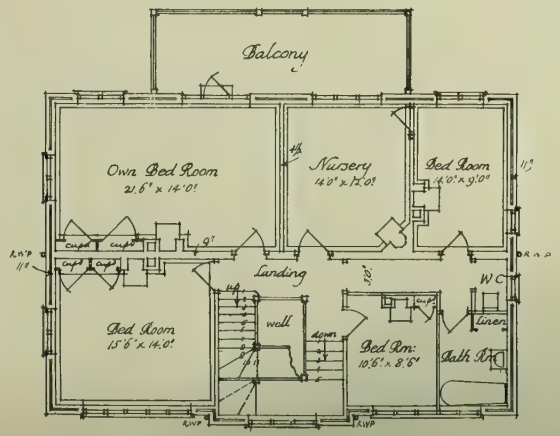
Ground Floor Plan



Front Elevation



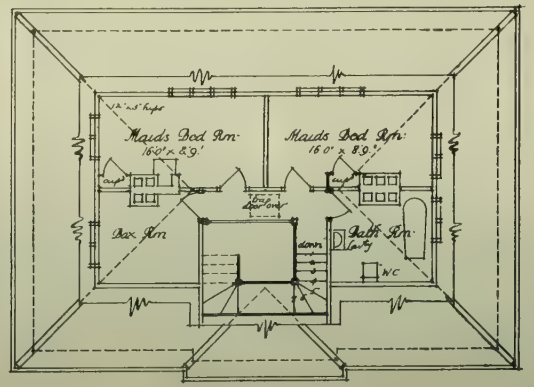
Section AA



First Floor Plan



Garden Elevation



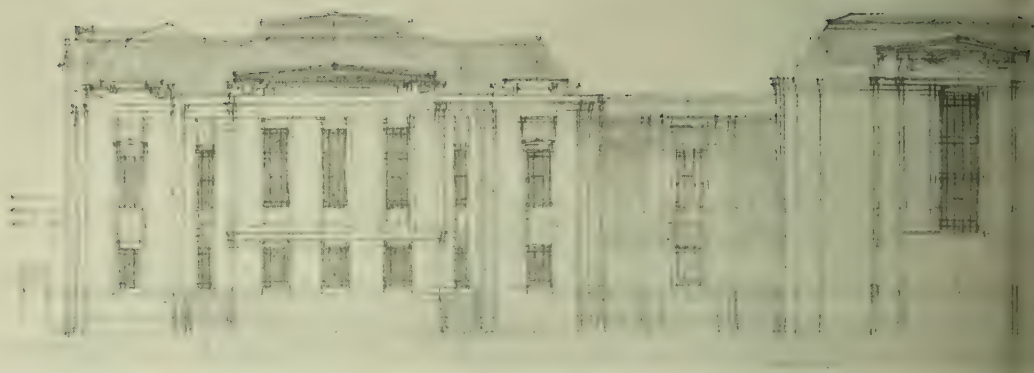
Second Floor Plan

House at Oxford.



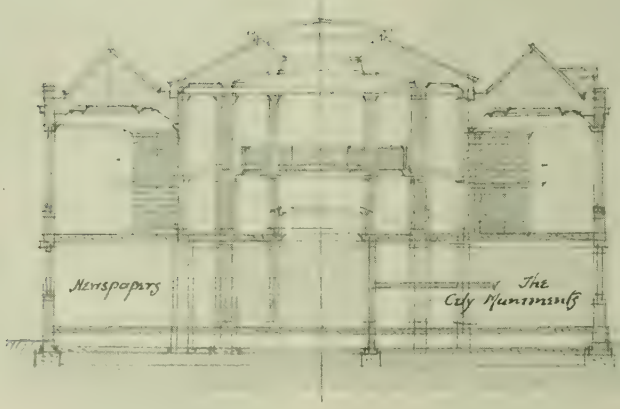
Barclays Bank, Fleet-street.

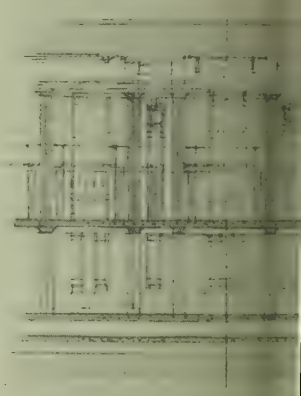
Messrs. Dawson, Son & Allardyce, Architects.



The Side Elevation towards Castle Street.

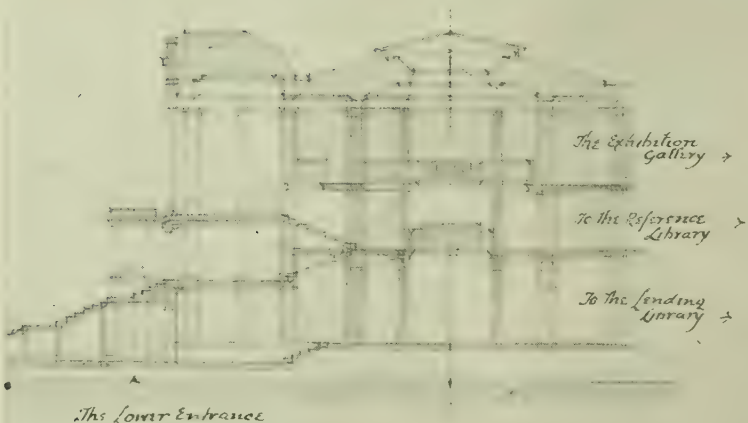
The Reference Library.

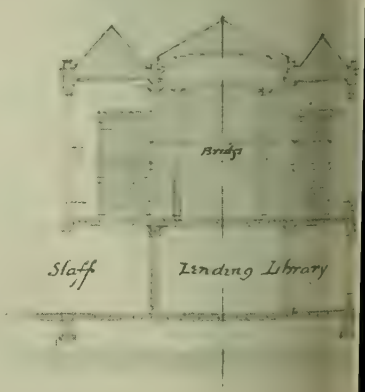




The Section thro' the Front Block

Interior of Refer Library.





The Section thro' the Main Entrance

The Section thro' Reference Library



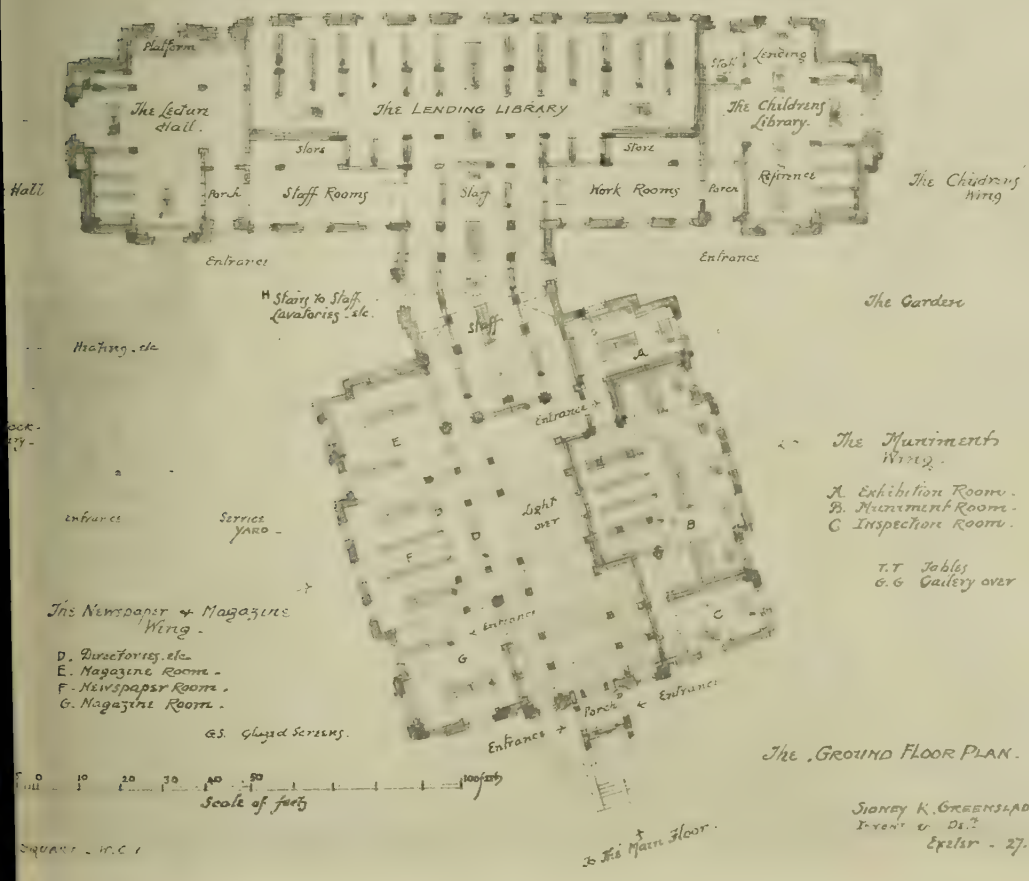




E CITY OF EXETER
LIBRARY BUILDINGS IN THE
OUNDS of ROUGEMONT -

Upper and Lower Plans

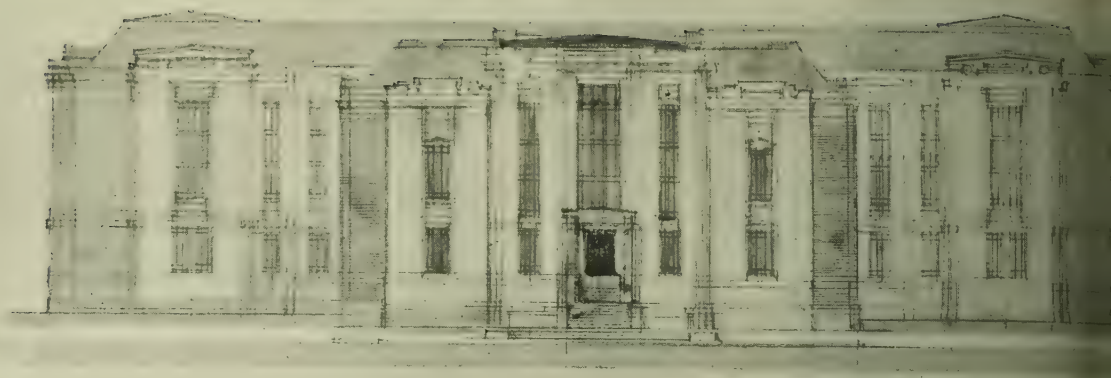
The Gallery Plan



The Ground Floor Plan.

Sidney K. Greenslade
Invent & Dr.
Exeter - 27.3.1914

F.R.I.B.A., Architect.



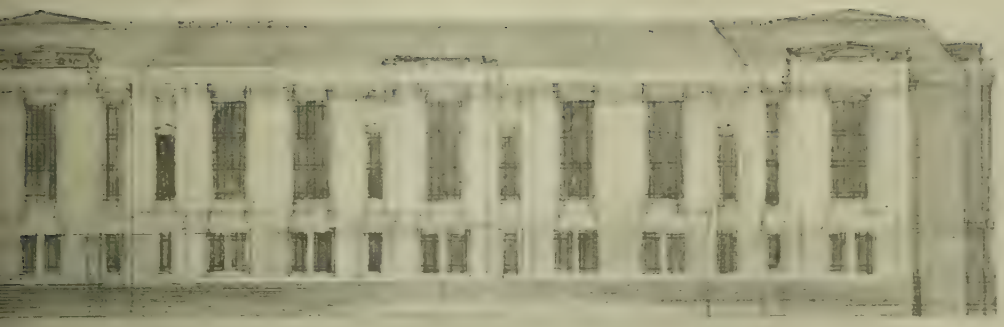
The Front Elevation
on the Axis to Castle Street

THE CITY of EXE
THE NEW LIBRARY BUILDINGS IN
of ROUGEMONT

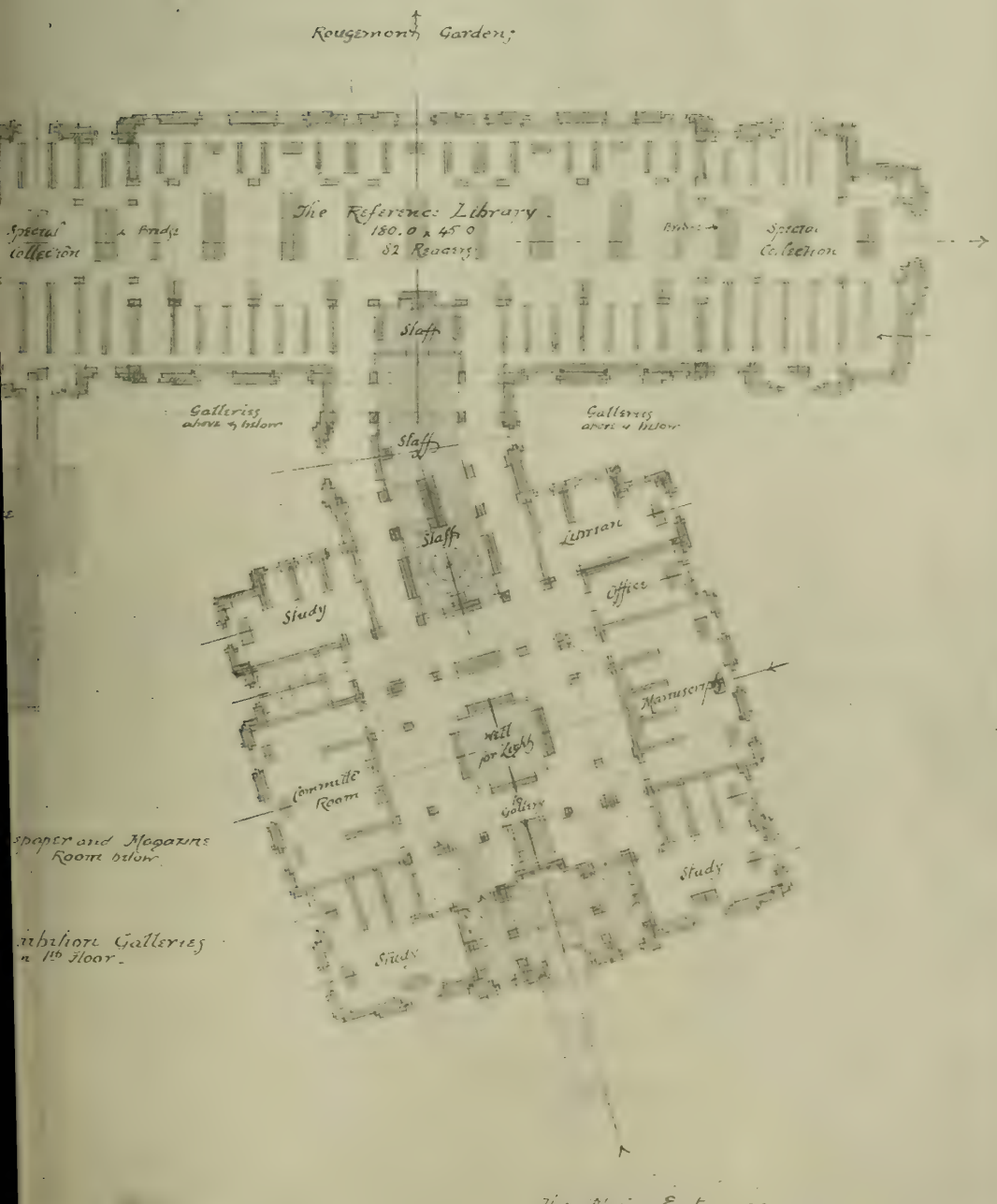


The Site Plan.
Showing a suggested re-arrangement of t
Approach to the Castle from the High Street.

March 1924.
11 Grays Inn Square. W.C.1.



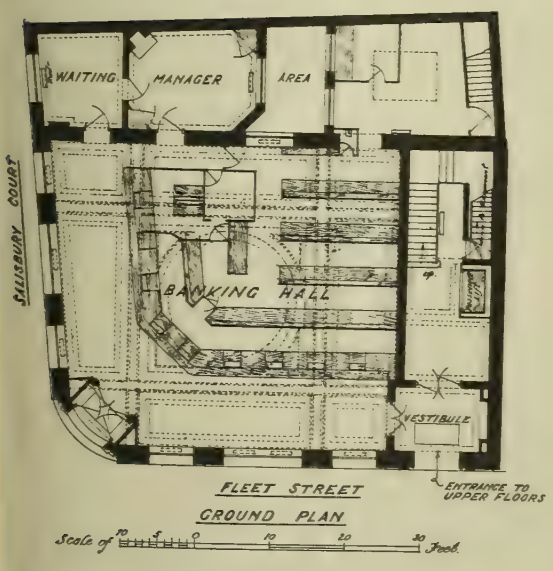
The Elevation towards the Garden of Rougemont.

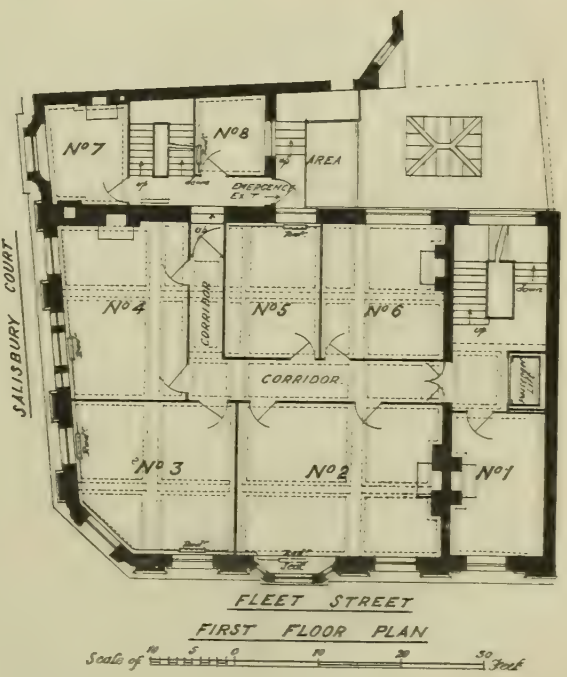


The Main Entrance.

R.I.B.A., Architect.







Barclays Bank, Fleet-street.

MESSRS. DAWSON, SON & ALLARDYCE, Architects.





Lady Chapel, St. Luke's Church, Maidenhead.

MESSRS. CHEADLE & HARDING, Architects. (*See p.* 434.)

MUSIC-ROOM FIREPLACE.

ENTRANCE HALL.

"Pantiles," Lyndale, Hampstead.

MESSRS. CHEADLE & HARDING, Architects. (*See p.* 435.)



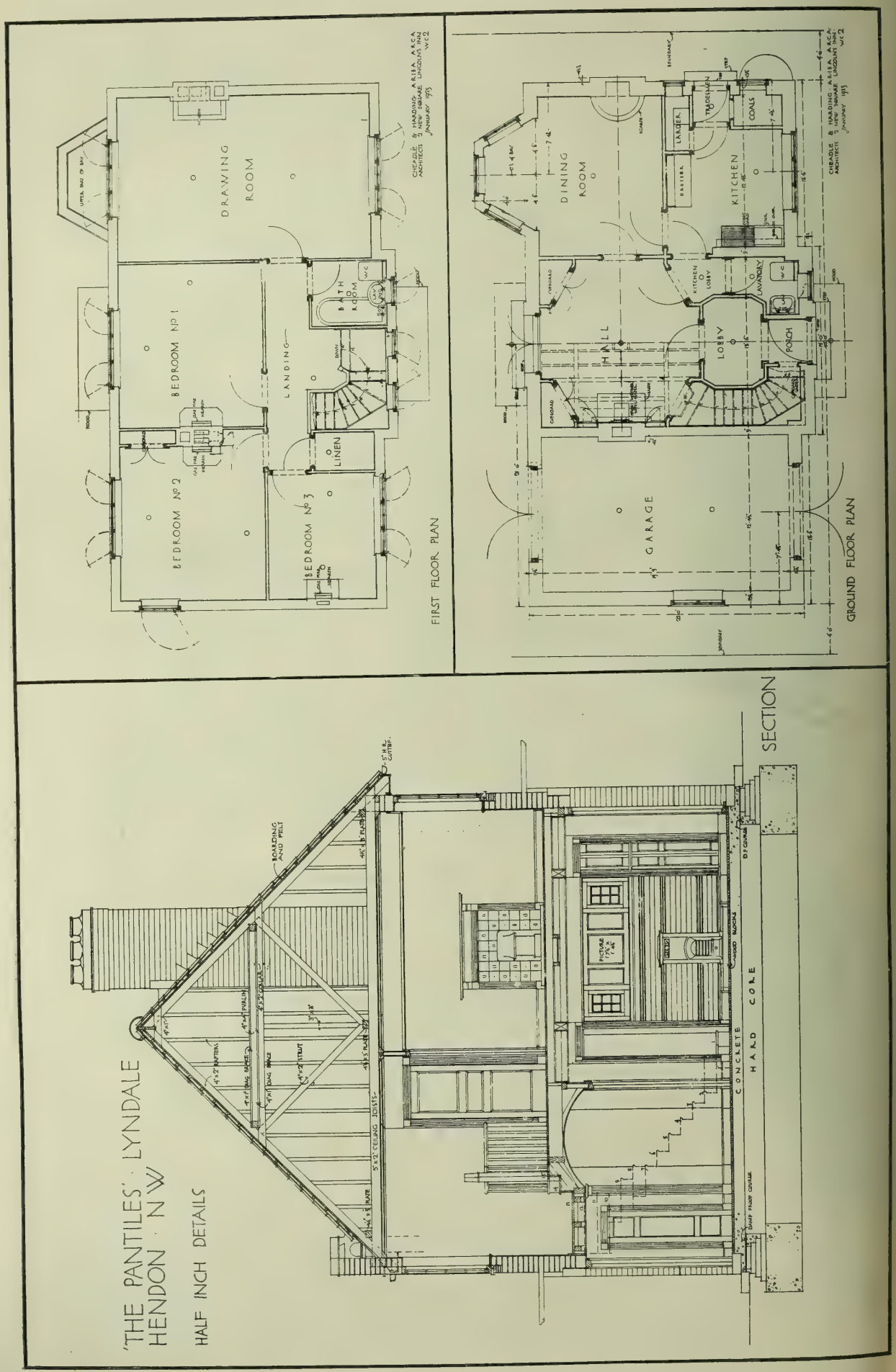
GARDEN ELEVATION.



FRONT ELEVATION.

"Pantiles," Lyndale, Hampstead.

MESSRS. CHEADLE & HARDING, Architects. (*See p.* 435.)



MESSRS. CHEADLE & HARDING, Architects. (See p. 435.)

"Warden," Surbiton. Messrs. Murrell & Pigott, A.A.R.I.B.A., Architects. (See p. 434.)

PRACTICAL DESIGN FOR BUILDING CONSTRUCTION.—VIII.

AN ELEMENTARY EXPLANATION OF THE APPLICATION OF THE THEORY OF CONSTRUCTION TO PRACTICAL DESIGN

By EWART S. ANDREWS, B.Sc., M.I.Struct.E., A.M.Inst.C.E.

SECTION II.—FLOORS AND BEAMS—Contd.

Loads and reactions on beams—The first problem in designing a beam is to determine the maximum value of the bending moment on the beam, and before we can do this we must know exactly what loads the beam has to carry and the value of the reactions at the ends of the beam.

The reaction at the end of a beam is equal to the pressure which the beam exerts on the support at that end.

One of the fundamental laws of mechanics (sometimes called Newton's Third Law of Motion, although it does not necessarily have anything to do with motion) is phrased in orthodox language as "To every action there is an equal and opposite reaction."

In ordinary language this means that if one body A presses downwards on another body B with a given force, then B must pressure upwards on A with the same force. This follows as necessarily true if Newton's First Law is true; and up to the present we cannot find anything wrong with that. The First Law states that if a body is at rest all the forces acting upon it must be in equilibrium; now if there are only two forces acting they can only be in equilibrium if they are equal and opposite, so that the downward pressure of A must be exactly equal to the upward pressure of B.

The first thing, therefore, that we must be able to do with any beam is to find the reactions at the ends. In order to do this we employ the principle of moments which we have already used in connection with walls. This principle states that if a body is in equilibrium the sum of the moments about any point of all the forces on the beam must be zero. In the case of the ordinary beam all the loads in the beam act vertically downwards, and the reactions act vertically upwards, and we can vary the statement of this general principle in the present case to the following form:

The sum of the moments about any point of the loads on any beam must be numerically equal to the sum of the moments of the reactions about the same point.

Before going further, we will remind the reader that moments have signs; those which tend to move the body in the direction of the hands of a clock (clockwise moments) are usually called positive, and those tending to move the body in the opposite direction (anti-clockwise moments) are called negative. In speaking of the sum of moments we mean the sum with due allowance for the signs.

Now let us apply the general principle to the case of the beam illustrated in Fig. 13; three loads are shown anywhere on the beam and P is any point about which we take moments.

We can then tabulate our moments as follows:

Moment of R_1 about P = $R_1.y_1$
Moment of W_1 about P = $-W_1.x_1$
Moment of W_2 about P = $-W_2.x_2$
Moment of W_3 about P = $-W_3.x_3$
Moment of R_2 about P = $-R_2.y_2$

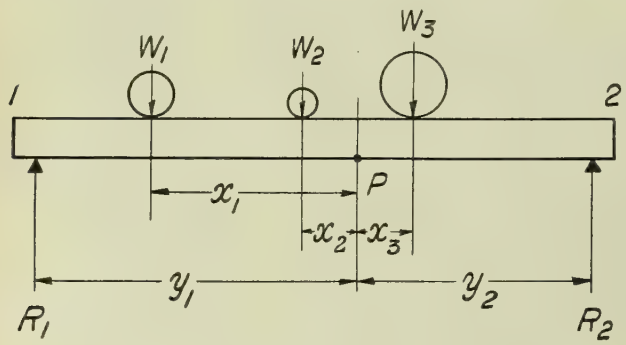


FIG. 13.

The general principle states that:

$$R_1.y_1 - W_1.x_1 - W_2.x_2 + W_3.x_3 - R_2.y_2 = 0$$

We can always change a term of an equation to the other side by changing the sign; so keeping the R's one side and the W's the other we have:

$$R_1.y_1 - R_2.y_2 = W_1.x_1 + W_2.x_2 - W_3.x_3 \quad \ldots (1)$$

This proves the statement printed in italics in column 1.

Now the point P can be chosen anywhere convenient, and by taking it at one of the supports (say 2) one of the terms on the left-hand side of equation (1) will become zero. This leaves us with an equation in which the only unknown quantity is one reaction, so that we are able to find that reaction at once.

In addition to this rule we have the rule that the total upward force must be numerically equal to the total downward force, so that if we know the total load and one of the reactions we can find the other reaction at once by subtracting the known reaction from the total load. This gives us the following procedure for finding th reactions:

(1) Take moments about one of the suppor of all the loads, and thus find the reaction the other support.

(2) Subtract the reaction thus found from t total load to find the second reaction.

Numerical example (1).—A beam of 20 ft. sp carries a uniformly distributed load of ½ ton p foot run, and an isolated load of 6 tons 5 from the left-hand support. Find the reactio on the supports. Fig. 14 illustrates the arrang ment; uniformly distributed loads are ve common in practice, and for purposes of t calculation of reactions we assume that t total load thus distributed acts at the centre the length over which it is distributed.

Beams of this kind are said to be simp supported, and the supports are diagramma cally represented by knife edges as shown the figure. If the ends of a beam are continuo over the supports, or are otherwise so fix that the beam cannot deflect freely between supports, the reactions and stresses beco quite different and cannot be dealt with in t manner now being described.

We now proceed as follows:—

Load distributed = ½ × 20 = 10 tons.
Total load = 10 + 6
= 16 tons.

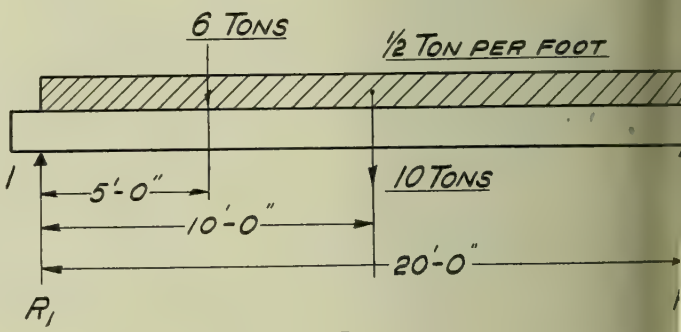


FIG. 14.

Now take moments about the point.

Moment of isolated or point load = 6 × 5
= 30 ft. tons.
Moment of uniform load = 10 × 10
= 100 ft. tons.
Sum of movement of loads = 30 + 100
= 130 ft. tons.
Movement of reaction R_2 about 1 = $R_2 \times 20$.
But moment of reaction = sum of moments o loads.
$\therefore R_2 \times 20 = 130$
$R_2 = \frac{130}{20}$
= 6.5 tons.
But $R_1 + R_2$ = total load = 16 tons.
$\therefore R_1 = 16 - 6.5$
= 9.5 tons.

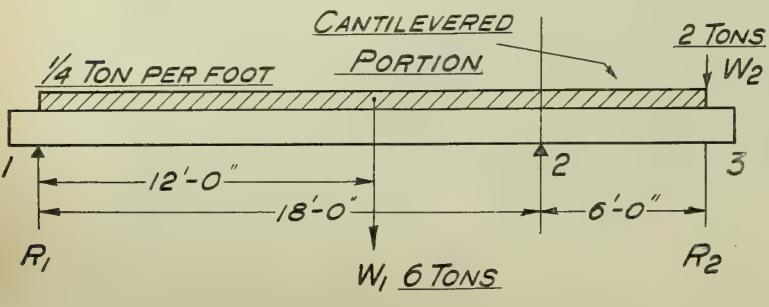


FIG. 15.

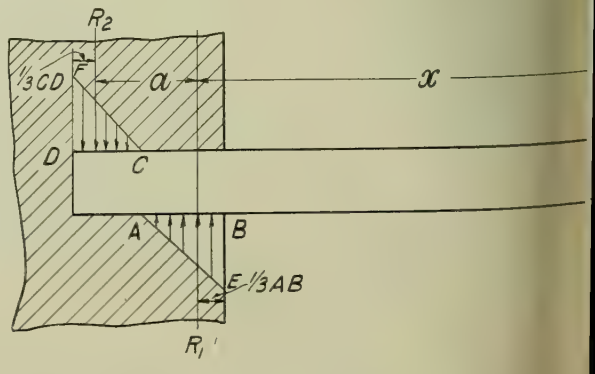


FIG. 16.

n check the accuracy of our working by
noments about the point 2 and thus
ng R_1, and the student is recommended
is as an exercise.

ical example (2).—A beam rests upon
18 ft. apart and projects at one end
ond the support; the beam carries
nly distributed load of $\frac{1}{4}$ ton. per ft.
ughout its length and an isolated load
rojecting end: Find the reaction at
l. The arrangement in this case is
d in Fig. 15; the portion of the beam
g beyond the support is said to be
red.

ilever is a beam which is fixed in direc-
ne end and is free or unsupported at
r; the branches of a tree are canti-
The beam is supported on points 1 and 2,
jects on the right-hand side to the

stributed load is $\frac{1}{4}$ ton per ft. run.
ributed load = $W_1 = \frac{1}{4} \times 24$
$= 6$ tons.
ted load $= W_2 = 2$ tons.
Total load $= 8$ tons.

iform load is regarded as acting at the
its length as indicated, that is, 12 ft.
support 1 and 6 ft. from the support 2.
he reaction R_1, take moments round the
2.

en have :—

t of isolated load $W_2 = 2 \times 6$ (clockwise).
$= 12$ ft. tons.

t of uniform load $W_1 = -6 \times 6$ (anti-clockwise).
$= 36$ ft. tons.

l moment $= -36 + 12$
$= -24$ ft. tons.

Now the moment of R_1 about $2 = R_1 \times 18$.

$R_1 \times 18 = -24$
$R_1 = -24$
$\frac{}{18}$
$= 1.33$ tons.
$R_2 = $ Total load—R_1
$= 8 - 1.33$
$= 6.67$ tons

The observant reader will at once ask why the minus sign has been dropped; the reason is that we do not worry about the sign of reactions so long as the two reactions come of the same sign, but if they come of different signs we know that one will act downward and the other upward. It is possible to obtain a downward reaction in a cantilevered beam, and it means that the weight on the projecting portion overbalances that on the other or anchor portion, and that the beam has to be positively held down to prevent the end from lifting. It will be noted that, in our previous statement in italics of the rule for reactions, we said that the sum of the moments of the reactions was numerically equal to the sum of the moments of the loads; the two are not algebraically equal, but are in fact opposite in sign. This will be clear from equation (1), since $W_1 . x_1$ and $W_2 . x_2$ are both anticlockwise, but are positive in the equation.

The Reactions in a Cantilever.—Many students get into difficulties when they try to find the reactions of an ordinary cantilever, such as that indicated in Fig. 16; this is largely due to the fact that the text-books are usually silent upon this point and the explanation is not altogether free from difficulty.

The fact is that, at the support of a cantilever, there is strictly not a reaction, but the effect is that of two reactions near to each other in the anchored portion of the beam and opposite in direction. The exact dispositions of these reactions is impossible to forecast, but it is probable that, from the edge B to a point A, the beam presses downwards upon the brickwork or other material of the wall, and presses upwards from the point C to the end D. If this is true, we should expect the downward pressure to be greatest at the edge B and diminish gradually to the point A; we should also expect the upward pressure to increase gradually from the point C to the point D. This will give us two pressure diagrams indicated by the triangles E B A and F D C. The resultant pressures, R_1, R_2, represented by the areas of these triangles, will then act in the lines indicated. In order to estimate the values of these reaction pressures, we will note that, by taking moments about the line of action of R_1, we must have :—

$R_2 \times a =$ Sum of moments about line of action of R_1 of all the loads on the cantilever $= Wx$ in our case.

We shall have a larger number of further examples of calculations of reactions when we come to consider bending moments.

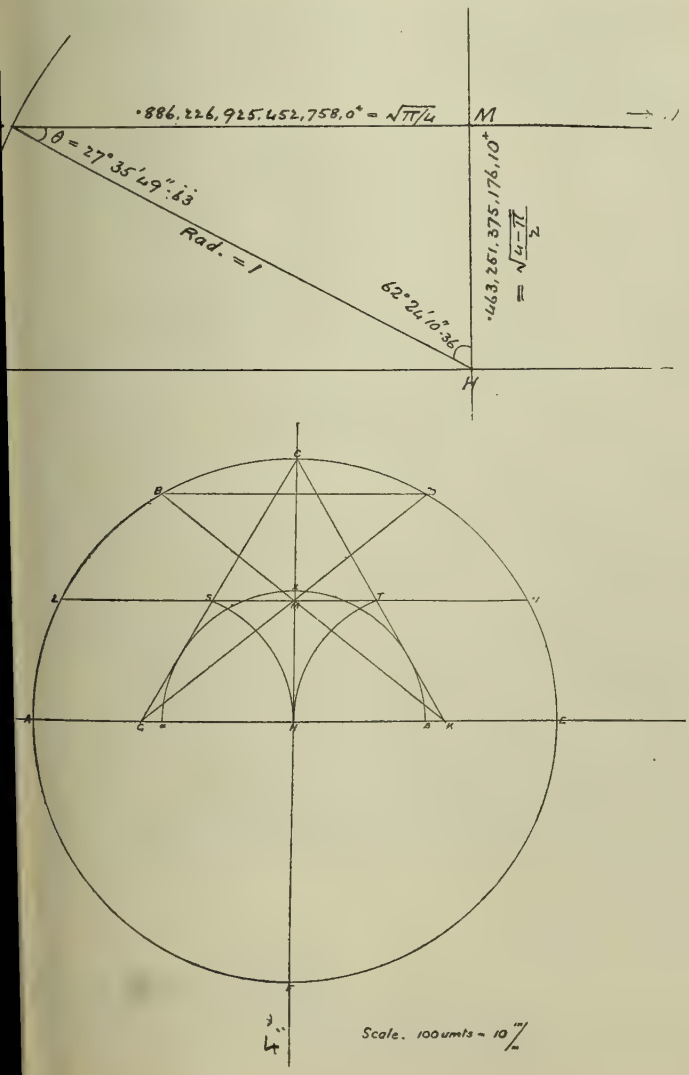
THE QUADRATURE OF THE CIRCLE

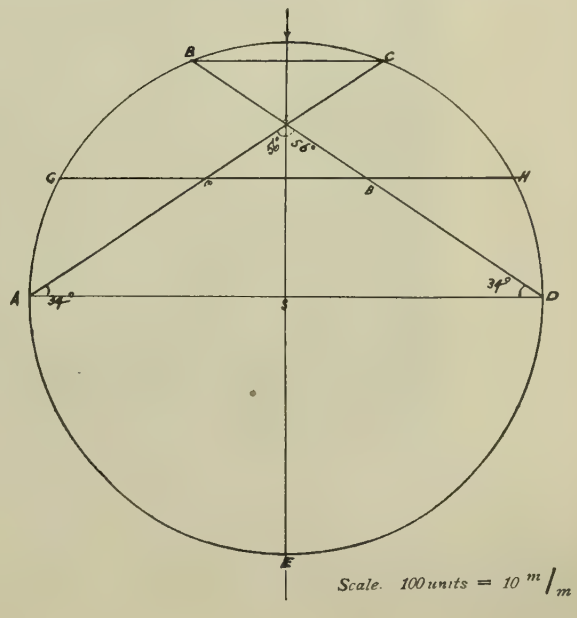
"How to square the circle" has been the dream and the perplexity of mathematicians for many hundreds of years. Innumerable approximations have been found showing more or less ingenuity, but none of them capable of proof by pure geometry. The diagrams given on this page show a solution by Mr. T. C. Dennison, of Thornton-avenue, Chiswick.

In the drawings which accompany this description a construction has been adopted which is applicable to any circle, and which, if accurately drawn, will give absolutely correct results, capable of mathematical proof. It is based upon the fundamental truth enunciated in the following theorem :—

If a circle be enclosed by a square and bisected by its diagonal, the co-ordinates round the point of bisection, together with the diagonal of square so formed, are equal in length to radius of circle.

Construction.—Let A B C D E be the given circle. From the points A and D, with radius equal to 4 ($\sqrt{2}$–1) cut the circumference of circle at B and C, and join B C. Also join A C and D B and bisect them at α and β; and parallel with the diameter A D draw G H through the points α and β. This construction makes the angles D A C and C A D = 34 deg., and the angles A × S and D × S = 56 deg. The line G H is the side of a square equal in area to that of the circle A B C D E. The above construction is the result of many years of patient labour, and it is intended to publish it, with the mathematical proofs, and to show at least four different methods of arriving at the solution.





BOOK REVIEWS

Small Houses for the Community. By C. H. JAMES and F. R. YERBURY. (London: Crosby Lockwood & Son. 1924.) 31s. 6d.

It has been said by one competent to judge that the housing problem with which we are wrestling will continue to absorb our attention for two generations yet to come. This is probably true and therefore it is necessary that the problem be approached in a comprehensive manner, that it be recognised as a permanent and not a temporary question, and that accordingly it must be settled on a permanent basis. Legislation can render valuable assistance by the removal of burdensome and effete by-laws and by placing reasonable restraint on private obstruction and aggression, but the ultimate solution of the problem must lay largely with those who are actually engaged in the design and construction of the houses—with the measure of skill on the one hand and honest work on the other. The difficulties of the problem are now well known and appreciated. In the volume before us we have a welcome and valuable contribution to the subject which should be of great assistance to those engaged in the work of actual construction.

The scope of the work is well expressed by the authors in the introduction. "It is the intention of this book to place on record for the use of those to whom they may be of value some of the best examples of completed work, showing that it is possible to carry out housing schemes and build small houses without either outraging the æsthetic sense on the one hand, or ignoring the question of cost on the other." The book is divided into four principal sections: the text, in which various practical aspects of the housing problem are discussed; a series of plans and photographs of small houses and cottages recently built in the newly-developed districts of London and the provinces—this is the largest section; plates of detailed drawings; and an appendix consisting of working drawings, specifications, and bill of quantities for a group of fourteen cottages at Welwyn Garden City. In the text are some remarks on such pertinent questions as site planning, design, materials, construction, and internal arrangement. The old method of laying out a residential building site was by means of long parallel roads, usually far too wide and having expensively constructed carriage ways. These were connected at intervals by short cross roads, which were merely flanked by the ends and the gardens of the houses in the longer roads, and were therefore useless as far as the development of building plots was concerned. Many wide roads served only a small number of houses, or even a cul-de-sac, and soon acquired that unkempt and weed-grown appearance which may be seen on the outskirts of many of our towns. These expensive methods of lay-out led to the charge for plots not by area but by the foot run of frontage and consequently to the reduction of the frontages of houses, so that often only 16 ft. or even 12 ft. was given to each house. It is now recognised that economy in the space devoted to road surface is an important factor in the general economy of the development of a building site, and that the less road construction it is necessary to mak less will be the general cost of develo and the greater the plot which can be for the same price. Many useful ob tions are made on the economical pla and lay-out of a site on these principles.

In respect to the design of the indi houses the principal factors to be cons are doubtless the materials available an locality of the site and the local traditi its neighbourhood. It would conduce b economy and good effect if the neighb cottages of a given site were examined deciding on the design for new work. are often very good reasons for the cha of the work pursued for centuries in localities, not at first apparent. Ther be no question but that while individua permissible and desirable in the develo of a residential area regard must be h the effect as a whole. On the subj design the authors say "Little thing very much in simple houses, and nothin be allowed to go unconsidered. The gr care must be exercised in the design placing of chimney stacks, which always be simple and with projections, i not exceeding three-quarters of an inch. flatter the pitch of the roof the shorte chimneys may be. Horizontal line window and door heads should be car followed out round a building. Eaves be proportionate in projection to the pi the roof, the steeper the pitch the nar the soffit. Fascia boards must be stopp kneelers or else returned at ends, and not exceed 4 in. in depth unless definite quired to give the effect of a cornice,



Vestries, St. James' Church, New Brighton, Wallasey. MR. A. RALPH KEIGHLEY, A.R.I.B.A., Architect.

[This church was designed by Sir Gilbert Scott in the early 'fifties. The new addition provides a large vestibule giving access to a clergy and to a choir vestry, the latter big enough to be used as a meeting room for adult classes when required. Lavatories are provided for both vestries independently. The addition is in Storeton stone, with a vertical dampcourse in the thickness of the walls. The roof is of Precelly slates. All the visible woodwork is Austrian oak, with gunmetal fittings. The vestibule and lavatories have tiled floors and the vestries wood block floors. Gas stoves the heating. The cost of the a furnished, is £3,100. The builders are W. Thornton & Sons, and the archi A. Ralph Keighley, A.R.I.B.A., of pool.]

istance of a bed mould will also be d."

plates of photographs and plans con- ne excellent examples of small houses tages recently erected in various parts country. These are built of various ls—though those with brick walls and ofs predominate—and are shown in nd arranged in blocks and groups. A g close of cottages at Welwyn garden ilt of concrete blocks, cement ren- nd roofed with tiles, and illustrated es xxxii, xxxiii, demonstrate clearly sfactory effect which can be obtained employment of these materials. Good s are also shown of the use of boarding in the upper stages, particu- a group of four cottages in plate A few examples from Holland, k, and Sweden, including some houses recently built near Stockholm, ed. All the photographs are very d sufficiently large for their purpose. ustrate some of the best examples of work and should assist in no small in establishing the high standard of of this class of house which these s have set. The encomium passed Raymond Unwin in his Foreword to is well deserved. "This volume," , "fittingly marks a success in that uggle to establish a new technique in using of the people. The housing which it portrays, whether carried municipal, public utility, or private have established beyond doubt the bility of the high standard of attain- own. That standard no one who is ble for housing work can afford to Who falls below it will in future escape reproach." The appendix most useful adjunct to what is a and opportune work.

aluation Policy. By JAMES DUNDAS ITE, M.A., LL.D., of Trinity College, bridge, Barrister-at-Law. (London: lished by the United Committee for the ation of Land Values. 1924.) 2s.

s a little volume of 196 pages and an d its object is to advocate the taxation ng of landed properties on the basis of d values, or, to quote from the author, we need is to reconstitute the public on lands—or in other words, the rates s on landed properties—on the basis of ple principles, (1) That the land which has provided ought to be regarded as property, and that those who hold it ay the people a rent for it, based on its value for the time being; and (2) that rovements, both present and future, e regarded as belonging to those who em, and should be relieved from public s much as possible."

t not be thought that the author simply o revive the land taxes which proved ilure under the Finance Act, 1909–10, ge 84 he says "They did not deserve the Duties on Land Values and were substitutes for the real reform," but this will have been already gathered quotation we have given above, for ple talk of the land being "the common of the people" and euphemistically taxation as "a rent paid to the people" t require great acumen to discover that m they advocate involves the divesting e rights in property and a system of which inevitably leads in the end to on. We do not propose in this notice he question, but that the above state- he proposals this little handbook con- ccurate can be shown by a very few s. We start with one sentence in the "Justice requires that all the people ve equal rights in the land which as provided." The capital N is the

e find that "Any tax or rate on land ht to be regarded as a rent paid to the y for the land and should be payable the land is held, apart from any ques- tion whether it is being used or 'occupied' in the technical meaning of that word." Further, that the public charges on the land value of each property should be treated not merely as a personal debt, but as a first charge on the land, and that if those charges are not met within a certain period "the community should be entitled to resume the land, and if payment is not made within a certain further period the community should be entitled to resume the land absolutely."

Systems of taxation or industrial enterprise based on confiscation of private rights are attractive reading, as they always show brilliant results and huge profits, and this volume is no exception. We do not care to discuss the obvious inherent difficulties in the system, nor to raise the question whether in practice the land so treated, irrespective of the actual returns being obtained from it, would not eventually so depreciate that the end aimed at would not be attained, as it is sufficient to indicate the general principle advocated in this little volume which concludes with a series of "Notable Sayings," in which Henry George and his followers figure, and which purport to point to the attainment of Utopia, but do not look far enough into the future to discover the "Paradise Lost" which may well be the sole fruits of any such system.

I for One. By J. B. PRIESTLEY. (London: The Bodley Head.) 6s. net.

It is a pleasure to review a volume of good essays. Good essayists are rare, but it is a mistake to believe that the fine art of essay-writing ended with Lamb and Hazlitt. It is an art which makes a double appeal to architects. They can appreciate a form of craftsmanship involving literary grace and exquisite taste, and they cannot neglect a medium which deals playfully with various aspects of life and art. The preferences may be individual and the sentiment elusive, but they represent the views of a highly cultivated mind, endowed with tolerance and sympathy. Mr. Priestley can claim most of the rare qualities of the good essayist; he has the light touch which can traffic delightfully with fancies, and the sense of humour which laughs at our little affectations, at the same time disguising the serious thought which lies below the surface. Hear him in his Essay on Cranks:—

"The eccentric merely discovered a mode of life which suited him; the crank has found a way for everybody; he possesses a panacea and is aggressive, militant, proselytising. The mark of the crank is his unshakable belief that his own particular crotchet will save the world."

He likes the soft opaque colours of toy balloons, and the beautiful spot of colour they make in our streets. This fancy leads him to wonder what would happen to such pretty trifles in the solemn economic utopias which some people are always fashioning for us.

"We might even agree to make the toy-balloon some sort of test for our prophets and grand, sweeping reformers. When they have told us what should be done, when they have finished refashioning the world, and have put everything in its place, we might venture to ask them what would happen to the toy balloon. If the wistful demand was met with a look of contempt and a shrug of the shoulders, we could then turn away well satisfied, knowing that, whatever they were, they were not the prophets for us. Let them reform themselves, we would mutter as we passed out of their hearing."

He conveys the impression of the "unlovely signs of industry" in "A Coincidence" with as sure a touch as the impression he gives us of the fragrance of cherry blossom in his essay "In the Country." As a corrective to our modern outlook these essays are more valuable to us now than to a later generation who will appreciate them.



British War Memorial, Hankow. MR. HORACE G. TURNER, A.R.I.B.A., Architect.

[This design was selected in competition. The memorial is built entirely of granite on brick footings, and is supported on a lime concrete raft. The metal work is bronze entirely made by Chinese labour.]

NOTES ON SOME BUILDERS' WORKMEN IN THE MIDDLE AGES

By H. LITTLEHALES

In the following little article we have attempted to give a very brief notice of some of the workmen employed by builders in Mediæval England. The notes have been taken from original existing accounts set down by Mediæval builders, which may be seen to-day in the Public Record Office.

Caretakers.—This official is very rarely mentioned. He appears, however, in MS. 545–29 to have been paid 10d. a day, his business consisting in "rydyny and goyng for cartes"—that is, his occupation consisted in engaging carts to carry material.

Carvers.—Carvers apparently earned 8d. a day. (Records of a London City Church, E.E. Text Soc., p. 224.) In MS. 464–23 a carver was paid 10d. for working for two and a-half days, and for his "bord" for that time 5d. was paid. A little later on a carver is paid for making doors, windows and other necessaries.

Dawbers, Plasterers, Pargetters and Roughcasters.—It is probable that the Dawber, Plasterer and Pargetter all did very much the same work in the Middle Ages, the more expert workmen among them being probably employed to execute the more difficult and elaborate features. In MS. 474–12, the names plasterers and pargetters appear to be synonymous. We read:—"Item the plasterers hathe pargetted the gallery within and withoute." In MS. 477–12 plasterers receive 7d. a day; in MS. 499–19, the pargetters are paid at the rate of 6d. a day.

The following entry from MS. 504–2 shows us that the plasterer was at times employed in "lathyng" (which we may suppose to have been the work of nailing the laths) and in "dawbyng":—"Playsterers Workynge in the new lathyng, dawbyng and plasteryng ye walles of the said stabull, lathyng, dawbyng and plastering ye new partycion there, as also repayryng & newe lathyng & plasteryng of dyvers wales" [walls].

In another part of this MS. we read of the plasterers "daubinge and plasteringe with morter and here (hair) the walles," and in another part of the book they are paid for "lathyng and davbyng of dyuers selynges" and "whiting the walles."

In MS. 474–13 we read of a chamber being "new playstered with whytyng betwene the battens."

In MS. 489–7 dawbers received 4d. a day; in MS. 474–7 they received 6d. In MS. 489–6 we find an entry recording the payment of 4d. a day to each of two men "for makyng clay and dawbyng the bottre [buttery] flor & in the towre."

Rough Casters.—Rough casters are mentioned in MS. 474–12 as having harled part of a building.

Diggers.—In MS. 477–12 we see that chalk diggers received 6d. a day, and in MS. 499–19 "diggers of ston to the lyme kylle" are entered as receiving 4d. a day.

Hurdlers.—In MS. 465–20, we see that the hurdle makers or hurdlers helped to make scaffolds and ladders, and that they also mended hand and wheelbarrows. The hurdles were really a part of the scaffold, fixed, it is said, to prevent the men from falling. "Hurdles for the scaffold" and "scaffold hurdles" are often mentioned.

Keeper of the Storehouse.—This official is rarely mentioned in mediæval accounts. In MS. 504-2, however, we find one employed, Thomas Button, in 1544, being Keeper of the Storehouse, at a wage of 5d. a day. Later on, Robert Clodder held the post at the same wage in Button's place.

Lath Cleavers.—Lath cleavers are referred to in MS. 544–12. They were paid by the piece at 2d. a hundred.

Limeburners.—Limeburners appear to have been paid by the piece at 3½d. a quarter. In MS. 504-2, "Richard Louche," of Butcheworth, Heythe, "was paid xxs. for burning 20 quarters of lime, with the carriage, at 7d. the quarter." Stephen Parrat burned "clx quarters . . . iiii quarters to the c. [cwt.], at vs. the c. with the carriage."

Mortermen.—The morterman is rarely mentioned by mediæval builders, and the following reference from MS. 504–2 probably refers merely to men mixing and carrying mortar to masons and bricklayers. In this MS. we see that the mortermen were paid 5d. a day; their work for this payment is carefully described:—

"Mortermen, workinge in carringe of watter for to slacke lyme with, and castinge and sandinge the saide lyme and in seeftinge the saide lyme and sande, together with wateringe, workinge and chaffinge the saide lyme and sande into morter redey for the briklayers to worke with; and further more in workinge in seeftinge and makinge of morter for the breklyers and tylers to tyle with; and more in makinge of fyne morter for the said masons to sett the battelments with."

Painters.—Painters are not often mentioned in mediæval accounts. In MSS. 479–9–11, they were paid 8d. a day.

Pale Cleavers.—In MS. 545–29 the pale cleavers were paid 7d. a day for cleaving pales and rails for a fence.

Palers.—In MS. 545–29, we read of "palecleuers, palers and carpenters." The palers were paid 7d. a day for "raylyng and paylyng" a park. In MS. 465–20, they are paid by the price at 6d. a "rodde."

Paviors.—"Pavyours" were paid 6d. to 8d. a day (MS. 479–11, 489–7, 504–2). Sometimes, however, the pavior worked by the piece (MS. 489–10).

Quarrymen.—"Quarreers" were paid 6d. a day (MS. 499–19), but labourers at the quarry received only 4d.

Refiners.—"Fyners" were those by whom the lead was melted and cast into "sowes." Fyners are rarely mentioned, the probability being that in almost all cases such work was done by the plumbers. In MS. 504–2, two "fyners" were engaged, one, John Kenedey, at 10d. a day; the other, William Rabye, probably a labourer, at 5d. Both worked for nine days and cast in all eight sowes weighing "xxxii c. and xiiii li," (that is, 32 cwt. and 14 lbs.).

Servitors.—We are not able to explain the duties of a "servitor," and the mention of them in MS. 477–12 is, so far as we are aware, a solitary instance of the employment of men under such an appellation. We might suppose from the name itself that the servitor was a labourer, but we may feel sure that they were not simply labourers from the fact that the labourers employed on the same work at the time are entered in the ledger in such numbers as to amount to nearly a hundred; whilst the servitors were but three in all. Also labourers are classed *as* labourers quite separately to the Servitors. In the ledger in question, the servitors are entered as receiving 5d. a day, the same wage being paid to the labourers.

Shinglers.—Shinglers were not often employed. In MS. 504-2, they were paid 7d. and 8d. a day. The work of the shingler was to lay the shingles or wooden tiles as a roofing.

Slaters.—Slaters are commonly referred to in mediæval documents as "sclaters," though the term slater at times occurs. An instance of the name of the man being probably derived from his occupation (we meet with such instances more or less frequently in old accounts) is to be seen in MS. 488–22, where we read of wages being paid "To John Sclater, sclatyng and admendyng the rof."

The wage paid to the mediæval slater was commonly 6d. a day (MS. 499–19). Sometimes the sclater was known as a helyour, that is, coverer. The slater used "a picke off steele to make holes in sclate" (MS. 504–2).

Smiths.—The smith was not comm gaged at a daily wage, but in MSS. mention is made of "waiges" paid to In MS. 504-2, two smiths were employed day each "in taking of mesures and in attendance tyll the wyndowes myght be with mendyng and setting on of lock

Spoylers.—Spoylers were those by wood was cut up. They are not very fre mentioned. In MS. 499–19 spoylers a 4d. a day for "spowlyng" of wood lime kiln. In MS. 479–11 we find the "clevyng of wode" for the lime kiln. 546–5 we read of "ffellyng and sp tymber."

Thatchers.—Thatchers were paid 5d. (MS. 476–8).

Tilers.—For "drye leying" tiles, til paid 8d. the thousand. In MS. 544– were paid 7d. a day; in MS. 504–2, 7d. Apparently at times they fitted the lat which the tiles were laid. In MS. 50 read of "Tylers workinge as well v newe lathynge and tylinge of the said K On the same page we read of the tilers pinge, serchinge, lathinge and poynti

Wallers.—We meet with this name of at times, but it is probable that such pellation was merely a more expressive term for a mason or bricklayer. In MS wallers are paid at the rate of 6d. a day labourers "for makyng of morter and s the said wallers" received 4d. a da Wallers in MS. 476–8 are paid 11s. 8 wallinge of v roydes of walle with sto morter."

OBITUARY

The death occurred recently of Mr. John Snell, architect, of Plymouth. leaving school, Mr. Snell entered, in the office of Messrs. Damant & Reid. a preliminary period of five years, he three as an assistant, and in 1867 set practice on his own account. Among th notable buildings erected from his desi the South Devon and Cornwall Institut the Blind at Plymouth; the Sailors' F Devonport, Keyham, and Portsmouth Sailors' Home at Devonport; the Y buildings at Plymouth and St. Austel Royal Dockyard Orphanage at Dev the Nurses' Home at the Royal Albert H Devonport; Tavistock Urban District Offices; the north wing and hospital a College, Tavistock; Devonport Technical the Grand Theatre at Plymouth; Pl Co-operative Society's Central Stor offices; the Marine Biological Lab at Plymouth; Plymouth North-road Station; Lloyds Banks at Plymou Devonport; Barclays Bank at Ply the Midland Bank at Plymouth; street Higher Grade School and Hyd road School at Plymouth; St. M Church, Stonehouse; Wesley Chapel, Eb street, Plymouth; and the Baptist Ch Mutley, Plymouth.

Edgware Widening.

Church-lane, Edgware, and part o street are to be widened at a cost of mately £157,746.

Anglican Memorial in Flanders.

It is proposed to erect a chapel betw port of Ostend and Zeebrugge. This Memorial Chapel is intended to be a con landmark and to be, perhaps, the lar most beautiful chapel in Christendo western door, of British oak, will give on the level to a stately porch, with marble staircase leading to the chape vision will be made for chapels, where d at the entrance to the different sali which local committees may be forme small oratories will be built, at leas larger cemeteries.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers cannot accept responsibility for contributed , especially on legal matters.

we appeal to our correspondents to their queries on paper of a size easily and written as legibly as possible, or still, in typescript?—ED.

Distemper and Asphalte Mastic.

[REPLY TO "CITY."]

—Referring to the letter by "City" in ssue for August 29, "City" evidently price not quality. Either a poor quality tic was used or too much flux was added ke it easily worked), and the result was re so soft that the drip caused the ers." Such weak alkali (or acid) as would istemper could not affect the surface of roofing asphalte mastic, properly laid. lon. H. DARKE.

Mortar Pans.

—Whilst on holiday in Wales I noticed r smaller type of pan being used than is ly employed in this locality for mortar , and believe it to be known as a "loam It has one cogged and one plain runner elf-delivering door in the side of the pan. emed to me to be an advantage over the ype of mill with plain runners and the g done by shovel from the pan. Have aders any experience with the type of cribed, and could they put me in touch e makers? "HAMPSHIRE."

Elm Boarding.

[REPLY TO "BUILDER."]

—Elm boarding, particularly if cleft and n, will quickly assume the natural toned which your correspondent seems to be nt for, and no artificial means can better lting effect. The lime treatment which cribed in a recent letter in this column in ion with oak timbering is probably the fensive of these artifical means that ually be applied to elm weather boarding. "NATURE."

Efflorescence on Brickwork.

—Can you recommend any treatment for rescence on brickwork? My house was t year and was stopped by frost, and the something awful. The walls are 11 in. ad lustre bricks and there is a distinct re the job was stopped, above which no sign of the trouble. Would acetic ove it? I should be much obliged if d give me any advice.

H. C. RICHARDSON (A.R.I.B.A.).

Concrete Blocks v. Brickwork.

We find great differences of opinion uilders regarding the comparative cost ructing houses in these materials. y speaking, concrete block cavity walls aper than brick walls in the country. ndon, where 9 in. solid walls are usually tisfactory, the concrete blocks seem vour with builders and appear to save le in cost. The experiences of other surveyors and builders, with actual possible, would be very interesting. "SURVEYORS."

Right of Light.

an any reader inform me of any recog- hod of valuing the loss of light occa- the erection of a building obstructing ral light of existing premises? Are standard works on this subject? "SURVEYOR."

Rot in Woodwork.

[REPLY TO MR. J. J. JONES.]

SIR,—Once dry rot appears in woodwork there is no known method of checking the spreading thereof, other than by cutting out every part affected, and treating the surroundings with preventative measures, before renewing the woodwork. The parts cut out should be burnt, together with any soil under the floor where this trouble generally occurs, and the surrounding brickwork and timber should be coated with boiling tar or a cold solution of corrosive sublimate. The subject is dealt with exhaustively in a paper issued by the Royal Institute of British Architects. "W. G."

Cement Wash.

[REPLY TO "G.O.M."]

SIR,—An excellent wash for cement is made by mixing best quality Portland cement with a little plaster of Paris, say, one-tenth part, and about the same quantity of a high-grade glue. The Portland cement and plaster should be thoroughly mixed to the constituency of thin cream in a tub or other suitable vessel and the glue, melted separately, should be stirred together with a very little alum which will solidify the glue

Any earth colours which will withstand an alkaline action can be added, such as yellow and red ochres, Indian red and black; a very large number of pleasing buffs, creams, and light reds may be obtained.

Before the wash is applied the surface should be thoroughly cleaned down and soft wire brushes will be found of service in removing loose parts. It is exceedingly important that the Portland cement should have plenty of water to enable it to set hard, hence it is advisable to wet the surface before the wash is applied, which might be done with a hose or brushes. The work must not be done in the sun as the moisture would evaporate before the cement had time to set.

It is advisable to strain the wash before putting it on. ARTHUR S. JENNINGS.

External Oak.

SIR,—What is the best preservative in London? I want something transparent and practically invisible. "F. S. A."

A Legal Question.

[REPLY TO INQUIRER.]

SIR,—The proposals of your correspondent should be submitted afresh to the local authorities, whose professional advisers will examine them on their merits. The flat having been condemned unless certain steps are taken, cannot be re-let for human occupation until those steps have been taken, or the authorities have been satisfied that other equally sound measures have been tried. It would render the offender liable to very severe penalties if this is not done. "M. A."

Rust on Bricks.

SIR,—As a regular reader of your excellent journal, may I make a small inquiry? I am erecting a house faced with Crowborough bricks and find that many of them are issuing what appears to be a kind of brown rust residue. It is visible both when laid (in lime mortar) and when stacked in bolts on the ground. In my opinion it is due to excess of rain or moisture. I should be very much obliged if you or one of your readers could give me a satisfactory explanation of this, and will this so-called rust wear out or recede in time? Does any reader know the analysis of an average Crowborough facing brick? "PARKSIDE."

Boundary Walls.

[REPLY TO "BOUNDARY WALLS."]

SIR,—The deed plans of the dwelling houses should make it clear to whom the wall referred to belongs—probably to the owner of the dwelling houses—in which case the maintenance of the wall is his responsibility, unless neglect can be proved against the local authority in the disposal of surface water that may be damaging it. If the street was raised to the position shown after the erection of the wall, then there would be a just case for a claim upon the local authorities, or whoever is responsible for the upkeep of the street. If, on the other hand, the wall was built after the street, then the onus of constructing it in a manner that would withstand the reasonable wear and tear of its position rests with the owner. Damage by individuals is also for the owner to guard against, or take action against the individual concerned. The reversal of the levels does not appear to alter the case.

As regards sketch 2, it is a little difficult to advise without having seen the site, but for such a small job it would appear advisable to carry it out in brickwork—say, six rings of blue brick in cement, the abutments being cut away and rebuilt as far as necessary. In this way the outline of the old arch might be continued, and incorporated therewith, while an entirely different system might lead to a settlement in the road surface owing to differences in vibration. "Z. X."

SIR,—The first thing to decide, in this case, is the ownership of the wall. The deed should be inspected, and if a plan is given, it might decide the point at once; otherwise, the extremities of the wall in question should be examined, which should reveal evidence of ownership. If the wall is wholly on querist's ground, he would be liable to repair; but if it should prove to be a party fence wall, the expense of repair would be shared by the parties interested. It would be a help to know who originally constructed the wall.

A. SOUTH.

Laying of Bricks.

[REPLY TO MR. W. F. KENNELLY.]

SIR,—In referring to cavity walls, I had in mind what I consider the only genuine walls of this description, viz., those with a continuous cavity. These may be said to consist of two shells, one presented to the weather, and therefore liable to be damp, and the other within it, but with a minimum of specially designed connecting ties, to be kept bone dry. It is on the dry shell that the floor timbers at least should rest, if the danger of rot is to be avoided, so that it is the inner shell that supports the greater part of the weight of the superstructure.

Any system that interrupts the continuous cavity, either with piers or with through webs in the individual blocks, I do not consider as either effective or genuine cavity work, as the cavity becomes merely a means of saving material, rather than as a weather protector.

In any case, the wall referred to showed a continuous cavity in which it would be difficult to support the floor timbers on anything but the inner shell without a big outlay in the way of leadwork which would cancel the saving that was aimed at. "TRADITION."

Composition Floors.

[REPLY TO "KERB."]

SIR,—The floor referred to needs re-surfacing, and the layers thereof should be consulted in the matter. Once the hard outer surface of these floors is gone, there is really little or no wear left in them. The probability is that in cleaning the floors a lot of water has been used—a practice against which most makers give warning. Water rots the sawdust, and the floor crumbles.

Given a good make of floor, and a liberal use of good wax polish, the composition floor of to-day should have a long life. "PAVIOR."

Clay for Bricks.

SIR,—Could you tell me where I could get clay tested for brick-making?

THOS. GERMAN.

THE BUILDING TRADE

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A., F.R.San.Inst. (Barrister-at-Law).

XIII.—VARIATIONS.—EXTRAS.—OMISSIONS.—DELAY IN COMPLETION.

VERY few works of any magnitude are carried to completion, in actual practice, without some deviation from the original plans and specification. Such variations usually include extras and omissions, and lead to questions of extra remuneration and extension of the contract period. Settlement is usually left to the final account, when, of course, the employer is inclined to concentrate on the contractor's charges for extra works, and the contractor on his loss of profit due to omissions. The office of the architect and surveyor is to see a fair and just finish.

Schedule of Prices.

The contract may state that all extra works are to be priced on the schedule of prices or at prices "analogous thereto," the latter to be decided by the architect or surveyor, who must consider fairly any arguments put forward by the contractor, make his decision, and certify accordingly.

Or, it may be left to the architect to fix a price on current rates—and in any case these must be reasonable and fair.

Contractor's Obligation or claim to Perform Extras.

In any case, a contractor is not entitled to refuse to perform extra works which are essential to the satisfactory completion of the work. But it is very usual to forestall any difficulty in this direction by defining in the contract the percentage and individual magnitude of extras and of omissions which can be ordered under the conditions of the contract, and beyond which limits, novation, or a new contract, must eventuate. This is to protect the contractor from being called upon to do a large amount of extra work at a loss; or of forfeiting an undue proportion of lucrative profits by omissions. Even an express stipulation for unlimited variations cannot operate oppressively *ad infinitum*.

On the other hand, there is no obligation on the part of the employer, unless so stipulated, to employ the general contractor to do extra works; though the latter can object to another being employed on the job, during the term of his own contract including the maintenance period, unless the employer has expressly reserved to himself the right to do so.

Written Instructions for Extra Work.

It is usually a condition that no work will be paid for as an extra except under the written order of the architect.

It would be well if, in every case of deviation or variation, a written order were first given by the architect, stating definitely if the work is extra to the contract. In this way the employer's interests are protected, and the contractor is not misled.

Where the written instruction of any agent is a condition precedent to payment, the extras so ordered must be within the scope of that agent's authority. See Forman *v.* The "Liddesdale" (1900) 69 L.J. P.C. 44.

Also the authority of the agent must be shown by the contractor seeking to recover remuneration therefor. See R. *v.* Peto (1826) 1 Y. & J. 37.

In the absence of such a stipulation, any substantial departure from the original plans and specification is a fertile cause of difficulty and dispute; and it would be better, in such an event, for all parties, that an entirely new contract be entered into. However, each party must then carefully watch his own interests, so that the new contract does not set aside his rights under the old, in any material point.

An employer is not liable for deviations involving extra work or cost, if undertaken on the contractor's own initiative. He may, however, become liable by ratifying such a deviation subsequently; but the mere taking and retaining possession of it does not render him liable to pay for it. Because, obviously, he cannot, alternatively, as in the case of a movable article, return any structure affixed to the freehold.

In a case where the contract made the written order of the architect a condition precedent to the payment for extra works, and where during construction, the employer had insisted on certain works being carried out, alleging that they were included in the contract, whilst the contractor maintained, whilst carrying them out, that they were extras and chargeable as such, and where no written order was given by the architect it was held that the arbitrator was justified in inferring an implied agreement by the employer to pay for these works as extras should he (the arbitrator) decide they were *not* included in the contract. See Molloy *v.* Liebe (1910) 102 L.T. 616 P.C.

Plant and Materials.

In general, if certain extras are found necessary for the satisfactory execution of the work contracted for in a lump sum, the contractor must perform them, and he cannot claim remuneration for the extra plant or materials. See Thorn *v.* London Corporation (1876) 1 A.C. 120.

Substitution of an Architect or Surveyor.

If, for any reason, an architect's connection with a job is severed, his successor accepts and is endowed with the full scope of responsibility and authority allotted to the original architect under the contract.

He cannot interfere with certificates or instructions already issued by his predecessor, but has full powers relating to subsequent certificates and the final settlement.

Also, if dispute arises between the two architects at the time of handing over, it would be for an agreed arbitrator to give a decision therein.

Statute of Frauds and Variations.

When a contract is in any category which the Statute of Frauds demands to be in writing, any variation must also be in writing; but similarly in any contract not so governed, variations may be carried out on verbal instructions.

Day Sheets and Extras.

In Myers *v.* Sarl (1860) 30 L.J. Q.B. 9, it was held that it is a usage of the building trade to charge these in a separate account, where they are capable of being measured.

In all the eventualities and similar disputes, an arbitrator or a jury would always consider the proportionate magnitude of any work disputed as an extra to the whole work. And it is clear that carefully prepared provisions and stipulations at the outset, followed by skilful and fair pricing, item by item, is the course most likely to reduce disputes to a minimum, and also to give least cause for anxiety to the contractor.

Date for Final Completion.

A date is usually fixed for final completion of the contractor's work, and he is entitled to the last hour of that day.

If no date is fixed, he must complete in a reasonable time, and be able to sho has used care and diligence, and s tools, etc., as are usual in simil takings.

Delay in Completion.

The condition as to the date of c with benefits or penalties agreed u be waived either expressly or imp or by the conduct of, the party enti sist on the condition; and a court will give relief to the other party on terms. The old rule that time is of t of the contract has been superseded, only where the parties have definite that time shall be of the essence of ticular contract, and where no other of the contract obviously render su dition ineffective. For example, w is also a clause providing for fines in of delay, or for extra works on wh sion of time would be claimable. then becomes evident that it is not that the work be completed at the A contract to erect a stand to view sion on a particular date would obvio time of the essence of such a contract the stand would be of no value afte cession had taken place. Also, tim of the essence of a contract when th subject to forfeiture if a building is n punctually.

Bad Weather.

Climatic conditions such as could have been foreseen and provided cannot be set up as a defence for d however, such unforeseen circumst damage by lightning or flood occur. contractor must show that he exer diligence in minimising the delay therefrom. Provision is usually ma tension of time at the discretion of tect in these events.

Otherwise, the principle holds that must perform any duty contracted any party is liable for damages ac the other party by reason of his dilat

Time is not Essential where Provisio for Delay.

It is to be noted that time ceases the essence of the contract when provisions for penalties, or liquidate for delay, or for extra works, etc., is overruled by an express condition shall not affect the stipulated dat pletion.

Town-Planning Institute.

The sixth annual country meeti Town-Planning Institute will take pla from October 9 to 12.

The following programme has been October 9: Delegates arrive. Oc Morning—Reception at the Council The President, Mr. W. T. Lancashir an address on the town-planning sch Leeds Corporation, followed by M Mattocks, who will give an address o of the joint town-planning committ noon—Visit to Middleton Housing Es road at Middleton, New-road betwe road and Gelderd-road, Ring-road fr hall-road to Swinnow-lane, Wythe Estate, Kirkstall Abbey and widening. Evening—Reception at Gallery. October 11.—Morning—Visi Newsam, then proceeding to Round after lunch proceed along the Ring Park-lane to Shadwell-lane, Ring- Harrogate-road to King-lane, th Meanwood Housing Estate to widening, and then *via* Weetwood-la Hollies," afterwards proceeding by lane to the Ring-road leading to October 12: A motor char-a-ba Bolton Abbey. October 13: Deleg

ARDEN CITIES

rden Cities and Town-Planning Asso-
netime since presented a memoran-
Garden Cities and National Housing
the Minister of Health.

norandum states that the definition
n garden city which has been adopted
sociation is: "A garden city is a
ned for healthy living and industry;
nat makes possible a full measure of
but not larger; surrounded by a
the whole of the land being in public
or held in trust for the community."
ty, therefore, is a self-contained town
: A town centre; an industrial
dential areas; a limited size; a
belt of agricultural land. It was
l element in the financial basis of a
that the land should be in public
or held in trust for the community.
l of land values which this form of
ave afforded the superior economic
f the garden city to that of all other

tion and development of garden
uired, the memorandum states, to
e scarcity of houses; supply better
tes for industry, and provide im-
ory conditions; relieve the traffic
f London and other large centres;
e of time and money due to long
and from work; bring agriculture
development into closer relation;
ntally, to provide employment.
or garden cities could be found in
cts at clear distances from large
existing small urban districts and in
there is substantial new industrial
t (*e.g.*, East Kent). In some cases
ential garden cities are required.
ing legislative provisions for the
t of garden cities have been em-
two recent Acts of Parliament;
emarked that comparatively little
has been made of them. "If the
tablishing garden cities is to be
on a considerable scale, with very
legislation, more active adminis-
the recognition of the principle of
should form a part of the Govern-
"

nite proposals to this end are put
ith regard to the initiation and
of garden city schemes, it cannot
that, except under special condi-
isolated cases, further schemes
d (at any rate, without considerable
om the Government) by small local
or by companies with a limited
ch as those responsible for the
and Welwyn schemes. The first
therefore, for securing greater
he development of garden cities
lishment of some central body
the specific duty of securing the
of garden cities. It is considered
owever, that the body should be
board or committee, partly con-
presentatives of the Ministries of
sport, Labour, and Agriculture.
the central body might be a
rporation not trading for profit.
ent of each garden city scheme,
l, would be vested in the local body
he purpose.
dered possible that a certain en-
powers of compulsory purchase of
necessary, and a Bill providing for
drafted by the Association. A
mount of capital is required for
and development of a scheme,
ted out that the experience at
ows that the capital so invested
e. Use of the Trade Facilities
nended, not merely for assisting
of capital for the schemes, but also
ufacturers to move from congested
ew centres.
nts are to be made for industry
he congested areas, the industries
ed of housing accommodation for

In conclusion, the Garden Cities and Town-Planning Association, for the reasons mentioned, urge upon Parliament the desirability of the establishment of garden cities as a permanent means of dealing with the congestion in large towns and the resulting unhealthy housing conditions and obstacles to the efficient and healthy conduct of industry. They suggest the immediate setting up of a departmental committee for the purpose of advising the Government on the methods by which the policy can be carried into effect in the most expeditious and satisfactory manner. Such a committee would consider the nature of the central committee to be set up, the kind of organisation which would be required, the method of finance, and the provision of technical advice. It is believed that the policy enunciated will meet with support from the three great political parties of the State and is pre-eminently one which at the present juncture could be carried into effect with the goodwill of all sections of the community.

WOMEN'S INTERNATIONAL HOUSING CONGRESS

The Women's International Housing Congress was held at Caxton Hall recently, when delegates from many countries, including America, Austria, Czechoslovakia, Denmark, Germany, Great Britain, Sweden, and the British Overseas Dominions were present..

The chair was taken at the opening meeting by the President, the Marchioness of Aberdeen and Temair, who said she had had ample opportunity of hearing the bitter cry that was going up from women of all civilised countries as to the inadequacy of housing accommodation, and the consequent suffering and diseases and wastage of physical, moral, and spiritual life thereby entailed. The object of the Conference was to awaken generally their responsibility and power to make both municipal and national authorities feel that such a state of things could no longer be tolerated.

A discussion on "The Duty of the State and Local Authorities in regard to Housing and Town Planning Legislation and Administration" was opened by Mrs. Porter, during which Miss Alison Garland spoke of the shortage of skilled labour and the difficulty of obtaining men to build houses. She remarked, "If you clothe me suitably I will undertake to learn bricklaying in four months."

The afternoon sitting was presided over by Mrs. George Cadbury, when "The Standards of Design and Lay-out of new Housing Schemes" was the subject for discussion. The chairman said it would be a pity if anything were done to hinder private enterprise. A village which took from fifty to two hundred years to develop was the ideal to aim at. Housing committees should try to visualise the village as it would appear when completed. The case for regional planning was overwhelming. Speaking of Bournville, there were various undertakings, separate and distinct, but all conforming to a general scheme. It was a pioneer scheme, which had helped to raise the standard all over the country; even in the smallest houses bathrooms were provided. One of the public utility societies now at work was building by direct labour and sold its houses on a deferred payment system, and about 180 houses had been erected in that way. They had always stood for a sufficient number of bedrooms, although at the present time they were building twelve two-roomed houses for young married couples, and two-roomed bungalows for single women. Half the houses on the estate were built to let.

To ensure the maximum of light and air, Mrs. Aldridge suggested a system of windows which would slide into a cavity in the wall. She urged that as an amendment to the present Housing Bill the number of houses to the acre be included, to prevent slipping back to the old state of things.

Mrs. J. R. Clynes said Oldham had the most smoke-laden atmosphere of any town. She referred to the overcrowding everywhere, and especially to one parish in Paddington, where 2,500 people lived in 140 houses, and in many cases ten to twelve in two rooms.

A resolution was passed to the effect that the Congress was emphatically of opinion that it was desirable provision should be made in the Housing Bill for limiting the number of houses per acre to twelve in urban housing schemes, to eight in rural housing schemes, and four where there was no water supply or drainage system. It further desired to protest against the limitations of the maximum measurement prescribed under the financial resolution on the Housing Bill to 950 super ft. for the building of 2,500,000 houses providing homes for 12,500,000 people, and urged all Members of Parliament, irrespective of party, to secure amendment of that provision, leaving to the local authorities the task of determining what standards could best be adopted for their areas.

"The Establishment of Garden Cities and Satellite Towns" was discussed. In the opinion of Lady Emmott, the chairman of this meeting, the importance of extending the garden city movement was shown by the decrease in the death rate owing to the improved surroundings of the children. Delegates from Russia, Sweden and Berlin told of garden cities which were springing up in their own countries, and of encouragement given to the movement by their respective governments.

Later in the day Mrs. Fairfield said that the Southgate Urban District Council had supplied materials and houses had been built by "semi-direct labour." The cost of a house with three bedrooms, living-room, and sitting-room, including cost of land and drainage, was £550.

A resolution, which welcomed the achievement of the Ministry of Health in laying a housing scheme before the country, and urged members of all parties to support the Bill and any amendments that might be introduced to secure the highest possible standard of sanitation, convenience and beauty in the homes of the nation, was carried.

"The Work of Trained Women in the sphere of House Property Management" occupied the Congress on Friday morning. Mrs. W. A. Holman (N.S. Wales), who was in the chair, said she was tired of hearing the remark that such and such a job was not suitable for a woman. The whole point was, was the woman trained for the particular job? They had reached a stage, fortunately, where training could be obtained in any particular subject, and property management afforded a fine scope for women.

At the concluding meeting, Mrs. H. R. Aldridge said it had been decided to ask local authorities in every town and district to set up special committees with the aim of creating the requisite number of skilled apprentices in training, and to bring the number of workers in the industry up to the proper level.

Prices of Building Materials.

Sir Halford Mackinder, Chairman of the Inter-Departmental Committee appointed to survey the prices of building materials, in a report for the months of July and August to the Minister of Health and the President of the Board of Trade, issued as a White Paper, states that among the changes between June and July in eight districts an advance in the price of common bricks was reported ranging from 2s. 6d. to 5s. per 1,000. There was also a general reaction in the price of lead, which increased by amounts varying between £1 and £2 per ton. As regards changes between July and August, in most districts the increase in the price of lead continued, but otherwise there was no general change to which attention need be drawn.

Takoradi Harbour.

The tender of Sir Robert McAlpine & Sons, 50, Pall-mall, has been accepted by the Colonial Office for constructing Takoradi Harbour on the West Coast of Africa. The value of the contract is stated to be approximately £1,700,000 The total cost of the entire scheme will be about £2,500,000.

NEW INVENTIONS

The Economical Use of Bricks.

ONE among the many problems standing in the way of the building of houses is the shortage of bricks. One way out of the difficulty is to avoid the use of bricks in the construction of walls, and many ways of doing this are on trial, but it is evident that although alternative methods of construction will be used, large numbers of houses will be built of brick, and therefore any method of economising their use is of importance.

In modern cottages the hollow wall method of construction has been universally adopted. The "pier" system of construction, for which the Beaverhall Colour Co., Edinburgh, holds the patent, claims to obtain the advantages of the hollow wall with a saving of 40 per cent. of the bricks and cheaper and stronger construction. In place of the usual hollow wall a single 4½ in. wall is built with piers at intervals of two brick lengths. In this method of construction no novelty is claimed. It is in the isolation from damp of the inner wall, which may consist of breeze slabs or any cheap and convenient lining material, that novelty is claimed.

At intervals in the building of the pier, in place of a half brick, a brick about an inch longer is introduced, made of breeze and cement and dipped in boiling tar. To the faces of these bricks the inner lining is attached by spikes or nails, thus completely insulating it from damp coming through the brick piers. The arrangement of two brick lengths between each pier gives a good bond, and the stretchers can be run the whole length of the wall as in the ordinary bond.

The wall only requires to be plumbed on the outside, care being taken to measure the distance from the outer face of the wall to the inner face of the breeze wherever a tar brick is inserted. A floor plate laid along the piers carries the floor joists, and should be laid on the breeze brick so as to ensure insulation from damp. When cheapness of construction is required the space occupied by doors and windows should be in units of the pier construction. One advantage of the method is that it enables a variety of inner lining to be used, thus doing away with the necessity for plastering if a panel system of inner wall slabs is preferred.

Burglar Alarm.

The British "Burglarm" Bell Knob Co. of Skinnergate, Darlington, has placed upon the market a line of door furniture for the prevention of trespass. The chief points of advantage claimed by the "Burglarm" patents are :—

(1) The bell push is contained in the door knob; (2) using of letter box automatically rings the bell—no more delayed letters and papers; (3) turning of knob right or left gives warning of attempted entrance—this latter control can be switched on or off from inside door.

This new door furniture is in much demand for new houses, and the fact that it is simple and easy to fix to existing bell wires lends support to the claims of the patentee (Mr. A. E. Oates, of Darlington), for its widespread use for banks, offices, stores, hotels, &c.

Woodworking Machinery.

We have received from Messrs. A. Ransome & Co., particulars of a new registering and copying device for mortising and boring. It can be attached to any mortising and boring machine, which obviates the old method of setting out the mortises and holes on each individual piece of work. The device consists of a horizontal rod carrying two or more holders fitted with the registering pointers which can be instantly turned up out of the way when required. These are adjustable into any required position. The horizontal rod is kept in position by a spring in a vertical post which is adjustable in a socket on the end of a rod held in a lug screwed to the side of the machine or any other convenient position.



New Method of Wall Construction.

THE HOUSES OF WORKERS

THE aim of this book is to presen
author was for nearly two years on
Commissioner's staff at Birmingha
justifiable assumption is made th
counties of which Birmingham was
trative centre can illustrate every
housing problem. It is certainly tr
solution could be found for these fi
the solution for the remainder of
would be at hand. The author
position as it was in 1919, and discus
the Housing Act of that year and
Acts have helped to ease the sh
examines how much now remains
But we are not only presented wit
some of the inferences drawn are a
indisputable. For example, on pa
read :—"The Ministry seems, in 19
possessed ideals, but little business
practical experience in building. T
generally seem to have possessed few
plenty of business ability and exper
result was that, at the end of the fir
Ministry could not show that they hac
the goods.'" Is it suggested that "
might have been delivered if the M
possessed no ideals? The one seri
in this book is the omission of any
ideals or architectural standard.
said that where there is no standard
housing problem. Standard does n
consist only of converting privies or
continuing the erection of back ext
demands the co-operation of bu
idealism; it means that the attrib
two must be found in everyone con
housing. Merely to abolish materia
to substitute machine-made stuff
from those evils is not enough. Eve
condemned house might be abolished
of "up-to-date" houses might be
without making our towns fit for the h
intelligent beings. The author is evid
suspicious of idealism and refers to "
results produced (in the Government
trying to run idealists and 'busin
double harness—the former in blink
latter without." One hardly likes
plate what the Addison scheme woul
like if it had been carried out entir
without blinkers. The only real n
now generally attributed to those 17
is that they introduced a new ideal.
is bound up and practically limite
the actual accommodation provided
small in comparison to the need. W
the accusation in chapter XX to th
the only department of the work i
with the Addison scheme over
Ministry exercised no supervision w
been the management of the house
were built, but it is not even now
local authorities to interest themse
important duty. Mr. J. A. Roseveai
a valuable chapter on the recent p
the conclusion tabulates some "
local authorities which might well h
a warning against the disfigureme
from building houses to the designs
tary inspector or the office boy.
concludes with three appendi
bibliography.

*"The Houses of the Workers." Edited by John A. Rosevear, F.S.I., w
buted Chapter XIX. (T. Fisher Unwin.
12s. 6d. net.

THE FACTORIES BILL

Factories Bill is a very comprehensive containing 143 clauses and four es; it repeals the Factories and Work- Act, 1901, and other Acts relating to and workshops and employment, erefore, is a consolidating Bill. We he late Government had in preparation aling with this subject, but we cannot much of the Bill introduced is the the present Government, or what have simply been adapted from any t by their predecessors.

ill deals in Part I with Health, in Part II fety, in Part III with Welfare. Part IV special provisions relating to all the ove headings; Part V deals with the ion and Investigation of Accidents lustrial Diseases; Part VI with the ment of Women, Young Persons and ; Part VII with special applications ensions; Part VIII with Home Work; with Piece-work and Wages; Part X, neous; Part XI, Administration; Part alties and Legal proceedings; Part XIII, tations; and Part XIV, Supplementary. of this description, which are amending, s consolidating Bills, it is a great con- when a marginal reference is given to ontained in existing statutes, as by that he new can be distinguished from the lation, but the Bill before us gives no istance, and as it repeals many Acts nds others (13 statutes are contained ird Schedule as thus affected), it would ult without exhaustive research to e precisely what are the new provisions d in the Bill. We are confining our- erefore to a brief notice of the Bill. provides, "Except where the contrary appears, the provisions of this Act ply to all factories, as defined by this nd considering the meticulous and legislation contained in this Bill. produced from other Acts, or introduced Bill, it would appear very important ecise definition should be given of what tory. We, therefore, turn to clause 136, I, "Interpretations," to ascertain what ctory."

as we can see, the distinction contained Act of 1901 between "textile" and xtile" factories has been abolished, old definition commenced by defining " and "non-textile" factories, and then that the word "factory" should ither of those descriptions of factories. nition in this Bill commences with what only of the paragraphs which formed the definition of a non-textile factory n 149, sub-section (1) (c) of the Act of ghtly amended. It provides, "Subject ovisions of this section, the expression includes any premises or place where- thin the close or curtilage or precincts , any person is employed in manual way of trade, or for purposes of gain, ntal to, any of the following purposes: (1) the making of any article, or of any article; (2) the altering, ornamenting, finishing, cleaning or or the breaking up or demolition rticle; or (3) the adapting for sale rticle; and to or over which pre- place the employer of the persons therein has the right of access or In the Act of 1901, this paragraph ly to premises wherein, or within the urtilage or precincts of which, steam, other mechanical power was used in e manufacturing process carried on he Bill then provides that "the ex- 'factory' also includes (without to the generality of the foregoing). under eight headings, certain pre- which specified processes are carried

s we can see at present, this definition e careful scrutiny when the Bill comes to be considered, for at first sight it appears far less definite than the definitions contained in the Act of 1901. That Act proceeded in section 149 in first defining "textile" factories where steam, water, or other mechanical power was used in certain defined processes. Then, "non-textile" factories were defined by reference (1) to certain places and processes named in the schedules, and (2) certain other premises and processes set out in the schedule, where mechanical power was used; then followed the more general provision set out above, which, as slightly amended, forms the leading definition in the Bill; but in the Act the operation of that provision was limited, as it applied only to premises where steam, water or other mechanical power was used; a limitation which does not appear in the Bill, but for which is substituted the limitation, "and to or over which premises or place the employer of the persons employed therein has the right of access or control."

To make the point clear, the present definition in this Bill of a "factory" includes "any premises or place wherein, or within the close, or curtilage, or precincts of which any person is employed in manual labour by way of trade, or for purposes of gain in, or incidental to, any of the following processes: (1) the making of any article or of part of any article, (2) the altering, repairing, ornamenting, finishing, cleaning or washing or the breaking up, or demolition of any article, (3) the adapting for sale of any article," and the only qualification is that the premises or place must be premises "to or over which the employer of the persons employed therein has the right of access or control." With the absence of the qualifications of the use of mechanical power on the premises, and exact definition of processes such as was contained in the Act of 1901, it appears to us that the question which will arise under this Bill is not "what is a factory?" but "what is not a factory?"

The definition is not confined to this clause, for, as we have shown above, in other sub-headings certain places and processes are set out which are to be included in the expression "factory," and then follow six clauses, some of which extend the operation of the definition, as, for instance, clause (2), which applies the Act to workplaces in which, with the permission of, or under agreement with, the owner or occupier, two or more persons carry on any work which would constitute the workplace a factory if the persons working therein were in the employment of the owner or occupier, and clause (5) which provides that a place or premises shall not be excluded from the definition of a factory by reason only that the place or premises are in the open air.

This question of definition affects the reasonableness, or the unreasonableness, of the whole Bill, for although the provisions it contains can reasonably be applied in large undertakings where machinery is employed and large numbers of workpeople are employed without seriously affecting the cost of production, that is not the case if they are applied to very small undertakings of what may be termed quite a homely nature where also they are not so necessary. Some clauses, it is true, are made only to apply where a certain number of workpeople are employed on the premises, but there are a great many provisions where no such qualifications occur, and thus, if we have read the definitions correctly, the provisions of this Bill will apply to small workshops where only a very few hands are employed on quite safe operations. The omission from the definition of the use of mechanical power, which, except in the case of certain processes or industries carefully prescribed, was contained in the Act of 1901, widens the scope of the Bill enormously; we do not propose to consider the Bill in detail in this first notice, but we may point out that building and engineering works are dealt with in clause 99, and the effect of that clause is as follows: The following provisions are to apply "to building operations and engineering works undertaken by way of trade or business, and to any line or siding which is used in connection therewith and is not part of a railway, subject to the modifications which are contained in this clause": (a) The provisions of Part I with respect to sanitary conveniences, (b) The provisions of Part II ("Safety") excepting those relating to vessels containing dangerous liquids, maintenance of passages and stairs, work in places where injurious fumes are liable to accumulate, steam receivers, compressed air receivers, self-acting machines, means of escape in case of fire, regulations as to means of escape from fire, and safety provisions in case of fire. (c) The provisions of Part III with respect to regulations for first aid and welfare orders. (d) The provisions of Part IV with respect to the regulations for safety and health. (e) Part V, that is, Notification and Investigation of Accidents and Industrial Diseases. (f) The provisions of Part IX with respect to weights and measures and weighing and measuring instruments used in ascertaining wages. (g) The provisions of Part X with respect to affixing an abstract, general registers, and duties of persons employed. (h) The provisions of Part XI with respect to the powers and duties of inspectors. (i) Part XII, that is, Penalties and Legal Proceedings. By subclause (2) The Notices of Accidents Act, 1894, shall not apply in the case of any accident in respect of which notice is required to be given under this clause, and if any question arises as to whether the notice ought to be given under that Act, or this Bill, the question shall be finally determined by the Secretary of State.

Under subclause (3) the provisions of this Bill in their application to "building operations and engineering works shall have effect as if reference to any place where the operations, or works, are carried on were substituted for references to factories, and references to the persons undertaking by way of their trade or business such operations and works were substituted for references to the occupier of a factory, and with such other necessary adaptations as may be prescribed: Provided that such of the provisions of this Bill as require general registers to be kept, and copies of the prescribed abstract and regulations to be kept posted up on the premises, shall be deemed to be complied with if the general register is kept at an office of the person undertaking the operations, or works, and copies of the abstract and regulations are kept posted up at each office, yard, or shop of the person undertaking the operations, or works, at which persons employed by him on the operations or works attend, and in a position where they can easily be read by such persons."

The provisions contained in this clause will require detailed examination in a subsequent article if the Bill proceeds. The corresponding section in the Act of 1901 relating to Buildings was section 105, and in that section the provisions of the Act only applied to premises on which machinery worked by steam, water, or other mechanical power was temporarily used for the purpose of the construction of a building, or any structural work in connection with a building, and to buildings exceeding a certain height.

By clause 137 "Building operation" means the construction, repair or alteration of a building, and the preparation for, and laying the foundation of, an intended building, but does not include any operation which is an "engineering work" within the meaning of the Bill.

"Engineering work" "means the construction of a railway, tramroad or tramway, and the construction, repair, or alteration of any harbour, dock, pier, inland navigation, tunnel, bridge, viaduct, sewer, gas work, water work, or other work authorised by any special Act or order having the force of an Act."

The above is only a very brief review of some of the provisions of this Bill, as there seems little prospect of its being proceeded with in the near future, but we may take this opportunity of expressing one warning as to all legislation of this character which aims at securing ideal conditions in the abstract, but is apt to overlook the general conditions under which trade has to be

carried on in the keenest competition with foreign markets.

The extension of what may be necessary protective legislation in large works, or in works where dangerous operations are carried out, is prohibitive to industry if unnecessarily extended to small undertakings and where safe operations alone are undertaken. Large works with considerable output may be able to bear the burden of increased expenditure made necessary by legislation, but to small undertakings such expenditure may well prove a prohibitive tax on home undertakings in the foreigners' favour. In all cases it increases the cost of production here, and the legislator's task is to discover the happy mean.

NEW BUILDINGS IN LONDON

Spring Gardens.—ART GALLERY.—The old County Hall in Spring Gardens will shortly be opened as an art gallery. The building is being converted at an approximate cost of £10,000. There is a circular hall, until two years ago the Council Chamber of the L.C.C., with a lofty ornamented roof. Opening out of the Council Chamber are smaller galleries, and altogether it is estimated that there will be accommodation for the hanging of about 500 or 600 pictures. In the outer galleries alterations are being made to give effect to the latest system of "top side" lighting. The old roofs are being removed, and these portions of the building are being rebuilt. Each outer gallery has had a new roof specially designed to suit its aspect and dimensions. The builders are Messrs. C. P. Roberts & Co., Ltd. The architects are Messrs. W. E. Riley and E. B. Glandfield, FF.R.I.B.A.

Paddington.—CEMETERY.—The Paddington Cemetery Committee recommend the Council to give authority for the purchase of Red Hill Farm, Edgware, at a cost of £24,500, for use as a cemetery. In their report, the committee state the approximate distance of the site from the nearest part of the borough is 5¼ miles by road. The committee estimate that expenses in connection with the purchase, erection of buildings, making of roads and paths, drainage, &c., will amount to £26,625, making the total cost of the proposed new cemetery, £74,252.

HOURS OF LABOUR IN THE BUILDING INDUSTRY

THE National Joint Emergency Committee of the building industry recently met in London with reference to the question of working hours in London. The official account of the negotiations states:—

A National Joint Emergency Commission, representative of the National Allied Building Trade Employers and the National Federation of Building Trade Operatives, was held in London, when the following decision was arrived at in reference to the summer working hours in the London district:

"This Commission, having considered the present difficulties on the application of the working rule agreement *re* hours of labour in the summer period in the London region, and having regard to the fact that meetings have been held in accordance with the provisions of the document of June 16 and no mutual agreement arrived at to depart from Clause 1 of the national working rule agreement, it is understood that the working hours in London during summer time shall be 46½, as provided for in the said working rule agreement, and the differences existing with regard to the method of working the 46½ hour week should be settled immediately and the same put into operation forthwith. In the event of these conditions being carried out the local inquiry and negotiation provided for in Clause 5 of the terms of settlement of the recent dispute to be proceeded with at once."

This report was signed on behalf of the employers by Mr. A. J. Forsdike and Mr. F. A. Wall, and on behalf of the operatives by Mr. Thomas Barron and Mr. R. Coppock.

RATES OF WAGES IN THE BUILDING TRA

The following are the rates of wages in the building trade in England and Wales. endeavour is made to ensure accuracy, but we cannot be responsible for errors that may oc

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 453.

CONTRACTS, COMPETITIONS, &c.

contracts still open, but not included in this List, see previous issues. Those with an asterisk ed in this number. Certain conditions beyond those given in the following information in some cases, such as that advertisers do not bind themselves to accept the lowest or any t a fair wages clause shall be observed; that no allowance will be made for tenders; and s are returned on receipt of a bona-fide tender unless stated to the contrary.

given at the commencement of each paragraph is the latest date when the tender, or the names ng to submit tenders, may be sent in; the name and address at the end is the person from whom re quantities, forms of tender, &c., may be obtained.

DING AND PAINTING.

20.—**Dewsbury.**—MORTUARY.—For the ortuary at Whitley Grange Hospital, for H. Dearden, Borough Engineer, Town y.

20.—**Earlsheaton.**—SHED.—For various tion of shed, Providence Mills, Earls- rs. Holtom & Fox, architects, Corpora- wsbury.

20.—**Friern Barnet, London, N.11.**— ction of 32 houses for the Friern Barnet . P. Kindell, Engineer and Surveyor to uncil Offices, The Priory, Friern Barnet- rnet, N.11. Deposit £2 2s.

20.—**London, W.7.**—DEAL FLOORING.— laying a new deal floor for the Dining trai London District School, Greenford- ll, W.7. Mr. George P. Morrell, Clerk to Central London District School, Green- anwell, W.7.

20.— **Warwick.**— HOUSES.—Erection 2 parlour and 9 non-parlour type) upon site, Warwick, for the Warwick T.C. s P. Trepess & Son, 1, Church-street, posit £1 1s.

22.—**Aberdeen.**—HOUSES.—Erection of ses. Director of Housing, Town House,

22.—**Barnsley.**—PAINTING.—For paint- ting the administrative block and long tendray Hospital, for the T.C. Borough field House Offices, Barnsley.

22.—**Bristol.**—SUB-STATION.—Construc- nderground sub-station at University he T.C. Mr. H. Faraday Proctor, Chief General Manager, The Exchange, Corn- Deposit £2 2s.

22.—**Carlisle.**—VARIOUS WORKS.—For rks in connection with the annexe to he observation wards at Fusehill Insti- B.G. Superintendent, Fusehill Insti-

22.—**Carlisle.**—VARIOUS WORKS.—For rks in connection with a verandah to foundations already provided, at the Nursery, at Fusehill Institution. Fusehill Institution.

22.— **Crowmarsh.**—HOUSES.—For the houses at South Stoke, for the Crow- Messrs. J. G. T. West & Son, Abingdon.

2.—**Cudworth.**—OFFICES.—For the erec- for yardmaster, &c., at Cudworth, for orth Eastern Railway Co. Mr. Stephen itect, N.E. Area, at York.

22.—**Glasgow.**—HOUSES.—For the equired in connection with the erection en's houses at Robroyston Hospital, Office of Public Works, 64, Cochrane-

2.—**Kent.**—PAINTING.—Outside paint- tions at Canterbury, Malling, Knock- Sevenoaks, and Tonbridge, for Kent Committee. County Architect, 86, idstone.

2 AND 23.—**Leeds.**—PAINTING.—For t-iron fencing and cottage property ommittee), and wrought-iron fencing Parks Committee), for the T.C. Mr. e. City Engineer, Municipal Buildings,

22. — **Leek.** — HOUSES.—Erection of rious blocks on the Housing Estate ek, for the Leek U.D.C. Mr. W. E. or to the Council, Town Hall, Leek.

.—**Lichfield.**—HOUSES.—For the erec- -parlour type houses with works of er main, for the T.C. City Surveyor, F.S.I., Guildhall, Lichfield. Deposit

2.—**Northampton.**— HOUSES.— Erec- B3 (parlour) and 16 A3 (non-parlour) ington Lodge Farm Estate, for the n-Planning Committee of the County hampton. Mr. Alfred Fidler, M.Inst. Engineer, Guildhall, Northampton. d cheques made payable to "North- ion").

—**Nottingham.**—PAINTING.—For in- and painting at Pumping Station, the T.C. City Engineer's Depart- Nottingham. Deposit £1.

—**Plymouth.**—PAINTING.—For ex- houses in the new estates at Mount for the T.C. Mr. J. Wibberley, r and Surveyor, Municipal Offices, sit £2 2s.

— **Pontypridd.**— SCHOOLROOM.—For schoolroom, and the renovation of apel, Pontypridd. Messrs. Thomas ers, architects and surveyors, Ponty- £2 2s.

—**Shilbottle.**—SCHOOL.—For a new Shilbottle Colliery to accommodate he County of Northumberland E.C. irector of Education, The Moot Hall, yne. Deposit £2 2s.

SEPTEMBER 22.—**Steyning.**—PAINTING, &C.—For painting, road tarring and other work at the Poor Law Institution, Shoreham-by-Sea, for the B.G. Mr. T. A. Brooks, Surveyor.

SEPTEMBER 22.—**Warrington.**—RETAINING WALL.—For the construction of a piled retaining wall in reinforced concrete about 700 ft. long alongside Knutsford-road and on the bank of the River Mersey, for the T.C. Mr. H. W. Fitzsimons, 39, Victoria-street, Westminster, S.W.1. Deposit £3 3s.

SEPTEMBER 23.—**Caerleon.**—PAINTING. — External painting of part of Newport Mental Hospital, Caerleon, Mon. for Visiting Committee. Clerk and Steward at the Hospital.

SEPTEMBER 23.—**Chesterfield.**—CONVENIENCE.—For the erection of underground conveniences in Newsquare, for the T.C. Mr. Vincent Smith, Borough Engineer, Chesterfield.

SEPTEMBER 23.—**Huddersfield.**—HOUSE.—Erection of house in Butternab-road, Beaumont Park, Huddersfield. Messrs. Lunn & Kaye, architects and surveyors, Milnsbridge.

SEPTEMBER 23.—**Leeds.**—PAVILION.—Extension to pavilion at Municipal Golf Course, Roundhay, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings, Leeds.

SEPTEMBER 23.—**London, S.W.**—FOUNDATIONS.—Construction of foundations for five blocks of dwellings on the East Hill Estate, Wandsworth, for the L.C.C. The Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £1 1s., payable to the Cashier.

SEPTEMBER 23.—**Plymouth.**—PAINTING AND REPAIRS.—For painting, alterations and repairs at No. 1, Providence-street, for the T.C. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth.

SEPTEMBER 23.—**Portsmouth.**—Extension of Employment Exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 23.—**West Cornforth.**—SCHOOL.—Erection of West Cornforth new Infants' Council School, for Durham C.C. Mr. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

SEPTEMBER 24.—**Doncaster.**—HOUSES.—For the erection of 400 houses, for the T.C. Mr. R. E. Ford, Housing Surveyor, 3, Priory-place, Doncaster.

SEPTEMBER 24. — **Folkestone.** — ADDITIONS. — For additions to the Corporation Offices, at 11, Church-street, for the T.C. Mr. A. E. Nichols, Borough Engineer, Corporation Offices, Folkestone. Deposit £2 2s.

SEPTEMBER 24.—**Huddersfield.** — PAINTING. — For painting and decorating Almondbury Branch Library, for the T.C. Mr. F. C. Cole, Librarian and Curator, Public Library Church-street, Huddersfield.

SEPTEMBER 24.—**Little Downham.**—PUMPING STATION.—Construction of a pumping station and laying pump delivery pipes at the Hundred-foot Pumping Station, Little Downham, Isle of Ely, for the Commissioners for the Littleport and Downham Drainage District. Mr. E. J. Silcock, Commissioners' Engineer, 25, Victoria-street, Westminster; and 10, Park-row, Leeds. Deposit £5.

SEPTEMBER 24.—**Manchester.**—Extension of Employment Exchange, Aytoun-street, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 24.—**Plymouth.**—SUB-STATION.—Erection of an electric sub-station at Pasley-street, Devonport, for the T.C. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth. Deposit £1 1s.

SEPTEMBER 24. — **Rochdale.**—PAINTING.—External painting work on 118 houses on Ivor-street and Kilworth-street Estates, for the T.C. Borough Surveyor, Town Hall, Rochdale.

SEPTEMBER 25.—**Glasgow.**—VARIOUS WORKS.—For the various builders' works and iron railings and gates in connection with the erection of (1) 55 tenements and (2) 59 blocks of houses proposed to be erected at Possil. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow.

SEPTEMBER 25.—**Newmarket (Kilkenny).**—SCHOOL.—Erection and furnishing of National School, for Commissioners of Public Works. Parochial House, Newmarket, Ireland.

SEPTEMBER 25.—**Nottingham.**—REPAIRS.—For repairs and leadwork to skylights at the Castle Museum, for the City Council. City Engineer's Department, Guildhall, Nottingham. Deposit £1 1s.

SEPTEMBER 25.—**Pantynawel.**—HOUSES.—Erection of 20 houses at Pantynawel, Blackmill, together with the construction of roads and sewers in connection therewith, for the Ogmore and Garw U.D.C. Mr. W. T. Ollivant Jones, Engineer and Surveyor, Council Offices, Brynmenyn. Deposit £2 2s.

SEPTEMBER 26.—**Bridlington.**—ALTERATIONS.—Extensions and alterations to Masonic Hall, Bridlington. Mr. J. R. Earnshaw, Architect and Surveyor, Cliff-street Chambers, Bridlington. Deposit £2 2s.

SEPTEMBER 26.—**Haverfordwest.**—NEW LABORATORY.—For erecting, for the Pembrokeshire E.C., at Haverfordswest Grammar School, a new physics laboratory, &c. Mr. Owain T. Thomas, County Architect, County Council Offices, Haverfordwest. Deposit £1.

SEPTEMBER 26.—**London, S.E.1.**—POLISHED PLATE GLASS.—Polished plate glass required by the Director-General, India Store Department, Branch No. 58, Belvedere-road, Lambeth, S.E.1. Tender forms obtainable from above.

SEPTEMBER 26.—**Neath.**—HOUSES AND SEWERS.—Erection of 50 houses (parlour type) on the Brynhyfryd-road (North) site, Briton Ferry, also for stoneware pipe sewers in connection with the above. Borough Engineer, Gwyn Hall, Neath. Deposit £3 3s.

SEPTEMBER 26.—**Sandwich.**—HOUSES.—Erection of 20 parlour type houses, for the T.C. Mr. R. Saunders, Borough Surveyor, Sandwich. Deposit £3.

SEPTEMBER 26.—**Tully.**—SCHOOL EXTENSIONS.—For extensions to Tully National School, for Commissioners of Public Works. District Office of Works, Galway, Ireland.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plas-terers' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/7½	1/8	1/7½	1/9	1/7	1/7	1/6	1/- to 1/3½	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 452

SEPTEMBER 27.—**Barry.**—HOSPITAL ADDITIONS.—Erection of additions and sundry works at the General Accident and Surgical Hospital, Barry Docks. Mr. J. C. Pardoe, A.M.I.C.E., Surveyor, Council Offices, Holton-road, Barry. Deposit £2 2s.

✱SEPTEMBER 27.—**Edgware.**—FENCING.—(*a*) Erection of a fence wall on the western boundary of land in North-road, Edgware, 7 ft. high and 120 ft. long; (*b*) supply and erection of about 366 yds. run of unclimbable iron fencing, &c., on land adjoining Children's Hospital, Edgware, for the Guardians of the Edgware Union. Mr. C. W. Wyles, Clerk to the Guardians, Union Offices, Edgware, between 10 a.m. and 4 p.m.

✱SEPTEMBER 27.—**West Ham, E.15.**—SCHOOL: Erection of a secondary school on a site at Cumberland-road, Plaistow, for the E.C. of the County Borough of West Ham. Mr. John H. Jacques, Lic.R.I.B.A., Architect to the Committee, 61, West Ham-lane, Stratford, E.15. Deposit £2.

SEPTEMBER 29.—**Dublin.**—CONVERSION.—Conversion of Block N at Keogh (late Richmond) Barracks into 60 flats; and (*b*) of blocks F and J at the same Barracks into 36 flats, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin.

SEPTEMBER 29.—**Dumfries.**—POST OFFICE.—For erection of a new Post Office, &c., at Dumfries, for H.M. Office of Works. Architect, H.M. Office of Works, 4-5, Drumsheugh-gardens, Edinburgh. Deposit £1 1s.

SEPTEMBER 29. — **Leicester.** — PUMPING STATION EXTENSIONS.—For the extensions of the Abbey Pumping Station, engine house, pump basement, &c., for the T.C. Mr. E. G. Mawbey, City Engineer, Town Hall, Leicester.

SEPTEMBER 29.—**Morley.**—HOUSES.—Erection of 22 houses on the Middleton-road Housing Estate, for the T.C. Borough Engineer, Town Hall, Morley. Deposit £2 2s.

SEPTEMBER 29. — **Morley.** — PLASTERING.—Labour and materials required in connection with the plasterers' work only for 26 houses, on Middleton Housing Site, for the T.C. Borough Engineer, Town Hall, Morley. Deposit £2 2s.

SEPTEMBER 29.—**Staines.**—COTTAGES, DRAINS, &C.—Erection of two five-roomed cottages of similar design with the construction of the necessary drains, &c., at Littleton Reservoir Works, both in the parish of Laleham, near Staines; also for the construction near one of the cottages of the superstructure only of a house (approximately 28 ft. by 14 ft. by 13 ft. high to roof plate) for containing venturi meter recorders for the Metropolitan Water Board. Office of the Board, Chief Engineer's Department (Room 201), New River Head, Rosebery-avenue, Clerkenwell, E.C.1. Deposit £5.

✱SEPTEMBER 29.—**Worthing.**—PIER PAVILION, RECONSTRUCTION OF THE PARADE BANDSTAND.—(A) New pier pavilion, consisting of light steel-frame and reinforced concrete building on screw piling, with small extension of entrance to pier to provide seating accommodation for about 1,200 people (Contract No. 1); and (B) The reconstruction of the parade bandstand enclosure, consisting of a light steel and reinforced concrete structure and screw pile foundation to provide seating accommodation for about 2,200 people (Contract No. 2), for the Corporation of Worthing. Borough Surveyor's Office, Municipal Offices, Tudor Lodge, Chapel-road, Worthing. Deposit £3 3s.

SEPTEMBER 30.—**Barry.**—READING-ROOM.—For the erection of a branch reading-room at Barry Island, for the U.D.C. Mr. E. R. Hinchsliff, F.S.I., Public Offices, Barry. Deposit £1 1s.

SEPTEMBER 30.—**Carlisle.**—OFFICE, &C.—Erection of office and lavatory accommodation, open shed, mess room and store, at Public Slaughter Houses, for the T.C. Mr. Henry C. Marks, M.Inst.C.E., City Engineer, 18, Fisher-street, Carlisle.

SEPTEMBER 30.—**Coventry.**—PAINTING, &C.—For the external painting on the housing estates, Radford-road, London-road, and Gorton-road, for the Commissioners of H.M. Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

SEPTEMBER 30.—**Maidenhead.**—HOME.—For the erection of a children's home at Cannon Court-lane, Furze Platt, near Maidenhead, for the Board of Guardians. Messrs. Albury, Rising & Morgan, 154, Friar-street, Reading. Deposit £1 1s.

SEPTEMBER 30.—**Saffron Walden.**—LAUNDRY EXTENSION, &C.—For the extensions to laundry and other sundry works at Saffron Walden Hospital. Messrs. Pick, Everard, Keay & Gimson, architects, 6, Millstone-lane, Leicester.

OCTOBER 1.—**Blackwell.**—HOUSES.—Erection of 20 parlour and 20 non-parlour type houses, for the R.D.C. Mr. A. H. Elliott, A.M.Inst.C.E., architect, 8, Union-street, Mansfield. Deposit £2.

OCTOBER 1.—**Burnley.**—TELEPHONE EXCHANGE.—For the erection of telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

✱OCTOBER 1.—**East Ham, E.6.**—FEEDING CENTRE.—Erection of a feeding centre on the school site in Dersingham-avenue, Manor Park, for the E.C. of the County Borough of East Ham. Borough Engineer, Town Hall, East Ham, E.6. Deposit £3.

OCTOBER 1. — **London, N.1.** — ALTERATIONS AND ADDITIONS.—Alterations and additions at the Electricity Station, Eden-grove, Islington, N., and for alterations and conversion into offices and garage of No. 2, Burnard-place, Eden-grove, Holloway-road, Islington, N.7, for the Metropolitan Borough of Islington. Mr. C. G. E. Fletcher, Town Clerk, Municipal Offices, Tyndale-place, Upper-street, N.1.

OCTOBER 2. — **Fulham.** — REPAIRS.—Execution of building and guttering repairs, pointing, &c., at the Infirmary, St. Dunstan's-road, for the B.G. Mr. E. J. Mott, Clerk to the Guardians, 129, Fulham Palace-road, London, W.6.

✱OCTOBER 3.—**London, E.1.**—STORES.—Erection of new central stores in the forecourt at the Royal Mint, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

OCTOBER 3.—**Long Eaton.**—HOUSES.—Erection of 54 non-parlour houses, for the Long Eaton U.D.C. Mr. H. Raven, C.E., Architect, The Hall, Long Eaton. Deposit £5 5s.

✱OCTOBER 4.—**London, S.W.1.**—DEMOLITION.—For demolition of temporary buildings at the War Office, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

OCTOBER 6.—**Barnsley.**—PAINTING.—For painting the railings and gates to St. Mary's Churchyard. Borough Engineer, Fairfield House Offices, Barnsley.

OCTOBER 6.—**Thundersley.**—SCHOOL.—For extensions to Thundersley Council School, for the Essex C.C. County Architect, Old Court, Springfield, Chelmsford. Deposit £1 1s.

OCTOBER 6.—**Warrenpoint (Ireland).**—HOUSES.—For the erection of 10 workmen's dwellings, for the U.D.C. Mr. S. J. M'Avoy, M.R.I.A.I., 66, University-avenue, Belfast.

✱OCTOBER 7.—**Evesham.**—POST OFFICE.—For the erection of a P.O. at Evesham, Worcestershire, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

OCTOBER 7. — **Nuneaton.** — BAKERY. — Erection of bakery buildings, for the Nuneaton Co-operative Society, Ltd. Mr. W. F. Edwards, architect, 1, Newhall-street, Birmingham. Deposit £1 1s.

✱OCTOBER 8.—**Bath.**—POST OFFICE, &C.—For the erection of a P.O. and telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

✱OCTOBER 9.—**Farnworth, near Bolton.**—ALTERATIONS.—For alterations (to form a telephone exchange), for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

✱OCTOBER 10.—**London, S.E.9.**—PAINTING.—For external painting, &c., at the Well Hall Estate, Eltham, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

OCTOBER 14. — **Guernsey.** — HOUSES.—Erection of 40 houses in Collings-road, and 10 or 12 houses at Sausmarez Mill, St. Martin's, for the States Committee for Homes for Workers, States of Guernsey. States Office, Guernsey, or at the office of Mr. Sydney Newcombe, architect, Greve d'Azette, Jersey.

NO DATE.—**Bonnybridge.**—PAINTING.—For painter work on pithead frame and buildings. Messrs. John G. Stein & Co., Ltd., Castlecary Works, Bonnybridge.

NO DATE.—**Buxton.**—SHOPS.—Erection of new branch premises at Byron-street, Buxton, for Whaley Bridge and Buxton Co-operative Society, Ltd. Architect's Dept., Co-operative Wholesale Society, Ltd., 1, Balloon-street, Manchester. Deposit £1 1s.

NO DATE.—**Clacton-on-Sea.**—HOUSES.—Erection of a pair of houses, Freeland-road. Mr. Sydney Albert Roper, Arlington House, Westerfield-road, Ipswich. Deposit £2.

✱NO DATE.—**Hendon.**—SHOPS.—Erection of a block of seven shops with houses, at Hendon. Messrs. D. Morris & Sons, 91, Moorgate, E.C.2.

NO DATE.—**Highburton.**—WAREHOUSE.—Erection of a stone-built warehouse, for the Highburton Industrial and Provident Society. Co-operative Wholesale Society, Ltd., Architect's Department, Manchester.

NO DATE.—**Liversedge.**—HOUSES.—For all or single trades for the erection of three blocks of semi-detached houses and one block of six houses, in Liversedge. Mr. Burrows, architect, Birstall, near Leeds.

FURNITURE, MATERIALS, etc.

SEPTEMBER 20.—**Stafford.**—MATERIALS.—Supply of stores and materials for six months, to the T.C. Mr. W. Plant, Surveyor, Stafford.

SEPTEMBER 22.—**Escrick.**—WHINSTONE, &C.—Supply of best Whinstone, limestone, slag, and tar, for the R.D.C. Mr. J. R. Hudson, Highway Surveyor, Wheldrake, York.

SEPTEMBER 22.—**Islington.**—GRANITE.—For the supply of 650 tons of granite or slag tarmacadam, for the B.C. Borough Engineer, Municipal Offices, Tyndale-place, N.1.

SEPTEMBER 22.—**Leek.**—SUPPLIES.—Supply of flags, kerbs, channels and setts, macadam stone and chippings, Portland cement, sanitary pipes, &c., for the U.D.C. Mr. W. E. Beacham, Engineer and Surveyor, Town Hall, Leek.

SEPTEMBER 22.—**Westminster.**—WOOD BLOCKS, &C.—Supply of cement, sewerage and drainage (minor works), and wood paving blocks, for the C.C. Mr. John Hunt, Town Clerk, Westminster City Hall, W.C.2.

SEPTEMBER 22.—**Wycombe.**—LIMESTONE.—Supply of limestone, for the R.D.C. Mr. A. L. Grant, Council's Surveyor, 15, High-street, High Wycombe.

SEPTEMBER 24.—**Kettering.**—CONCRETE KERBING.—Supply of about 18,000 yds. lineal of concrete kerbing. Mr. T. Reader Smith, Surveyor to the Council, Market-place, Kettering.

SEPTEMBER 25.—**Dublin.**—BUILDING MATERIALS.—For building works and supplies in the Dublin district for alternative periods of six and twelve months, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Dublin. Deposit £1.

SEPTEMBER 26.—**Plymouth.**—SAND.—Supply of clean sharp sand, clean sharp gravel, clean limestone rubble, suitable for concrete. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth.

SEPTEMBER 27.—**Bexley.**—KERB,—1,980 ft. run of 12 in. × 8 in. dressed s kerb. Mr. W. T. Howse, Surveyor, Bexley Heath.

SEPTEMBER 27. — **Bucklow.** — GRA Supply of granite setts, broken granite, ta chippings, slag, and cinders, for the R.D Cordon, Surveyor, 25, Station-building

SEPTEMBER 29.—**Loughton.**—GRANITE —For 1,500 tons of railborne granit 500 yds. of hoggin, for the U.D.C. Mr. Surveyor, Loughton, Essex.

ENGINEERING, IRON AN

SEPTEMBER 22.—**Cowes, I.W.**—I For supply of 174 yds. of 10 in. cas pipes and 54 yds. of 10 in. s. and f. pip Webster, Surveyor, Council Offices, C

SEPTEMBER 22.—**Plymouth.**—BRIDG taking down and removal of a bridge to b the Burrator Reservoir, situated about Plymouth, for the T.C. Mr. Frank H Engineer, Stonehouse, Town Hall, Plymo £2 2s.

SEPTEMBER 22.—**Warrington.**—BRID reconstruction of Black Bear Bridge concrete, crossing the Bridgewater Can of 28 ft., including the provision of appr wall, &c., for the T.C. Mr. H. W. F Victoria-street, Westminster, S.W.1. D

SEPTEMBER 26.—**Farnham.**—WATE For provision, laying and jointing of ab of 7 in., 6 in., and 5 in. cast-iron main and hydrants, and making connection mains, for the U.D.C. Messrs. John T engineers, 36, Victoria-street, S.W.1.

SEPTEMBER 27. — **Folkestone.** — Co STEELWORK, STEEL CASEMENTS, AND PA CONTRACTORS:—(*a*) The supply and erecti columns, steelwork in curved roof trusses, casements; (*c*) patent roof glazing at th in Marine Gardens, for the Borough Folkestone. Mr. A. E. Nichols, M.Inst. Engineer and Surveyor, Corporation Offic Deposit £3 3s.

SEPTEMBER 29. — **Rochford (Esse** TIONS, HEATING AND HOT WATER.— tenders from contracting engineers, for alterations and additions to the heating supply services and boiler plant at the Ro for the Guardians. Mr. F. Broadhurst Cra street, London, W.1; and 22, Cooper-str ter. Deposit £5 5s.

SEPTEMBER 30. — **Trowbridge.** — RO Supply of (*a*) 12 two-ton (British make) side tippers, hand-operated; (*b*) four fiv quick reverse rollers, steam or intern engines; (*c*) tarspraying machines, gallons capacity; (*d*) six bitumen boilers C.C. Mr. J. G. Powell, County Surveyor

OCTOBER 4.—**Llangeinor.**—FENCING.— 190 lineal yards of unclimbable wrought-i Reservoir at Llangeinor, for Mid-Glam Board. Messrs. Thomas & Morgan & neers, 23, Gelliwastad-road, Pontypr £2 2s.

OCTOBER 6.—**Dundee.**—ESPLANADE, struction of a sea wall or bulwark extendi and 1,000 ft. of breakwater in rubble; of 32 in. diameter outfall sewer, with r crete piles and groynes, for the T.C. Baxter, City Engineer, 91, Commercial-st

OCTOBER 28.—**Wellington, N.Z.**—BRI For plate girder spans for Wairoa, R Awakeri bridges, for N.Z. Public Works of Overseas Trade, 35, Old Queen-street,

NOVEMBER 3.—**Sydney, N.S.W.**—BRI For metal work for superstructure of t Ugly's Point, for Department of Public W Dept. of Overseas Trade, 35, Old Queen

NOVEMBER 20.—**Chile.**—HARBOUR harbour works in the port of Lebu. Chi 22, Grosvenor-square, W.1.

DECEMBER 31.—**Hamilton.**—BRIDGE. Clyde Bridge, Hamilton, for the Joint the County Council of the County of Council of the Burgh of Hamilton, and T the Burgh of Motherwell and Wis Formans & M'Call, C.E., 160, Hope-st Deposit £1 1s.

ROAD, SANITARY, AND WORKS.

SEPTEMBER 21.—**Greenwich.**—ROA forming and paving of Sections 2 and 3 o Charlton, for the B.C. Borough Engine Greenwich, S.E.10.

SEPTEMBER 22.— **Bentley-with-Arks** Reconstruction of about 4½ miles of Gre Doncaster and Tadcaster section, for th County Council. Two contracts. We veyor, County Hall, Wakefield. De contract.

SEPTEMBER 22.—**Birstall.**—MAIN R struction of about 1¼ miles of the Leeds a Birstall and Huddersfield main roads, Riding County Council. West Rid County Hall, Wakefield. Deposit £1 contract.

SEPTEMBER 22.—**Bradford.**—ROAD.— mation of road and paths at Myopes Hill, for the T.C. City Architect, Town

SEPTEMBER 22.—**Darlington.** — RO reconstructing, and surfacing about 5 road, at Darlington, for the North Riding Surveyor, County Hall, Northallerton.

SEPTEMBER 22.—**Nottingham.**—APPRO For construction of embankment, &c., Approach-road, for the C.C. Mr. J. C. Surveyor, Shire Hall, Nottingham. De

BER 23.—**Bacup.**—INVERT.—To execute rete work on the Hennebique system, for n invert in concrete, and covering part of the h ferro-concrete, &c., for the T.C. Mr. W. H. Borough Engineer, Municipal Offices, Stubby- Bacup. Deposit £5.

BER 23.—**Coulsdon and Purley.**—SEWER.—ruction of 1,300 yds. of 9 in. sewer. Mr. R. rveyor, Council Offices, Purley. Deposit

BER 23.—**London.**—FOUNDATIONS.—For the on of foundations for five blocks of dwellings ast Hill Estate, Wandsworth, for the L.C.C. County Hall (Room No. 3), Westminster E.1. Deposit £1 1s.

BER 24.—**Broadmoor.**—Drainage works at lmoor Asylum, for the Commissioners of rks, &c. Contracts Branch, H.M.O.W., les-street, London, S.W.1. Deposit £1 1s.

BER 24.—**Edinburgh.**—DRAINAGE.—For reconstruction work at Craiglockhart Poor- the Parish Council. Mr. J. M. Johnston, 47, Charlotte-street, Leith.

BER 24.—**Felling.**—STREET WORKS.—For ut of private street works at Felling, Windy Pelaw Main, for the U.D.C. Mr. C. W. Hall, Felling. Deposit £1.

BER 24.—**Northumberland.**—ROADS AND —For road widening and road diversion works, for proposed new bridge works at Felton and n. Mr. J. A. Bean, County Surveyor, Moot castle-on-Tyne.

BER 24.—**Wood Green.**—ROADS.—For works e street improvements in Solway, Saxon, d Thirlmere-roads, for the U.D.C. Surveyor, . Wood Green, N.22. Deposit £1 1s.

BER 25.—**Altofts.**—FOOTPATH.—For relaying ving 240 yds. of footpath in concrete and ags, for the U.D.C. Mr. T. H. Hailstone, and Cy.E., Surveyor, Council Offices, ear Normanton.

BER 25.—**Lambeth.**—ROADS.—For the follow- Making up of Felsberg-road, (*b*) laying bitu- aving in Dante-road, (*c*) taking down and two bays and piers of boundary wall at Cemetery, for the B.C. Mr. Osmond Cattlin, Engineer, Town Hall, Brixton Hill, S.W.2.

BER 26.—**Kilmarnock.**—WATER PIPES AND —For (*a*) laying water piping; (*b* supply and clay sewers; (*c*) excavation and bottoming y; and (*d*) erection of stob and wire fencing works in connection with erection of 72 t Bonnyton-road, for the T.C. Mr. W. Burgh Surveyor, Market Bridge, Kilmarnock.

BER 26.—**Kilmarnock.**—WATER PIPING AND —(*a*) Laying of 4 in. water piping; (*b*) fireclay (*c*) excavation and bottoming of roadway; rection of stob and wire fencing, and other works in connection with 20 houses at New for the T.C. Mr. Wm. Dunbar, Burgh Market Bridge, Kilmarnock.

BER 27.—**Birkenhead.**—STREET WORKS.— works in Norman-street, for the T.C. Mr. wnridge, M.Inst.C.E., Borough Engineer and Town Hall, Birkenhead. Deposit £1 1s.

BER 27.—**Middleton.**—WATER MAIN LAYING. ing-in the open Goyt along Mill Dam Side, including the construction of a small storage ing new cast-iron water mains, and adjusting vater mains, &c., for the T.C. Borough and Surveyor, Town Hall, Middleton, Lancs.

BER 27.—**Reigate.**—SEWER.—For sewer ex- n Balcombe-road, Horley, for the R.D.C. Traviss, Sanitary Surveyor, 48, High-street, Deposit £2 2s.

BER 27.—**Surbiton.**—STONE PIPE SEWERS. he construction of about 400 yds. of pipes for soil and surface water sewers estfield Lodge Estate, for the U.D.C. Mr. ther, Surveyor, Council Offices, Ewell-road, Deposit £1 1s.

BER 29.—**Carlisle.**—SEWERS.—For the con- of a concrete and brick settling tank, the bout 100 lineal yards of 9 in. stoneware pipes incidental work at Stainton, for the R.D.C. Boyd, engineer, 18, Bank-street, Carlisle. 's, 6d.

BER 29.—**Hanwell.**—CONVENIENCE.—For onvenience, Churchfields, for the U.D.C. Council Offices, Hanwell.

R 1.—**Dinas Powis.**—STREET IMPROVEMENTS. mprovement works in Elmgrove-place, Dinas the Cardiff R.D.C. Mr. William Farrow, Park House, 20, Park-place, Cardiff.

R 3.—**Cylla and Deri Valleys.**—SEWERAGE For carrying out, for the Gellygaer U.D.C., struction of about 11 miles of 15 in., 12 in. diameter glazed stoneware and cast-iron pipe ogether with manholes, storm overflows, ambers, and other incidental works. Messrs. Raikes, 63, Temple-row, Birmingham. 7 7s.

R 4.—**Chester.**—SEWER.—Construction of a ater outfall sewer in concrete tubes and pipes, for the T.C. Mr. Charles Greenwood, C.E., City Engineer and Surveyor, Town ter. Deposit £1 1s.

R 6.—**Beckenham.**—ROADS.—For the widen- per Elmers End-road, for the U.D.C. Mr. J. Surveyor, Beckenham. Deposit £2.

BER 6.—**Lancashire.**—ROAD IMPROVEMENT CTION OF COTTAGES.—Improvement of verpool main road and erection of four n Coe-lane, Tarleton, for the Main Roads ges Committee of the Lancashire County County Surveyor's Office, County Offices,

R 6.—**Manchester.**—BRIDGE WIDENING.— dening of Slade-lane Bridge over the London astern Railway, for the T.C. City Engineer's wn Hall, Manchester. Deposit £2 2s.

R 6.—**Warrenpoint (North Ireland).**—SEWER- the improvement of the sewerage, for the Mr. S. J. M'Avoy, M.R.I.A.I., 66, University- elfast.

OCTOBER 20.—**Fermanagh.**—ROADS.—For construction of roads, for the C.C. Mr. J. P. Burkett, County Surveyor, Enniskillen. Deposit £5.

Competitions.

(See Competition News, page 428.)

Auction Sales, Tenders, etc.

✱SEPTEMBER 22.—**Eastbourne.**—Messrs. Charles R. Davis & Co. will sell, under a deed of assignment, *re* E. G. & S. A. Noakes (trading as Noakes & Co.), by order of the Trustee, at the Phœnix Works, 5A, Pevensey-road, Eastbourne, the whole of the joinery manufacturers', builders' and decorators' woodworking machinery, plant, and stock-in-trade. Auctioneers, 285, Borough High-street, London, S.E.1.

SEPTEMBER 22.—**Kent.**—Messrs. C. E. Clark in conjunction with Messrs. Fox & Mainwaring, will sell, without reserve, at the Cattle Market, Edenbridge, Kent, prime new timbers and builders' effects. Auctioneers, Beddington House, near Croydon.

SEPTEMBER 24.—**Beckenham, Kent.**—Messrs. Baxter, Payne & Lepper will sell, with possession, at the Mart, 155, Queen Victoria-street, E.C.7, seven blocks or 53 plots of freehold building land possessing important frontages to the main Croydon road and Whitmore-road, on the Eden Park Estate, Beckenham, Kent. Auctioneers, Beckenham and Orpington, Kent, and 14, Sackville-street, W.1.

SEPTEMBER 24.—**Clacton-on-Sea.**—Messrs. Knight, Frank & Rutley will sell, in conjunction with Messrs. Edwin J. Gilders & Co., by direction of Mr. Arthur Webster. Alton Park Estate as a whole or in lots, at the Royal Hotel. Auctioneers, 20, Hanover-square, W.1.

SEPTEMBER 24.—**London, E.C.4.**—Messrs. Cuthbert Lake & Sutton will sell, at the Mart, 155, Queen Victoria-street, E.C.4, 24 acres of freehold building land, Alperton, Wembley, just off main Ealing-road, and part of Manor Farm. Auctioneers, 9, Stone Buildings, Lincoln's Inn, W.C.2.

✱SEPTEMBER 24.—**London, N.W.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the trustee, E. J. Webber, Esq., F.S.A.A., under a deed of assignment, upon the premises, Lancefield Works, 60, Lancefield-street, Queen's Park, Kilburn, plant and stock of cabinet makers, nearly new machinery, &c. Auctioneers, 15, Newington-green, Islington, London, N.16.

✱SEPTEMBER 24.—**London, S.E.1.**—Messrs. Charles R. Davis & Co. will sell, under a deed of assignment, *re* Mrs. M. A. Sharp (trading as Frank L. Sharp), by order of the trustee, at the timber yard, 55, Union street, Borough, S.E.1, selected stock of well-seasoned timber. Auctioneers, 285, Borough High-street, S.E.1.

SEPTEMBER 27.—**Lincolnshire.**—Messrs. Escritt & Barrell will sell, at the Estate Sale Rooms, Elmer House, Grantham (unless previously disposed of by private treaty), the valuable freehold brickworks and premises, including Hoffman kiln, machine shed and power house, fitter's shop and offices, &c., the whole extending to an area of 11 acres, 1 rood, 29 perches (more or less). Auctioneers, Elmer House, Grantham.

PRELIMINARY ANNOUNCEMENT.—**London, W.**—Messrs. Knight, Frank & Rutley will sell, in a number of lots, in the Hanover-square Estate Room, in September (unless previously sold privately), a freehold building estate known as Broadfields Manor, Edgware, about 273 acres. Auctioneers, 20, Hanover-square, London, W.1.

✱OCTOBER 1.—**Horley, Surrey.**—Mr. C. E. Clark will sell, without reserve, at Market Field, Horley, Surrey, prime timber and builders' effects (bright, square and new). Auctioneers, Beddington House, Beddington, near Croydon.

✱OCTOBER 1.—**London, S.E.**—Messrs. Veryard & Yates will sell, to clear site, without reserve, "Hazlewood," Church-road, Upper Norwood, useful building materials, from demolition of the mansion. Auctioneers, 365, Norwood-road, S.E. 27.

✱OCTOBER 9.—**London, E.C.**—Mr. Joseph Stower will sell, at Winchester House, Old Broad-street, E.C., freehold property containing the important area of 74,700 ft., or about 1¾ acres, on the north side of the main road between Bow Station and Bow Bridge, formerly St. Catherine's Convent. Auctioneer, 43, Chancery-lane, London, W.C.2.

Public Appointments.

SEPTEMBER 24.—**Middleton, Lancs.**—Surveying Assistant in the Borough Engineer and Surveyor's Department required by the Town Council of Middleton. Mr. J. P. Walmsley, Town Clerk, Town Hall, Middleton, Lancs, endorsed "Surveying Assistant."

SEPTEMBER.—**London, S.E.1.**—(*a*) **Lecturer in Architecture and Building**; (*b*) **Instructor in Brickwork, required by the Governors of the Borough Polytechnic Institute, for two evenings a week.** Mr. J. W. Bispham, Principal, Borough-road, London, S.E.1.

SEPTEMBER.—**Wimbledon, S.W.19.**—Evening Lecturer in (a) Surveying, (b) Brickwork and Masonry, to the Standard of Grade I City and Guilds Syllabus. The Principal, Technical Institute, Wimbledon, S.W.19.

OCTOBER 14.—**Auckland, New Zealand.**—Professor of Architecture required by Registrar, Auckland University College, Auckland. London Agent of the University of New Zealand, J. W. Joynt, M.A., 83, Gower-street, W.C.1.

✱NO DATE.—**Gold Coast.**—Draughtsman required by the Government of the Gold Coast, for the Public Works Department, for two tours of 12 to 18 months' service, with possible extension. Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting clearly at head of application M/13089.

✱NO DATE.—**Sudan.**—Foreman of Works required by the Sudan Government. Consulting Mechanical Engineer, Sudan Government Railways and Steamers, Wellington House, Buckingham Gate, London, S.W.1.

HOUSING WITH STATE ASSISTANCE

The following figures, issued by the Ministry of Health, show the position of housing schemes under the Housing, &c., Act, 1923, on the under-mentioned dates:—

1. HOUSES AUTHORISED BY THE MINISTER OF HEALTH—up to September 3rd, 1924—

To be erected by local authorities ..	55,286
To be erected by private enterprise ..	103,233
Total	158,519

2. HOUSES INCLUDED IN DEFINITE ARRANGEMENTS—on or before September 1st, 1924—

Schemes of local authorities:	
Number of houses included in contracts or in approved direct labour schemes	39,965
Private enterprise:	
Number of houses included in undertakings given by the local authorities under section 2 (3) ..	69,844
Number of houses approved by the Minister under section 3 and included in contracts	5,714
Total (included in Table 1) ..	115,523

3. BUILDING PROGRESS—at September 1st, 1924—

	Foundations completed.	Roofed in.	Total under construction.	Completed.
Schemes of local authorities	9,704..	7,224..	16,928..	8,566
Private enterprise	17,846..	15,750..	33,596..	17,781
Total houses (included in Table 2) ..	27,550..	22,974..	50,524..	26,347

NOTE.—Tables 1 and 3. For 42 local authorities from whom Returns for September 1st, 1924, have not yet been received, the numbers included above are taken from the previous month's Returns.

New Romford Institution.

The foundation stones were recently laid of the Romford Institution, in connection with the guardians' scheme for providing additional accommodation. The new buildings will cost approximately £100,000.

A Flint Chapel.

The chapel at Godsfield, New Alresford, Hants, has recently been scheduled for preservation as an ancient historical building. Built of flint, with ashlar dressings, it dates from about 1360.

British Commercial Gas Association.

The thirteenth annual conference of the British Commercial Gas Association is to be held in Liverpool under the Presidency of Alderman H. Wade Deacon, on September 29 and 30 and October 1. The speakers at the public conference on October 1 will include the Bishop of Liverpool, Dr. A. A. David, who will deliver an address on "The Worker and his Work"—human relations in an industrial age—and Sir Lawrence Weaver, K.B.E., Director of United Kingdom Exhibits at the British Empire Exhibition, who is to speak on "Art in Industry"—the influence of beauty in industry and commerce.

"Empire Forestry Journal."

We have received from the Empire Forestry Association, Imperial Institute, London, the July issue of the *Empire Forestry Journal*. It includes an interesting series of articles on the timber supplies of Burma, North America, and the Pacific Coast, together with an account of the lumber industry of British Columbia. Forestry in Tanganyika, South Africa and New Zealand is also dealt with, and an account is given of the Empire timbers at Wembley. Attention is called to a change in the by-laws, which enables members of the forest services of the Empire and others who make forestry their profession, to join the Empire Forestry Association as professional members, at an annual subscription of 10s. 6d., with all the privileges of membership.

PROPOSED NEW BUILDINGS & OTHER WORKS *

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERCARN.—The U.D.C. has approved of the Llanover Estate scheme for the erection of 600 houses. The scheme provides that the estate should build the houses.

ALVERSTOKE.—The B.G. proposes to carry out a scheme to include a laundry boiler and disinfector, and additional lavatory accommodation in the female ward of the House of Industry. The total cost will be about £5,000.

ASHTON-UNDER-LYNE.—The Recreation Grounds Committee of the T.C. have decided to apply to the M.H. for sanction to borrow £1,050 for the purchase and levelling of land in William-street, which it is proposed to use as a recreation ground.

AYLESBURY.—The T.C. has reserved two sites on the housing estate, one for the erection of an infants' school and another for the erection of a building for central day continuation and technical schools. Another hundred houses are to be built, and tenders have been accepted for 64 at £30,390, and 36 at £13,888. The B.S. has submitted plans of a scheme for sewage disposal, and been asked to prepare estimates as to cost. A refuse disposal scheme is under consideration.

BARNES.—Queen's Ride Bridge is to be repaired at a cost of £460. Plans passed: Nine houses, Stonehill-road, for Messrs. Rosevears, Ltd.; six houses, Nassau-road, for Mr. E. Broughton; house, Christchurch-road, for Mr. W. Burridge; 32 houses, Warren-avenue, for Barker's Estate; bungalow, Mortlake-road, for Mr. A. Dawkins; house, Sheen-drive, for Messrs. Crouch & Coupland; five houses, Stanley-road, for Mr. R. B. Rowell; film store, Station-road, for Mr. G. J. Viner.

BARNSLEY.—The Housing Committee recommends the purchase of 21 acres at Ardsley, and 2 acres at Carlton-lane, for housing schemes. Mr. C. Smith, the contractor for the Ardsley scheme, is to be asked to submit a price for the erection of 90 additional houses, and Messrs. Fairhurst Bros. to quote a price for erecting 50 houses. The Housing Committee recommends acceptance of the offer of the U.K.H. Syndicate, Ltd., to erect 50 cottages in pairs according to the Borough Engineer's plan, at £670 per pair. The Library Committee is in communication with the Carnegie Trust regarding a grant towards the cost of a new library.—Recreation rooms and playing fields situate near the garden suburb at Hollinwood are to be provided at an early date for the employees at the Woodpark Colliery and the Hollinwood Colliery. At a meeting of the Limehurst D.C. preliminary plans were approved of the scheme.—Plans passed by the T.C.: Two houses in Mount Vernon-road for Mr. D. R. Snowden; bungalow in Belgrave-road for Mr. H. Hibbert; two bungalows in Dodworth-road for Mr. F. Burkinshaw; warehouse in Windermere-road, for Mr. H. Ambler. Relief schemes proposed include concreting, kerbing, channelling and forming footpaths in a number of roads at an estimated aggregate cost of £5,366.

BLACKBURN.—Plans approved by T.C.: Bungalow, Pleckgate, for Mr. Edward Moorcroft; two houses, Lammack-road, for Mr. Gerald R. Clayton; two bungalows, Pleckgate, for Mr. S. T. Braidwood; bungalow, Fecitt Brow, Mr. John Brindle; four houses, Lynwood-road, Messrs. Penny Bros; two bungalows, Pleckgate, Messrs. E. Mercer & Sons.

BLACKPOOL.—The Housing Committee have decided to acquire a further site at Layton for the completion of the Corporation housing scheme in that district.

BLACKWOOD (MON).—The Miners' Welfare Council has taken control of the Blackwood Institute, and a permanent new structure is to be erected. Plans have been passed. This and other welfare projects in the district are estimated to cost, together, £27,000.

BOLTON.—The Committee of the Hulton Ward Labour Association have acquired a site in Ellesmere-road for proposed new club premises, plans for which have been submitted to the T.C. for approval.

BRADFORD.—Plans have been prepared for the erection of a warehouse in Wilton-street, for Messrs. J. Holmes & Co. Tenders for the building work are about to be invited by the architects, Messrs. Ross & Briggs, Bradford.

BRIGHTON.—The T.C. has completed the laying-out of two recreation grounds at Dyke-road and Lewes-road.

BRISTOL.—Estimates for new road works, brought before the Corporation by the Sanitary Committee, include: road, St. John's-lane to Parson-street, estimated cost, £17,250; road, Parson-street to Bedminster Down, £13,100; widening Parry's-lane, £21,180; widening Coombe-lane, Stoke-lane to Cross Elms, £3,720; road, Dingle-road to Coombe Dingle, £20,420; widening road opposite St. John's Schools, Durdham Down, £600; road, extension of Stoke Hill at Junction of Sea Mills-lane, £10,480; road, Hillfield-avenue to Midland-road, £1,360; road, Lodge Hill to Woodland Way, £4,260; extension and widening of Park-road, Shirehampton, £11,380; road and widening Gordon-road, Rose Green-road and Royate Hill, Fishponds, £48,910; widening Wick-road between Sandy Park-road and Sandbach-road, £1,500—total, £154,160. Other proposed works are to widen Netham road at a cost of £4,860.

BROMLEY.—Plans passed by T.C.: House, Quernmore-road, Kinnaird Park Estate Co.; two houses, Holligrave-road, Messrs. T. Crossley & Son; bungalow, Avondale-road, Mr. A. Frampton; house, Edward-road, Messrs. Oetzmann & Co.; sub-station, Madeira-avenue, Bromley Electric Light Co.; house, London-lane, Messrs. Perry Bros.; house, Park-grove, Mr. P. Coad; bungalow, Woodside-road, Mr. J. Ransom; two houses, Southlands.

BURNLEY.—The Corporation propose to acquire about 170 acres of land at Towneley for playing fields.—Plans passed by T.C.: Pair of houses in proposed street off Rosehill-road, Mr. L. Todd.

BURTON-ON-TRENT.—The T.C. has decided to build a covered-in annexe to the market hall. The cost is estimated at £1,700.

CARLISLE.—The T.C. has approved of plans for the erection of a new generating station, at an estimated cost of £233,882.—The Corporation is to widen and reconstruct the Caldew Bridge and St. Nicholas Bridge at a total expenditure of £108,500.

CARMARTHENSHIRE.—Grants have been made by M.T. as follows in connection with the C.C. roads improvements schemes: Llanelly-Carmarthen road widening, £3,500; Llanelly-Lougher road improvement, £6,000; Llanelly-Trimsarau road widening, £2,000, and for the Carmarthen-Newcastle Emlyn road improvement, £2,500. The County E.C. is to erect a new science laboratory at Carmarthen County School (estimated cost, £1,720) and is considering erection of additional scholars' accommodation at the school. The committee is also to erect a new gymnasium, a brick building, at Llanelly County School, at an estimated cost of £1,850. The erection of changing rooms and lavatory accommodation for the girls' department is also under consideration. The G.W.R. Co. has notified the Llanelly B.C. that a scheme for extensive additions and alterations to the railway station will be submitted to the Council for approval.

CAXTON.—Formal sanction has been received by the R.D.C. to the borrowing of £1,800 for the erection of four houses at Gamlingay.

CHATTERIS.—Plans passed by U.D.C.: Messrs. Shanks & Toms, for a building in London-road, for Mr. A. Curtis.

CLIPSTONE.—The Duke of Portland has given a sum of £1,000 towards defraying the cost of a parsonage for the new village of Clipstone, for which plans are now being prepared.

CLITHEROE.—The scheme for the erection of over 100 dwellings on the Goosebutts Estate of Clitheroe Corporation is likely to go on. The legal formalities are now in process of being carried through, and once they are completed Messrs. Moore, the Morecambe contractors, who are now developing the Pimlico-road district, intend to start work at once. The R.D.C. have decided that the new ferro-concrete bridge to be erected over the Ribble at Grindleton should be built opposite the bottom of Darkwood Brow. This will involve the construction of a new length of road on the Yorkshire side of the river at an additional cost of £1,000.

COSELEY.—Owners of premises in Woodsetton-road are making arrangements for sewer connections with the Sedgeley Council's system.

CROMPTON.—The D.C. have decided that the two plots of spare land on each side of Salts-street should be fenced and drained, and laid out as two separate playgrounds for boys and girls, and have instructed the Surveyor to prepare a scheme.

DISS.—Plans passed by U.D.C.: Building to be erected by the British Petroleum Co.

DONCASTER.—The Central Fund of the Miners' Welfare Scheme has made a grant of £3,500 for extensions to the Central Technical College.

DOUGLAS (ISLE OF MAN).—The B.S. has prepared plans for the widening of the approach to the Victoria Pier at an estimated cost of £91,000. Plans passed: New school and hall, Playing Fields-road, for St. Ninian's Church.

DROXFORD.—Plans passed by R.D.C.: Bungalow at Gregory-lane, Durley, for Mr. Gough; schoolroom for the Primitive Methodist Trustees at Hambledon; two houses for Mr. W. Hammond at Swanmore; eight houses for Mr. E. C. Miles at Bishop's Waltham; 10 houses for Mr. L. A. Short at Shedfield.

DUBLIN.—Plans passed by T.C.: Castle-avenue, Clontarf, house, Mr. H. G. Smith.

DUNDEE.—Plans and sections of proposed new buildings, &c., in Dundee have been lodged at the office of the City Engineer.

FARNHAM.—Plans approved by R.D.C.: House at Dippenhall, for Mr. H. Falkner; bungalow at the Pride of the Valley-road, Churt, for Miss E. R. Dallas; two cottages near Churt Post Office for Mr. Paul Goldie.

FEATHERSTONE.—Plans passed: The M.H. has approved of a scheme for the erection of houses which includes 100 houses per year for two years. Plans and specifications are being prepared by the Surveyor's Department, and tenders are to be invited.

FLETTON.—An old flax factory has been purchased by Messrs. Kemil, Ltd., for the purpose of establishing a silk works.

GLAMORGAN.—The Neath R.D.C. has decided to carry out private street works at Dulais Higher; the Bridgend Cottage Hospital Governors are to ask subscribers to authorise the building of a new hospital or the taking over of Glanogwr House (lately the residence of Lord Swansea) and converting same to hospital use. The estimated cost of the scheme is about £12,000. The M.H. has sanctioned the borrowing of £31,600 by the Portardawe R.D.C. for housing purp Council is shortly to invite tenders for the e 10 houses at Alltycham site. The C.C. has fied of grant of £1,500 toward cost of imp Cardiff-Swansea main road. The Penarth U Cardiff R.D.C. are jointly to construct a extending from Cliff Parade, Penarth, to Sev to be met at Lavernock by a drive to Sully, ab bridge beach, and thence to Barry. The U.D.C. and the Town Improvements Comm in consideration a scheme for laying out Bro welfare area. This, with the lay-out of Cast estimated to cost £7,000. The U.D.C. is p building scheme.

GLASGOW.—Plans passed by the Dean Court: To Glasgow Corporation Housing D to form streets and sewers at Low Balornoc of a housing scheme. John Taylor, builder, house in Woodburn-road; William Hood, Union street, factory at Cadogan-street; Hamilton, Ltd., 115, Port Dundas-road, fact Corporation Electricity Department, electrici —The Scottish Board of Health ha to make a grant of £180 per bed towards the s the proposed new pavilion of 24 beds at the sanatorium. The City Engineer has prepa for an infant welfare clinic at Elder Park, est cost £6,500. It is proposed to erect a simi at Springburn and plans have been approv Scottish Board. The committee is to re suggestion for the construction of a walled ment along the south bank of the Clyde be weir and the suspension bridge at M'Neil-s shelter and lavatories are to be erected at the tramway terminus at a cost of £800. Two adjoining the electricity showroom in Sa street are to be purchased at a cost of £1,0 larging the showroom. The Housing Com commends that the work of erecting hous ground at Summerton-road, Govan, are to out by contract, and that the surveyor appointed measurer to prepare the necessary s The Extensions Committee has now the areas sought to be added to the City mentary sanction is needed for the adoptio extension proposals.

HARPENDEN.—Plans passed by U.D.C.: Tw Moreton End-lane, for Mr. J. Catton; bungalo ton End-lane, for Mr. J. Catton; house, Park for Mr. H. Griffiths; rebuilding of "The Crown," for Messrs. J. W. Green, Ltd.; house, road, for Mr. G. Rabbetts; bungalow, Cowper-Mr. R. A. Finch; house, Hillside-road, for Mr. Snoxell; sewer, Hillside-road, for Messrs. & Son; house, Station-road, for Messrs. Freem

HASLINGDEN.—The parishioners of St. Mission are raising funds for the renovation a of their chapel, estimated to cost £360.

HAZEL GROVE.—Plans passed by U.D.C.: Glendene-avenue, for Mr. Snow; two houses, Moor-lane, for Messrs. Unsworth & Wilson Robins-lane, for Dr. Thompson; bakeho Commercial-road, for Mr. P. Oldham; b Robins-lane, for Mr. H. Mills; two houses, road, for Messrs. Hallows & Co.; house, Ack-Mr. Croucher; three houses, Lawrence-r Mr. H. Vernon; new street, Lawrence-roa Grove; two houses, Chester-road, for Messrs. Booth; 16 houses, Bean Leach-road, fo Harding.

HEMSWORTH.—The Electricity Committee R.D.C. propose to carry out the following subject to the approval of the Electricity sioners. Three sub-stations are to be ere Frickley, Grimethorpe and Brierley. The has prepared plans of a lay-out for 150 houses Houghton, and another scheme is being prepare erection of 52 houses. The South Kirby P Committee are urging for 100 concrete hous erected and these are to be considered.

HIGH WYCOMBE.—An inquiry has been hel M.H. into the application of the T.C. for san a loan of £7,000 for extension of water mai erection of an additional 60 houses, under th housing scheme, is contemplated.

HINDLEY.—Application by the D.C. is to to M.H. for sanction to borrow £13,000 fo of sewerage and sewage disposal, including the of new works at Abram.

HOVE.—Plans passed by the T.C.: Mr. J. for Capt. G. S. Leach, class room, The Wick Mr. J. M. Comber, for Mr. C. Comber, eight pa detached houses, Reynolds-road; Mr. C. Comb detached house, 47, Grange-road; Mr. J. Ba Messrs. W. E. & P. J. Lynn, pair semi-detached Hove-street; Mr. G. M. Jay, for Messrs. Morris four detached houses, Glebe-villas; Messrs. De Son, for Mr. A. A. Jones, conversion int Rochester-gardens.

KIRKHAM.—The U.D.C. decided that app be made to the M.H. for loans of £250 for the of extending the sewer in Freckleton-road, a for extending the culvert in Orders-lane.

LEEDS.—Extension of accommodation at Meanwood Park Colony is estimated to cost —Sanction has been given to the borrowing T.C. of £2,567 for renovation of Old Hall at Kill Sanatorium and provision of additional accomm for the staff of the Institution and recreatio and dining room for female patients.—Plans by T.C.: H. Crowther and W. Houghton, tw detached houses, Walsh-lane, New Farnley; Purdy, two semi-detached houses, Grove Hall-Beeston; G. Stocks and W. Hudson, two semi-d houses, Farm-hill, Meanwood; W. Teal, 12 detached houses, Cambridge Gardens Estate, and Bradford-road, Bramley; Mrs. M. Catley, d house, Town-street, Middleton; Clarke and two semi-detached houses, Grove Hall-avenue, B William Brinkman, junr., semi-detached house stall Mount; Adam Jackson, two semi-d houses, Grove Hall-drive, Beeston; Herbert G

* See also our List of Contracts, Competitions, etc.

nto-place, Chapel Allerton Hall Estate; wo semi-detached bungalows, Blue Hill-

-Plans passed by the Corporation: 12 houses, Eldred-road, 28 houses, houses, T. Wainwright & Sons, for & Co.; Aigburth-road, four houses, , for J. Hughes; Primrose-road, two lare, for G. S. Louden and another; ension of "University Hall," F. C. University Committee; Calder-drive, ick, for E. T. Cooling; Orchard-lane, Trantom, for Roxburgh & Harrison; our houses, R. Musgrave, for self; ngalow, Medcalf & Medcalf, for A. T. lane, bungalow, R. Musgrave, for J. Tree-road, cottage, F. C. Trench; ur bungalows, J. W. Harding, for R. Mill-lane, Old Swan, flour mill, Fenton ee Bros.; Garston Old-road, two houses. , for Williams & Jones; Broad Green- , Walter Lothian, for self; Brewster- es, T. Griffiths, for self; Heathfield- N. Meredith, for Capt. J. T. H. Ward: lton, 23 houses, City Engineer, for Ferguson-road, 17 houses, Larkhill- , Sandy-lane, 54 houses, North-way, rton-road, 19 houses, New-road, 52 ood Estate, 31 houses, for the Cor- on-road, five houses and shops, Brown Evans & Howarth.—The T.C. has to borrow £23,500 for provision of a en's dwellings, &c., in Longmoor-lane.

RMONDSEY).—Plans have now been .C.C. for the conversion of the Parish- e into flats for temporary rehousing Council has authorised the work to be the Building Works Manager, whose 28. The Building Works Manager has to carry out repairs at the central of £386. Plans passed: New approach Morgan's-lane for proprietors of Hay's reet; 12 shops and flats, Tower Bridge- . L. Haynes on behalf of Messrs. E.

BERWELL).—The B.C. reports in favour plans which have been forwarded 16 houses, Ruskin-walk, for Messrs. scod; building, 92–95, Rye-lane, for rth & Co., Ltd.,; five houses, Hill Mr. Figgis; six lock-up shops, Nor- Mr. Cooper; building at Nos. 3, 4, 5 ews, for Mr. J. C. Collings; buildings Peckham Rye and Nunhead-crescent, nton & Co.; shops on site at corner of -road and Greenhundred-road, for tson & Sons.

MARK HILL).—The L.C.C. has prepared widening of Denmark-hill at a cost of

BETH).—The L.C.C. gives notice of its t a new elementary school for about capable of enlargeme nt by 128 places stricts of West Norwood and West

e Corporation have commenced the ion with the cutting of the new road n of Fairlawn-road and Clifton-drive f Seafield-road and the Beach-road at

FIL.—The B.C. is to borrow £2,200 for s, including a site purchase, at Tre- tural Welfare Committee has made a in connection with the lay-out of Field, Merthyr Vale, as a recreation nection with the proposed new library he B.C. at an estimated cost of £12,500. iting upon the Carnegie Trustees has grant of £4,500, plus 10 per cent. . A number of unemployment relief put in hand by the B.C. and a definite ade toward hastening a start upon the earance scheme, and the erection of ction therewith.

RE.—A church extension scheme is hand for the parish of St. Andrew's, proposed to build a new church at an f £18,000, a new Sunday school at an f £15,000, and a new vicarage. A site d near the junction of Corporation ads for the church and vicarage, and and Oakley-streets for the Sunday The Council is negotiating with the and Tredegar Coal and Iron Co. anent sed new road from Commercial-street e C.C. has been promised a 50 per cent. the widening of Usk-Crumlin road.

—The South Elmsall E.C. have a contract for the alterations at the dle School for the sum of £4,567, pproval of the B.E.

S-TYNE.—The bottom of the lake in to be cemented, cost £2,580.

. W.).—Plans approved by the T.C.: hews & Son, office proposed, in Trafal-

N.).—Plans passed by T.C.: Cumber- for J. Fisk (Scott & Black, architects): enue, conversion of building into ge, for W. M. Blackburn (F. S. Swash, mmercial-street, six shops and six bs & Phillips (Page & Lawrence, cia-avenue, bungalow, for H. Davies . Holmes); St. Julian-road, house, Graham, Hitchcox & Co., architects); , warehouse, for F. James (A. E. ect).—Private street works are to be T.C. in Hawthorn-avenue and Linden-

ns passed by T.C.: Werneth Cricket nce gates, Chamber-road: S. & J. transformer house, Lowside Brick- rustees of Ross-street Independent Methodist Sunday School, re-arrangement of outside lavatory accommodation, Independent Methodist Sunday School, Ross-street; Trustees of St. Mary's Catholic Church, two new vestries, St. Mary's Catholic Church: H. Chester, wood and brick outbuilding, 23, Crete-street; J. Austerberry, wood and brick outbuilding, 32, Beechey-street; I. Barber, five houses, Ripponden-road.

PAIGNTON.—The Surveyor has been instructed to paint and decorate the Badminton Hall. The U.D.C. is considering the purchase of the Victoria nurseries for pleasure ground purposes. The M.H. is to hold an inquiry into the application for a loan of £7,000 for laying new water mains. As more houses are to be built in Ordway-road the Surveyor has been asked to prepare a scheme for widening the road. The Surveyor is to prepare estimates of a scheme for the extension of the depot in Mill-yard. Mr. F. W. Eggins has been appointed Council Architect for the housing scheme at Preston. The Water Committee has met a committee of the Brixham U.D.C. to discuss heads of an agreement regarding a bulk water supply. Draft estimates have been prepared by the Surveyor for laying out the Whitley recreation ground. The Surveyor has prepared estimates of the cost of filling in the land at Goodrington Sands and erecting two shelters, and application is to be made for sanction to a special loan of £3,000 for the scheme. The offers of Messrs. R. Veitch & Sons and Messrs. Treseder & Co. have been accepted for the preparation and carrying out of schemes for the development of Goodrington Park.—Plans passed: Two houses, Manor-gardens, for Messrs. Ballenger & Clarke; two houses, Manor-gardens, for Messrs. Maunder & Sons; house, Cliff-road, for Mr. W. E. Forster; shop and flat, Torquay-road, for Mr. A. H. Kenwrick; two houses, Dartmouth-road, for Messrs. Pitman & Hayman; house, Clennon-park, for Mr. S. Batten; house, Preston Down-road, for Mr. W. H. Webber; bungalow, Manor-road, for Mrs. Clara Martin; new road, sewer, shop, showrooms and offices, Winner-street, for Mr. S. Batten; five houses, Orient-road, for Messrs. Caunter Bros; bungalow, Goodrington Lane, for Messrs. C. & R. E. Drew.

PEMBROKESHIRE.—The Pembroke T.C. is to invite other authorities to join in soliciting the G.W.R. Co. to improve and make additions to Whitland railway station. The M.T. has agreed to make grant of £75,000 in connection with the reconstruction of the Haverfordwest-Fishguard road by the C.C. and local authorities.

PETERBOROUGH.—The City Engineer is to prepare a report on the decorative scheme for the Council Chamber at the Town Hall. The Milton Estate Office has had tenders for a new building, to be erected in Cathedral Gateway. A street widening is to be considered near the "Cherry Tree" Inn, on the Oundle-road. Thorpe Park and Church-lane are to be improved. The Town Clerk has been authorised to interview the Lord Bishop of Peterborough to ascertain his views with reference to a proposal to take over part of the Palace Gardens. Application is to be made for a grant towards the proposed widening of Narrow-street. Land in Star-road is being purchased for housing, and the City Engineer has been instructed to prepare plans for the erection of non-parlour houses. Modified plans are to be prepared for the erection of an infant welfare centre. Plans passed: Lecture room at St. Peter's College, for Dean and Chapter; house, Grange-road, for Mr. H. Maycock; bungalow, Fairfield-road, for Mr. Green; house, Gladstone-street, for Mr. A. Brown; house, Grange-road, for Mr. W. J. Mayes; house, Alexandra-road, for Mr. C. Barlow; house, Grange-road, for Mr. H. A. Sutton; two houses, Fairfield-road, for Messrs. Corner & Campion.

PONTEFRACT.—The Corporation's road works, as approved by the C.C. during the coming year, are as follows: Repairing Beastfair from Ropergate to Front-street with granite setts, £3,552; widening of Wakefield-road opposite Beechwood House from Shepherd's Farm to Priory-terrace, 420 yards, £1,235.

PORTSMOUTH.—The Markets Committee has been asked to consider the acquisition of the Oxford-street and Lake-road site for the purposes of an open market. The Tramways Committee has been asked to consider the abandonment of the proposal to extend the tramways, and to provide other travelling facilities. Permission is to be sought for a loan of £3,500 for reconditioning the Canoe Lake grounds, and £3,500 for reconditioning the Kingston recreation ground. Concrete steps are to be constructed on the esplanade, at a cost of £575. The B.E. has approved of the site for the northern secondary school for boys. The B.S. is to formulate a scheme for the northern end of Eastern-road to enter the Havant-road through Cosham. The Southern Railway has consented to the scheme for the widening of Fratton Bridge, estimated to cost £9,000. Sanction has been given for loan of £17,755 for works in connection with the lay-out of the first portion of the Southsea Common. Plans passed: Trustees, Congregational Church, Milton, Sunday school, Milton-road; Messrs. C. & F. Oliver, two houses, Empshott-road; Portsmouth Corporation Electricity Supply, transformer, Southampton-road, Cosham; Messrs. Fox & Smith, four houses, Kimbolton-road; Messrs. C. W. Stigant & Sons, 17 houses, Devonshire-avenue; R. J. Winnicott, eight houses, Thurbern-road; Messrs. J. J. Young, Ltd., rebuilding, "Electric Arms," beer-house, Fratton-road; C. W. Dye, private extension—road, Kirby-road; R. J. Winnicott, private extension—road, Thurbern-road; R. J. Winnicott, six houses, Devonshire-avenue.

PRUDHOE.—Plans approved by U.D.C.: Four semi-detached houses at Low Prudhoe, for Messrs. W. S. Allen, M. H. Armstrong, R. F. Fletcher, and W. F. Chapman.

RAMSBOTTOM.—Plans have been approved by the D.C. for the erection of four houses in one block in Longsight-road, Holcombe Brook, for Mr. J. Castle, and for the erection of a store room and grey room in Heywood-road, Holcombe Brook, for the Holcombe Brook Calico Printing Co.

REDCAR.—The T.C. has decided to erect a war memorial, to take the form of a monument. Consideration is being given to a proposal to carry out further extensions of the Coatham promenade.

RENFREWSHIRE.—Plans passed: Villa in Lethington-road, Whitecraigs, for Mr. J. Guthrie; villa in Lethington-road, for Mr. Alexander Fyffe; eight houses at Crookston-road, for the Govan District Board of Control; bungalow at Humbie Bridge, Mearns, for Mr. Wm. M'Mahon; 59 houses at Ormonde-avenue and Ormonde drive, Netherlee, Cathcart, for Messrs. John Dickie & Son; and bungalow at Uplawmuir, for Mrs. C. Allan.

RHONDDA.—The U.D.C. is to undertake considerable private street works at Tylorstown.

ROYSTON.—The U.D.C. have invited the authorities of the Aire and Calder Navigation Co., the M.T., and the West Riding C.C. to a joint conference to discuss the ways and means of the erection of a new bridge over the canal.

RUGELEY.—Tenders are to be obtained as soon as possible by the U.D.C.'s Surveyor for thirty parlour-type houses.

ST. GERMANS (CORNWALL).—A cottage for the district nurse is being erected on a suitable site in the village.

SANDWICH.—Plans passed by T.C.: House in Sandown-road, submitted by Mr. E. W. May for Mrs. H. M. Culpin; pavilion at Sir Roger Manwood's Grammar School, submitted by Messrs. Turner & Watts: three houses for Messrs. Hallett & Co., in St. George's-road.

SCARBOROUGH.—The principle has been approved by the T.C. of improvements at North Side, estimated to cost £14,700. These improvements are part of a much larger scheme for extending the Promenade by 400 ft., terracing cliffs, providing public shelters and lavatories, etc. Plans have been passed for extensions to a café at Peasholme, to cost about £7,500, and including a new building.—A contract has been "let" for the erection of a New Yorkshire Penny Bank in Huntress-row. Messrs. Wm. Nicholson & Sons, Ltd., of London and Leeds, are the contractors. Messrs. Chorley & Gribbon, architects, Park-place, Leeds.

SEAHOUSES (NORTHUMBERLAND).—It is proposed to erect a new Primitive Methodist Church at the Seahouses fishing station. Additional land has been secured for the purpose, and Sir Walter Runciman is giving £1,000 towards the cost of erection.

SEAHAM HARBOUR.—The U.D.C. has decided to proceed with the widening of Dawdon crossing, and to obtain an estimate for the widening of the railway bridge.

SEDGLEY.—At the U.D.C. the engineers for the Lower Gornal scheme for sewerage and sewage disposal submitted plans, the cost being estimated at £76,000. The scheme was approved, and the engineers, Messrs. Willcox & Raikes, were authorised to proceed with the preparation of quantities. The engineers also reported on a sewerage scheme for North Springfield, estimated to cost £1,000, and were authorised to prepare an estimate for the elimination of all surface water from the foul sewers on the housing estate. Plans have been passed for a slaughterhouse in Hill-street, for Mr. C. H. Guest. The Council has authorised the Surveyor to proceed with the lay-out of the extension to the cemetery at a cost of £740. The Town Clerk is negotiating with Lord Dudley regarding the widening of Cotwall End-road. Land is to be acquired to effect a widening of Bibdale Bank. A committee has been asked to report on extensions to the gas works, suggested by the gas manager, and involving an outlay of £14,300.

SHEFFIELD.—Plans approved by T.C.: Two houses Dalewood-road, for Gillam & Co.; four houses, Shiregreen-lane, for Mr. Ernest Reeder; bungalow, Dalewood-road, for Mr. A. S. Goodwin; house, Rockley-road, for Mr. Bernard F. Glossop; eight houses, Bents-road, for Mr. J. A. Wragg; four houses, Ringinglow-road, for Mr. Riley Watson; six houses, Ecclesall-road S. and Tullibardine-roads, for Mr. A. J. Belton; eight houses and shops, Ringinglow-road, Trap-lane, and Bents Green-road, for Messrs. W. Malthouse, Ltd.; bungalow, Dalewood-road, for Mr. J. V. Auckland; house, Bromwich-road, for Mr. C. Mitchell; two houses, Toftwood-road, for Mr. F. Hessey; bungalow, Carsick Hill-road, for Mr. W. W. Wood; five bungalows, Derbyshire-lane, for Mr. H. J. Taylor; two houses, Holmhirst-road, for Mr. H. Moulson; two bungalows, Watt-lane, for Mr. P. Parry; house, Stubbin-lane, Woodhouse, for Mr. E. E. Piper; house, Linscott-road, for Messrs. S. Higton & Sons; two houses, Snaithing-lane, for Mr. H. Tranter; house, Clarendon-road, for Mr. A. H. Cowan; house, Linaker-road, for Miss E. F. Judge; house, Whirlowdale-road, for Mr. C. Hodgkinson; house, Sefton-road, for Mr. A. Tyzack; two houses, Folds-crescent, for Messrs. C. Swift and C. B. Lowe; house, Gisborne-road, for Mr. W. Booker; two houses, Carter Knowle-road, for Messrs. F. Ridal & Son; two houses, Louth-road, for Messrs. Simpson Bros; bungalow, Cherry Bank-road, for Mr. E. C. Hannant; bungalow, Richmond-avenue, for Mr. J. L. Bostock; bungalow, off Richmond-road, for Mr. R. G. Redfern; two houses, Cairns-road, for Messrs. W. P. Cauwood and H. S. Harrop; two houses, Ford-road, for Mr. W. G. Porter and Messrs. Rawcliffe & Ogden; bungalow, Lees Hall-road, for Mr. J. C. Pimperton; two houses, Folds-crescent, for Messrs. Swift & Lowe; house, Whiteley-lane, for Mr. W. H. Bland; two houses, Louth-road, Messrs. Simpson Bros.; house, Stumperlowe-crescent-road, for Mr. Ernest Walton; house, Stumperlowe-crescent-road, for Mr. Ernest Walton; house, Stumperlowe-crescent-road, for Mr. J. H. Chatt; house, Holmhirst-road, for Messrs. Hammett & Co.; house and garage, Darwin-lane, for Mr. T. Sanderson; house, Chorley-drive and Chorley-road, for Mrs. E. Maclaurin; two houses, Firth Park-crescent, for Mr. T. Pye; bungalow, Seagrave-road, for Mr. A. Tate; house, Chorley-road, for Mr. S. Hancock; house, Chorley-road, for Mr. S. Hancock.—The T.C. has received sanction to borrow £20,399 for works of street

(*Continued on* p. 459.)

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inqu

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fletton, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick:—			
2½ in.	8 11 9	3 in.	10 3 0
GLAZED BRICKS—			
Best White Ivory, and Salt Glazed Stretchers	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
Headers	22 10 0	One Side and two Ends	32 10 0
Quoins. Bullnose and 4½ in. Flats	29 10 0	Two Sides and one End	33 10 0
		Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
¾ in. Shingle for Ferro-Concrete	14 0	" "
½ in. "	15 0	" "
¾ in. Broken Brick	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

	£ s. d.
Best Portland Cement, British Standard Specification Test £2 18 0 to 51/- alongside at Vauxhall in 80-ton lots.	£3 3 6
Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

	s. d.
Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.	s. d.
Scappled random blocks Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£34 0	3 × 6	£24 10
4 × 9	32 0	3 × 11	30 0
4 × 8	26 0	2 × 11	30 0
4 × 7	26 0	3 × 9	26 0
3 × 8	25 10	2½ × 9	27 0
3 × 7	25 10	3 × 3½	25 0
2½ × 7	24 0	3 × 3	24 10

PLANED BOARDS.

1 × 11	£37 10	1 × 9	£36 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
½	21/-	1¼	33/6
⅝	24/-	1½	37/6
1	26/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
½	17/6
¾	21/-
1	26/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 8
Dry Wainscot Oak, per ft. super, as inch	0 2 0 to 0 2 6
¾ in. do. do.	0 1 6 to 0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9 to 0 2 6
Cuba Mahogany	0 3 0 to 0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 4 0 to —
American Whitewood planks, per ft. cube	0 12 0 to 0 14 0
Best Scotch Glue, per cwt.	4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work "	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ⅞ in.	13 10 0
⅜ in.	14 10 0	1 in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discount; carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ⅜" &up.	Fittings. ½" to ¾" inclusive.	Flanges ⅜" &up.	Flanges ½" to ¾" inclusive.
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 3ft. lengths	4 9	5 8	8 10
4 in. "	6 3	6 8	11 4
5 in. "	7 6	11 6	18 2
6 in. "	8 10	14 4	23 5

IRON—	Per ton in London £ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 8
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	"	18 0 0
Mild Steel Bars	12 10 0	"	13 10 0

METALS (*Continued*).

	£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	13 0 0
Hoop iron, basis price	16 10 0
" Galvanised	21 0 0
Soft Steel Sheets, Black—	
Ordinary sizes to 20 g.	15 0 0
" " " 24 g.	16 0 0
" " " 26 g.	18 0 0
Sheets Flat Best Soft Steel, C.R. & C.A.	
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0
Flat and Galvanised Corrugated Sheets—	
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0
Sheets Galvanised Flat, Best quality—	
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0
Best Soft Steel Sheets, 26 g.	26 0 0
Cut Nails, 3in. to 6 in.	20 10 0
(under 3in. usual trade extras.)	

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, p coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	

NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s

	£ s. d.
Old lead, ex London area, at Mills per ton	31 0 0
Do., ex country, carriage forward per ton	32 0 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
29/	45/-	76/-	153/-	246/-	510

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in
41/6	62/-	92/-	174/-	300/-	588

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per d.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	41/- ne

NEW RIVER PATTERN CROYDON BALL VALV

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

	1½ in.	1¾ in.	2 in.
8 lbs. P. traps	33/-	41/-	56/-
8 lbs. S. traps	35/-	45/-	66/-

COPPER—	£ s. d.
Strong Sheet per lb	0 2 3
Thin "	0 2 4
Copper nails "	0 2 3
Copper wire "	0 2 4
TIN—English Ingots "	0 2 6
SOLDER—Plumbers' "	0 1 2
Tinmen's "	0 1 4
Blowpipe "	0 1 5

PAINTS, &c.

Raw Linseed Oil, in pipes per gallo	
" " " in barrels	
" " " in drums	
Boiled " " in barrels	
" " " in drums	
Turpentine in barrels	
" in drums (10 gall.)	
Genuine Ground English White Lead, per to (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms "Park," "Supremus," "St. Paul's "Spedol" and other best brands 14 lb. tins) not less than 5 cwt lots per ton delivere	
Red Lead, Dry (packages extra) per to	
Best Linseed Oil Putty per cwt	
Filocol per cwt	
Size, XD Quality per gall	

Continues on next page.

The information given on this page has b compiled for THE BUILDER and is copyright. this list is to give, as far as possible, the ac of materials, not necessarily the highest or low and quantity obviously affect prices—a fact w he remembered by those who make use of this

RRENT OF MATERIALS (*contd.*)

GLASS.

EET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
..	3⅜d.	32 oz. fourths	8½d.
...	4½d.	32 „ thirds	10½d.
..	5d.	Obscured Sheet. 15 oz.	4d
...	6½d.	„ „ 21 „	5½d.
..	6d.	Fluted 15oz. 6¾d., 21oz.	9½d.
...	7¾d.	En'lled 15oz. 5½d., 21 oz	7½d.

cording to size and substance for squares ck.

LLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
e	4½d.
ed	5½d.
ed	5¾d.
lled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large white	6½d.
tinted	9d.
et	6d.
ed Cathedral	5½d.
do.	7¾d.

te is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
rriage	ditto	1 4 0
.....	ditto	1 12 0
.....	Inside	0 18 0
er	ditto	0 18 0
binet	ditto	1 2 6
atting	ditto	1 0 6
Oak.....	ditto	0 18 0
ying Oak	ditto	0 19 0
rnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
old Size	.....	0 10 0
pan	.....	0 10 6
gany Stain (water).....	.....	0 12 0
ck.....	.....	0 7 6
.....	.....	0 14 6
ent)	.....	1 5 0
rush Polish	.....	0 17 0
in Terebine.....	.....	0 9 0
Enamel.....	.....	0 7 0

OSED NEW BUILDINGS

(*Continued from p.* 457).

—The M.H. has approved of the follow-: Further sanatorium accommodation additional shelters and beds, removal of culosis clinic from Norfolk-street to the Queen's-road. In connection with the houses on the public hall site the Estates as asked the Housing Committee to uses for people who will be displaced. ood Estate 7½ acres are to be scheduled ks and pleasure grounds. Consideration to a proposal to erect a further 300 houses Estate, at a cost of about £154,000. It o proceed as soon as possible with the Rockingham-street fire station, at a cost The Corporation has obtained a pro- regarding street improvement schemes outlay of £106,000. A modified scheme ared for widening Piper-lane at a cost of ulsory powers have now been obtained sition of Wooley Wood for park and purposes.

—Authority has been received by the t 90 additional houses. The surveyor, as been appointed architect.

—A scheme of extensions is to be carried Birmingham and Midland Hospital for ated cost; £8,000. The scheme will v block with accommodation for 16 beds oom with seating for 100 persons.

-Funds are being raised by the Catholic towards the cost of erecting a new

E.—The E.C. have decided to purchase ional sports field in Grey-street, and ining used at present for allotments, rect a new girls' school when required playground for children.

The U.D.C. has obtained intimation sanction the borrowing of £23,600 for 50 houses at Stanley Edge, and £2,400 s and sewerage. The M.T. has approved 75 as a proportion of a total expenditure e incurred upon classified roads in the

.—Health Committee of the T.C. pro-20 acres of slum area to re-erect modern

Revised plans are to be prepared for Cwm Council school. Plans have been improvements at the Glais Council Borough Architect is to prepare plans n a site at Llansamlet. The Estates agreed to lease land at Townhill to Mr. or the erection of timber and asbestos and at Sketty is to be leased to Messrs. for the erection of four houses, and to ins for the erection of two houses. The Joseph's Church are negotiating for the a site in Cae Pistyll-street required for an elementary school. Tenders are to he erection of a public convenience near Sketty tram terminus at an estimated cost of £1,050. A sewer is to be laid at a cost of £930 along the site of the proposed 50 ft. road from Lime Kiln-road to Mumbles-road. The Housing Committee has approved of the erection of temporary structures of an approved design at the rear of Council houses and instructed the Borough Architect to design such structures. Plans passed: Chapel, &c., House of Mercy, West Cross, for Bishop of Swansea; schoolroom, Glanmor Estate, for Trustees Trinity Chapel; schoolroom, Sketty-road, for Mr. E. Joseph; bank, Woodfield-street, for Midland Bank, Ltd.; church and hall, Clarence-terrace, for Swansea Parochial Church Council; eight houses, Norton, for Mr. P. Haywood; nine houses, Gelli-street, for Danygraig Housing Society; chapel house, Moriah-place, Treboeth, for Trustees, Moriah Chapel; vicarage, Victoria-road, for Rev. W. Francis, the vicar of Gowertown; bungalow, Hendrefoilan-road, for Mr. A. G. Gugar; two houses, Tycoch Estate, for Mr. T. J. Williams; two houses, Pentregethen-road, for Mr. F. G. Rosser; bungalow, Mayals, for Mr. Wm. Perry; two houses off Coed Cely-road, Derwen Fawr, for Mr. G. Stringer; two houses, Carmarthen-road, for Mr. Griffith John; bungalows, Ravenhill-road, for Mr. Harry Hocknell; two houses, Cecil-street, for Mr. Wm. Samuel; house, Oystermouth-road, for Miss Parkinson; house, Pwll-street, for Mr. D. J. Harries; two houses, Tycoch-road, for Mr. W. T. Humphreys; house, Middle-road, for Mr. L. C. Morgan; house, St. John's-road, for Mr. W. J. Jones; house, Waun Wen-road, for Mr. J. A. Myles; bungalow, Tycoch Estate, for Mr. F. R. Miller; house, Tycoch Estate, for Mr. L. C. Shaughnessy; house, Mysydd-terrace, for Messrs. Richard & Matthews; bungalow, Bayswater-road, for Mr. D. A. Williams; house, Monterey-street, for Mr. F. S. Nicholas; house, Oystermouth-road, Blackpill, for Mrs. A. L. L. Jones; house, Oystermouth-road, Blackpill, for Mrs. C. E. Grove; bungalow, Bayswater-road, for Mr. D. A. Williams; two houses, Middle-road, for Mr. J. Ll. Davies; two houses, Cwmgwyn Estate, for Messrs. T. & G. Spragg; house, Goitre-fach-road, Killay, for Mr. D. E. Sandy; house, Pinewood-road, for Mr. J. R. Cheley; house, Tycoch Estate, for Mr. Thos. Evans; house, Tycoch Estate, for Mr. T. C. Hughes; two houses, Tycoch Estate, for Mr. L. Lloyd; bungalow, Pentregethin-road, for Mr. D. Jonah; house, Lucas-road, Glais, for Mr. S. Edmunds; two houses, Aberdy-berthi-street, for Mr. J. O. Watkins; two houses, Belle-Vue-road, for Mr. P. J. Haywood; house, Lime-kiln-road, for Mr. B. F. Hoppe; house, Manselton-road, for Mr. T. L. Norman; two houses, Prospect-place, Sketty, for Mr. G. R. Thomas; house, off Aberdy-berthi-street, for Mr. S. Govier; two houses, Bellevue-road, for Mr. W. S. Davies; house, Gower-road, for Mr. J. C. Croocock; two houses, Cwmgwyn Estate, for Messrs. T. & G. Spragg; two houses, Slade-road, Newton, for Messrs. Howell & Michael; three houses, West Cross-lane, for Mr. F. E. A. Beer; bungalow, New-road to Waunarlwydd, for Mrs. Norton; house, Caswell-road, for Mr. W. D. Hughes; two houses, Glanbrydan-avenue, for Mr. C. H. Cousins; house, Pentregethin-road, for Mr. T. J. Hughes.

THORNABY-ON-TEES.—A new public elementary school, to accommodate 300 children, is proposed by the North Riding E.C.

TORQUAY.—The T.C. has expressed favour of a scheme prepared by Messrs. Watson for improving the entrance to the Imperial Hotel, and considers that the time has arrived to re-open the scheme for the proposed widening and improvements to the entrance to the marina on the Beacon Hill, and that the final consideration of the two schemes should be taken together. A special committee has been formed to consider schemes prepared by the Surveyor for street widenings.

TREGARON.—The C.C.s of Brecon and Cardigan, with the R.D.C.s of Cardigan, Tregaron and Builth, the Llanwyrtyd Wells U.D.C. and other local authorities, are preparing a joint scheme for construction of a new road, Tregaron to Abergwessin.

TRURO.—The City Surveyor has been instructed to prepare plans for utilising the lower portion of the Hendra site for houses. Messrs. Thornley & Rooke, of Plymouth, architects for the Civic Hall, have been asked to get tenders for the scheme as soon as possible, the M.H. having sanctioned a loan of £6,000 for the purpose. The site of Nos. 2 and 3, Clement-street is to be cleared and the Surveyor asked to prepare plans for the erection of two houses. Plans passed: Bungalow, Faniell-road, for Mr. Bennett.

WARWICK.—The M.H. has sanctioned the proposal of the T.C. to erect a further 41 houses on the Emscote site, and tenders are now to be invited. The B.S. has been instructed to proceed with the scheme for the widening of Swan-street.

WELWYN.—Garden City Parochial Committee has decided to let the contract for its proposed 200 new houses as a whole.

WIGAN.—The managers of the Sacred Heart, Springfield, R.C. School, are proposing enlarging the school premises to provide additional accommodation for 120 scholars.

WINCHESTER.—Plans passed by the R.D.C.: House, Shawford, H. G. Courtney; cottage, Hookpit, E. C. Green; shop, Easton, E. Clark; bungalow, Michel-dever, A. Edwards; cottage, Fair Oak, Mrs. Treasure.

WOODFORD.—The U.D.C. has passed plans as follows: 4 houses, King's-avenue; house, Horn-lane, and house Mankham-avenue.

YORK.—The City Council has under consideration the desirability of erecting cottages on the hospital lands, for the accommodation of members of the staff. It is suggested that accommodation for mental defectives could conveniently be provided at the City Mental Hospital.

FIRE.

Damage to the extent of between £15,000 and £20,000 was done at a fire which occurred recently on the premises of Messrs. James Burn & Co., Ltd., wholesale publishers and bookbinders, Kirby-street, Hatton-garden.

NEW COMPANIES.

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

W. D. WILLIAMS & SON, LTD. (198,219). Registered May 26. 12, Gibson-street, Liverpool. General building contractor, property repairer, plumber, decorator, and electrician. Nominal capital, £2,000.

J. W. SHIPPEN & SONS, LTD. (198,170). Registered May 23. 142, York-road, Leeds. Builders and general contractors, &c. Nominal capital, £3,500.

W. E. PALLANT & CO., LTD. (198,110). Registered May 22. 17, Philpot-lane, E.C. Timber and builders' merchants, &c. Nominal capital, £2,000.

SYNTHETIC MARBLE CO., LTD. (198,044). Registered May 19. Manufacturers and dealers in tiles and bricks, artificial stone, &c. Nominal capital, £200.

MEMORIALS, LTD. (198,068). Registered May 20. Sculptors, quarry masters, and alabaster, marble, granite, and stone merchants, &c. Nominal capital, £100.

NEASHAM BRICKWORKS, LTD. (198,133). Registered May 22. The Brickworks, Neasham, Darlington, co. Durham. Brick and tile works. Nominal capital, £6,000.

ACKWORTH STONE CO., LTD. (198,119). Registered May 22. Moor Top, Ackworth, near Pontefract. Quarry masters and stone merchants. Nominal capital, £3,000.

JOHN WILLMOTT & SONS (HORNSEY), LTD. (198,065). Registered May 20. 40, Tottenham-lane, Hornsey, N. Builders, contractors, timber merchants, makers of shop, office and house fittings, and experts in decoration and equipment. Nominal capital, £6,000.

JOHN WILLMOTT & SONS (HITCHIN), LTD. (198,032). Registered May 19. 80, Walsworth-road, Hitchin. Builders, contractors, timber merchants, makers of shop, office, and house fittings, &c. Nominal capital, £6,000.

HORRELL & BOWMAN, LTD. (199,232). Registered July 11. 508-512, Moseley-road, Balsall Heath, Birmingham. Ironmongers and builders' merchants. Nominal capital, £20,000.

BASINGSTOKE TIMBER CO., LTD. (199,184). Registered July 10. Timber and builders' merchants. Nominal capital, £5,000.

RILEY & CO. (ACCRINGTON), LTD. (199,126). Registered July 7. 2, Dutton-street, Accrington. Ironmongers, builders' merchants, engineers, &c. Nominal capital, £3,000.

DENNY & CO., LTD. (199,218). Registered July 11. 157-8, Windsor House, Victoria-street, S.W. Builders, contractors, merchants, and general traders, &c. Nominal capital, £100.

J. W. RIDLEY, LTD. (198,922). Registered June 27. Builder and building contractor. Nominal capital, £2,000.

KENEFICK, LTD. (198,804). Registered June 23. Woodhorn Quarries, Ashington, Northumberland. Quarry owners and artificial stone makers. Nominal capital, £10,000.

STANSTEAD ABBOTTS STORES, LTD. (198,811). Registered June 23. Sheffield House, High-street, Stanstead Abbotts, Herts. Builders, &c. Nominal capital, £1,000.

ARMSTRONG (CONTRACTORS), LTD. (198,815). Registered June 24. Quarry House, Blaydon, co. Durham. Builders and contractors. Nominal capital, £2,000.

W. L. JOHNSON, LTD. (198,832). Registered June 24. 19-20, Queen Ann-road, South Hackney, E. 9. Builders, &c. Nominal capital, £500.

THOMAS REID, LTD. (198,830). Registered June 24. Building contractors, &c. Nominal capital, £1,000.

UXBRIDGE AND HAREFIELD BUILDERS, LTD. (198,891). Registered June 26. Builders and contractors, &c. Nominal capital, £1,000.

DEWS SAND PITS, LTD. (198,884). Registered June 26. Sand, gravel and ballast merchants, &c. Nominal capital, £1,000.

MORRIS (BIRMINGHAM), LTD. (198,865). Registered June 26. Builders, contractors, &c. Nominal capital, £1,000.

CURRENT PRICES FOR BUILDING WORK IN LONDO

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6 ..	per yard cube	35	0
Add if in underpinning in short lengths	„ „	7	6
Add if in floors 6 in. thick	„ „	3	6
Add if in beams	„ „	4	0
Add if aggregate 1 : 2: 4	„ „	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	„	7	10	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1¼

POINTING.

Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	1	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	„ „	9	0
¾ inch on flats in two thicknesses.....	„ „	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	3

MASON.

York stone templates fixed	per foot cube	12	6
York stone sills fixed	„ „	21	6
Bath stone and all labour fixed	„ „	10	6
Portland stone fixed	„ „	19	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails....	per square	72	9
Do. 20 in. × 10 in. Do. Do.	„	80	9
Do. 24 in. × 12 in. Do. Do.	„	90	0

CARPENTER AND JOINER.

Fir framed in plates .....per foot cube		5	3
Do. joists	„ „	5	9
Do. roofs, floors and partitions	„ „	6	3
Do. trusses	„ „	8	3

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers .. „		50	0
Do. to beams .....per ft. sup.....		1	0
Centres for arches ..... „		1	6
Gutter boards and bearers ..... „		1	0

FLOORING.		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	„		54/-	65/-	72/-
Do. matchings	„	45/-	55/-		
Moulded skirting, including backings and grounds .....per ft. sup.		1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size.....	„ „	3	9

DOORS.		1½″	1¾″	2″
Two-panel square framed .....per ft. sup		2/1	2/4	2/6
Four-panel Do.	„	2/5	2/8	2/11
Two-panel moulded both sides	„	2/8	2/11	3/2
Four-panel Do. Do.	„	2/11	3/2	3/5

CARPENTER AND JOINER—continued

FRAMES.

		1″
Deal wrot moulded and rebated	per foot	
Plain deal jamb linings framed	per ft. sup.	1/8
Deal shelves and bearers	„	1/5
Add if cross tongued	„	2d.

STAIRCASES.

	1″	1¼″	1½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers		
Deal balusters, 1 in. × 1¼ in.	per ft.	
Mahogany handrail; average 3 in. × 3 in.	„	
Add if ramped	„	
Add if wreathed		

FIXING ONLY IRONMONGERY (INCLUDING SC

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners .....11½d.		Mortice locks	
Casement fasteners	1/5	Patent spring bi	
Casement stays.....	1/2	letting in to f	
Cupboard locks	1/5	making good ..	

FOUNDER AND SMITH.

Rolled steel joists	
Plain compound girders	
Do. stanchions	
In roof work	

RAIN-WATER GOODS.

		3″	4″
Half-round plain rebated joints .. ft. run		1/11	2/4½
Ogee Do. Do. .. „		2/4½	3/1
Rain-water pipes with ears ..... „		2/9	3/7
Extra for shoes and bends ..... each		4/4	5/11
Do. stopped ends ..... „		1/11	2/4½
Do. nozzles for inlets ..... „		2/2	2/7

PLUMBER.

Milled lead and laying in flashings and gutters	pe
Do. Do. in flats	
Extra labour and solder in coated cesspools	e
Welt joint	per
Soldered seam	„
Copper nailing	„

	½″	¾″	1″	1½″
Drawn lead waste per ft. run	1/1	1/9	1/11	3/5
Do. service „	1/8	2/2	2/7	3/10
Do. soil „				
Bends in lead pipe each				
Soldered stop ends „	1/2	1/8	2/1	2/10
Red lead joints .... „	11d.	1/-	1/3	1/11
Wiped soldered joints „	2/10	3/6	4/-	4/11
Lead traps and cleaning screws .....„				14/7
Bib cocks and joints ..„	6/4	9/7	15/4	41/-
Stop cocks and joints „	15/4	17/2	25/8	51/-

PLASTERER.

Render, float and set in lime and hair	per ya
Do. Do. Sirapite	„
Do. Do. Keen's	„
Add sawn lathing	„
Add metal lathing	„
Portland cement screed	„
Do. plain face	„
Mouldings in plaster	per l
One-and-a-half granolithic pavings	per ya

GLAZIER.

21 oz. sheet plain	per fo
26 oz. Do.	„
Obscured sheet	„
⅛ in. rolled plate	„
¼ in. rough rolled or cast plate	„
¼ in. wired cast plate	„

PAINTER.

Preparing and distempering, 2 coats	per ya
Knotting and priming	„
Plain painting 1 coat	„
Do. 2 coats	„
Do. 3 coats	„
Do. 4 coats	„
Graining	„
Varnishing twice	„
Sizing	„
Flatting	„
Enamel	„
Wax polishing	per foo
French polishing	„
Preparing for and hanging paper	per pie

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The

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PATENTS

PPLICATIONS PUBLISHED.*

-P. Hall: Adjustable clip for use or other supports.
-F. E. Brandt: Adjustable arm-
-S. Haskins & Bros., Ltd., and Means for raising and lowering fire- and shutters.
-North of England School Furnishing nd C. A. Gray: Desks.
-H. K. B. Davis, jun.: Wood- chines.
-T. Rigby: Drying-processes.
-L. D. J. Cornelissen: Domestic oilers.
-J. Field: Window sashes.
-J. G. Austin: Device for guarding, nd drilling machinery.
-G. F. Hight and T. W. Brown: liding window sashes.
-M. H. Walsh and G. Woffenden: kets.
-D. Taylor: Fire grates and ranges.
-Herbert Kershaw & Co., Ltd., and ell: Hinges.
-T. Robinson & Son, Ltd., C. J. nd J. Tweedale: Cutter-heads for od.
-J. L. Heath and W. H. Crosse: dows.
-G. F. Silley: Folding tables.
-T. Nose: Process of constructing ipes of concrete.
-S. Acton: Safety or pressure- vice for low-pressure heating.
-A. B. Davis: Ladders.
-Radio Communication Co., Ltd., . Beswick: Casings particularly use with sectional panel boards.
-H. A. Lamplugh: Seats.
-D. Moir and H. Buchanan: Means ufacture, centrifugally, of pipes and
-F. Mills and A. E. Mills: Method or locking sliding window sashes.
-A. Chatwin and Kingfisher, Ltd.: and seats.
-G. Jacques: Chimney cowls.
-W. Schindler: Builders' hoisting-
-J. W. Sunderland and W. A. Sut- s for supporting or attaching girders o another for overhead runways.
R. A. Leahy: Apparatus for screen- material.
Welin Davit and Engineering Co., in and A. W. Davis: Winches.
J. A. Davenport: Swimming-baths.
R. K. Abbott: Cement-integrated
Pavement Publicity, Ltd., and ble: Manufacture of paving-slabs
J. Neal: Wind-tilted and auto- lanced chimney and ventilating-
F. Brossler: Composite material in heets, plates, slabs and blocks.
J. D. Bennet: Table desks.
J. B. Macdermott and D. A. anufacture of porous bricks, blocks
R. S. Chambers and H. F. Barnett- ising machines.
E. L. Cooper and J. E. Jackson: cooling, and humidifying
M. Righetto and C. Zorzi: Re- ete sleepers or ties.
. P. Lievre: Automatic securing- ged doors, windows and panels.
. Wilhemi: Blasting of rocks.
. R. Dickinson: Lavatory basins e.
. A. Stenning: Connecting pipes

pplications are now in the stage in to the grant of Patents upon them

212,646.—Linoleum Manufacturing Co., Ltd., and A. A. Godfrey: Manufacture of mosaic-like tiles from linoleum.
212,649.—C. P. Wall: Collapsible table.
212,689.—G. West: Billiard tables.
212,692.—R. H. Macartney: Domestic tables.
212,715.—F. L. Ball, F. Moulton, and Lead Wool Co. (1919), Ltd.: Apparatus for testing pipe-joints for leakage.
212,720.—E. Le Bas and E. A. Garratt: Metal sheet piling.
212,721.—Parker, Winder & Achurch, Ltd., and J. P. Achurch: Kitchen ranges.
212,739.—W. T. McCullough & J. W. McCullough: Chimney cowls.
212,748.—J. McMorran: Outside steps of doors of houses.
212,753.—F. B. Dehn (National Pneumatic Co.): Door-operating mechanism.
212,762.—E. Darrah and H. Robinson: "Pull" handles for closet flushing-cisterns.
212,775.—C. H. Twells: Writing-desks.
212,785.—G. B. Alison and J. G. White & Co., Ltd.: Road constructor.

TRADE NEWS

Economical methods of obtaining satisfactory finishes of all kinds of woodwork are thoroughly dealt with in a booklet of 32 pp., illustrated throughout in colour, issued by Messrs. S. C. Johnson & Son, Ltd., of West Drayton, Middlesex. Among a large variety of treatments for wood surfaces considered are dyes which give an attractive appearance to soft woods in cases where the question of cost does not permit the use of expensive grained hardwoods; flat varnish stains for covering up old work; paste wood fillers and wax in a variety of shades for floors; prepared wax for polishing finished surfaces; powdered wax for dance floors; undercoats; enamels which are claimed to cover from 300 to 500 sq. ft. per gallon; preparations for removing old paint and varnish; and washable wall finishes in different colours. In addition to text illustrations, 3 pp. are devoted to 60 colour panels showing the actual results obtained with the firm's products. Copies of the booklet will be sent free on request.

Those of us who have admired the beautiful woodwork to be seen in the India and Burma forestry and timber exhibits at the British Empire Exhibition will welcome the publication of a catalogue of these sections. Such a volume, running into 140 pp., has been issued by Messrs. W. W. Howard Bros., & Co. (sole agents for the Governments of India, Burma, Bombay, Madras, and Western Australia), of 4, Stanhope-street, Euston-road, N.W.1.

The Cheltenham Shop Fitting Co. have found it necessary, owing to increased business, to remove to larger premises, and their address is now Station Works, Cheltenham. The new premises comprise large and well-fitted workshops, draughtsmen's offices, showrooms, polishing shops, etc., and some of the latest and best machinery has already been installed, with further additions to be made in the near future.

Councillor's Resignation.

At a meeting of the Bromsgrove Urban Council, a letter was received from Mr. John Brazier, of the firm of J. & A. Brazier, builders, Bromsgrove, stating that, owing to the recent decision of the late Mr. Justice Bailhache, he felt bound to resign his seat on the Council. The Council decided to accept the resignation with regret, and to express to Mr. Brazier appreciation of his services, coupled with the hope that he would be able to return to the Council at a later date. The firm of which Mr. Brazier is a director are the provisional contractors for the erection of a new market hall for the town, and for a number of Council houses.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

ABERDEEN.—For the extension of the Rubislaw electricity sub-station, for the T.C.:—
*G. Bissett & Son, Aberdeen.

ASHBURTON.—For 12 houses, for the U.D.C.:—

*F. J. Badcock, Ashburton	£7,283	0	0
Bond & Son	7,242	6	6
W. A. Brown, Gunnislake.....	6,966	0	0
J. A. Cox, Newton Abbot	6,820	0	0

AYLESBURY.—For the erection of (*a*) 16 houses, and (*b*) 36 houses, for the T.C.:—

*Cannon, Green & Co., Aylesbury ..	(*a*)	£5,753
	(*b*)	13,888

BARNSLEY.—Accepted by the T.C.:—
For street works in Back-road—
*C. D. Potter & Sons..... £910
For street works in Blenheim-road—
*C. D. Potter & Sons..... 995
Erection of 50 Type "A" houses in pairs, in concrete—
*The U.K.H. Syndicate, Ltd. (per pair).. 670

COLWYN BAY.—For erecting two sub-stations, for the U.D.C. Mr. J. Amphlett, Town Clerk, Council Offices:—
*R. Hughes Williams, Colwyn Bay..... £564

HAZEL GROVE AND BRAMHALL.—For interior redecoration of Council Offices:—
*G. Griffen, Hazel Grove.

HOUGHTON-LE-SPRING.—For the erection of 44 "A3" Type and 6 "A2" Type houses, for the R.D.C.:—
*Dyson, Lindsley & Co., Ltd., Chester-le-Street £21,613

IRELAND—Accepted by the Commissioners of Public Works, Dublin:—
For restoration of Borris-in-Ossory ex-R.I.C. Barracks, Co. Leix—
William Gaynor, Borris-in-Ossory, Co. Leix.
Restoration of Partry Civic Guard Station, Co. Mayo—
Martin Birmingham, Ballindine, Co. Mayo.

LEEDS.—For carrying out private street work:—
Fish-street (part)—
*W. Keighley.
Noster-terrace and Noster-road (part)—
*M. Harrison & Co.
Meadow-road—
*Leeds & Yorkshire Road Construction Co.
Armley-road—
*J. E. Speight.
Water-lane—
*Dalton & Higgins.
The Calls—
*W. Keighley.
Swinegate—
*J. Speight.

LEEDS.—For the demolition of existing shop premises and rebuilding of new premises, for Messrs. M. C. Hitchen & Sons. Messrs. Kitson, Parish & Ledgard, architects, Leeds:—
*Wm. Irwin & Co., Ltd., Leeds.

LEICESTER.—For the erection of 750 non-parlour type houses (£465 per house) and 750 parlour type houses (£515 per house), in concrete, for the T.C.:—
*Boot & Son (London), Ltd.

LONDON.—For the external painting and repair of the Bethnal Green Hospital in Cambridge-road, for the B.G. Mr. C. F. Jones, 79A, Bishops-road, Bethnal Green:—
*C. J. Kemp & Sons, Forest Gate, E.7 £2,630 10

LONDON (BERMONDSEY).—For conversion of Parish-street workhouse into temporary housing accommodation, for the T.C.:—

Rice & Son	£18,777	0	
Wm. Moss & Sons, Ltd.....	18,644	0	
Holiday & Greenwood, Ltd.	18,157	0	
Patman & Fotheringham, Ltd. ..	15,151	0	
*The Building Works Manager	12,628	5	

LONDON (LEWISHAM).—For external painting of the hospital, for the B.G.:—
*Norfolk Decorators, Holborn Viaduct, E.C. £763 7 7

MARKET HARBOROUGH.—For the construction of public conveniences in Church-square, for the U.D.C.:—
*H. H. Garlick £1,194 10

MEARNS.—Extension of 7 in. main to Housecraig Farm, for the Eastwood and Mearns Water Committee:
*W. Gibson, Glasgow..... £395 6

PATRICROFT. — For erection of 24 houses in Davyhulme and Flixton, for the Barton-upon-Irwell R.D.C. Mr. E. L. Leeming, Surveyor, Council Offices, Green-lane:—
*J. Chapman & Son, Patricroft.

PENRHYNDEUDRAETH.—For the erection of a memorial hall to accommodate 1,500 people:—
*J Jones, Harlech £2,200

PENZANCE.—For the erection of a garage on the quay, for the T.C. :—
*J. H. Nicholas £199

RATHMINES.—For the erection of 16 houses at Church-place, for the R.D.C. :—
*J. R. Thompson, Ltd., Fair View, Dublin £9,752

SCARBOROUGH.—For erection of new banking premises in Huntress-row, for the Yorkshire Penny Bank, Ltd. Messrs. Chorley & Gribbon, architects, Leeds :—
**Mason work*—Wm. Nicholson & Sons, Ltd., Leeds.
**Asphalter*—The Northern Asphalte Co., Ltd., Leeds.

SHARLSTON.—For carrying out the necessary street and sewer works in connection with the Wakefield R.D.C. Housing Scheme :—
*A. Waterman, Leeds £3,150

SHEFFIELD.—For painting houses on housing estate, for the T.C. :—
*Flint Bros. £1,394

ST. NEOTS.—For alterations and additions to the Old Hall, Cambridge-road, for Mr. F. E. Brightman. Messrs. Cockrill & Sellek, architects, 7, St. Paul's-square, Bedford :—
*Bull & Son, St. Neots..... £926 5

TORQUAY.—For the construction of buttress to sea wall, for the T.C. :—
*W. H. Smith..... £890

TORQUAY.—For improvement at Lymington-road, for the T.C. :—
*R. E. Norracott £631

TORQUAY.—For sea defence works, Torbay-road for the T.C. :—
*W. H. Smith..... £3,518 12

UPPINGHAM.—For taking down and rebuilding the Memorial Monument. Mr. G. Dolphin, architect, North-street :—
T. A. Dorman, Uppingham..... £245
*H. H. Clarke, Uppingham..... 169

WALLASEY.—For the painting of Corporation houses, for the T.C. :—
*B. Crowther, Shaw..... £316

WALTON.—For erection of 40 houses, for the Wakefield R.D.C. :—
*Paul Rhodes, Ltd., Leeds.

WEYMOUTH.—For painting, &c., at Guildhall, for the T.C. :—
*Pates Bros..... £138 10

WATFORD.—For erection of a nurses' home at the Infirmary in Vicarage-road, for the Union. Messrs. A. Saxon Snell & Phillips, 9, Bentinck-street, Manchester-square, W.1. :—

S. E. Moss, Southend	£15,543	3	8
Kempster & Williams, Watford	15,485	0	0
Prestige & Co., Grosvenor-road	15,096	0	0
Higgs & Hill, Lambeth	14,444	0	0
R. Ginn & Son, Hertford	14,300	0	0
Clifford & Gough, Watford ..	14,299	0	0
General Building Co., St. Martin's-lane	14,210	0	0
H. Pickrill, Wealdstone	14,100	0	0
Brightman & Sons, Watford ..	13,959	0	0
Clark Bros., Watford	13,884	10	0
A. E. Symes, Stratford	13,787	0	0
Perry Bros., Ealing	13,661	0	0
*A. J. Eldridge, Watford	12,800	3	10
Winter & Ward, Harpenden ..	12,728	0	0

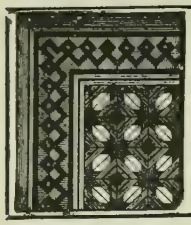
WOOLWICH.—For Painting, &c., at Infirmary (in place of tender withdrawn), for the B.G. : —
Eltham Construction Co. £1,780

Builders' Estates.

Mr. Edward Williams, Ce
Walton, Liverpool (net persona
£11,814.

Mr. Charles Burt, Victoria-road
Flint (net personalty nil), £20,949.

Mr. Benjamin Bridgwater, of
Hornsey, N. (net personalty £14,6



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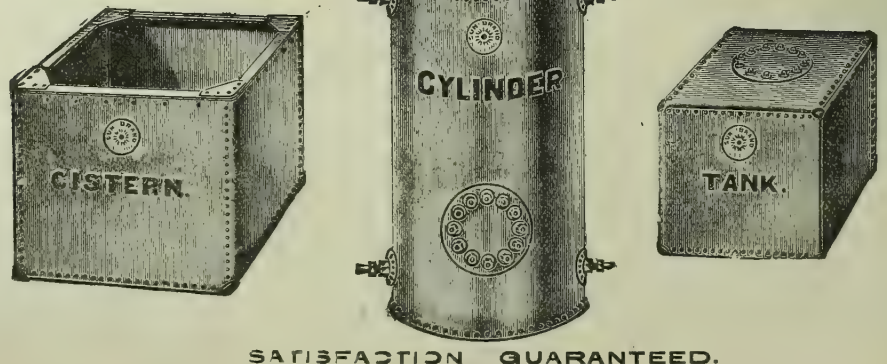
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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VII.—No. 4260. SEPTEMBER 26, 1924.

HOUSING

THE figures recently given by the Ministry of Health relating to housing schemes under the Chamberlain Act of 1923, which we published in our issue for September 19, appear to raise the question whether the policy embodied in the Act of this year of favouring the local ities more than private enterprise in the amount of the bution or subsidy is a wise one. Table I gives the number ses authorised up to September 3, and the figures are : s to be erected by local authorities, 55,286 ; houses to be l by private enterprise, 103,233. Table III, which is l "Building Progress," gives the number of houses under uction : By local authorities, 16,928 ; by private enter- 33,596. In fairness it must be pointed out that in a note se tables it is stated that returns had not been received 12 local authorities for September, and that in the case se local authorities the numbers had been taken from the s of the previous month, but it is still worth noting that mber of houses authorised and under construction by e enterprise were nearly double the number given for local ities. Under this Act both private enterprise and the uthorities, so far as the State contribution or subsidy cerned, are in a position of equality, and under such ons private enterprise has given about double the output ses. If we may use a simile, the policy of favouring the uthorities appears akin to what would have been the of a Government who in past times had elected to se horse traffic to the disadvantage of motor traffic, nce being given to the slower method of progression.

e Government, however, concedes the fact that private ise produces houses, but alleges that the houses so ed do not meet the present need for working-class gs, as they are sold and are not offered on weekly ents. Mr. Wheatley, in a recent article in the *Operative* , has again emphasised this point, as he says : "The 1923 was producing houses, but not enough to ease the n, and the houses were mostly being built for sale and letting, so that those very people whose needs it was to meet were not being helped." A correspondent, in we published in our issue of June 6, went further than he stated that "Working-class dwellings never have pplied by private enterprise and with much stronger cannot be supplied now without assistance from the

We cannot but think that this statement goes too far, re are working-class buildings erected expressly for the g-classes in every industrial town in the country which ected by private enterprise, and although of late years, ly since the war, there has been considerable conversion e houses in neighbourhoods which have changed in er, we hardly think it could be proved that until com- ely recent times the bulk of the working-classes were sed in houses erected by private enterprise.

his as it may, the figures published by the Ministry of as to the numbers of houses now being produced whilst thorities and private enterprise stand practically on an ooting as regards subsidy, coupled with the statement ose erected by private enterprise are only sold, and not very suggestive, as it would appear that the real problem lved is why private owners will not let the houses which n produce twice as quickly as the local authorities have It will also be very interesting to watch the results of the p which the present Government has instituted. The ion to houses being offered on lease or let on weekly agreements is rent restriction, and the nation is now being called upon to subsidise housing because for many years an economic rent has not been permitted. The Clydebank dispute in itself serves as an object lesson as to what restriction in rent may lead to, especially in the case of weekly tenancies to the poorer classes, and with that example before their eyes private owners hesitate to let the houses which they erect. Rent restriction is founded on a radically wrong principle, as it makes the private owner of one class of property alone contribute to the national necessity. For ten years the private owners of certain classes of houses have been called upon to pay a subsidy towards housing levied on their property alone, and having thus paid a tax or rate levied upon no other class, they are still left with this burden upon them, whilst an additional subsidy is offered to the local authorities in order to induce them to undertake the work that the private owners are prevented from carrying out.

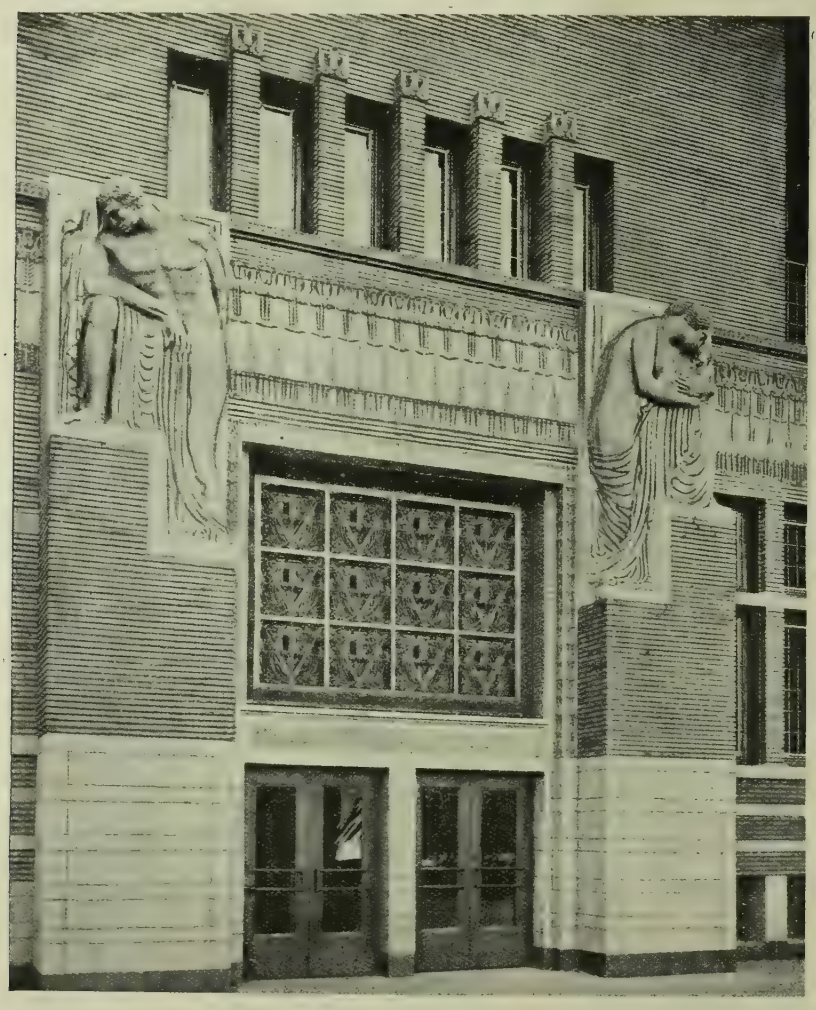
Since it is proved, other things being equal, that private enterprise supplies twice as many houses as the local authorities, the solution of the housing question appears not to lie in increasing the subsidies unequally between the two agencies for supply, to the detriment of the most productive, but to inquire carefully whether steps can be taken to encourage private enterprise not only to erect houses but to let them when erected. This is a very thorny subject and requires approaching with the greatest caution. There is strong opposition to the immediate repeal of the Rent Acts, and although we cannot follow the argument in the letter by the correspondent we have already referred to, that it would be unfair to those who went to the war placing them at a disadvantage with the "stay-at-home," seeing that the real effect would be to place the stay-at-home on an equality with those who served instead of being "preferential" householders as they are under rent restriction, we are content to leave the matter there in this article, which is not so much addressed to the subject of repeal of the Rent Acts as to securing the increase of housing accommodation which will be let to small tenants. Our correspondent agreed with us that the payment of subsidies is a wrong method, and puts the point tersely, saying that generally it is an encouragement to extravagance and unfair inflation of prices, but the nation stands now committed to vast subsidies and is backing the slowest horse, the local authority. If a subsidy has to be paid, is it being spent to obtain the best result ? Would not a less sum than that now proposed to be spent in subsidies be expended if the Rent Acts were repealed and necessitous tenants assisted ?

We made some such suggestion tentatively in our issue of May 23, and our correspondent in the letter we have referred to characterised the policy as "stark staring daylight madness," and thought it would lead to profiteering on the part of those who had bought property at low prices, but although we deprecate assistance being given through the rates, we may remind ourselves there is some precedent for such assistance being given in section 5 subsection (1) (*c*) of the Housing Act, 1923, in the case of converted houses, and possibly some such method of assisting tenants might be devised. We only desire to show that there is need for inquiry whether the best method of securing houses quickly is embodied in the new Act, which favours local authorities more than private enterprise, or whether a more economic means might not be devised which would accelerate output and at the same time do something towards restoring economic rents.

NOTES.

The Influence of Ruskin. It is probably impossible even now fully and justly to estimate the amount or the value and influence of Ruskin's writings. In its sociological aspect one can hardly doubt the value of his insight and sympathy. In its critical artistic aspect much exception might be taken; it would be quite impossible for us all to follow him in his extreme laudation of Turner. In its relation to architecture it has become the fashion to underrate much of his writing, but we think our readers will agree that in his very interesting paper on "The Architect's Debt to Ruskin" Mr. Halsey Ricardo has done no less than justice to Ruskin's wise prevision as to church restoration, and shows that he was actually a pioneer in regard to matters which signify much to architects to-day. Elsewhere in this issue will be found the paper in question.

Housing and Labour. We must all agree that a broader vision has been brought to bear upon many of our present-day problems during the past fifty years. The increased generosity of view which makes it desirable to realise the hopes and fears of the manual labourer is a distinct advance in modern civilisation. But real statesmanship should be the guide in national affairs, and that is bound to take cognisance of all the needs of all classes. There is much to commend in the efforts of the National Federation of Building Trade Operatives to make things easier and fairer for its members. But we have to face many hard facts in these tax-ridden days, and whilst we must give a sympathetic ear to the sociologist and philanthropist, we cannot afford to ignore the economist or the statesman if the greatest good is to be assured to the country. It is not a fact that the "new earth" is a something which "plain men alone can produce," if it is the generally accepted meaning of plain. Nor will there be felt general confidence in the statement of the Federation that they "are both able and willing to build houses with or without the intervention of the employers." We welcome all fair and simple statements, but we cannot see that the way out of our many difficulties is to be found without full consideration of our economic and practical difficulties side by side with the vital interests of manual labour and non-manual labour. We must not forget that brain is at least equal to brawn and and we cannot reckon without it.



Woodbury County Court House: Side Entrance. (*See page* 472.)
MR. WILLIAM L. STEELE, Architect; MESSRS. PURCELL & ELMSLIE, Associated Architects.

Architects' Benevolent Society's Insurance Scheme. We have received a the Architects' Ben Society's Insurance which, we understa been sent to every of the architectural profession. Th let contains full particulars of the tects' Benevolent Society's In Scheme, from which we learn an architect has to do, whatev of insurance he may require, is t to the Architects' Benevolent The Architects' Benevolent Society tied in any way to any insuranc pany. Each architect who insures to choose his own office, but if he preference he can leave it to the to recommend an office where th of policy he requires will be and advantageously carried throu architects insure through a central which is at the same time a society entire income is expended on t fortunate members of the archit profession, they have the satisfact knowing that the commission w attached to the transaction, and is paid to the Architects' Bene Society, is returned by the Society architectural profession in the fo grants and pensions to "those in n tous circumstances who have been e as architects or architects' assistan to their widows and children." is an aspect of the scheme which, it has only to be realised to appeal architects who care for the solida their profession, and we gladl attention to a very simple way in the Society can be assisted.

Workmen in the Building Trade. We are glad to n the current issue R.I.B.A. *Journal* th Committee appoint the Institute to into the shortage of skilled w in the building industry has been a on the question for some month hopes to be in a position to lay it before the Ministry of Health early date. Their views should special interest at the present tim we hope they will have some suggestions to put before the M Wages are standardised, there is pl work, and yet, with large numbers employed workmen, many of them trained, we find this serious shor labour.

Mural Decoration. We are glad to notic in no way depress recent failures i attempt to revive painting, a scheme of decoration h recently carried out in the Memori of the Highway Clubs (Incorporat two students of the Slade School un



Mr. W. John Allcorn.

Sheldonian Theatre, Oxford.
nowing the President of the R.I.B.A.)

ion of Professor Tonks. From ductions of them appearing in a con- prary they appear to be executed much ability. Perhaps it is hardly ble to speak of such work as executed udents, as the handling shows con- ble experience; however, as the ages e artists are given as 19 years only, evidence of great promise for their e careers. The two students execut- ese paintings are Mr. Rex Whistler liss Adshead, a daughter of Professor ad, the Professor of Town Planning, n University. We shall be inter- to learn whether these paintings, are executed in oil, were carried out e wall itself—the essential require- of mural decoration—or whether re that studio substitute over which ch talent wastes itself. A real l of mural decoration will only be ed when the methods are those properly belong to the art. The measure about 7½ ft. by 10 ft. It something of an achievement if the ration of two artists in this way has ded in obtaining a unity in their which from the reproduction we een appears to be the case. Every agement should be given to work character, and the two students ve executed these paintings are to ngratulated on the vivacity and ce of their work. We like to hear arts finding a home in Shadwell, there is perhaps as genuine an iation of beauty as in more favoured ourhoods.

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aling ement.

For whatever reasons—probably more than one—we are very glad to notice, in reference to the note on bject in our last week's issue, that ge mirrors disfigured by advertise- which were placed recently on the en at Ealing have been removed. uncil is to be commended for its support of the amenities of the locality in deciding to remove them. We feel sure that many others besides ourselves felt the unsuitableness of introducing ugly advertisements on ground belonging to the public, and this aggression was a very flagrant one. It is a pleasure therefore to be able to state that wiser counsels have prevailed and that the attractive old green is freed from this violation of its old-world quiet.

Commercial Education.

We are glad the Royal Society of Arts is calling attention to the advantages offered by the London County Council for commercial education in their evening classes and the examination organised by the Society. It is to everyone's interest that students should take the fullest advantage of the educational opportunities offered, and it is to be hoped that our commercial houses will do all they can to encourage the attendance at these schools and examinations, for in these strenuous times we must aim at the most thorough-going efficiency.

Pictures and Sculpture.

An interesting exhibition is that of the New Forest group at the Mansard Galleries, and many admirable pieces of sculpture add much to the value. Mrs. Phœbe Stabler and Messrs. Hesketh Hubbard and Armfield have specially good subjects. Two or three of the landscapes reach a quite high level of attainment. The serene and quiet charm of some of our old English water-colour painters would be a welcome addition to the skill of our modern artists.

The Making of Pictures.

Whilst so much really excellent work is being done it is a pity that space is found for what can neither elevate nor amuse. One of the exhibitions now open is typical of the futility of much modern art. We looked carefully over every exhibit in this collection and could not find out any reason for their existence. It is a curious thing that anyone should be ready either to produce or exhibit works so completely lacking in any real artistic value.

Building Materials.

The Committee which has been appointed by the Minister of Health to report as to materials and methods of construction available for the building of houses for the working classes have a wide field for their inquiries. It would appear, however, that apart from the advantage of different localities for the supply of particular materials, there is not much difference of cost between them all. We think the use of wood as a building material has greater claims than one generally allowed to it, and we should like to see some building done on the lines of the Essex and Kent weather-boarded buildings. The risk of fire has not been established as much if at all greater than other materials. Nor should the consideration of the material to be used be wholly utilitarian. Certain localities have already been defaced owing to the alien material used for housing schemes, forming so great a contrast to the buildings already existing as to create a very unsightly effect. We cannot altogether ignore considerations which affect so much the result of what is done. Concrete has the advantage that it can be adapted to take a local character in its form, and should in the hands of good architects be made to conform to local characteristics. In any case, it is more a matter of locality than price as between different materials, and what we do want to see combined with due economy is some sensibility of the fitness of what is built, that it shall add to and not disfigure the existing amenities of the localities in which it is placed.



Photo: Mr. W. John Allcorn.

Oriel College, Oxford.

GENERAL NEWS

Professional Announcement.

Mr. Walter Dewes, architect and surveyor, has removed his offices from 4, Bloomsbury-place, W.C.1, to 37, Bedford-row, W.C.1. Telephone: Chancery 7512.

Mural Decoration.

At the Memorial Club, Shadwell, a successful experiment in mural decoration has recently been carried out by Miss Adshead (daughter of Professor Adshead, Professor of Town Planning, London University) and Mr. Rex Whistler, under the direction of Professor Tonks. Five bays in all have been decorated.

Oxford Society for the Blind.

On September 29 Mr. Herbert A. Cox will lecture on "Old London," in the Holywell Music Room, Oxford. The chair will be taken by the Rev. T. W. L. Caspersz, Rector of Crowmarsh. The lecture will be illustrated by lantern slides and a model of "Old St. Paul's" will be exhibited.

Bartlett School of Architecture.

On September 29–30 (10 a.m. to 1 p.m.) students of the Bartlett School of Architecture will be received by the Provost, Professor Richardson, and the Tutor to architecture students. On October 1, at 5.45 p.m., the students of the evening courses in Architectural Design, and of the Architecture Atelier, will assemble.

The Earliest Architecture.

The Tomb Chapels, which have recently been unearthed by the Department of Antiquities, are, it is claimed, the earliest surviving stone buildings in Egypt, and therefore in the world, having been built at the very least in 3000 B.C. according to the so-called short chronology, but many archæologists are prepared to give them 1,500 years earlier. The discovery, it is stated, will involve the re-writing of the first chapter of the history of architecture.

The Institute of Builders.

The next Licentiate examination of the Institute of Builders will be held about the third week in May, 1925. The fee for the examination will be £1 1s. Applications should be sent in not later than February 1. Syllabuses containing application forms can be obtained from the office of the Institute of Builders. Specimen sets of Licentiate papers with drawings are also obtainable at a charge of 5s. a set.

Leiston War Memorial.

A memorial chapel was recently dedicated at Leiston, Suffolk. The chapel is built of flint and granolithic stone, with a red tiled roof, and copper bell turret at the west end. It is in the Early English style of architecture, and consists of a nave, small chapel and vestry, the design of Mr. J. A. Sherman, architect, Ipswich. The memorial tablet, of white marble, on which are inscribed the 122 names of the fallen, was carried out by Messrs. Smyth Bros., Leiston.

New Houses in Glasgow.

The Minister of Health recently visited the two new types of houses at Dalmuir and Burnside which have been built with a view of helping on the solution of the housing problem. In the morning Mr. Wheatley visited the Beardmore works at Dalmuir, where a new type of steel house has been constructed. The other house, which has been erected by Messrs. John M'Donald, contractors, Burnside, on a site on the East Kilbride road, was inspected in the afternoon. The usual materials have been utilised in the building of this house, which has three apartments and a scullery and bathroom. Mr. Wheatley stated it was an interesting fact that people in the industry had awakened to the possibility of competition from other directions, and were turning their attention to the production of houses of the existing type by mass production methods.



Woodbury County Court House: Main Entrance.

MR. WILLIAM L. STEELE, Architect; MESSRS. PURCELL & ELMSLIE, Associated Architects.

COMPETITION NE

Christian Science Church, Southport

Designs are invited for a new churc Sunday school at the First Church of Scientist, Southport. Premiums of £7 and £30 are offered respectively. The as are Messrs. J. E. Sanders & Son, A.R. 219A, Lord-street, Southport, to whom a tion should be made, accompanied by a pa of 10s., returnable only to those who s designs. (See advertisement this week.

Manchester Art Gallery.

The sending-in day for this competit January 20, 1925. (See our issue for Aug

Concrete Cottages.

Designs for cottages of concrete constr Prizes of 30 guineas and 15 guineas for th designs and, in addition, the successful tect will be paid architect's fees for w drawings and details, but will not be re to superintend erection. Particulars Messrs. G. & T. Earle, Ltd., Wilmington.

The closing date for this competit October 31. Particulars can be seen a Office.

Methodist Church.

Designs are invited for a Methodist C school house and manse, Sheffield. Parti from Mr. T. A. Hardy, 24, Thornsett Sheffield. (See our issue for September 5

Barrow Hill Memorial Club.

Applications are invited for plans specifications for the erection of a clu way of extension of the existing Barro Memorial Club, near Chesterfield. Approx cost, £4,000. Particulars can be obtained the Secretary of the Club. (See advertis this week.)

Other Competitions.

Other competitions still open includ following (the dates given are, first the send date, and second the issue of *The Buil* which full particulars were given):—Ross- Memorial (Sept. 30; Feb. 22). Public Newton-in-Makerfield (Sept. 30; July Harrogate Infirmary (Sept. 30; Aug Masonic Hall (May 1). Glasgow High (Sept. 30).

BRONZE DOORS, BANK BOSTON, BUENOS AI

THE solid cast bronze entrance door illu on p. 467, is the largest metal door, we t that has ever been produced in this c The dimensions are 20 ft. in height by wide. The door is in solid cast bron weighs 3½ tons. The decorated pane borders are finely chased and form a s example of metal craftsmanship. The were cast in the foundries of the Birm Guild, Ltd., Grosvenor Works, Gro street West, Birmingham, to the desi instructions of Messrs. Yorke & Sawyer tects, of New York, in conjunction with Chambers & Thomas, of Buenos Aires, consulting engineers in connection wi work were Messrs. Stone & Webster, of U.S.A. The doors are for the main entr the Bank of Boston, Buenos Aires, America. They are to be fitted with gearing for raising and lowering. It is i ing to note that the production of this metalwork was entrusted by American tects to a Birmingham firm.

Architects' Estates.

Mr. Joseph Nodal, of Heaton Gables, Mersey, near Manchester, architect and e £11,375.

Mr. John Exton, of Marsh-street, Man road, Bradford, architect (net pen £2,827), £4,566.



Solid Cast Bronze Entrance Door for the Bank of Boston, Buenos Aires, South America.

MESSRS. YORKE & SAWYER, Architects, New York, in conjunction with MESSRS. CHAMBERS & THOMAS, Buenos Aires.

THE VIRTUE OF THE ANONYMOUS

By DUDLEY HARBRON.

PUBLICITY in the interest of architecture as an art or calling is excusable. In the interest of individuals it is selfish. At times it may be tolerated for the smile that its devotees may bring on occasion to the most pessimistic. We can afford, not being competitors, to laugh when we read how Philibert de l'Orme, the builder of the Tuileries, and a very pushing young man, was pleased to measure the Triumphal Arch of S. Maria Novella just when several Cardinals and nobles—possible clients—happened to be passing. But we jeer when his modern imitator rings the bell in the close and asks a Minor Canon to hold his tape when he measures the Cathedral. Such actions are not quite fair. Fortunately, they defeat their own aim. It is policy to wait for the Minor Canon to volunteer to assist, rather than to aggravate him by repeating a custom which has worn thin.

Advertisement always tends to overreach itself. So doing, it appears to the onlooker who is impartial as ridiculous. The memorial to the late Prince Consort, in Hyde Park, is an instance. Admired by the Victorians, with some few exceptions (John T. Emmett amongst them), now so anathematised by the Georgians, it has, as has been noticed by E. V. Lucas in one of his delightful papers on Saturday afternoon, unconsciously overstepped the mark; for, as he indicates, "Indeed, such is the emphasis that Giotto and Michael Angelo each comes into the scheme twice—once as a painter and again for structural design."

You can call "Wolf" once too often. I am not sorry I do not figure on the podium, garbed in a frock coat, as do several eminent gentlemen.

The code of "Professional Conduct and Practice" permits—nay, encourages—the artist to sign his work. This has led the architect in some cases to have his initials cast upon the rain-water heads. No assayist has yet condescended to rescue his partial evasion from the deserved oblivion of the back elevation. Doubtless the owner feels a little tired when, for the twentieth time, he is asked by his guest to explain the enigma. Work that is worth initials is hardly in need of such adventitious aid; it speaks for itself. Its creator is evident in its lines and nuances, its colour and proportions.

At one time there was a virtue in anonymity that perhaps, if we are not too optimistic, is now a little outworn. The work was not worth signing. Observers have said so. I do not press the point. I leave the words of Pater as I find them in his essay in the *Guardian*: "Our generation, quite reasonably, is not very proud of its architectural creations—confesses that it knows too much—knows, but cannot do."

We, not quite so bashful, murmur, "Thank heaven we have outgrown such observations, and are not ashamed to own our creations." But, is it wise? Is it necessary? It has been indicated for a very good reason that it is not the latter. The wisdom of it may be left for others to determine. Who wants to know? Where ignorance is bliss, 'tis folly to enlighten. There are advantages in residing in the country away from the telephone. Even being in *Who's Who* has its inconveniences.

That which to-day we look upon with pride, may to-morrow turn and rend us—may even be designated a terra-cotta monstrosity by our fellows, a shocking waste of material; one can never be sure of the judgment of even the immediate future. If our critics cannot without effort find our names—and they are habitually lazy—we can sleep the more comfortably in our beds; perhaps mercifully forget our youthful indiscretions. If we have signed, then all that remains to do is to sneak out at night with a chisel and mercifully erase our signatures. As we cannot use pseudonyms, if we must sign let it be out of sight. On the top of the cornice the plumber may chance upon it and forgive. On the top of the door, where nobody ever dusts, and the painter seldom paints.

The Greeks sensed the matter rightly when they gave pseudonyms to their gods to preserve their dignity. Our dignity must be conserved at all cost. The politician, tired of publicity, seeks the anonymous in the House of Lords. Too few architects get there. If the worldly-wise thus decide, why should we, traditionally, happily, as Belloc says in "Unknown People," "the most anonymous of all the arts," seek a place in the limelight that our complexion will not stand? Is it not better, continuing the simile of the stage, that we should, like the actor, conceal our identity behind our rôle, until called by a clamant public to make our bow before the curtain? Of course, some of us may organise clacks—some of us have—but the gallery know the source of the applause. I will say nothing about the excitation of envy if half the street is to be plastered with somebody else's name. Nor yet of covetousness—that the client should be so fortunate. No, we must contain ourselves. Display the owners' arms, if need be, not too often. Be ourselves content with a humble monogram, mayhap on the head that takes the bathroom waste; for after all it is not our own, but another man's house, a matter that the advertiser is apt to overlook.

We can admire the solution of the problem by our compeers who have succeeded, without signatures. They infallibly stamp other people's houses as their own. Into such a category has passed the mansion of many a noble lord, now only recognised as "that house of Norman Shaw's." In the same manner we speak of "Inigo Jones's Banqueting Hall": filching from a King his rightful claim.

That is the sort of advertisement worth striving for. Until then, let us be modestly anonymous.

CORRESPONDENCE

Architects' Benevolent Society's Insurance Scheme.

SIR,—May I trespass on your columns for a little space in which to call the attention of your readers to a very simple way in which they can help the Architects' Benevolent Society?

If in the next insurance they effect—be it on their life, their house, its contents, or any other thing that is theirs—they will ask their insurance company to put it through the agency of the Architects' Benevolent Society, the commission will be given to the Society as a subscription in their name.

Architects are not usually agents for insurance companies, and therefore these agency commissions, which in the aggregate must amount to a very large sum per annum, are dissipated as far as the profession is concerned. The aim of the Benevolent Society is to collect them and expend them for the good of the profession.

This is one of those simple proposals which, like "Daylight Saving," is so obvious that one wonders why no one thought of it before. The medical profession thought of this one some years ago, and are now, I understand, making a large income for medical charities out of it.

We architects can now do the same without even trouble for ourselves, and with great benefit to our Benevolent Society.

MAURICE E. WEBB,
Chairman,
A.B.S. Insurance Sub-Committee.

Friction in the Building Trade.

SIR,—May I, as a layman and a foreman, be permitted a little space in order to comment upon the letter in last week's issue, by a past-President of the L.M.B.A., bearing upon the question of the 46½ hours a week? My remarks bear upon the London area only.

It seems to me that the solving of the 46½ hours a week perplexity has been very dilatory; that it is now too late, and certainly serving no useful purpose in bringing it to the fore. The real point at issue should be how to get the best results. Of what use is it when we know that no matter how many hours are worked quite 50 per cent. cannot pul weight. I think over this matter the em have used the wrong tactics. They hav trying to get the 44 "objective" ball i "46½" pocket by striking it full on. are two ways to deal with these things markian or psychological; either to k striking hard and trusting to the luck run into the pocket, or, after you have yourself why it can't be done, you rea going a little to the off the thing is done. I submit that the question of the 46½ from the employees' point of view has no fully understood. The question of the hours does not enter into the argum the average employee; in fact, from have experienced there is no difficu getting men where overtime can be w This is well known to the trade union o The reason for their sticking to the 44 is that they think, rightly or wrongly, they work longer hours—in a general s sooner or later there will be a revision position and that the sum total per wee be brought into line with the cost of basis, with a consequent reduction per This is preached and emphasised in every union branch, shop and job. The overc of this difficulty will solve the problem

I think, too, that it must be remem that the majority of trade unionists are st for their rules; some through the fear of found out, I admit; and I do suggest there was a diversity of opinion ex between the employer and employee ov interpretation of the Fraser Award. A decision was the only way out.

It would not have been very difficult test case, for some possibly antiquated point to have been brought to light, and a action for not complying with the A brought against certain men or unions su say, the A.S.W., who had it printed in their monthly journals that the 44 was to be worked. The decision of the A Award would have received its legal and p interpretation, no harm would have been and it would have been very interesting re

There is just another point upon the m I don't think it is fully understood the am of time that is spent in travelling to and work. Most men live in the suburbs; two or three hours daily are spent in trav many of them having to strap-hang. T getting a serious matter, for whereas pre-war worker used to make it a coming up West, he now finds that h do better in and around his own locality. result is that we are getting a younger, perienced, post-war type of worker, wit glamour of London, and with the know that no matter how "duffy" he is, h "bunch in" somewhere. This is the that flieth by day to the foreman who h to get a "move on." In fact, there is than one righteous foreman who has mor once dangled over Hades, or been driv Colney Hatch through the incredible "bloo that have been made by these men. A everything done, little or great, must r personal supervision. The sketch of Pink's" workmen cutting the wrong supply or fixing nails for coat hangers is not

It is easier for a camel, &c.; noth mentioned about foremen. *Verb sap.*

Personally, I have come to the conc that there is no real incentive for a man his best (I speak of the casual employee not those who become attached to dir firms), and that the only solution to problems is a system or method of g which could be approved by both sides.

Next year the 46½ hours will be in oper but the aforementioned woes of foreme not cease; therefore I do suggest tha matter of grading, together with security, receive careful consideration, and that sides be given space in your journal to the pro's and con's, and that in conclusi all think less of what might have bee more of the goodwill and prosperity building industry.

Wimbledon. W. D. STEFF



Timber Bridge at Wilderswil, Switzerland. By Mr. Francis Unwin.
[This drawing was recently exhibited at the St. George's Gallery.]

THE ARCHITECT'S DEBT TO RUSKIN

By HALSEY RICARDO, F.R.I.B.A.

On March 31 an able and lively paper was read by Mr. H. S. Goodhart-Rendel on "English Gothic Architecture of the Nineteenth Century" at the Royal Institute of British Architects. The lecturer dwelt only slightly—as hardly within his scope—on the moral awakening as regards the workman's part in the evolution of mediæval architecture that took place during the latter half of the century. He recognised the intense conviction of men like Pugin, Butterfield and Street that the "Gothic" forms of the past represented a fervour of English (and North European) feeling that still lingered, and could be encouraged to burgeon forth again, and that it was their mission to foster a gospel that was stirring in the minds of the earnest thinkers of the time. Those architects came in on the crest of the full tide of religious emotion at that time flooding the land, and the enduring value of their work was the mass of cultivated opinion that supported and urged them on to provide the ideals of "Christian" architecture. It was a wonderful, wide-spreading, passionate backing, and its power pervades and strengthens the conceptions of the great architects of that time. None of the three that I have named (nor many of their architect contemporaries) ever for a moment doubted but what the "Gothic style" could prevail over all others in the future—in England at least, if not throughout the Christian world.

But it was the æsthetic side of the movement that made the first appeal, and it was not till the publication in 1849 of Ruskin's "Seven Lamps of Architecture," and in 1852 of the second volume of the "Stones of Venice"—in the famous chapter on "The Nature of Gothic"—that a real appreciative analysis of Gothic art was given to the world. How it fell on the ears of the laity lies outside the scope of this article. The architectural world was far from being prepared to receive it. *The Builder** (the mouthpiece of the profession) prophesies that "his doctrines will fall to the ground and be, if not forgotten, remembered and referred to only as the visionary speculations of one who shows himself determined to be original *coûte que coûte*. . . . And surely there must be something very peculiar in that gentleman's idiosyncrasy when we find him so dotingly enamoured of the ducal palace and St. Mark's at Venice, in which he is pleased to behold supreme *loveliness*, the very last quality which anyone else would ever think of attributing to that grotesque pile."

And again, after the publication of Vol. II of the "Stones":† ". . . if passion and prejudice, or something else that is inexplicable, did not lead their author into gross and pernicious extravagances and errors; errors and extravagances the more dangerous for being advocated with unusual literary powers and sometimes a witching eloquence." In the *Civil Engineer and Architect's Journal* for July, 1849, we find: "Mr. Ruskin lays by far too much stress upon the value of material as absolutely essential to excellence of design. Even when there is equal beauty of both material and design, it is for the latter alone that the architect himself can claim any merit, for as to the other, and the workmanship of it, they belong not to him, but in the first instance to his employers, and in the next to the actual operatives. As far as his own talent is concerned, it makes no difference whether his ideas be realised in genuine of fictitious materials."

We have travelled a long way from this attitude during the past seventy years, and we owe to Ruskin's insight and compelling eloquence the guidance that has befriended us. He was the first to insist on the humanity of art—that works of art had moral and intellectual qualities as well as æsthetic—that they expressed and summed up all those qualities and the social conditions in which they were produced. So, to quote Clutton Brock,‡ "his criticism gave a new importance to works of art, as being the clearest expression of men's minds which they can leave to future ages; and in particular it gave a new importance to architecture and all the applied arts, since, being produced by co-operation and for purposes of use, they express the general state of mind better than those arts, such as painting, which are altogether the work of individual artists. All this Ruskin saw; and he saw that the building and applied art of his own time were bad as they had never been before. And this badness troubled him as if it were something corrupt and sinister in the manners of men and women about him. It was not merely that he missed a pleasure which other ages enjoyed; he also was aware of a positive evil from which they had been free. Art for him was not a mere superfluity that men could have or not as they chose; it was a quality of all things made by men, which must be good or bad, and which expressed some goodness or badness in them. So, from being a critic of art, he became a critic of society, and, after writing about old buildings and modern painters, he wrote about political economy, about the order and disorder of that society which produced all the ugliness of his own time."

The "Lamps" were published in 1849; the "Stones of Venice" in 1851-2-3. William Morris went to Oxford in 1853; and the chapter on "The Nature of Gothic" sank deep into his nature, and all his ideas about art grew out of it.

There had already been plenty of tabulation and classification of the outward aspects of British mediæval buildings: antiquarians and architects, such as the elder Pugin and Rickman, had measured, drawn and grouped into "periods" selected specimens, but they all only dealt with the aspects of the buildings. It was Ruskin who penetrated past the veil of appearances and reached to the maker of the things made. The burden of the cry in the "Stones"§ is that men had lost a joy in life, a loss of which they were only dimly, if at all, conscious: with him the discontent became conscious, was analysed and analysed on scientific grounds. "Let me not be thought to speak wildly or extravagantly. It is verily this degradation of the operative into a machine which, more than any other evil of the times, is leading the mass of the nations everywhere into vain, incoherent, destructive struggling for a freedom of which they cannot explain the nature to themselves. Their universal outcry against wealth, and against nobility, is not forced from them either by the pressure of famine, or the sting of mortified pride. These do much, and have done much in all ages; but the foundations of society were never yet shaken as they are at this day. It is not that men are ill-fed, but that they have no pleasure in the work by which they make their bread, and therefore look to wealth as the only means of pleasure. It is not that men are pained by the scorn of the upper classes, but they cannot endure their own; for they feel that the kind of labour to which they are condemned is verily a degrading one, and makes them less than men. Never had the upper classes so much sympathy with the lower, or charity for them, as they have at this day; and yet never were they so much hated by them: for, of old, the separation between the noble and the poor was merely a wall built by law; now it is a veritable difference in level of standing, a precipice between upper and lower grounds in the field of humanity, and there is a pestilential air at the bottom of it. I know not if a day is come when the nature of right freedom be understood, and when men will se to obey another man, to labour for him reverence to him or to his place, is not s It is often the best kind of liberty— from care. . . . To yield reverence to a to hold ourselves and our lives at his di is not slavery; often, it is the nobles in which a man can live in this world. is, indeed, a reverence which is servil is to say, irrational or selfish: but t also a noble reverence, that is to say, able and loving; and a man is never s as when he is reverent in this kind even if the feeling pass the bounds o reason, so that it be loving, a man is by it. . . . And therefore, in all ages countries, reverence has been paid and fice made by men to each other, no without complaint, but rejoicingly; and f and peril, and sword, and all evil, a shame, have been borne willingly causes of masters and kings; for all gifts of the heart ennobled the men wh not less than the men who received the nature prompted, and God rewarded the fice. But to feel their souls withering them, unthanked, to find their whole sunk into an unrecognised abyss, counted off into a heap of mechanism, bered with its wheels, and weighed w hammer strokes—this nature bade no God blesses not—this humanity for n time is able to endure."

He was the first to recognise and voi discontent—this new danger to the life —and his eloquent exposition of the first principles of social economics struck a re from the inarticulate fretted chords breasts of thinking men. Carlyle had over this ground, like a prairie fire, sco and withering the rampant vegetation t itself upon the discontented field—ba lyle's indignant scolding, fierce for destr was little helpful to the oppressed cr under the harrow. Ruskin, as pr brought a gospel that opened out a v relief—a gospel that has changed men's on humanity. As preacher he spoke conviction that mastered his audienc burning sincerity was beyond all questi above all dispute. As teacher he spok authority. His knowledge of art cou be questioned—he spoke from an exp granted to few men—possibly to no man—he had stored and analysed an in accumulation of facts and examples, a theorist, but as a delineator with the powers of perception and representation. he said about the masterpieces of archi could not be brushed aside as the *obite* of an amateur: you might disagree as conclusions, but they could not be ign

His teaching underlies and transfus present practice of architecture, althou external garniture does not necessarily Gothic forms—indeed, to state a p under the present conditions of buildi our social requirements, the use of forms would, in most cases, imply a of the Gothic spirit. The attention t conditions, local characteristics, local m (where the circumstances permit) in th tecture of to-day testifies to the exist this spirit; the encouragement to ind handling and individual treatment material by the craftsman employed is nificant feature: the mason is required his experience of the nature of the st has to deal with, their choice and thei ment; the bricklayer is directed helpf the matter of bricks, as to their sou their texture, and the beds of mortar or they are laid; the carpenters and join preciate the demand for cordial co-op in the job, and the insistence of a high st of execution; the common phrase of made" this and "hand-made" that, the recognition and the demand f human touch, slight as in most c must be.

Even in the case of machine-made

* *Builder*, May 10, 1851, Vol. IX, No. 431.

† *Builder*, December 10, 1853, Vol. XI, No. 566.

‡ "William Morris, His Work and Influence," by A. Clutton Brock. Home University Library. Page 13.

§ "Stones of Venice," Vol. II, Chapter vi. Nature of Gothic, page 163 *et seq.*

abour has begun to discover that there can joy in work, that men and women need not main slaves of the machine; to discover that e workman can reassert his supremacy over s own handiwork, and once again make the achine his servant. It was inevitable, too, nen this time should arrive, that the folly olitical and commercial) of any other system ould be made plain. This folly is revealed d exposed in the 1922 report of the Indus- al Fatigue Research Board.* In it the thods of the last generation, so far, at any e, as the "human machine" is concerned, e arraigned as virtual robbers of industry, d we are introduced to what is truly a new dustrialism and a new craftsmanship. Ex- iments have been carried out to see if the ed of the machine may not be brought into rmony with the human speed. They have ealed the fact that much can be achieved this way, for in several instances a change pace of the mechanism, either up or down, resulted in an increase of output. The port deals very fully with the selection of prentices by means of tests designed to dis- er their aptitude for the work, and shows v studies of the qualities needed in many ferent industrial pursuits are now being ried out; the selected employees, working teams, represent the new craftsmanship. will no longer pay to subordinate such men the pace of any machine; they are highly lled and they are master of their imple- nts; their output represents their craft— ir pride in their work. If it falls, they fall h it in a way unknown to the victim of e drudgery or mere monotony. The sub- of fatigue is discussed in its bearings on rs of work and on the pace of work, and alterations in arrangements which result nitigating this trouble speedily result in in- ased productiveness. Quite small changes working method have resulted in increases output of as much as 88 per cent. within a months. These changes, too, have fre- ntly converted dissatisfied into cheerful kers, and so, in a general sense, added national efficiency.

is in the regions of applied art—and more cially in the building trades—that the cts of Ruskin's impassioned teaching are t instantly visible; and they are due in t measure to its heartfelt acceptance by most influential architects. This doctrine "the joy of work" and the intimate co- ation of the craftsman found an easier od of realising itself than in other trades, was welcomed and encouraged by all who the true craft of building at heart—and outcome forms the salient characteristic e architecture of to-day. This care for the are of the material and the human con- and labour spent upon it, felt and sub- iated by the architect, makes him cially tender over the treasures bequeathed e nation by his predecessors. Here again oice of Ruskin was the first to proclaim inestimable and irreparable value of relics on our land, and the danger which they stood from the ignorant eciation of the qualities they possessed. appreciation was wholly superficial n Pugin's "True Principles" did go very deep; Professor Willis' "On onstruction of the Vaults of the Middle " (published in 1842), a most able work, only with the problems of their construc- It was a received opinion that all the ng parts of old buildings ravaged by or violence could be replaced with new identical (where the necessary evidence be ascertained) with the vanished por- that the mediæval work should be purged bsequent accretions differing in date and from the (supposed) main conception, he (conjectural) original portions supplied w work equivalent to the lost pieces. these restorations could not be made ilent formed no part of its creed, and struction that ensued, under the head of



Presidential Medallion of the York and East Yorks Architectural Society.

repair, of precious work under his own eyes, stung Ruskin to vehement protest. "The Seven Lamps of Architecture" was published in 1849, and in the sixth chapter ("The Lamp of Memory") there are these two "aphorisms"—No. 27: "There are two duties respecting national architecture whose importance it is impossible to overrate: the first, to render the architecture of the day historical; and the second, to preserve, as the most precious of inheritances, that of past ages"; and No. 31: "Neither by the public, nor by those who have the care of public monuments, is the true meaning of the word *restoration* understood. It means the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed. Do not let us deceive ourselves in this important matter: it is *impossible*, as impossible as to raise the dead, to restore anything that has ever been great or beautiful in architecture." Ruskin returned to this vitally important matter in a pamphlet he published in 1854, entitled "The Opening of the Crystal Palace considered in some of its Relations to the Progress of Art," in which he speaks of the restorations which "have actually begun like cancers on every important piece of Gothic architecture in Christendom; the question is only how much can yet be saved." He suggests: "Something might yet be done, if it were but possible thoroughly to awaken and alarm the men whose studies of archæology have enabled them to form an accurate judgment of the importance of the crisis. . . . An association might be formed, thoroughly organised so as to maintain active watchers and agents in every town of importance, who, in the first place, should furnish the Society with a *perfect* account of every monument of interest in its neighbourhood, and then with a yearly or half-yearly report of the state of such monuments, and of the changes proposed to be made upon them; the Society then furnishing funds, either to buy, freehold, such buildings or other works of untransferable art as at any time might be offered for sale, or to assist their proprietors, whether private individuals or public bodies, in the maintenance of such guardianship as was really necessary for their safety; and exerting itself, with all the influence which such an association would rapidly command, to prevent unwise restoration and unnecessary destruction. . . . I make this appeal at the risk of incurring only contempt for my Utopianism. But I should for ever reproach myself if I were prevented from making it by such a risk; and I pray those who may be disposed in any wise to favour it, to remember that it must be answered at once or never." It was in 1877 that the Society for the Protection of Ancient Buildings was founded. The influence of this Society has been of incalculable benefit to architects in giving its support to them against projects, well-intentioned, for restoring objects of beauty and historical interest which the enthusiasts for their preservation are unable to see can only lead to the destruction of their history and interest. So much of Ruskin's teaching has been absorbed by all earnest-minded men, that it has passed from polemic into platitude, and one is apt now to forget the prophet in the fulfilment of his prophecies. His teaching about art may not cover the whole ground; his teaching about political economy may not cover the whole ground; but the truth of his impassioned cry has told on the world—has changed men's outlook on life and art. The local and temporary accidents of his teaching—on which his antagonist contemporaries vociferously fastened on—have dropped away through the lapse of time and that sad unlearning that we call experience; our present-day definition of art, due to his insight, plays its part in the architect's debt to Ruskin.

Royal College of Art.

The Prospectus of the Royal College of Art, South Kensington, has just been issued for the session 1924–5.

The School of Architecture, of which Mr. J. Hubert Worthington is Professor, and Mr. H. J. Harding, Assistant Instructor, provides an auxiliary course for the schools of drawing and painting, design and sculpture. This course deals with the relation of the arts to architectural history and practice; the spaces and forms of buildings that are decorated in colour or enriched with sculpture; the employment of the crafts in furnishing and completion; and the study of geometrical draughtsmanship for technical purposes. Students will enter upon a course in the architecture school, upon the recommendation of the professor of their own school; such a course may be taken as preliminary to or at subsequent periods of their college career.

A special full-time course will be available for students studying with a view to the College Associateship in Architecture. The aim of the course is the study of the art of design in architecture, its objects and means of expression.

Advanced studies will be continued in post-diploma study. Measured surveys of buildings away from the College may be undertaken, the drawings being worked out in the School. Collaboration with painters, sculptors and designers in a complete scheme for a building or for an important design will be arranged under the joint advice of the professors.

Copies of the Prospectus are obtainable at H.M. Stationery Office, price 6d., by post 7d.

York and East Yorkshire Architectural Society.

The pendant illustrated on this page is executed in silver gilt with azure enamelled convex section oval ground, upon which the coats of arms of the important centres within the area of the York and East Yorkshire Architectural Society are depicted; viz., York in the centre, Hull on the left, Beverley on the right, and Scarborough below. The devices are supported by the title of the Society in gold letters on a raised ground, and capped by the White Rose of York. The size of the pendant is 2½ in. by 3½ in., and it was executed by Messrs. Fattorini & Sons, Ltd., Bradford. The Society was founded in 1882, and has a total membership of 69. The President is Mr. Stephen Wilkinson, and the Hon. Secretary is Mr. J. E Reid.

*ond Annual Report of the Industrial Fatigue h Board, February, 1922.

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ILLUSTRATIONS.

New Premises, Glasshouse-street.

These premises represent part of the rebuilding of the Quadrant which is now being extensively carried out, and the illustration shows the elevation of the rear portion of the Regent-street premises facing Glasshouse-street. The façade has been designed to harmonise with the design for the Quadrant, and the main lines, such as cornice and stringcourses, have been carried through at the same levels. The whole of the front is being carried out in Portland stone.

The contractors responsible for the carrying out of the work are Messrs. Thomas & Edge, Edwards Construction Co., Ltd., Messrs. Hall, Beddall & Co., Ltd., Messrs. Ford & Walton, Ltd., and amongst the sub-contractors are :— Steelwork, Messrs. W. H. Blake & Co., Ltd., Messrs. Redpath, Brown & Co., Ltd.; stonework, Messrs. F. Mortimer, Ltd., Messrs. The United Stone Firms, Ltd.; patent floors, Messrs. Diespeker & Co., Ltd., Messrs. Bradford & Co.; heating, Messrs. Brightside Foundry Engineering Co., Ltd., Messrs. Mumford, Bailey & Preston, Ltd.; casements, Messrs. Mellowes & Co., Ltd., Messrs. W James & Co., Messrs. Wotton & Sons; lifts, Messrs. Express Lift Co., Ltd., Messrs. Marryat & Scott, Ltd.; electric lights, Messrs. Macfarlane, Messrs. Marryat & Place, Messrs. Cecil Cooper & Co., Ltd.; fire escapes, Messrs. The Lion Foundry, Ltd., Messrs. Haywards, Ltd.; wrought iron balconies, Messrs. Caston & Co., Ltd.; artificial stone, Messrs. Stuarts Granolithic Co., Messrs. Bradford & Co.; pavement lights, Messrs. King & Co., Messrs. Geo. Wright, Ltd.; asphalte, Messrs. Limmer and Trinidad Lake Co., Ltd., Messrs. Ragusa Asphalte Co., Ltd.; terrazzo paving and tiling, Messrs. Diespeker & Co., Ltd.; wood block flooring, Messrs. The Acme Flooring and Paving Co.; plaster decoration, Mr. Paul Turpin; ironmongery, Messrs. Chas. Smith, Sons & Co.; cast leadwork, Mr. J. L. Emms; carving, Messrs. Gilbert Seale & Co.; modelling, Messrs. W. Aumonier & Son; W.I. stair balustrades, Messrs. Starkie Gardner, Ltd.; shop front, Messrs. Saml. Haskins & Bros., Ltd.; lantern lights, Messrs. W. James & Co.

The architects for whole façade and reconstruction of Messrs. Du Deney, Brown & Weir's premises are Messrs. Yates, Cook & Darbyshire. The architect for the reconstruction of the Aquascutum premises is Mr. Gordon Jeeves.

New Nurses' Home, Reading.

This building is being erected in Craven-road, Reading, immediately adjoining the Royal Berkshire Hospital buildings. The Home is designed to accommodate the whole of the nursing staff, about 90 in number, but is so planned that by future extensions the total may be raised to 120.

The building is simply treated, having hand-made red brick facings with Bath stone centre gable and main cornice.

Mr. C. H. Lanfear is acting as clerk of works, and the general contractors are Messrs. W. T. Nicholls, Ltd., of Gloucester.

The following sub-contractors are engaged :— Messrs. Mosdell & Lovell, Mortimer, Berks, hand-made facings; Messrs. S. & E. Collier, Reading, sand lime bricks; Messrs. Bath Stone Firms, Ltd., Hartham Park stone; The Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., all floors throughout; Messrs. Burkenite, Ltd., jointless flooring; Messrs. Stevens & Adams, wood block flooring; Messrs. Cash & Co., Ltd., Westminster, heating and hot-water installations; Messrs. Waygood-Otis, Ltd., passenger lift; Messrs. Jennings, Ltd., Lambeth, sanitary fittings; Gloucester Concrete Construction Co., Ltd., stone staircases, steps and copings; Messrs. Haywards, Ltd., fire escape staircases; Messrs. A. Brown & Co., Birmingham, locks and ironmongery.

The architects are Messrs. Chas. Smith & Son (Harry Hutt, F.R.I.B.A.), of Reading.

Midland Bank, Piccadilly.

We illustrate this week new premises of the Midland Bank just completed on the Piccadilly site formerly occupied by the Old Vestry Hall. Mr. T. B. Whinney, F.R.I.B.A., is the architect to the Bank; the elevations are by Sir Edwin Lutyens, R.A. Elevational drawings were given in *The Builder* for January 5, 1923.

Quarters for Married Military Officers in India.

These designs have been sanctioned by the Government of India for the construction of quarters for married military officers throughout India. The quarters are divided into two classes, for senior and junior officers respectively. Each class is sub-divided into plans for quarters at very hot plain stations, normal plain stations, semi-hill stations and hill stations.

The designs have been worked out with a view to providing the maximum accommodation for the minimum rent. The maximum rent recoverable from an officer is 10 per cent. of his pay, therefore should the assessed rent be over this amount the difference is a loss to Government.

An average cost of the quarters is as follows :—

	Senior Married Officer for Normal Plains Stations.	Junior Married Officer for Normal Plains Stations
Main building ..	Rs. 27,320 ..	Rs. 21,576
Porch	„ 1,250 ..	„ 1,250
Kitchen block ..	„ 4,346 ..	„ 2,997
Servants' houses ..	„ 6,879 ..	„ 5,362
Stables and coach-house	„ 1,993 ..	„ 1,993
Compound wall and gate	„ 1,800 ..	„ 1,800
Total	Rs. 43,566 ..	Rs. 34,378
Total in pounds Sterling	£2,904 ..	£2,291

In accordance with Indian custom the principal bedrooms have a dressing-room and two bath-rooms attached. The dressing-rooms being large enough to be used as an additional two bath-rooms attached, the dressing-rooms being large enough to be used as additional bedrooms when required. The details of the kitchen block have been carefully considered with a view to satisfactory working with Indian servants.

In order to reduce the amount of furniture required to a minimum, each bedroom has bo hanging and shelf cupboards built into the wa The bathrooms are fitted with built-in ang washstands, shelves, and towel racks as fixture

The plans were prepared by Mr. Matthews, F.R.I.B.A., consulting architec for Military Works in India, and approved b Major-General Sir Edwin Atkinson, K.B.E C.B., C.M.G., C.I.E., Engineer-in-Chie Army Headquarters, India.

Woodbury County Court House.

The foundation stone of the Woodbur County Court House, at Sioux City, Iowa, w laid on July 10, 1916, and it was completed an occupied on March 1, 1918. The building of brick with granite base and copings, an modelled polychrome terra-cotta enrichment The entrance is the focal point, with the larg mosaic figure representing the law. Th general colour tone is a rich light brow varied by the colour of the granite base an coping and the unglazed burnt-clay colour the terra-cotta. The windows are of met enamelled a vivid blue, with the sashes picke out in a delicate grey. The sashes throughou are of the casement type with leaded glass.

The *Western Architect*, from which our illu trations are taken, says in reference to th plan of the building :—" In preparing for th study of the court house a careful survey the available data was made. The Board Supervisors were shown that the typical cou house, which is fast becoming 'standardised in the hands of so-called specialists, is a del sion and a snare. They were convinced th the economical procedure would be to develo a plan suited as nearly as possible to th county's needs, and let the exterior appea ance grow out of the plan. Visits were ma to other court houses and sketches were pr pared showing the application of the so-call Classic design to the terms of Woodbu County's problem. The result was that wh the preliminary sketches were finally approv the supervisors were enthusiastic over t evidence that the Woodbury County Cou House would have more actual square feet working space for the money than any cou house previously built. Upon this very pra tical working basis the design was develope and most interesting and fascinating was t working out thereof. The main functio were housed in the lower part of the buildi and the entire available area was used. T offices most frequently sought by the gene public are those of the auditor, treasur recorder and clerk. These four offices a placed on the main floor, and are inter-co municating as well as being grouped about commodious lobby or rotunda."

The floors of the rotunda are a rich b quartzite tile, the walls and piers of Rom brick with large plastered spaces containi mural paintings framed and enriched w cream terra-cotta and coloured inlays of gl mosaic. The dome is lighted by clerest windows above the main roof, and through at all times of day comes a flood of rich tinted light. The mural paintings are by M John W. Norton, of Chicago.

The building, which cost 850,000 dollars, fire-resisting. The only woodwork is a li for ornamental purposes, and the desks a chairs. All doors, windows, and filing ca are metal. Floors are of terrazzo, tile, cork linoleum. Marble is used in the rotunda court rooms and sparingly elsewhere.

The architect is Mr. William Steele, as ciated with whom are Messrs. Purcell Elmslie.

Imperial Delhi.

Mr. R. T. Russell, F.R.I.B.A., is the arc tect of the Gazetted Officers' bungalows the hostel for members of the Legisla Council at Imperial Delhi, illustrated t week. There are verandahs to all rooms protection from excessive light and heat. for the same reason only the bath-rooms h small direct windows.

XMOUTH DEVELOPMENT

IE plans illustrated on this page show the osed "lay-out" of the foreshore at Ex-th, South Devon. Plan "A" shows what t be done by utilising the whole of "The ," but this does not find favour as it roys the natural beauty of the foreshore. lan "B" the sports fields are improved enlarged, and accommodation provided visitors in the way of shelters, combined provision for refreshments and a pavilion. The Marine-drive is continued round the picturesque Orcombe Point, thereby giving easy access to the Cove, at all times and tides, and opening up the higher lands above the Drive and proposed cliff walks.

The design is by Mr. E. Vincent Harris, F.R.I.B.A.

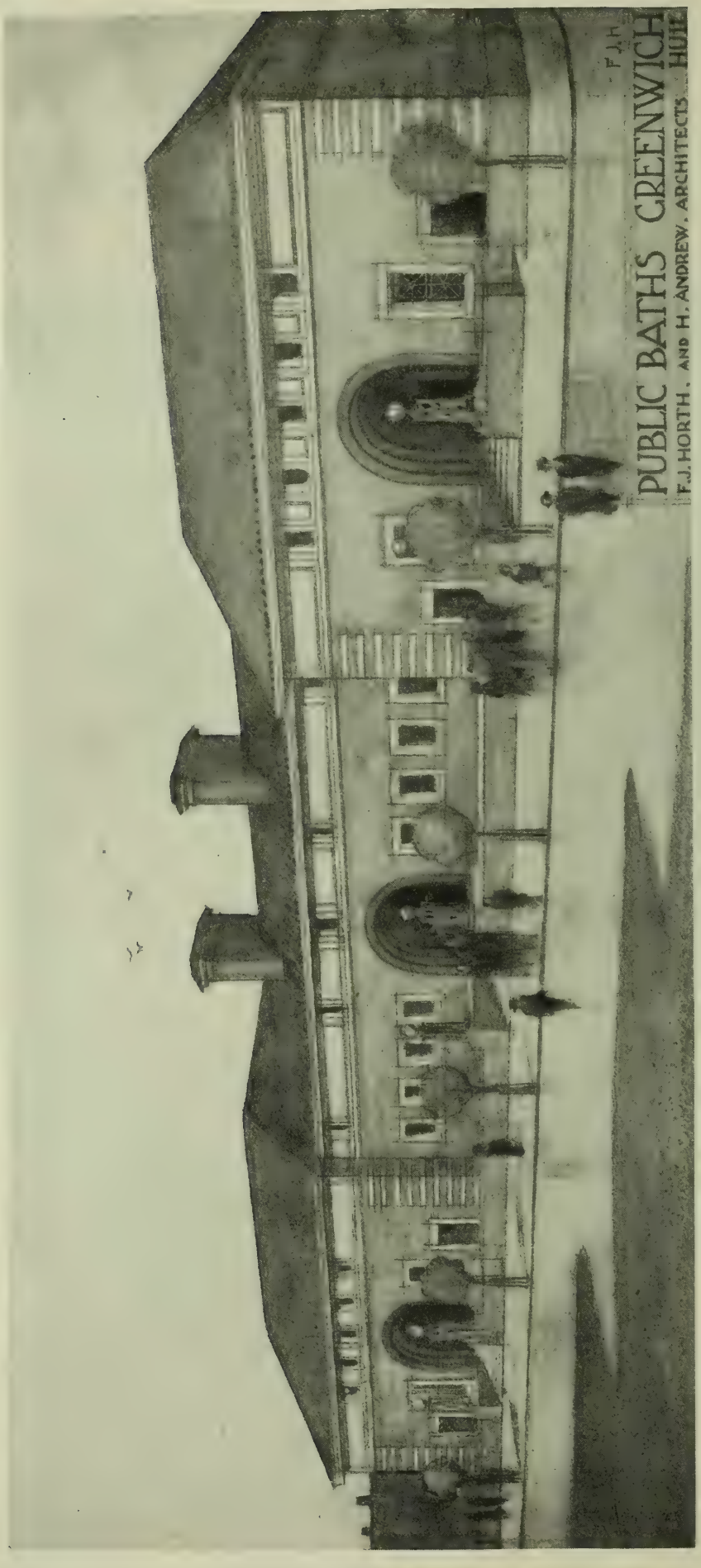
Mediæval Architecture.

Sir Banister Fletcher, F.R.I.B.A., will continue his series of University Extension Lectures on the History of Architecture at the Central School of Arts and Crafts, Southampton-row, next session, by delivering a course of twenty-four lectures on "Mediæval Architecture." The first lecture, on Wednesday, October 1, at 6 p.m., is open to the public without fee.

Sir Banister will deal with the mediæval architecture of all European countries, devoting the major portion of his time to that of Italy, France and England; each of his lectures will be fully illustrated by means of his collection of specially prepared lantern slides.



Lay-out of Foreshore, Exmouth. By Mr. E. Vincent Harris, F.R.I.B.A.



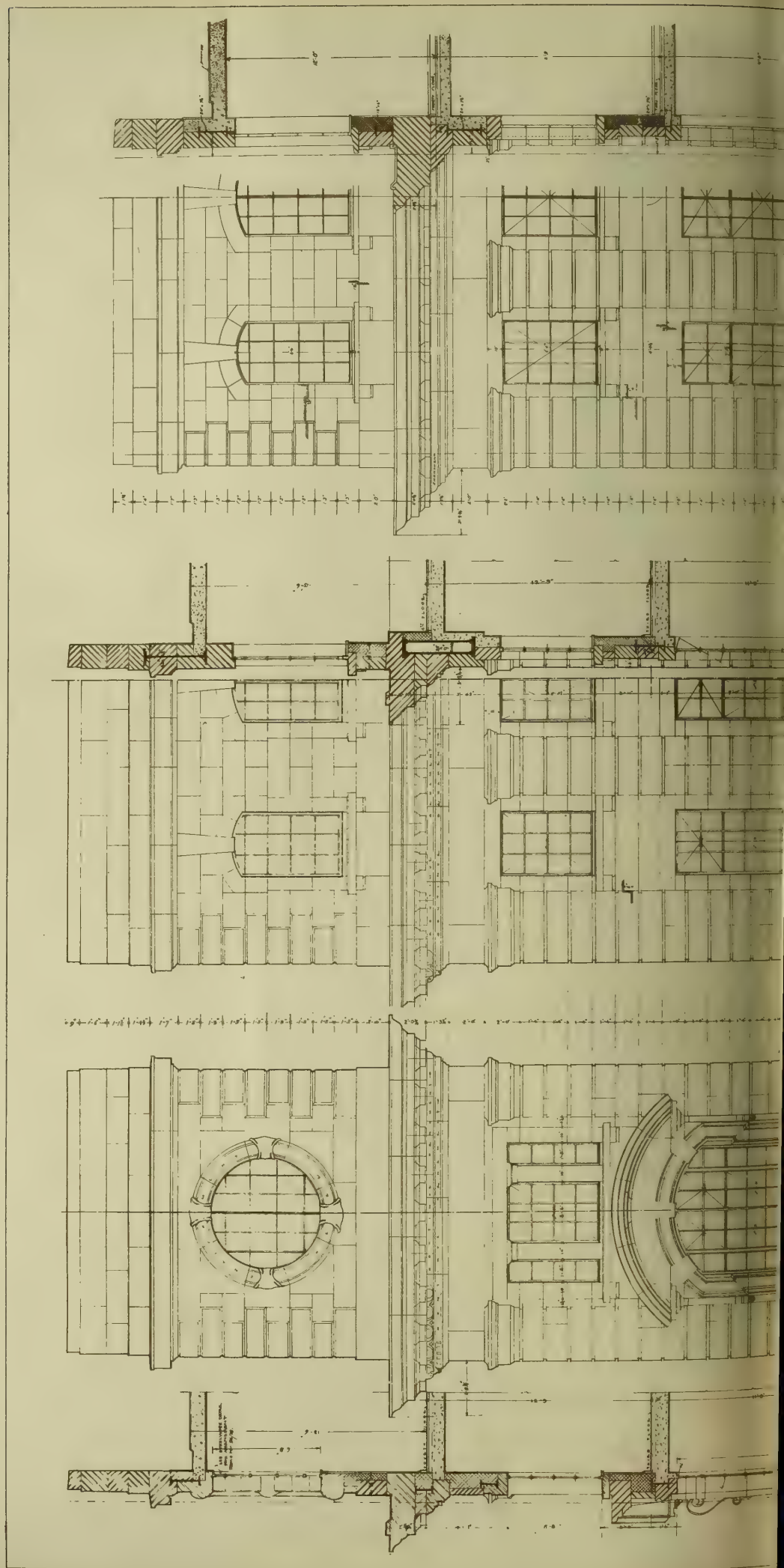
Accepted Design, Greenwich Baths Competition. By Messrs. F. J. Horth & H. Andrew, AA.R.I.B.A.

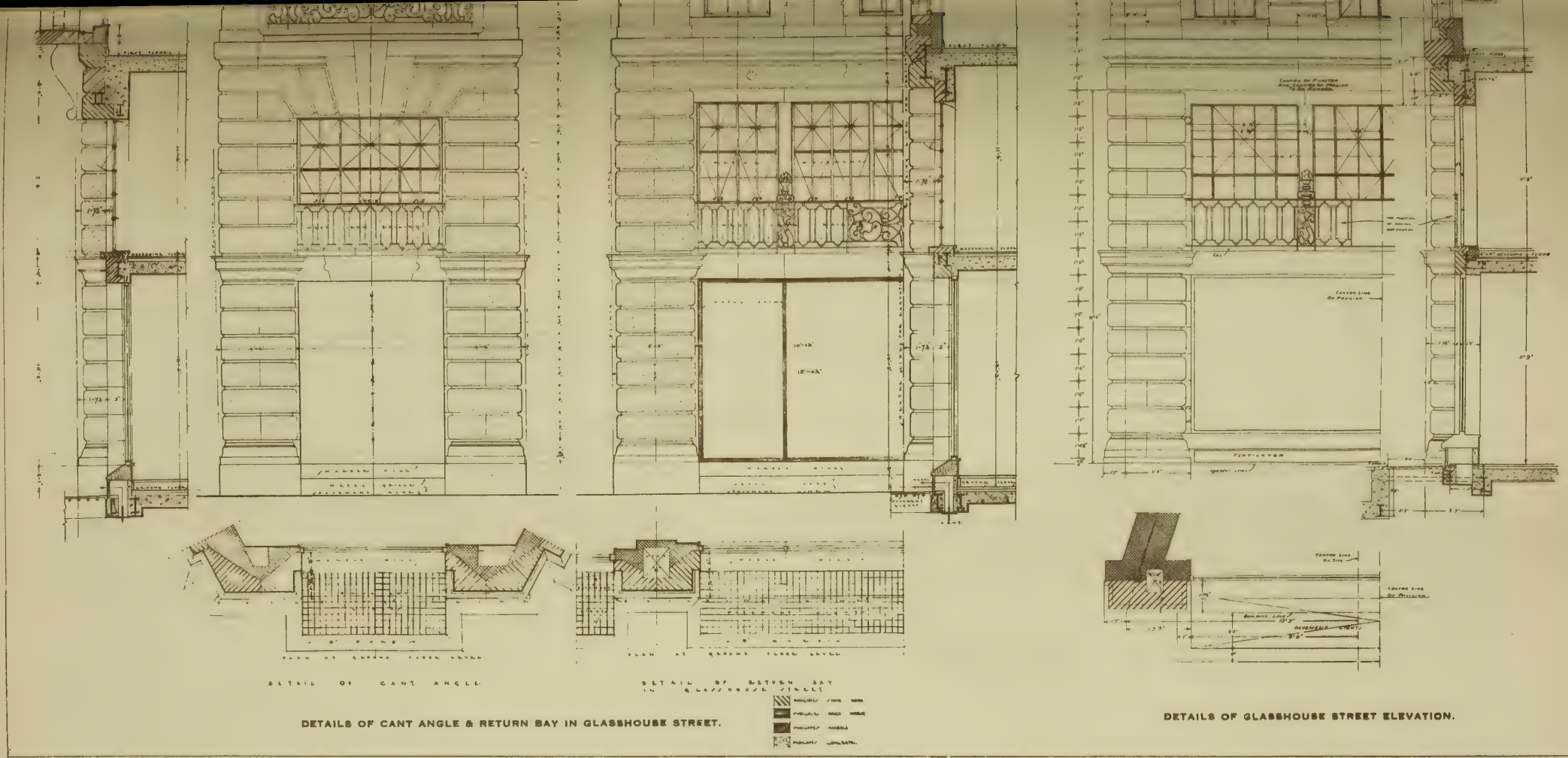
[This perspective is a water-colour sketch of the Trafalgar-road frontage, to be faced in 2½ in. multi-coloured bricks, a Portland stone frieze the depth of the first-floor windows, and the roofing in red Roman tiles.]



New Premises for the Midland Bank, Piccadilly.

Mr. T. B. Whinney, F.R.I.B.A., Architect to the Bank; elevations by Sir Edwin Lutyens, R.A.



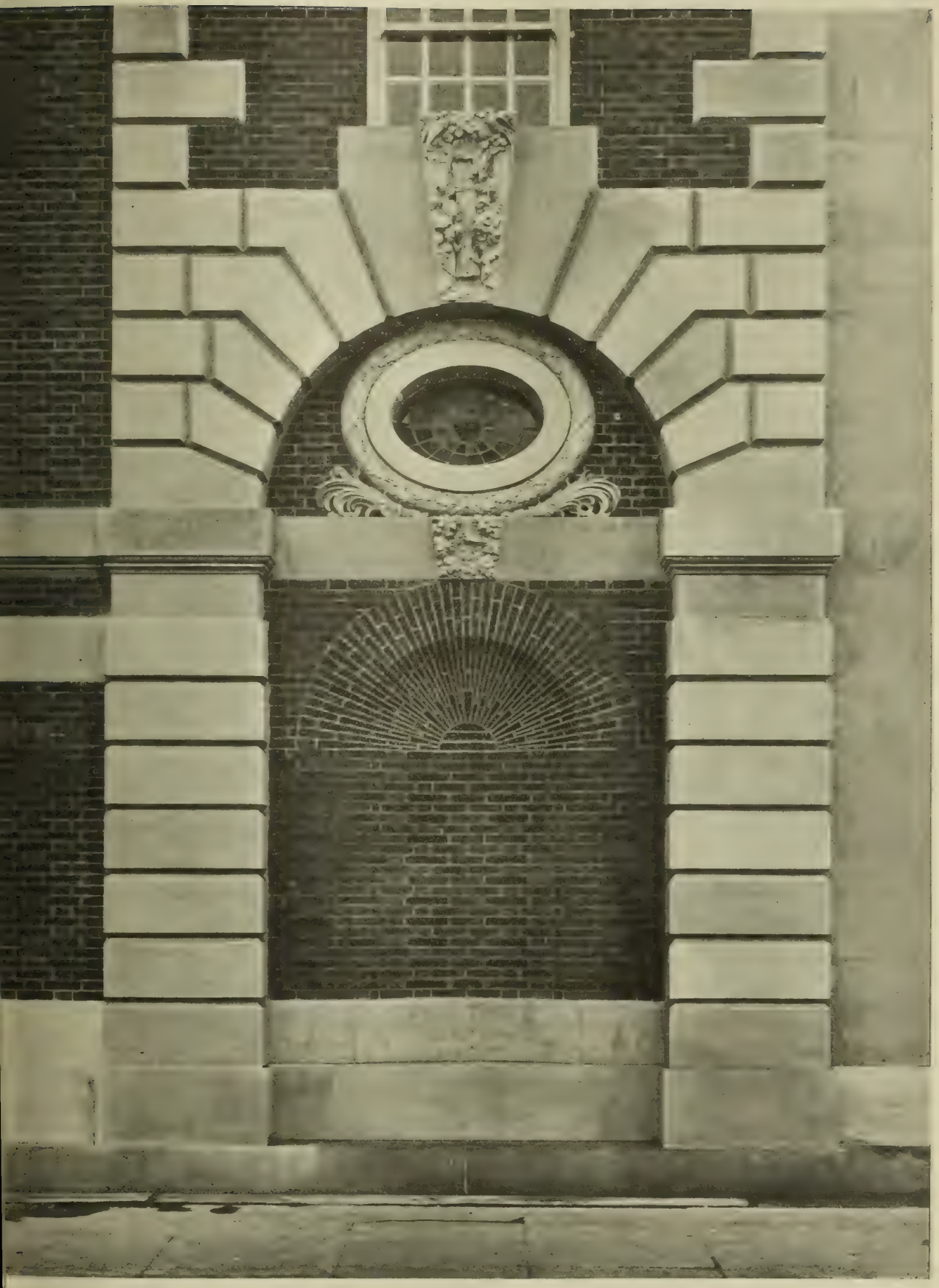


DETAILS OF CANT ANGLE & RETURN BAY IN GLASSHOUSE STREET.

DETAILS OF GLASSHOUSE STREET ELEVATION.

NEW PREMISES, GLASSHOUSE STREET, REGENT STREET, W.

MESSRS. YATES, COOK & DARBYSHIRE, ARCHITECTS.



New Premises for the Midland Bank, Piccadilly.

Mr. T. B. Whinney, F.R.I.B.A., Architect to the Bank; elevations by Sir Edwin Lutyens, R.A.

Gazetted Officers' Bungalow, Imperial Delhi.

MR. R. T. RUSSELL, F.R.I.B.A., Architect.

Hostels for Members of Legislative Council, Imperial Delhi.
Mr. R. T. Russell, F.R.I.B.A., Architect.

PLANS OF QUARTERS FOR SENIOR MARRIED OFFICERS.

IN ACCORDANCE WITH ARMY INSTRUCTION No. 51 of 1923.

NOTE:— THESE PLANS ARE TO BE USED ONLY AS A GUIDE; THEY SHOULD BE MODIFIED AS REQUIRED TO SUIT LOCAL CONDITIONS

NOTES:—

FOR DETAILS OF DOORS TYPES Nos 1, 2, 4 & 5 SEE DETAIL SHEET No. 1.

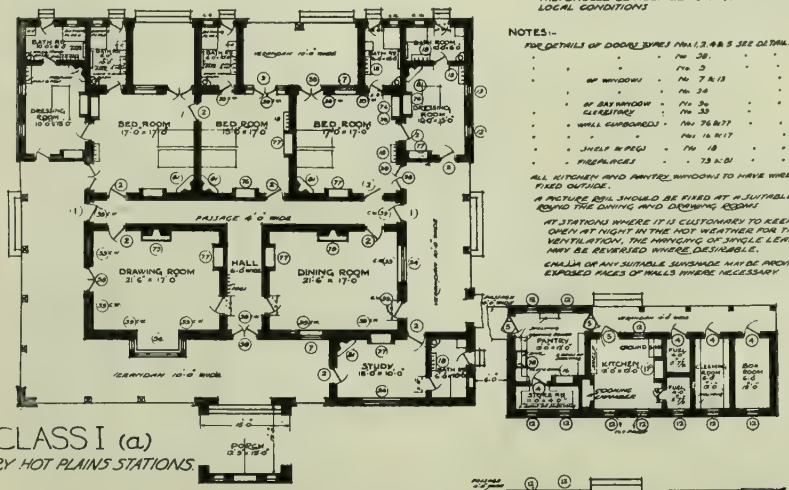
DOORS	No 30.		31.
	No 3		3
OF WINDOWS	No 7 & 18		2 & 6
	No 24		7
OF BAY WINDOW	No 34		31.
CLERESTORY	No 33		15
WALL CUPBOARDS	Nos 76 & 77		28.
	Nos 16 & 17		5
SHELF & PEGS	No 18		5.
FIREPLACES	73 & 81		26.

ALL KITCHEN AND PANTRY WINDOWS TO HAVE WIRE GAUZE FIXED OUTSIDE.

A PICTURE RAIL SHOULD BE FIXED AT A SUITABLE HEIGHT ROUND THE DINING AND DRAWING ROOMS

AT STATIONS WHERE IT IS CUSTOMARY TO KEEP ALL DOORS OPEN AT NIGHT IN THE HOT WEATHER FOR THROUGH VENTILATION, THE HANGING OF JUNGLE LEAF DOORS MAY BE REVERSED WHERE DESIRABLE.

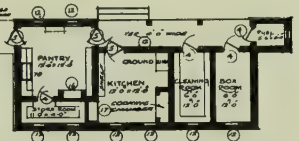
CHALLIA OR ANY SUITABLE SUNSHADE MAY BE PROVIDED ON THE EXPOSED FACES OF WALLS WHERE NECESSARY



CLASS I (a.)
FOR VERY HOT PLAINS STATIONS.

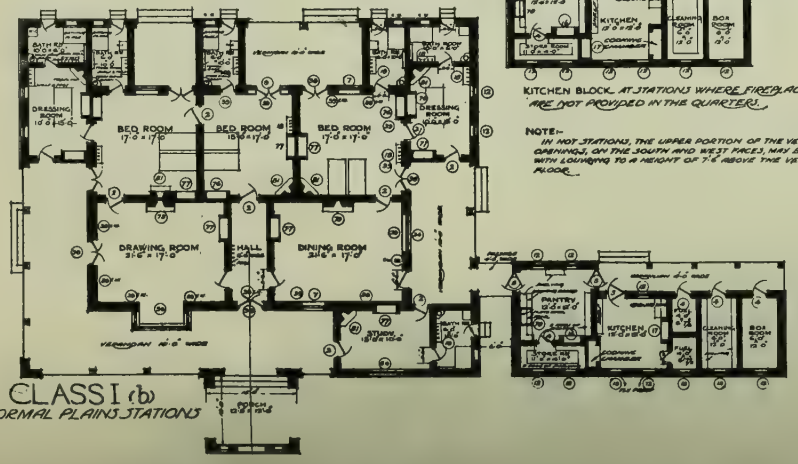
PLAN

NOTE:— CLERESTORY WINDOWS OF ALL THE BATH ROOMS TO BE 1'-5" WIDE



KITCHEN BLOCK AT STATIONS WHERE FIREPLACES ARE NOT PROVIDED IN THE QUARTERS.

NOTE:— IN HOT STATIONS, THE UPPER PORTION OF THE VERANDAH OPENINGS, ON THE SOUTH AND WEST FACES, MAY BE CLOSED IN WITH LOUVRING TO A HEIGHT OF 7'-6" ABOVE THE VERANDAH FLOOR.



CLASS I (b)
FOR NORMAL PLAINS STATIONS

PLAN

Scale

TYPE PLANS OF QUARTERS FOR SENIOR MARRIED OFFICERS.

IN ACCORDANCE WITH ARMY INSTRUCTION No 51 of 1923 (INDIA)

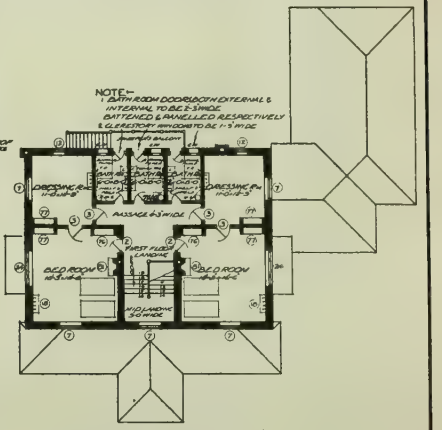
NOTE:— THESE PLANS ARE TO BE USED ONLY AS A GUIDE. THEY SHOULD BE MODIFIED AS REQUIRED TO SUIT LOCAL CONDITIONS



CLASS I (d)
FOR HILL STATIONS.

GROUND FLOOR PLAN

NOTE:— 1 BATH ROOM DOORS BOTH EXTERNAL & INTERNAL TO BE 5'-0" SINGLE BATTENED & PANELLED RESPECTIVELY & CLERESTORY WINDOWS TO BE 1'-5" WIDE.



FIRST FLOOR PLAN

NOTES:—

1 FOR DETAILS OF DOORS TYPES NO 1, 2, 3, 4 & 5 SEE DETAIL SHEET NO 1

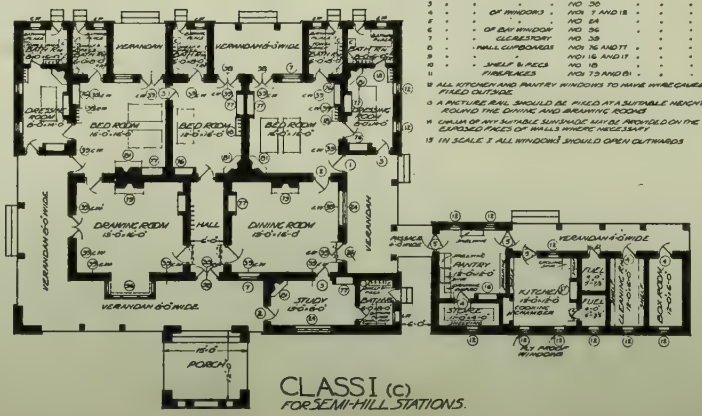
DOORS	NOS 3		NO 3
	NO 30		NO 31
OF WINDOWS	NOS 7 AND 18		NO 2 & 3
	NO 24		NO 7
OF BAY WINDOW	NO 34		NO 31
CLERESTORY	NO 33		NO 13
WALL CUPBOARDS	NOS 76 AND 77		NO 28
	NOS 16 AND 17		NO 5
SHELF & PEGS	NO 18		NO 5
FIREPLACES	NOS 73 AND 81		NO 26

12 ALL KITCHEN AND PANTRY WINDOWS TO HAVE WIRE GAUZE FIXED OUTSIDE.

13 A PICTURE RAIL SHOULD BE FIXED AT A SUITABLE HEIGHT ROUND THE DINING AND DRAWING ROOMS

14 CHALLIA OR ANY SUITABLE SUNSHADE MAY BE PROVIDED ON THE EXPOSED FACES OF WALLS WHERE NECESSARY

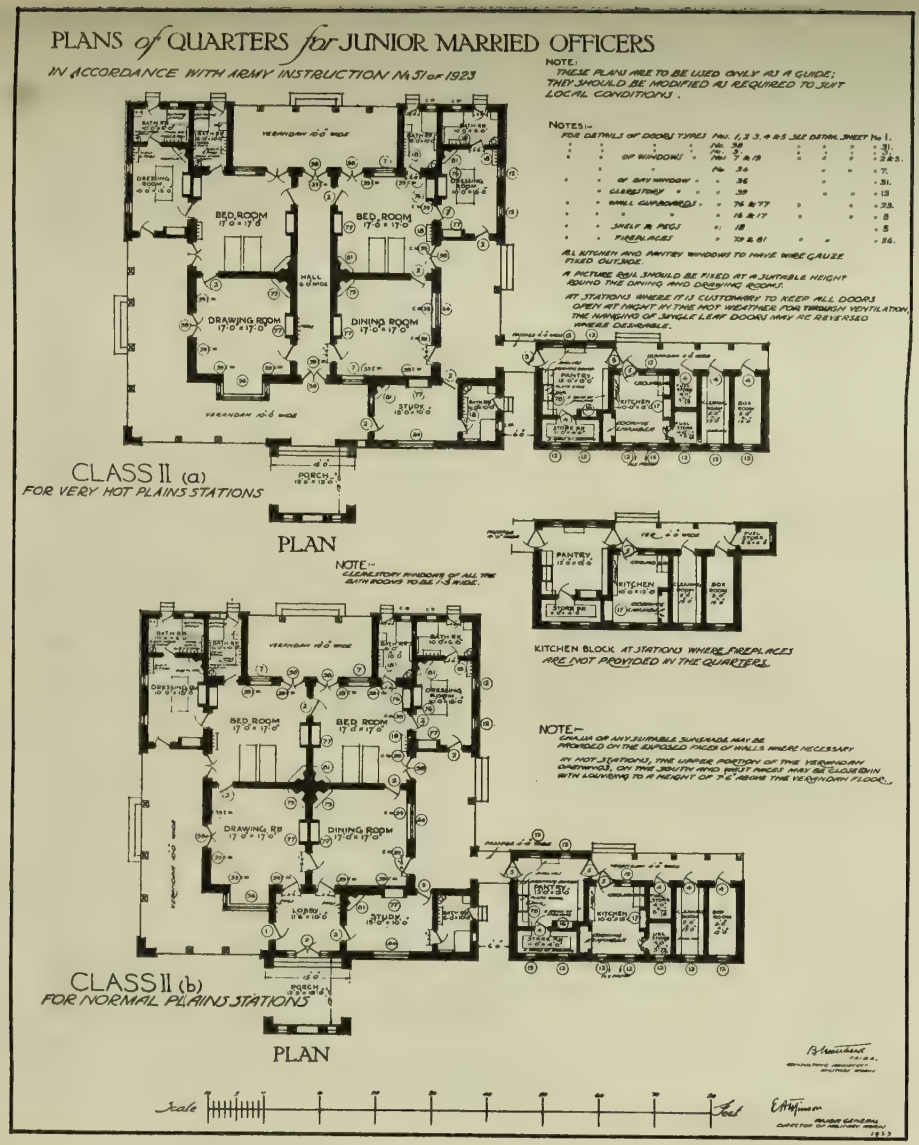
15 IN SCALE 1 ALL WINDOWS SHOULD OPEN OUTWARDS

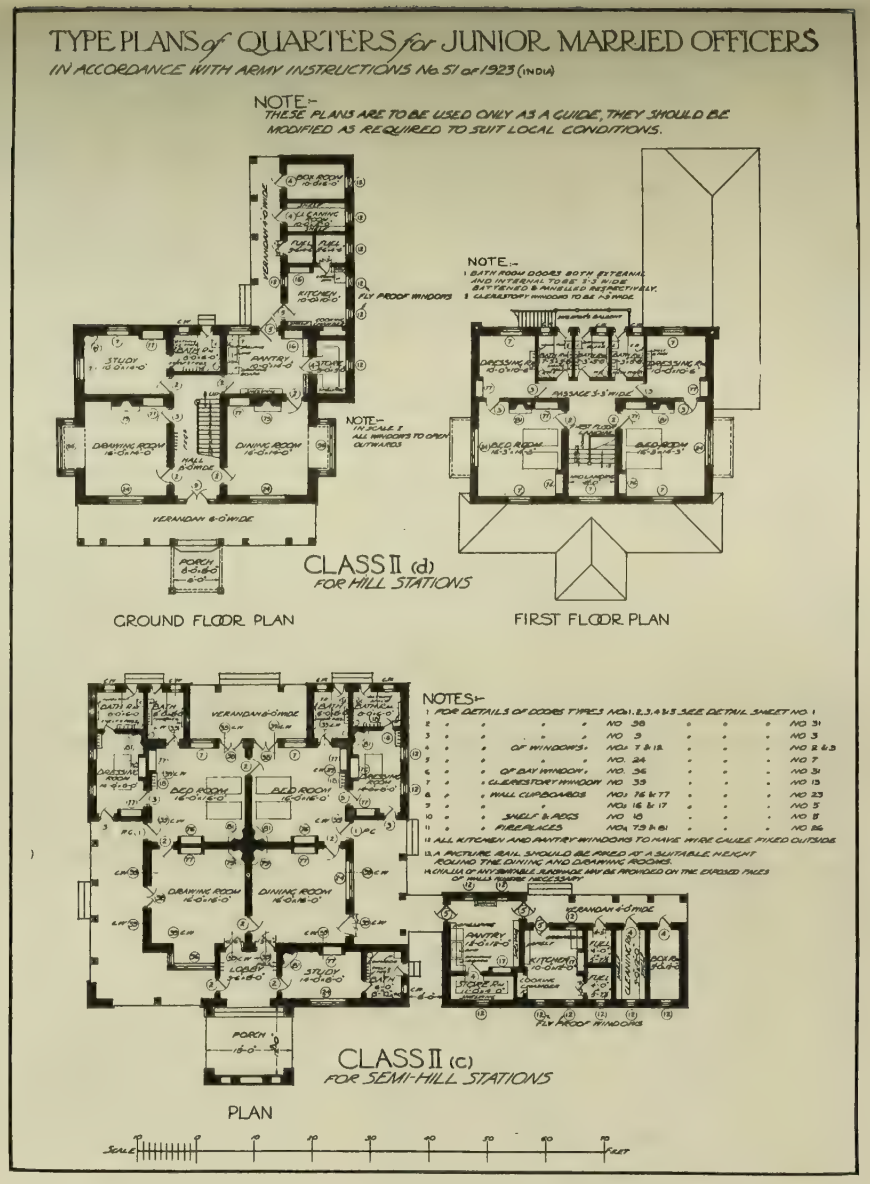


CLASS I (c)
FOR SEMI-HILL STATIONS.

PLAN

Scale





Quarters for Married Military Officers in India.

MR. B. MATTHEWS, F.R.I.B.A., Architect.

NEW PREMISES, GEORGE-STREET, OXFORD

THIS building is in course of erection for Messrs. Twining Brothers, wholesale and retail grocers. The front elevation is being carried out with Luton bricks of varying colours and Messrs. Lawrence's cherry-red bricks for quoins. The base and dressings are in Clipsham stone. The building is of ferro-concrete framed construction throughout.

The general contractors are Messrs. Wooldridge & Simpson, Oxford. The engineers for the ferro-concrete work are Messrs. The Birmingham Concrete Steel Co., Birmingham.

The steel sashes are being supplied by Mr. J. H. Pye, Moreton-in-Marsh, the electric goods lift by Messrs. R. A. Evans, Ltd., Leicester, the heating by Messrs. Young, Austen & Young, Leicester, the pavement and floor lights by Messrs. Haywards Bros., the rolling shutter by Messrs. Haskins, Ltd., the granolithic stairs by Messrs. Stuarts Granolithic Co., Ltd.

The architect is Mr. Gilbert T. Gardner, Lic.R.I.B.A., 7, St. Aldate's, Oxford.

OBITUARY

The Late H. K. G. Bamber.

By the tragic death of Mr. Henry Kelway Gwyer Bamber, J.P., who was killed in a motor-car accident near Gravesend last week, the cement industry and those interested in the development of concrete as a building material have lost one of their keenest and most popular friends. He was born in 1864, and commenced his business life in the office of his father, the late Henry Kelway Bamber, as an analytical chemist. Later, he took the post of chemist in the Portland cement works of Messrs. J. R. Patrick & Sons, of Harwich, and afterwards entered the service of Messrs. Knight, Bevan & Sturge, probably the oldest firm of cement manufacturers in the world. In this firm he very soon became a junior partner, and the board of the Associated Portland Manufacturers, Ltd., on its formation in Of this concern he acted as one managing directors for twenty-three and he also became a managing of the British Portland Cement Manufa Ltd., on its formation at a later date. these positions he occupied until the last year, when he relinquished the ma directorships, but retained a seat on boards as a consultant, in which capac knowledge and foresight were of very value. He was one of the founders Concrete Institute (now the Institut Structural Engineers); in this body h a great interest and was one of its most committeemen, and was last year elected president. An original member of th Committee of the British Engineering Sta Committee, formed to draft a standard fication for Portland cement, during th two years he had been engaged on nu investigations in connection with the rev the specification now in progress.



New Premises, Oxford. MR. GILBERT T. GARDNER, Lic.R.I.B.A., Architect.

LEGAL SECTION

NOTES ON CURRENT CASES

Restriction: Tenant Furnishing and Sub-letting.

case Prout *v.* Hunter, which we briefly May 30, has been carried to the Court eal and is reported in *The Times*, July 31. ase raised a question of some difficulty the Rent Acts. The plaintiff was the of a block of flats and had let three flats shed to one of the defendants, a Mrs. , who occupied one of the flats herself nished the two others and let them as ed flats to two tenants who appear also been parties to this action. The plaintiff en Mrs. Hunter notice to quit and, from ort at present available, it does not what order was made as regards the flat upied herself, as the appeal was limited case of the furnished flats, the question hether they were under the protection Rent Acts. The point depends upon 12, subsection (2), proviso (i) of the ct, 1920, which provides: "This Act ot save as otherwise expressly provided o a dwelling house *bona-fide* let at a rent ncludes payments in respect of board, nce or use of furniture," and the Divi- Court had held that this proviso applied status of the premises at the particular hat is to say, the letting to the occupying had to be regarded and not the letting original tenant.

e Court of Appeal it was argued that as a difficulty in reconciling this proviso ctions 9 and 10 of the Act which relate to ed lettings, as those sections might be d by the words "save as otherwise ex- provided," but the Court of Appeal out that the Statute operated in two t protected the tenant as to the rent aid, and it protected him from eviction, tions 9 and 10 relate only to rent but bearing on the question of eviction. re the words in the proviso, "save as e expressly provided," apply to the ns as to rent in sections 9 and 10, but bearing on obtaining possession. The us decided that what had to be regarded status of the premises at the material at is, when the claim for possession le, a decision which it pointed out was dance to the case of Glossop *v.* Ashley K.B. 1, THE BUILDER, April 15, 1915). s appears that if a sub-tenant takes from nt of premises let to that tenant un- l, premises or part of premises l by the tenant, those premises or parts ses pass out of the protection of the Act, ppears to us that some questions may to procedure unless, as we understand ase here, the sub-tenants are also joined s when possession is claimed, for other- sub-tenant may rely either upon , subsection (5), which provides: "An judgment against a tenant for the of possession of any dwelling house, ent therefrom under this section, shall t the right of any sub-tenant to whom ises or any part thereof have been law- -let, before proceedings for recovery sion or ejectment were commenced to ssession under this section, or be in perative against any such sub-tenant," ection 15, subsection (3). This section ide note, "conditions of statutory but subsection (3) is in general terms des" Where the interest of a tenant of g house to which this Act applies is d either as the result of an order, or for possession, or ejectment, or for reason, any sub-tenant to whom the or any part thereof have been lawfully all, subject to the provisions of this emed to have become the tenant of the on the same terms as he would have held from the tenant if the tenancy had continued."

The sub-tenant therefore appears, even in the case of a house let furnished, as in this case, to be able to hold the premises and to avail himself of the provisions as to rent contained in sections 9 and 10, but if the landlord desires to get rid of him then he can do so for the premises are not protected as to possession, and section 5 which relates to "Restriction on right to possession" according to the decision in this case does not apply.

It may be remembered that proviso (i) to section 12, subsection (2) and sections 9 and 10 were both amended in the Act of 1923, in section 10, but the amendment does not touch the point decided in this case.

Subsection (1) of section 10 of the Act of 1923 only provides that the proviso excluding the premises from the operation of the Act of 1920 shall only apply where the charges for attendance or the use of furniture, regard being had to the value to the tenant of the same, forms a substantial portion of the whole rent, as otherwise it is not to be deemed a *bona-fide* letting within the proviso. Subsection (2) provides that in section 9 and 10 of the Act of 1920 "the expressions 'landlord' and 'tenant' shall, respectively be substituted for the expressions 'lessor' and 'lessee.'" The reason for this latter amendment appears to be that the former expressions are defined in section 12 of the Act of 1920, whilst the latter are not.

Liability under the Employers' Liability Act, 1880.

Since the principle of Workmen's Compensation was adopted there has been a steady decrease in the cases brought under the Employers' Liability Act, 1880. That Act marked the first stage in extending the liability imposed by common law for accidents to employees, a law which proved defective for many reasons, but perhaps mainly by the doctrine imposed upon it that the workman took the risk of acts done by his fellow workman, that is roughly stated the doctrine of "common employment."

The Employers' Liability Act did away with some of the hardships under the common law, but it was a highly technical Statute involving complicated considerations, and for many years the Law Courts in each year had to consider a number of cases involving these technical points, but in 1897 the introduction of the first Workmen's Compensation Act brought in some degree the principle of insurance from accident into practice, and although the compensation recoverable might be less the workmen preferred to take a sum certain, rather than thread the intricacies of the Employers' Liability Act.

A recent case, James Nimmo & Company, Ltd. *v.* Connell (1924 A.C. 595) has reached the House of Lords on appeal from the First Division of the Scotch Court of Session in connection with the Employers' Liability Act, and it is a reminder of the complication of the Act to find that the House was unable to come to a unanimous decision, but was divided three to two.

Section 1, paragraph (1) of the Employers' Liability Act provides that where personal injury is caused to a workman "by reason of any defect in the condition of the ways, works, machinery or plant connected with, or used in the business of, the employer," the workman shall have the same right of compensation and remedies against the employer as if the workman had not been a workman of, nor in the service of, his employer, nor engaged in his work. In other words his common law rights are extended to the conditions of employment subject to the limit of compensation fixed by section 3.

Section 2, paragraph (1), however, provides that the workman shall not be entitled to any right of compensation or any remedy against the employer under the above paragraph unless the defect therein mentioned arose from, or had not been discovered or remedied owing to the negligence of the employer, or of some person in the employment of the employer, and entrusted by him with the duty of seeing that the ways, works, machinery, or plant were in proper condition.

By subsection 3 the workman is debarred from remedy if he knew of the defect but failed to report it unless he was aware that the defect was already known.

In the case in question the injured workman had been employed as a "brusher" in a mine worked by the appellants. It was a "gassy" mine, that is to say it was a mine where inflammable gas was known to be present. Such mines can be worked subject to the provisions of the Coal Mines Act 1911, which are very comprehensive, but amongst those provisions, in a mine worked as this one was in shifts, it is provided that no place shall remain uninspected for more than five hours. The fire examiner, whose duty it was to carry out this inspection, had neglected to do so in the section where the man was employed, and the accident was caused by the accumulation of gas in the working which was ignited by a spark from a coal-cutting machine which other men were working improperly, having neglected to screw down the cover properly. The question to be decided was as follows: Was the presence of gas at the working place, which had not been discovered owing to the negligence of the fire examiner, a defect in the ways within the meaning of the Section 1, paragraph (1)? It may here be noted that the Sheriff who had tried the case had found in one of the findings of fact that "At the time of the explosion the ventilation provided failed to dilute and render harmless inflammable gas to such an extent as to make the working place in the vicinity of the top of the heading unfit for working." This, however, appears not to have been due to a defective system, but to have been a condition which might occur in a "gassy" mine, and which had to be guarded against by repeated inspections in compliance with the Mines Act. The trend of many decisions given upon this paragraph of the section has been that the defect must be of a permanent or quasi-permanent nature.

With these preliminary observations we will now turn to the judgments delivered in the House of Lords, taking first the opinions delivered by the majority who held that the man was entitled to recover the damages awarded, viz., £325. Lord Atkinson said: "In my view, therefore, there is a defect, within the meaning of section 1, subsection (1), in the condition of ways and works in a mine when from any cause they are in a condition which renders them unfit for the uses for which they are designed, to which they are intended to be put and are in fact being put." He then went on to say that it might have been expected that in the forty-three years that have elapsed since the Employers' Liability Act was passed the meaning of this subsection would have been definitely and clearly determined, yet that was not the case, and he then proceeded to examine the decided cases to show that, on the whole, they supported the view he had expressed. He found some support in the judgment delivered by Lord Watson in the House of Lords in Smith *v.* Baker (1891 A.C. 325) in which, although the crane itself in use was not defective, it was used in a manner which made the system defective, and in a dictum in Walsh *v.* Whiteley (21 Q.B.D. 378), and especially relied upon Tate *v.* Latham (1897 1.Q.B. 502) where a guard had been removed from a circular saw for his own convenience by the sawyer, and yet the absence of the guard was held a defect in an action by a workman who had fallen against the saw.

The decision in McGiffen *v.* Palmers' Shipbuilding & Iron Co. (10 Q.B.D. 5) where a

man was injured by a temporary obstruction having negligently been left in the way, Lord Atkinson considered had been wrongly decided as against the man, and Lord Dunedin agreed with this view. Lord Shaw of Dunfermline agreed with the judgment delivered by Lord Atkinson, but referred to Butler or Black *v.* Fife Colliery Co. (1909 S.C.H.L. 33), a case relied upon by the sheriff, and agreed with his finding that the presence of gas causing danger in a factory does not resemble a casual obstruction affecting the safety of ways, but at all events in a "gassy" mine is one of the dangers to be guarded against by special precautions.

In the sheriff's judgment, which Lord Shaw also expressly agreed with, was a finding that the condition imposed by subsection (2) was satisfied in that the defect was not discovered owing to lack of inspection, and lastly that under subsection 3 the burden of proving that the accident would not have been prevented lies on the person responsible.

Lord Dunedin agreed with the opinions delivered by Lords Atkinson and Shaw. It is not necessary to refer at length to the opinions expressed by the dissentient minority in the House, Lords Phillimore and Blanesburgh. It is sufficient to say they adopted the view which is strongly supported by the decided cases that the defect must be a standing defect and not of a temporary character, and there is much to be said for this view for a "gassy" mine must always be dangerous, and here all the statutory precautions had been observed to obviate that source of danger, whilst in Black's case the noxious but uninflammable gas was difficult to discover and guard against, and no safeguards were existent (Lord Blanesburgh made this point clear), therefore the accident here arose in the opinion of the minority, not from a defect under section 1, paragraph (1), which was the paragraph the House was considering.

The importance, therefore, of the majority judgments in this case lies in the fact that it gives an extended operation to section 1, paragraph (1), which coupled with Section 2, paragraph (1), imposes liability on employers in respect to the condition of the ways, works, machinery, or plant irrespective of negligence of the fellow-employees, except in so far as the latter paragraph makes it a condition that the defect arose from, or was not discovered through, the negligence of the employer or of some person entrusted by him with the duty of inspection.

"THE MITRE," OXFORD*

"A CLERK there was of Oxenford also
That unto logyk haddé long y-go,"

And Chaucer goes on to tell us that his horse was as lean as a rake and he himself anything but fat or well clothed being unbeneficed and, what's more, so unworldly-minded that—

"For him was levere have at his beddes heed
Twénty bookés clad in blak or reed
Of Aristotle and his philosophie."

We may well imagine that his bed's head may have been in the old Mitre Inn. Chaucer was writing his "Canterbury Tales" in 1386–88, and probably had in mind some such hostel as "The Mitre," which in 1364 was known as "Croxford's Inn," and perhaps in 1374 as "Dagville's Inn" although there is some slight doubt about this latter nomenclature. "The Mitre" under its present or earlier name or names, is nearly as venerable as the University. We must think of it in its youth more as a religious hostel than as a hotel, in the same sense in which we differentiate between the Inn or Tavern, and the Legal Inn.

Oxford University was a venerable institution even in Chaucer's days. It is said to have had small beginnings in or about the year 1199, when seven poor pedestrians journeyed thither with empty purses and tightened belts in the hopes of earning a livelihood by imparting crumbs of knowledge to the children of the Burghers of Oxeneford. But away down the ages from the days of the Saxon Kings it was a seat of learning under the benign influence of Alfred the Great, and from the days of the Conquest its schools were famed the worl
The seven poor scholars had no "Crox
or "Mitre," but perforce one, for a few
was content to hire a cobwebby garret,
a room over a beershop, whilst a thi
more venturous spirit managed to ge
free, the use of a disused stable, a loft,
hen house, and a small court containing
water-butt on the understanding that h
teach the "three R's" to his landlord'
sons. Whether he held out the cont
the water-butt as an inducement to cle
in his scholars or, Diogenes like, slept
cavernous depths, history does not say.
was the protoplasmic University, and h
germ of the College "Inn."

It is of these and many more int
things that Mr. Spiers tells us in his de
little book "Round About 'The Mit
Oxford." He does not pretend to give
whole history of the University City,
content to give us a quite comprehensive
of one of England's famous Inns, whi
boast of having never been bought or s
upwards of 600 years, and has been
ownership—that of Lincoln College—for
400 years.

The Inn is his first charge, but he g
the setting quite adequately in the c
dealing with the "roundabout" such as
College, The Carfax, The Turl, the Chur
St. Mary, St. Michael and All Saints
illustrations produced from old prin
charming pencil sketches by Walter
The man who knows his Oxford will w
read the book and he who does not w
reading, probably emulate the seve
scholars with the difference that, like H
he will say "Shall I not take mine ease i
inn?"

* "Round About 'The Mitre' at Oxford," by R. A. H. Spiers. Published at "The Mitre" Hotel, Oxford.

Prestatyn Institute.

A new institute, built at a cost of £
was recently opened at Gronant, near Pre
The architect is Mr. F. A. Roberts, M.S
Mold; and the builders are Messrs. G
Sons & Cromwell, Ltd., Upper Duke
Liverpool.



Pavilion at Wembley. MESSRS. RICHARDSON & GILL, FF.R.I.B.A., Architects.

[This small pavilion shows a design for exhibiting the books of the publishing firm, Messrs. Cockerell, Willis & Bellière, Ltd. It is a simple
in red, black and gold, and stands in the open near the entrance to the Amusement Park. Messrs. Brand, of Tottenham, were the contr

PRACTICAL DESIGN FOR BUILDING CONSTRUCTION.—IX.

AN ELEMENTARY EXPLANATION OF THE APPLICATION OF THE THEORY OF CONSTRUCTION TO PRACTICAL DESIGN

By EWART S. ANDREWS, B.Sc., M.I.Struct.E., A.M.Inst.C.E.

TION II.—FLOORS AND BEAMS

(Continued).

and Reactions on Beams (*continued*).

Loads and Live Loads.—In estima- e loads upon beams we divide the loads o parts.

first part is called the dead load, and s all the loads forming a permanent the structure; in the dead load must uded the weight of the floor surface ogether with any special finish, such olithic or wood-blocks in the case of e floors, plaster ceiling construction,

other part of the load is called the live nd consists in the load which may come he beam from time to time according happens to be upon the floor.

loads can, of course, be estimated with ccuracy because the weights are known ly, but live loads can be ascertained y the combination of knowledge and nt; in general, however, we are re- of the necessity of having to exhibit e combination of qualities because the fix the loads for us.

timating the live load to be taken in ith which the by-laws do not deal we remember that the load is what is he equivalent dead load, and allow- ust be made for the "liveliness" of d; loads which involve impact and n should be taken as equivalent to nore than the same loads which are ich as water in tanks.

ould here be pointed out that we use ns dead load and live load in a slightly sense from that employed in many ks on building construction; Rivington, ance, says that "live loads are those re suddenly applied or are accompanied ks or vibrations," and "dead load is hich is very gradually applied, and emains steady.

ifficulty is got over to some extent in .C. regulations by avoiding the use of "live load" and saying that the dead sists of the weight of all permanent tion and calls everything else "super- load."

Floor Loads on Buildings.

igh we design our steelwork or rein- oncrete for certain working stresses, it at all follow that they will ever be d to those stresses. It has been the since the dim past, when material our were cheap and knowledge was o err on the safe side in the matter oads coming upon buildings, and the necessary loadings have not been so that at the present time many s are capable of carrying at least three e load which they ever do carry in before the stresses reach the "safe" oon which they are designed. If we that the stresses are based upon a safety of four, we see that the real safety of the building is twelve.

ne people it may be comforting to at a building is three times as strong ed be, but an engineer should regard candal and insist upon its being taxed ury.

llowing is a summarised list of floor cified in the L.C.C. Reinforced Con- gulations, those for the steel frame buildings being the same on the whole, but divided into fewer classes.

Class of Building.	Equivalent dead load in lb. per sq. ft.
A. Domestic buildings	70
B. Hospital wards, hotel bedrooms, etc.	84
C. Offices and counting houses ...	100
D. Theatres, meetings, school rooms, etc., retail shops, workshops	112
E. Ballrooms, drill-halls	150
F. Warehouses, not less than ...	224

Mr. Fleming, of the American Bridge Company, has often written upon this important subject, which was investigated very fully by the late C. C. Schneider, of New York, who issued what are probably the most reliable specifications for floor designs. One point which Mr. Fleming makes is that there should not be a wide difference between the specified load for the same class of floors in different towns, as is at present the case in the United States.

The loads for office floors vary, for instance, from 40 lb. per sq. ft. at Milwaukee to 100 at Boston. There is not the same difference in regulations in this country, mainly because most towns do not have any.

Investigations made in 210 Boston offices showed that the highest floor load was 40.2 lb. per sq. ft.; the highest average load for ten offices was 29.8 lb. per sq. ft., and in many cases it was less than 10.

It appears to be sheer extravagance to design office floors for a superload of more than 50 lb. per sq. ft.; to meet the case of concentrated loads, such as safes, it should be specified that every floor beam of an office building should be designed for a central load of 3,000 lb. (not, of course, in addition to the superload).

The loads in any ordinary dwelling-house are much below those specified; 40 lb. per sq. ft. for the ground floor and 30 lb. per sq. ft. for upper floors are quite enough.

In this connection we will mention the question of weights of crowds; the record weight obtained by packing 67 picked Harvard engineering students into 64 sq. ft. is 160 lb. per sq. ft.; this broke Stoney's Irish labourer record of 147 lb. per sq. ft., which held the field for many years. We must not be led away too much by these figures for practical design; nobody would consent in the ordinary way to crowding to half this extent for fun, and even that extent of loading would be so unlikely to occur in a domestic building that it should be taken in as part of the factor of safety of 4 for which we design.

Hotels have slightly heavier traffic than ordinary houses, but nothing like the amounts specified; Mr. Fleming recommends 80 for the first and ground floor and 40 for other floors. The loads called for in schoolrooms are absurd; it is difficult to see how a crowd of children in a classroom can weigh as much as 50 lb. per sq. ft., let alone 112 lb.; 50 lb. is ample for design.

For theatres and churches 75 lb. per sq. ft. is sufficient, the figure being increased to 100 lb. per sq. ft. for assembly rooms where the seats are not fixed.

Many people are nervous in designing ball-rooms on account of the vibration, and think that 100 lb. per sq. ft. is too low. We know that London dancing rooms are uncomfortably crowded and that some people can be very heavy on their feet, but, allowing for the fact that the whole area of the floor is assumed to be covered, and that the dancers are willing to be so crowded that each couple has only one square yard of space, then, taking the weight of a couple as 300 lb., this only amounts to 33 lb. per sq. ft. Even if we multiply by three to allow for the effect of vibration we are still within the limit which we suggest for the design load. The student will find it interesting to estimate the total load on a ball-room floor under normal conditions of crowding; if it exceeds 20 lb. per sq. ft. we shall be surprised.

The minimum figure of 224 lb. per sq. ft. for warehouses is too small, as the load to be carried must depend on the merchandise to be stored. For light goods we think that the figure should come down to 120 lb. per sq. ft.

To deal with the difficulty that a warehouse building designed for one class of goods may be used later for another class, we would make it incumbent upon the owners to display in a conspicuous position the load for which floors are designed, and would make it an offence to exceed such load.

The Schneider Specifications.

Mr. Schneider proposed a specification for floor loadings which provides for considerable reduction in floor loads compared with British practice, and yet deals with the possibility of concentration of loads over small areas, and this seems to us to be the most rational method of procedure. The following figures are given in the Schneider specification:—

Schneider's Specification for Floor Loads.

	Distributed per sq. ft.	Concentrated.	Per ft. length of Girder.
Dwellings, hotels, hospitals, &c.	40 ..	2,000 ..	500
Offices (ground floor)	80 ..	5,000 ..	1,000
,, (upper floors)	50 ..	5,000 ..	1,000
School rooms, theatre galleries, churches	60 ..	5,000 ..	1,000
Assembly rooms, main floors of theatres, ball rooms ..	Floors 100 / Columns 50 ..	5,000 ..	1,000
Light workshops, stores, &c.	80 ..	8,000 ..	1,000
Sidewalks in front of buildings	300 ..	10,000 ..	1,000
Warehouses and factories	120 up ..	Special ..	Special

All figures are in pounds.

Example of Calculation of Loads and Reaction on Floor Beams.

As a numerical example of the methods in which the loads and reactions are calculated, we will take the portion of the floor framing of a building illustrated in Fig. 16; at a later stage we propose to continue this same example in order to work out the sizes and details of the beams and columns.

A, B —— H represent the columns by which the loads on the floors are transmitted to the foundations. The word "column" is used by most scientific engineers, although the word "stancheon" is favoured among the people in structural-steel trade; the word "pillar" is used by the London County Council in their Steel Frame Act, presumably on the delightful idea among the authorities that they would settle the confusion arising from the use of two words by introducing a third.

The floor will be assumed to be a concrete floor 5½ in. thick which spans in the direction indicated by the double-headed arrows.

The framing has been given the particular form shown in order to provide the opening indicated; for this purpose this opening is "trimmed" by the provision of a beam 8, which transmits its reactions on to beams 9, 10, which in turn transmit their reactions to beams 1, 6 and 2, 7.

The centre portion of the floor is carried by beams 3, 4, 5 which transmit their reactions to beams 9, 10 and columns D. E.

The first estimate, the load per sq. ft. for which the floor has to be designed, it being

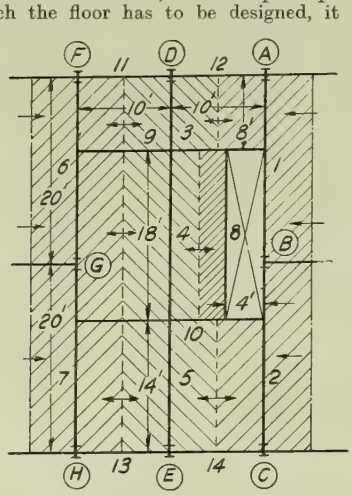


FIG. 16.

assumed that the live load is to be taken at 100 lb. per sq. ft.

We then have:

5½ in. Concrete ..	=	66
½ in. Granolithic	=	6
½ in. Plaster ..	=	6
Total dead load		78
Live load ..		100
Design load ..		178 lb. per sq. ft.

The light shading indicates the area of floor that comes on to the various beams.

We then calculate these as follows:

Beam 3. Width of floor carried = 10 ft.

$$\therefore \text{Load in tons} = \frac{10 \times 8 \times 178}{2240}$$

$= W_3 = 6.4$ tons (uniformly distributed).

$$\text{Each reaction} = \frac{6.4}{2} = 3.2 \text{ tons.}$$

Beam 4.—Width of floor carried = 8 ft.

$$\therefore \text{Load in tons} = \frac{18 \times 8 \times 178}{2240}$$

$= W_4 = 11.4$ tons.

$$\text{Each reaction} = \frac{11.4}{2} = 5.7 \text{ tons.}$$

Beam 5.—Width of floor carried = 10 ft.

$$\therefore \text{Load in tons} = \frac{10 \times 178 \times 14}{2240} = 11.1$$

Each reaction = 5.5 tons.

Beam 8.—Width of floor carried = 3 ft.

$$\text{Load in tons} = \therefore \frac{3 \times 178 \times 18}{2240} = 4.3$$

Each reaction = 2.1 tons.

Now take beams 9 and 10. Beam 9 has a load W_1 at the centre which is equal to the sum of the reactions from the beams 3 and 4 and also has a load W_2 equal to the reaction from the beam 8. From the above figures we have:

$W_1 = 3.2 + 5.7 = 8.9$ tons.
$W_2 = 2.1$ tons.

Fig. 17 shows the loads on the beam 9.

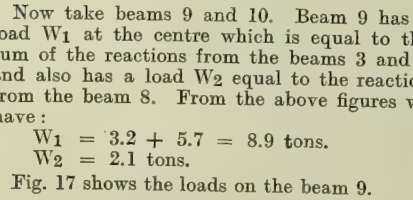


FIG. 17.

We have now to find the reactions R_1, R_6, at the points 1 and 6.

To find R_6 take moments about the point 1:

Moment of W_2	=	$2.1 \times 4 = 8.4$
W_1	=	$8.9 \times 10 = 89.0$
Total moment		97.4

This must be equal to the moment of R_6., about 1, *i.e.*, $R_6 \times 20$.

$$R_6 \times 20 = 97.4$$

$$R_6 = \frac{9714}{20} = 4.9 \text{ tons}$$

Total weight $= W_1 + W_2 = 11.0$
$R_1 = 11.0 - 4.9 = 6.1$ tons

Working in a similar manner for the beam 10 we should get:

$R_7 = 6.0$ tons
$R_2 = 7.3$ tons

The reader is recommended to test this as an exercise.

We will now find the loads and reactions on one of the main beams, such as C.

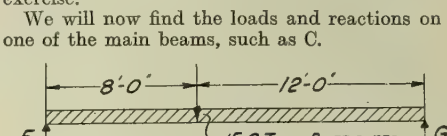


FIG. 18.

It has a point load of 4.9 (the reaction from beam 9) and a uniformly distributed load from the floor slab. This uniformly distributed load

$$= W = \frac{10 \times 20 \times 178}{2240} = 15.9 \text{ tons}$$

Taking this as acting as the centre of the beam, we take moments about the point F with the following results:

Moment of—		
Point load	$= 4.9 \times 8$	= 39.2
Uniform ,,	$= 15.9 \times 10$	= 159
Total moment		178.2 ft.-tons

$$RG = \frac{\text{Total Moment}}{20} = 8.9 \text{ tons}$$

The total load = 4.9 + 15.9 = 20.8 to

Reaction at F = 20.8—8.9 = 11.9

The reactions in the other main b found in a similar manner and the loa mitted to the columns are then det as a check on the accuracy of the wo should always see that the sum of all th loads is equal to the total load on th ponding portion of the floor.

Ormiston War Memorial.

The Marquis of Linlithgow recently a war memorial and opened a welf memorial institute at Ormiston. In the institute is the war memorial, whi the form of a polished stone shaft wit capital. The base bears on its front tablet with the memorial inscription bronze figure representing "The Sac Youth" surmounts the shaft. The was Mr. J. A. Carfrae, Edinburgh.

Steel Houses.

The Sub-Committee on Sites and H Glasgow Corporation Housing Co recently decided to authorise the Dir Housing to have 10 steel houses of t proposed in the offer of Lord Weir er an experiment on ground belonging department at Drumoyne. The sub-co also agreed to erect on the ground set a experimental purposes at Drumoyne a in timber consisting of a block of four h



Woodbury County Court House: General View. (*See p.* 472).

MR. WILLIAM L. STEELE, Architect; MESSRS. PURCELL & ELMSLIE, Associated Arch

BOOK REVIEW

ghteenth Century Architecture of Bristol. C. W. F. DENING, F.R.I.B.A., R.W.A., B.E. (Bristol: J. W. Arrowsmith, Ltd., ay-street. London: J. W. Arrowsmith, l. Price £2 12s. 6d.

nty beautiful plates and the judgment of l critic freely and forcibly expressed ave made an interesting book, even had mples of architecture under examination a less admirable character, and Bristol with fine buildings of that delightful here civic fitness and the convenience individual are inextricably merged to- Sir Lawrence Weaver contributes a in which the names of various historical s are mentioned. Bristol architecture iated with some well-known men, Sir nbrugh himself having built a Palladian King's Weston House, which sufficiently is his reputation as a designer with a and.

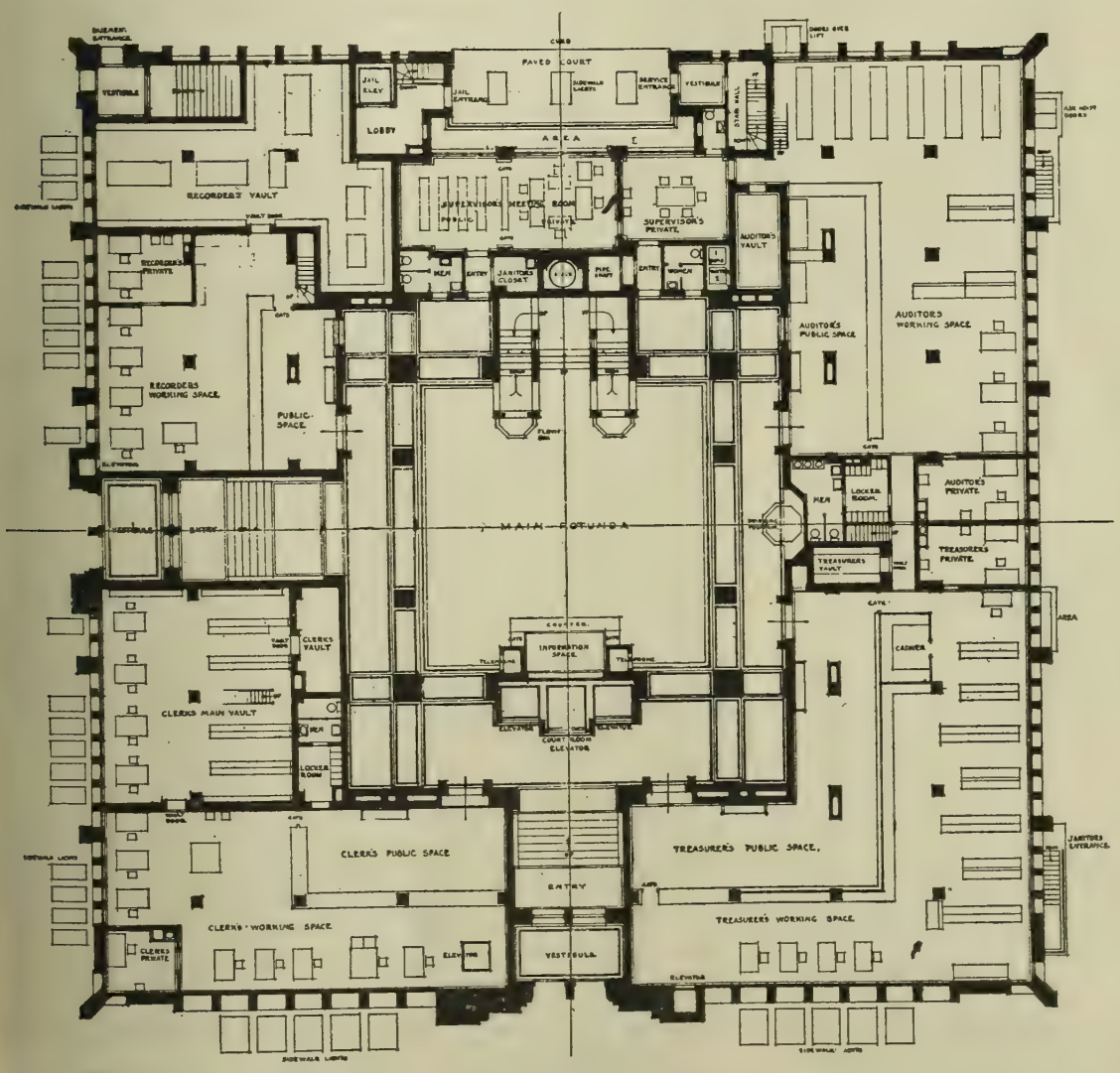
ntroduction by Mr. J. E. Barton dis- he spiritual status of these orderly f the eighteenth century, which was, s, "a period of equilibrium between the antic spirit that had passed away with rts, and the new imaginative life that ollow the French Revolution. Peaks sses of emotion—the mysticism of great es or poets—were outside its experience rt.

ould not have produced a Shakespeare nor a Shelley. The fastidiousness of Addison, the wit of Pope, the ease of Goldsmith, and the common sense of Johnson are typical of its mental quality and range. Eighteenth-century work as a whole, in all its degrees from honest competence to exquisite mastery, is marked by consistent care and thoroughness. Clear principle and solid practice marched together; and where the practice fell short, a recognised standard of criticism was always at hand to detect the flaw."

The absence of such instructed criticism at the present time, and, indeed, of any real popular interest in architecture at all, is deplored by Mr. Dening, who sets himself to stir up interest in his opening chapters on the study of architecture and craftsmanship. How far a brief resumé of architectural evolution can achieve this end is rather doubtful. Can it be useful to inform the reader that "a glance at the plans of Egyptian and Grecian temples will reveal the contradistinction between the two"—and omit to print the plans? Or to repeat the old familiar statements about the darkness and awe of Egyptian buildings with their "austere and forbidding aspect," when we know that their simple expanses of wall surface were but the basis for the gayest imaginable colour decorations, and that in the intense sunlight and under the vast equalising sky of Egypt even the heaviest structures are apt to appear dwarfed, and, in contrast with the limitless horizon, insignificant? The "austerity" of Egyptian art may be apparent in the dim light of the British Museum or in the crudely exaggerated shadows of an ill-developed photograph, but it is by no means noticeable on the spot.

It is a far cry from Beni-Hassan to Bristol, and in spite of several sage remarks contained in the first two chapters it is a pleasure to pass on to the excellent subject-matter in the later pages, where admirable art is matched with pointed and pertinent comment. The desirability of a central feature in the side of St. James's-square, and the absurdity of a sham feature with a pediment shared in equal halves between two different owners who each paint "their own portions their own particular colour" is very properly emphasised in text and illustration. The value of well-proportioned panes of glass, and the damage done to a dignified front by the removal of sash bars, is pointed out on more than one occasion, and it is to be hoped that the mania for dark expanses of plate-glass may be mitigated by these timely warnings. "Outside the profession," writes Mr. Dening, "it is not generally recognised how much of the effect relies upon the proper proportion of a pane. It is the unit that controls the design of the window opening, and from Sir Christopher Wren downwards it has received considerable attention."

The beauty of old crown glass with the exquisite iridescence in its rippled surface is shown in many of the illustrations, and the recent revival of the eighteenth-century manner without the brilliant colouring picked out upon the glass can never be quite so satisfactory in appearance. A comparison of the Bristol Exchange in its present state with the sash bars



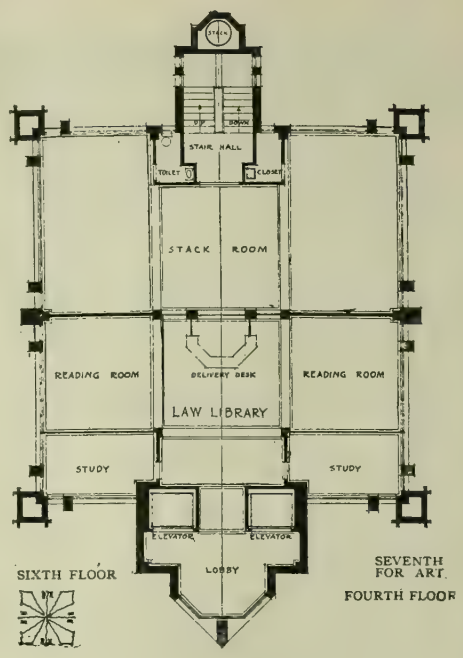
Woodbury County Court House: Ground Floor Plan.

MR. WILLIAM L. STEELE, Architect; MESSRS. PURCELL & ELMSLIE, Associated Architects. (*See p.* 472.)

cut out and the old glass replaced with large gloomy slabs of new, with the façade of the Royal Fort, where both bars and old glass remain, should convince any reader of the superiority of the older way.

Some fine staircases with bracketed treads and twist-turned balusters are detailed and described, and the characteristic Bristol bracketed and niche headed entrance doors appear on several of the plates. A magnificent mantelpiece attributed to Grinling Gibbons is illustrated in Plate XXIII. The ornament, which has the lightness and buoyancy of Gibbons' work in limewood, is actually carved in solid blocks of oak. Other elaborate wood carvings are shown in connection with the Bristol churches where some sumptuous panelled reredoses have been preserved. Some of these have their central panel occupied by pairs of tablets inscribed with the Commandments. Mr. Dening remarks: "It is strange that this treatment occurs in each instance. The object of a central feature—the focal point of a design—has been defeated by introducing this central division." Historical reference to the stone tablets of Sinai seems to have been allowed to take precedence over considerations of design.

A chapter on metalwork is illustrated with photographs of some beautiful wrought-iron gates; a sword-rest and some area-railings of very charming quality and other examples are referred to in the earlier parts of the book.



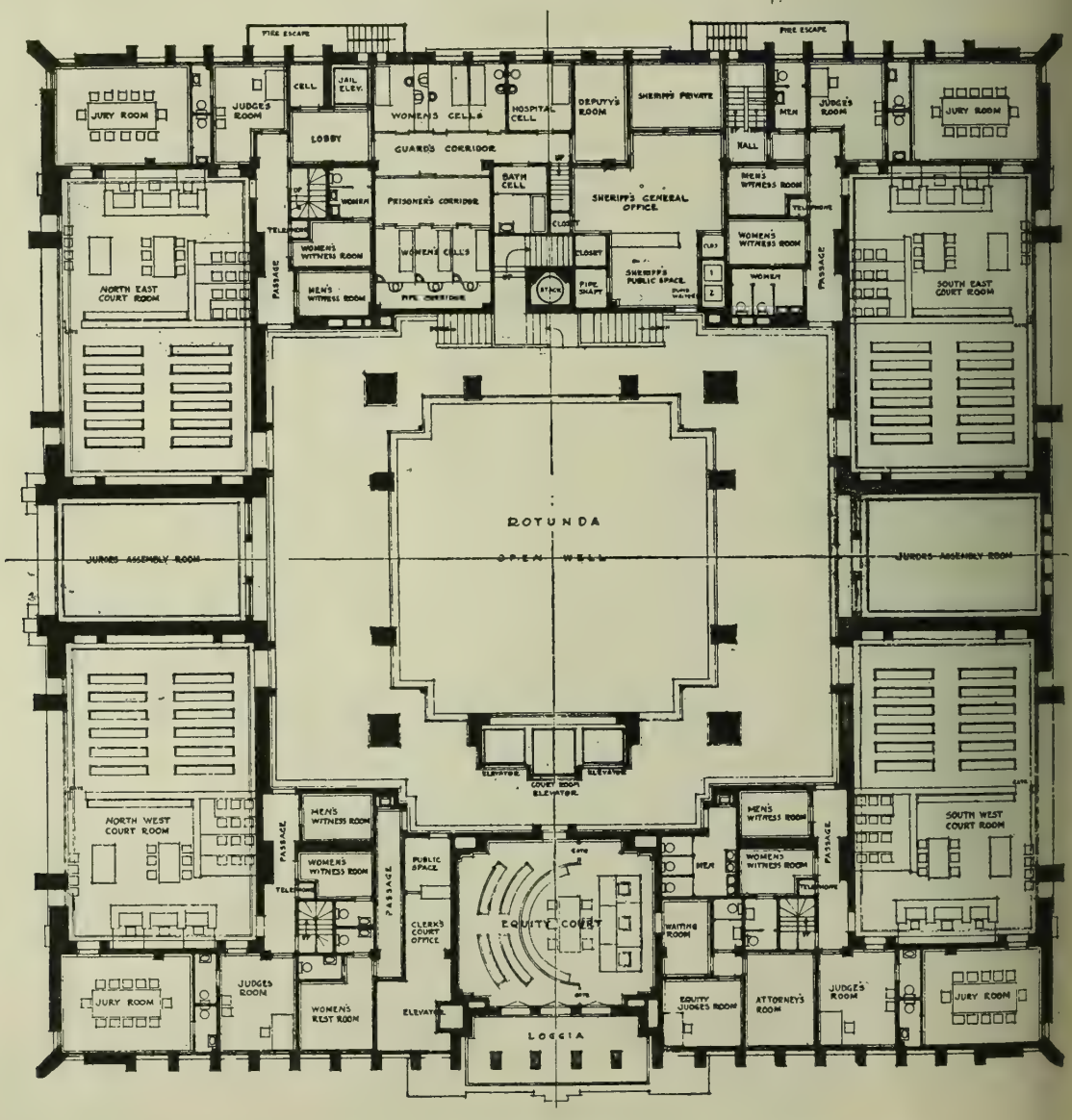
Woodbury County Court House: Sixth Floor Plan.

Plaster work is also illustrated, but t
mens, though refined, happen to be s
feeble in design. Better examples are s
former pages of the work devoted to
scription of modelled overdoors.

A chapter upon the Greek reviva is
without illustrations, and includes a
verbal slip by which Pugin and the
Revivalists are credited with having e
the eighteenth century in place of the ni
A glossary of terms appears at the en
book, the general character of whic
tremely useful and full of information
practical order.

Institution of Heating and Ventilating E

A competition was arranged by th
tution of Heating and Ventilating E
early in the year to encourage educati
industry. The result has now been i
the Council of the Institution. The "
Premium, £10 10s., presented by
Lumby's, Ltd., of Halifax, was sec
Mr. V. Nekrassoff, of Philadelphia.
The "Sirocco" Premium, £10 10s., p
by Messrs. Davidson & Co., Ltd., Bel
awarded to Mr. Victor Matthews, of
and the "Preston" Premium, £5 5s., p
by Mr. J. R. Preston, of Messrs. M
Bailey & Preston, Ltd., London, was
to Mr. H. A. Stirzaker, of London.



Woodbury County Court House: Second Floor Plan.

MR. WILLIAM L. STEELE, Architect; MESSRS. PURCELL & ELMSLIE, Associated Architects. (*See p.* 472.)

ARCHITECTS' AND UILDERS' INQUIRY BUREAU

are glad to give questions and answers not accept responsibility for contributed especially on legal matters.

we appeal to our correspondents to their queries on paper of a size easily nd written as legibly as possible, or still, in typescript?—Ed.

Preparation of Designs.

I should be glad to know if, on receipt ent's instructions to prepare designs, t of the ordinary duties of an architect ver whether there is a town-planning and if so, whether and how this affects nt's instructions ?

C. R. Millington.

Cement Wash.

[Reply to "G.O.M."]

If the wash is merely required for ng, why not use cement coloured dis- outside quality ?

s required for waterproofing purposes, h a good waterproofing preparation in portions recommended by the makers rand chosen. "Colour."

Brick-Making Plant.

Can any of your readers refer me to any source of information as to why sand- ck-making plants have not been exten- dopted in this country ? Is there any to the lasting qualities of the bricks ?

"Querist."

r opinion, the reason why they are not tensively used in this country lies in hat there is such an abundance of brick- ailable.]

Laying Bricks.

Re my suggestion of laying bricks on n a 3 in. cavity in constructing a 9 in. hould like to thank your readers who ressed their valuable views. I do not waste space by showing in detail how ds, &c., can effectively be distributed wo wall thicknesses, as this belongs to entary, almost traditional knowledge wall construction; but there seems that the proposed method is sound; is done already in other countries, reason why we should not adopt it, if it means a great saving in labour and

V. J. Wenning.

Mortar Pans.

[Reply to "Hampshire."]

believe some such mortar mill, as by your correspondent, is supplied by ers' Supply Co., of Shipley, Bradford.

"Observer."

Efflorescence on Brickwork.

[Reply to Mr. Richardson.]

Mr. Richardson quite correct in e trouble "efflorescence"? The nat works through in the walls of his ubtless from without, and due to the ving been killed by the frost before The cure is to seal the outer surface s, which will then dry out in a short he change from the good to the bad convenient place, such as not far ground floor window cills, it might effective way if the defective portion or so above were rendered over with pfed cement, in the form of a plinth. ly it might answer the purpose if the he defective portion were raked out and carefully re-pointed in cement, and the wall surface washed over with a colourless water-proofing solution of good make and mixed strong. If the trouble were really efflorescence, and due to the presence in quantity of salt in the body of the wall, either in the bricks or the mortar, (as occurs when sea sand or "below bridge" Thames sand is used), then the remedy is to seal the inner face of the wall, for it is practically impossible to eradicate the salt, and it but remains to keep it in its place.

"Incrustation."

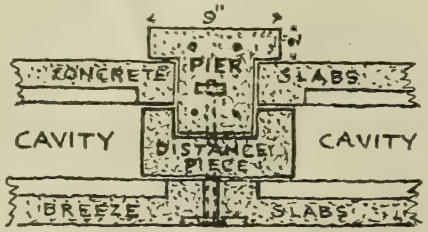
Cavity Walls and Laying of Bricks.

[Reply to "Tradition."]

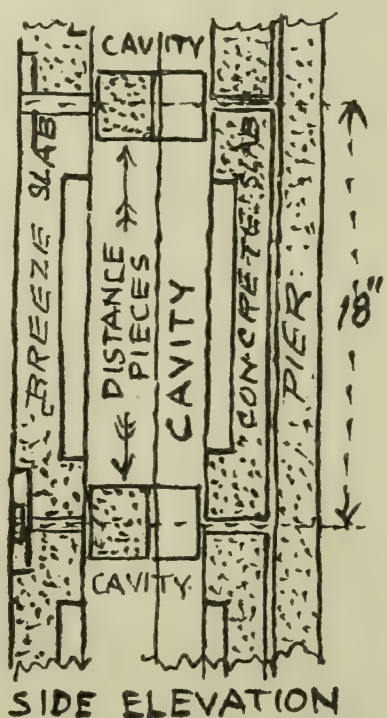
Sir,—With reference to *The Builder* of the 19th instant, referring to cavity walls, the concrete slab system I had in mind also has a cavity, both horizontally and vertically, except for the 3 in. by 2½ in. distance-pieces of super cement (damp-proof), which are secured to the reinforced super cement piers at 18 in. centres.

A house of this description was built at Shoeburyness in 1920 by the War Department, within 1,000 yards of the firing range of the 15 in. guns, and although the concussion caused by the firing of the very heavy guns is enormous, and the house situated in a very exposed position, it is still as good as the day it was built, and absolutely bone dry. It would require a very good brick house to stand the above conditions.

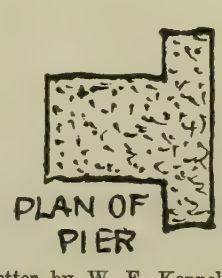
W. F. Kennelly.



PLAN OF PIER, OUTER SLABS DISTANCE-PIECE & INNER SLABS



SIDE ELEVATION



(See Letter by W. F. Kennelly.)

Concrete Blocks.

[Reply to "Surveyors."]

Sir,—I think it is generally admitted that, unless concrete blocks are actually cast on the site, there is no saving over the cost of brickwork in walling for small housing work; in fact, rather the reverse, if really satisfactory concrete is used.

There are so many interruptions in the way of quoins, window and door jambs, and breaks and returns in a small house, that the small easily handled brick, easily cut and snapped to shape to meet individual eventualities, is bound to hold its own over all comers. For large uninterrupted stretches of walling it is another matter, but where there is a large proportion of special made blocks, the concrete block does not really get a look in. "Convinced."

Right of Light.

[Reply to "Surveyor."]

Sir,—"Light and Air," by Sir Banister F. Fletcher, is a very comprehensive work, in which I feel sure your correspondent will find all the information he may require on this subject.

His question covers much too wide a field to deal with in the limits of a short letter.

"Authority."

Sir,—There does not appear to be any recognised method of valuing loss of light coming to the dominant tenement; nor do the standard works on the Law of Light suggest definite working rules that may be used to ascertain the value of the injury. When valuing the injury it should be borne in mind (1) that the dominant tenement is only entitled to such an amount of light as is necessary, according to the ordinary requirements of mankind, for the use and enjoyment of the house as a dwelling-house, if it be a dwelling-house, or for the beneficial use and occupation of the building if it be a warehouse, shop, or other place of business; (2) that there is no fixed test as to amount of light to which a dominant owner is entitled, and that to interfere must amount to a nuisance; (3) that the Court will not necessarily allow a defendant to pay damages for his wrongful interference with the plaintiff's light, since it will not allow a wrong to continue simply because the wrong-doer is able and willing to pay for the injury he may inflict; (4) that, however, when the injury is small, and is capable of being estimated in money and is one in which it would be oppressive to grant an injunction, then damages in substitution for an injunction may be given.

The questioner, applying the ordinary rules of valuing property to arrive at the value of the injury, should consider: (*a*) does the obstruction lessen the letting or selling value of the property; (*b*) is the convenience or comfort or business of the dominant owner interfered with, and, if so, to what extent they be remedied and cost of such remedy ?

Combe's "Law of Light," and Banister Fletcher's "Light and Air" might be consulted.

C. T. W.

External Oak.

[Reply to "F.S.A."]

Sir,—I do not know of any transparent and colourless preservative for oak, but I do know that English oak is probably the most durable building material we have, excepting granite and some similar stones, and I should not personally hesitate to use it, even in London, without any preparation whatever. The timber, if in large scantlings, will crack, and quite large fissures will occur; but there is no danger to be feared. There is many an old oak tree standing to-day, cracked from top to bottom, but quite healthy after many centuries.

"Nature."

THE BUILDING TRADE

WORKMEN'S COMPENSATION

CASE UNDER THE NEW ACT

An important decision has been given by the Court of Appeal in the case Davies *v.* Gwauncaegurwen Colliery Company, Ltd. (*The Times*, July 24), on the new Workmen's Compensation Act, 1923, section 7, which provides "For the purposes of the principal Act an accident resulting in the death, or serious and permanent disablement, of the workman shall be deemed to arise out of, and in the course of, the employment, notwithstanding that the workman was at the time when the accident happened acting in contravention of any statutory or other regulation applicable to his employment, or of any orders given by, or on behalf of, his employer, or that he was acting without instructions from his employer, if such act was done by the workman for the purposes of, and in connection with, the employer's trade or business."

The applicant in the case was the widow of a man who acted as a screensman in the Mardy Colliery, and whose employment it was to work on the front part of screens for loading railway wagons. The rear part of the screens had been disused for some ten years. There were two cabins provided for the men to hang up their coats and to leave their food in, and there was no necessity for any of the men to go to the rear of the screens, but this man, who was an old servant of the company, had made it his practice to go into the disused part behind the screens, hang up his coat there, and later to eat his food there. This practice of his was known to the officials, but he was the only workman who did it. A few days before the accident a barrier of railings was put up to prevent any man from going into the disused part behind the screens, as it was considered dangerous, but the man must have continued to do so, although he had been warned not to do so by the carpenter who had put up the barriers, for, on February 13, having arrived at the pit before daylight, he was found down a hole 19 ft. deep in the disused part, and he subsequently died of the injuries he had received. The County Court Judge in these circumstances had held that the accident did not arise out of and in the course of his employment.

The Court of Appeal affirmed this judgment, and considered the effect of this new section. The court observed that the section was not very happily worded, but it was important to note that it introduced a new phrase, "the employer's trade or business," and the act done by the workman when he met with injury by accident must fulfil both limbs of the last sentence in the section, that is to say, unless the act was done for the purposes of, and in connection with, the employer's trade or business, it was not an act arising out of the employment. This principle was not satisfied in this case, for the workman was acting entirely for his own purposes in entering the disused portion behind the screens.

It may be noted that the Master of the Rolls, while saying that it was doubtful whether it would be wise at this early stage to apply any particular construction to the section, did give some intimation as to its probable intention. He is reported as having said the section was probably intended to apply to such a case as Bourton *v.* Beauchamp (1920, A.C. 1,001; *The Builder*, June 25, 1920); but it was more doubtful whether the section applied to such a case as Lancashire and Yorkshire Railway *v.* Highley (1917, A.C. 352; *The Builder*, April 6, 1917), although in the notes to Chitty's "Statutes" it was suggested it did so apply.

In the first of these two cases a man employed to attend the cages at the bottom of a mining shaft, in contravention of a regulation made under the Coal Mines Act, while the cages were working, crossed the shaft bottom and noticing that a sumph board was loose, stopped to knock it into place, which it was part of his duty to do when the cages were not working, but he himself had signalled for the cage to descend. Under the old Act, the House of Lords held the accident not to have arisen "out of and in the course of the man's employment, as this man had acted contrary to a statutory order; but under the new Act, the act done by the workmen would be one done by the workman "for the purposes of and in connection with his employer's trade or business." We pointed this out in our article of December 28, 1923, when the Bill first became law.

In the second case a workman in the employ of the railway company had been ordered to go to Goole, and whilst on transit he had to wait half an hour at Wakefield station, and whilst there crossed the line to get some hot water to make tea for breakfast, and was killed by a train. This was held by the House of Lords not to be an accident arising out of and in the course of the employment, as the man had taken an additional and unnecessary risk upon himself. It would appear that the result would be the same under this new section for the man in crossing the line, instead of using the bridge, was not acting, for the purposes of, and in connection with, his employers' trade or business, but taking a short cut for his own convenience.

Broadly speaking, therefore, the new section seems to apply to those cases where the Act is confined to furthering the employers' interests, though in contravention of a statutory, or other order, or without directions, but as we showed in our recent note on St. Helen's Colliery *v.* Hewitson (1924 A.C. 59; *The Builder*, April 25, 1924) where the meaning of the words "out of and in the course of the employment" was discussed at length by the House, the same sort of questions may arise under the new section as have arisen under the old Act where men, though not actively engaged in work, are still acting within the scope of their employment. Lord Atkinson gave examples of this such as haymakers going a short distance to get water to drink to enable them to continue their work, workmen taking food on the premises or standing by, for in such cases if a man is acting contrary to orders, or without directions but not for his own purposes, it will still have to be determined whether he was not acting indirectly for the purposes of, or in connection with, his employers' trade or business.

The wording of this new section, however, appears to give rise to another consideration with reference to the Act itself, for it seems a question whether the definition it contains in the last part of it, of the scope of a man's employment, could not be adopted in the Act with advantage in place of the expression "arising out of and in the course of the employment," which has proved so very difficult of interpretation and application.

It is true the Committee which sat in 1920 recommended no change in this expression, as it considered it had been defined by judicial decisions, but since then numerous decisions in the House of Lords have again altered the interpretation to be put on this expression, and have showed the extreme difficulty of suggestion tests for its application.

The Act would then read, "If in any employment personal injury by accident is caused to a workman whilst acting for the purposes, and in connection with, his employer's trade or business . . ." and these words supply a definite test easily determined as a question of fact. As the law stands at present this test is only applied in cases resulting in death, and serious and permanent disablement, and where the man is acting contrary to orders or without direction, whereas in all other cases the meaning of the expression "Out of and in the course of the employment," has to be deter the light of the many conflicting ca think the amendment of the Act by th adoption of the expression now used in section, either by itself or as in the se combination with the words "out of a course of the employment," would ve simplify the administration of the Ac in no way limiting its scope.

NEW BUILDINGS LONDON

Devonshire House Site.—Offices an —Thirty-one thousand sq. ft. of the portion of the Devonshire House site frontage of over 200 ft. to Berkeley-str been acquired by Messrs. Thomas Cook for whom Messrs. Holland & Han Cubitts, Ltd., will, it is stated, imm commence the erection of a building central London offices and bank.

Farringdon-road.— Offices. — Messrs Stadelmann & Co., Ltd., lamp manuf are having offices erected at Farringd Messrs. Allen Fairhead, Enfield, are the The architects are Messrs. Fuller, Hors & Cassell, of 11, Billiter-square, E.C.3.

Bellingham.—Church.—A contract h placed for the erection of the new ch St. Dunstan on the L.C.C. Housing E Bellingham, S.E., and building operat to commence at once. To be built with a slated roof, the new edifice wil modate about 500 worshippers. It w £18,000, practically all of which is i The architect is Sir Charles Nicholson of New-square, Lincoln's Inn, the being Walden & Son, of Henley-on-Tha

Victoria.—Hotel.—Work will comme winter in connection with the develop an important site in Wilton-road, S.W., Victoria Station. An area about 20,00 in extent, with frontages of 200 ft. Wilton-road and Vauxhall Bridge-ro just changed hands at £250,000. T chasers intend to erect a large hotel, t on inexpensive lines, containing over rooms. The building will be of seven stories, and will have ten shops on ea frontage. Each bedroom will possess bathroom. Sketch plans are now being by the architect, Mr. Ernest G. W. F.R.I.B.A., 3, St. James'-street, S.W.1

Bishopsgate.—Bank.—A large bloc premises in Bishopsgate, E.C., are to b in order to accommodate new head o Hambros Bank, Ltd. With a fro about 100 ft. the new building wil fire and burglar proof strong room basement, a large banking hall on th floor, and five floors of offices abov framed construction will be carried fireproof floors, and a frontage of Portla The architects are Messrs. Niven & worth, of John-street, Bedford-row. Trollope & Colls, 5, Coleman-street, the contractors for the foundations.

Barrhill Memorial Hall.

Erected at a cost of £3,500 Barrhi War Memorial Hall was recently o Captain D. Euan Wallace, of Kildo hall accommodates 300 people, and w out from the design of Mr. Jam A.R.S.A.

Blackpool Promenade.

Estimates for the extension of I promenade amount to £463,000. will then have spent £1,250,000 on menade, which will be five miles lon

REINFORCED CONCRETE AND ITS LATION TO CONSTRUCTIONAL STEEL

e course of a recent lecture before the of the Institution of Civil Engineers, Whitridge Davies, B.Sc., A.C.G.I., value of a-building material depended e extent to which it possessed certain , the most important of which were: ngth, (2) resistance to fire, (3) re- to corrosion, (4) resistance to wear, ity in design, (6) facility in construc- æsthetic possibilities.

rced concrete was a good fire-resist- erial for two reasons: first, because ductivity of concrete was low, and heat travelled slowly from one part er; second, because the coefficients of n of steel and concrete were approxi- he same, so that no internal stresses up due to unequal expansion. The heat on concrete was to cause it to ate and "spall," but owing to its uctivity this action was generally con- a small surface layer. Unprotected attacked by fire, was the most un- and treacherous material used in construction; owing to its relatively ductivity the effect of heat spread ver a structure, with disastrous re- ts stability. Steelwork could only be ctively fireproof by being coated with a or concrete or some other non- g substance, which added consider- the dead weight without increasing gth of a member. In this way it unfavourably with reinforced con- in the case of the latter the concrete a double rôle, both protecting the playing an essential structural part. e, like stone and brick, was a inert substance, and therefore suf- y little from corrosive action. It ected by water. Some acids affected most cases the reaction was not slow, but resulted in the formation ective coating which prevented fur- k. With a good hard, dense con- e was little chance of corrosion oc- Steel, on the other hand, was much nically active, and therefore more corrosion. Its failing in this s too well known to need descrip- ce to say that the discovery of a nd stronger form of rustless steel of the greatest value, and un- would have the effect of lessening tance of reinforced concrete as a aterial, for resistance to corrosion ost valuable property of the latter. e question of resistance to wear d it was found that the position of terials is reversed; steel was able d the heaviest wear to which a liable, whereas concrete was not resistant. The greatest cause of in concrete was the occurrence n the presence of water. Cracks es were of no consequence if water sent, but the presence of the two most inevitably resulted in dis- These cracks might be caused erent ways: by shrinkage during f the concrete, by expansion and due to changes of temperature, e due to alternate wetting and y the presence of excessive tensile t first they were only fine hair- as soon as water was allowed to xpand—either by freezing or by n—the interstices became wider the entrance of further water. ion was accumulative, and might in the falling away of large por- work. No entirely satisfactory yet been devised for this ill, but duced to a minimum by avoiding ges of section, and where large urred by providing a light mesh to take up the shrinkage

Facility in design involved two main considerations: the accuracy with which the stresses due to a given condition of loading could be determined; and the economy with which these stresses could be resisted. With regard to the first consideration, owing to the monolithic nature of reinforced concrete the computation of stresses was a somewhat involved process. In steelwork design no continuity was assumed to exist between member and member, and although that implied a loss of economy it also meant that the stresses in each member could be calculated with greater accuracy and therefore that the factor of safety might be proportionately smaller. Given, however, a certain stress to be resisted it was possible in the case of reinforced concrete to adjust the size and strength of the member to suit the exact requirements, thereby securing the maximum economy. Constructional steel, on the other hand, being rolled in a limited number of shapes and sizes, could not always be designed so near the required strength. This might at first sight seem to be a trivial inconvenience, but that it was really of some importance was shown by the recent introduction of new British Standard sections with a view to filling some of the gaps in the old table.

There were many factors which determined the suitability of a material for construction purposes, but the more important ones were: ease in handling; accuracy of workmanship; skilled labour required; and speed of erection.

In these days of expensive labour the ease with which a material could be handled was a very important consideration. In this respect reinforced concrete did not compare favourably with steelwork, for besides being heavier it could not so easily be handled by mechanical means. Steelwork units were lighter, involved only one material, and could be easily manipulated by means of a crane; they could also be assembled in the shops and stored there until required for erection, thus avoiding unnecessary transportation. Up-to-date methods in concrete construction employed mechanical mixers, metal formwork, and chutes for distributing the concrete to the forms, but even with these improvements a large amount of labour was required which was unnecessary in steel construction.

It had often been asserted that a large proportion of unskilled labour could be utilised in reinforced concrete work, but the truth was that good work could only be performed by men with the necessary knowledge and skill. But although skill was certainly required the training of men to the necessary degree of aptitude was not a difficult task. In this respect it compared favourably with steelwork construction which, from the very nature of the material, involved the employment of a specialist firm.

Architectural effect was controlled mainly by three elements: colour, texture and form, and it was through these that a structure must appeal to the eye. Reinforced concrete, if properly employed, was capable of æsthetic treatment in all three respects. Its colour was normally that of natural stone, but could be altered at will by introducing permanent pigments during mixing or by using naturally-coloured aggregates. In texture, too, it was similar to masonry, but, as with colour, it was capable of infinite variations; a number of different means were employed for obtaining the required texture, from rubbing with carborundum for fine effects to bush-hammering for coarse effects. Concrete could also, within reason, be moulded to any desired shape, and although a limit was imposed in such treatment by the difficulty of constructing the formwork, it was far easier to obtain æsthetic effect with concrete than with constructional steel. Steelwork had no colour except what was given it by paint, and that soon dulled and tarnished; its texture was smooth and uniform and could not be altered by surface treatment; it could not be moulded, but must rely for its effect upon the use of standard sections, which might be structurally efficient, but were certainly not beautiful.

The chief advantages of reinforced concrete compared with constructional steel were its resistance to fire, resistance to corrosion, and æsthetic possibilities; while the advantages of steel were its lightness and its facility in construction.

All commercial buildings of any size were now constructed as frame buildings; in essence they consisted of a steel or reinforced concrete framework composed of beams and columns, and floors and wall panels which rested upon this frame.

The main strength of a reinforced concrete framework lay in its monolithic nature. That ensured rigid connection between beams and columns, and not only resulted in a more even distribution of stresses due to vertical loads but also caused the whole frame to act as if it were diagonally braced when subjected to lateral wind load. A steel framework, being designed with cleat connections, which approximated to pin-joints, and through which no appreciable stress could be transferred from one member to another, was less rigid and therefore in that respect less strong. The rigidity of a concrete framework was not confined to the framework only; the floors, and sometimes the walls, were constructed monolithic with the beams and columns so that the whole structure was knit into one solid, elastic, continuous mass.

Coming to the question of resistance to fire, as all building regulations insisted on the adequate protection of steelwork by some form of concrete or terra-cotta, there was little to choose between the two forms of construction, except on the ground of economy. In the case of reinforced concrete the concrete played an important part in the structural strength of a member, whereas in constructional steel it functioned merely as a protecting material. More notice was now being taken of the fact that the concrete actually did considerably add to the strength of the beam or stanchion it encased; a joist embedded in a concrete floor would safely support a 50 per cent. greater load if the strength of the concrete were taken into account, and in the case of stanchions that increase might be as much as 100 per cent. An interesting example of the efficiency of concrete as a fire-proof material occurred at an hotel in Minneapolis. A fire broke out on the eleventh floor of the building, and attained such a degree of heat that the plaster crumbled and the iron fixings melted. In spite of this the reinforced concrete walls and floor were able to confine the fire so effectively that many of the guests below were unaware of what was occurring.

It was necessary in the case of a steel frame building to use some sort of facing, but reinforced concrete, being a material possessing the appearance of natural stone, should not require a veneer. Many buildings had already been erected in which concrete was the only material used, the concrete being treated architecturally with great success. No doubt, as the surface treatment of concrete was more universally employed and as our general knowledge of the material increased a style of architecture suited to its own particular properties would gradually be evolved, and buildings constructed entirely of reinforced concrete would be much commoner than they were to-day.

Messrs. Bivert & Firth have recently issued a brochure, "Celatexed Roofs," which contains useful information concerning the construction and upkeep of roofs. It deals with the water-proofness, strength, efficiency in practice, availability, and reasonableness of costs of "Celatexed" Roofs, and should, therefore, prove of interest to architects. Copies can be obtained on application from Messrs. Bivert & Firth, Cunard House, 27, Cockspur-street, London, S.W. 1.

NEW INVENTION

New Method of Building.

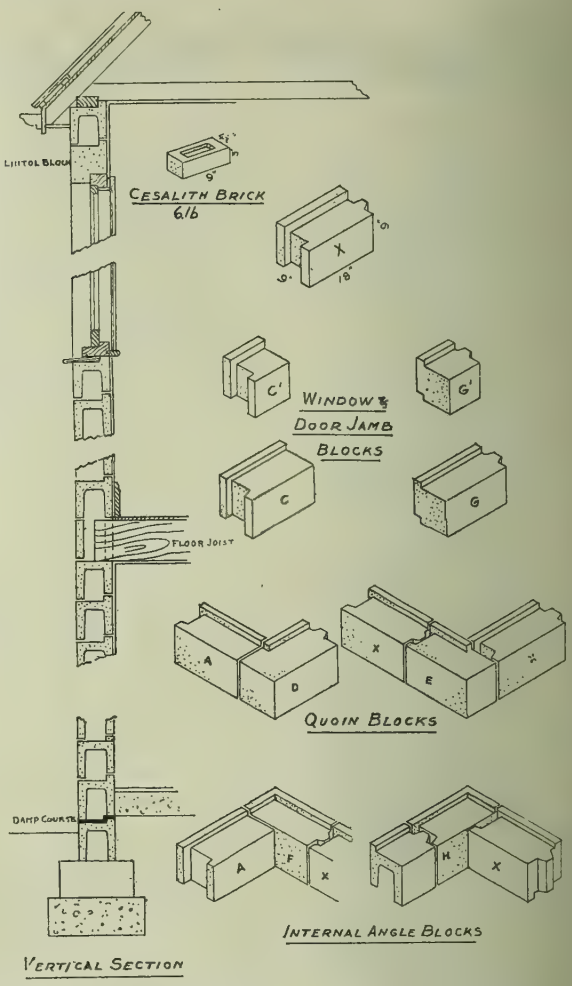
"CESALITH" is the name given to a new system of hollow wall construction about to be put on the market by Mr. Bruce Brown, M.I.Struct.E., of 150, Southampton-row, W.C.1, which is of particular interest on account of the method of manufacture. "Cesalith" is a synthetic sandstone rather than concrete as generally understood. The walling is formed of hollow blocks measuring 18 in. by 9 in. by 9 in., and weighing about 40 lb. each, and are thus easily handled while equal in size to 12 ordinary bricks. As shown in the illustrations, the blocks are of hollow formation, with plain sides, a groove at one end and a tongue at the other, a top piece which is flat on top and shaped to a parabolic arch inside, while the bottom of the block is left open. On one side of the top of each block is a flange, and the blocks are so laid that in each course the position of this flange is reversed; thus, on the bottom course the flange will be on the outside of the wall, while in the next course it will be on the inner surface. By this means, as is shown in the illustration, a continuous longitudinal air space is formed throughout the walling at each block course, which, by keeping the temperature of the outer and inner faces of the wall more equal acts as a preventative against condensation.

It is, however, in the method and materials of manufacture that the chief novelty of the system lies. The mix used is in the proportion of one part Portland cement, eight parts sand, and one part chalk, the absence of coarse material making an excellent surface finish possible, which is enhanced by the fact that the blocks are made in a steel mould. The quantity of water is carefully regulated at the mixer, and a very small amount used, so that when poured into the moulds the concrete resembles sand on the seashore immediately after the tide has gone out. The machins used are of the vibratory type, which is undoubtedly productive of the densest concrete and to be recommended where the use of such consolidating machines is practicable. In this machine, called the "Rototamp," the blocks are vibrated for 15 seconds and then removed on pallets and allowed to cure thereon for 12 hours. After this period the blocks may be handled, and they are then removed from the pallets and cured under water, or sprinkled at frequent intervals for a further period of three days, and at the end of from six to eight days they are ready for use. Any desired colour can, of course, be obtained by mixing pigments with the dry materials before mixing. A waterproofing liquid is incorporated with the mixing water.

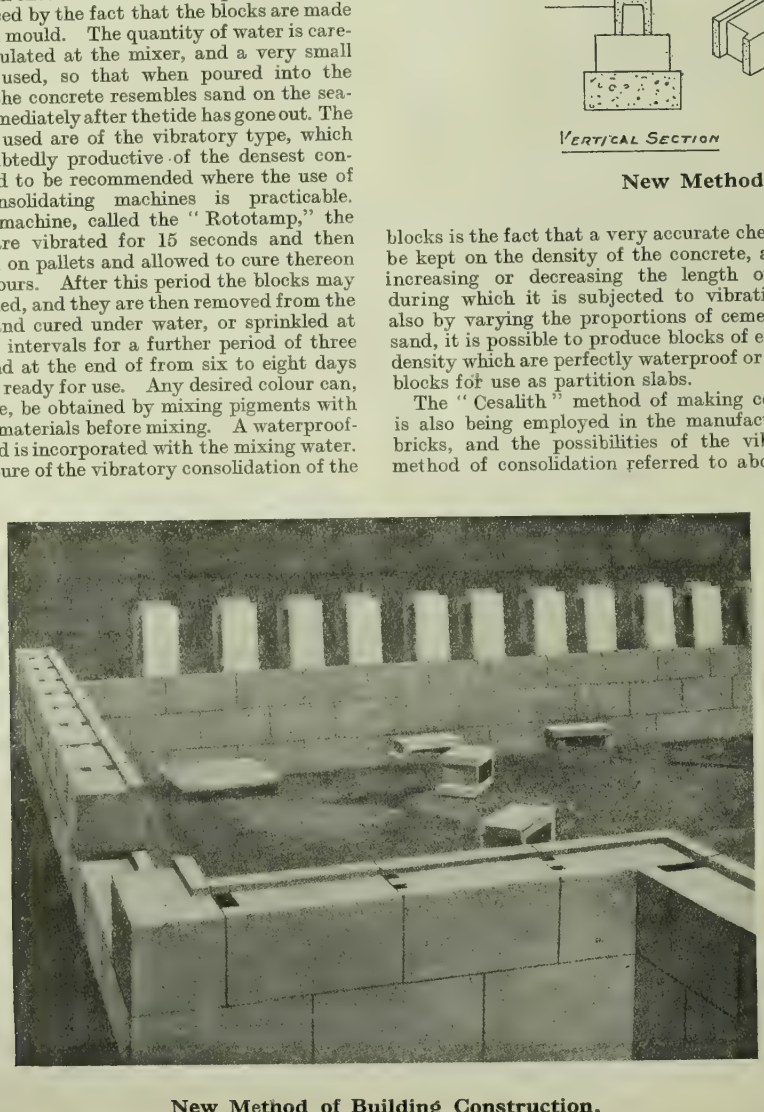
A feature of the vibratory consolidation of the blocks is the fact that a very accurate check can be kept on the density of the concrete, and by increasing or decreasing the length of time during which it is subjected to vibration, as also by varying the proportions of cement and sand, it is possible to produce blocks of extreme density which are perfectly waterproof or porous blocks for use as partition slabs.

The "Cesalith" method of making concrete is also being employed in the manufacture of bricks, and the possibilities of the vibratory method of consolidation referred to above are made use of to produce anything from brick to an engineering brick at will by the density of the concrete. These br be economically made wherever suitable available at, we are informed, a con price with clay bricks. They are mad a time in a "Rototamp" machine, and five seconds is necessary to consolidate is claimed that it is possible to produc 600 bricks per hour on a building site, or of 5,000 per day per machine in a fa battery of 20 machines would thus b turn out 100,000 bricks per day.

We are informed that a house built a more Hill two years ago with this s concrete blocks shows no trace wh dampness or condensation, even in the and kitchen. A saving of one-sixth or cost of a house is claimed for the " method compared with brick construc



New Method of Building Construction.



New Method of Building Construction.

Building in Egypt.

£E.201,000 has been allotted for the of Suez Harbour, and £E.20,000 for the Customs House at Port Said.

Building in Japan.

The Acting Commercial Counsellor reports that a Japanese Ministry of t Ordinance was published recently rela grant of subsidies for the constructi proof buildings in certain zones in To Kanagawa Prefectures. It is state public expenditure involved will r 20,000,000 yen. A translation o portions of the Ordinance with e notes appended by the Acting Counsellor indicating the nature of th to be given and the types of buildin may be consulted by United Kingd application to the Department Trade, 35, Old Queen-street, S.W.1. C.X.1171).

HE SCOTTISH BUILDER

HE GOVERNMENT'S USING SCHEME—THE COTTISH CIRCULAR

full terms of the Government's housing are set out in a circular which the Scottish of Health issued recently to the local ties in Scotland. The circular generally the lines of the recent circular issued by glish Ministry of Health, but there are modifications in the Scottish scheme. ost important of these are the definition rural area" in Scotland, the decision of ard to issue model plans, &c., and the limitations which the Board put on their ion to build houses smaller than the standard.

introduction explains that the primary of the Act is "to establish continuity ing with the housing problem and, by option of a long and continuous pro- e of building, to ensure such a develop- all the resources of the building industry guarantee the production of houses on sufficient to overcome the present shortage of houses, and to make adequate on for meeting the growing need and replacement of unsatisfactory accom- on." The circular goes on to explain the of the scheme and the administrative ements for carrying it out.

The Subsidy.

main points are as follows:—

es which comply with special conditions of letting and amount of rent), and are completed before October 1, 1939, provided by a local authority, be eligible Government subsidy of £9 a year for ears; or, if the house is situated in a area," £12 10s. a year for forty years. dy is also payable by the local authorities vate enterprise. The amount of such , which must take the form of an annual t for a period not exceeding forty s a matter for the determination of each thority, subject to the approval of the Board of Health. If the local authority private enterprise less than the amount £12 10s., as the case may be, the amount Exchequer contribution to the local y will be reduced to the equivalent local authority's grant. A "rural in Scotland for the purposes of the osely defined. In general terms it may ribed as a landward parish (or the part of a parish) in which the value gricultural land exceeds 25 per cent. tal valuation of all lands and heritages, which the population is less than fifty per hundred acres; and any area an a burgh) within the Highlands and Medical Service area.

rates apply to houses built only during two years. After October 1, 1926, and o years thereafter, the contribution for uilt during the next two years may be f the cost of building and other condi- rant a reduction.

Type of House.

reased subsidies apply to houses having ial area within the following limits:— ried cottage:—Minimum 620, maxi- superficial feet.

ried cottage or bungalow, or house in tenement:—Minimum 550, maximum ficial feet.

s a provision which empowers the permit smaller houses, having a size of 570 superficial feet for two- tages and 500 superficial feet for one- tages or flats. But the circular states ore permitting any houses of the mensions the Board will require to be hat the circumstances of the area are exceptional as to warrant departure from the general standard, and in no case will the number of smaller houses in any one development be allowed to exceed 25 per cent. of the total number of houses included in that development."

The density of the houses, unless in exceptional circumstances, must not exceed 8 per acre in a "rural area" and 12 per acre elsewhere.

Freedom to the Local Authorities.

The Board propose to leave the details of the schemes, so far as practicable, within the discretion of the local authorities, and save in exceptional circumstances, the local authorities need not submit plans, specifications, &c., tenders or contracts for the Board's approval. The Board's officers, however, are at the disposal of the local authorities for consultation.

The Board's approval normally will be given in two stages, first, general approval to a programme for two years, and second, specific approval to the building of houses which are to be put in hand at once and which are likely to be completed within nine months. The local authority's proposals for provisional approval are to be submitted with a statement setting out, among other things, the shortage of houses in the area, estimates of the number of houses likely to be built by the local authority and by private enterprise, the present labour position in the area, and an undertaking by the local authority that, where they apply, the special conditions will be strictly observed. The main point in the application for specific approval is the local authority's estimates of costs (houses, lands and roads) and the anticipated date of completion of the houses.

Board to Issue Model Plans, &c.

The Board are preparing model plans, specifications, and schedules which embody the numerous economies which the Board have found to be practicable during their experience of the housing schemes of the last five years. These plans, &c., will be put on sale through H.M. Stationery Office.

Rents.

The special conditions which must be observed in order to qualify for the increased subsidy include, among other things, requirements that the houses will be let to tenants who intend to reside in them and that reasonable preference will be given to large families. The rents clause of the special conditions is as follows:—

"That the rents of the houses will not in the aggregate exceed the rents payable if the houses were let at the appropriate normal rents charged in respect of pre-war working-class houses, except in so far as the expenses to be borne by the local rate would exceed the equivalent of £4 10s. a year per house for 40 years, and that no fine, premium or other like sum shall be taken in addition to the rent."

This makes it clear that the local authority can charge a higher rent than the ordinary rent for pre-war working class houses only if the loss to the local authority exceeds £4 10s. per house, which is the amount of the local authority's contribution to be added to the Government contribution of £9 for a house in a non-rural area of £12 10s. in a rural area.

The provisions of the 1923 Housing Act so far as Exchequer contributions are concerned are extended practically unaltered for 15 years, so that local authorities if they do not want to comply with the special conditions may continue to build themselves or assist private enterprise on the basis of the 1923 Act. The Exchequer contribution under that Act is limited to £6 a year for 20 years. A significant modification, however, is that which requires that the fixed bath must be provided in a bathroom.

The 1924 Act generally continues in force and makes permanent the temporary provisions of the Act of 1923, which authorised local authorities to lend money to builders and building societies for houses up to an estimated value of £1,500.

New Building Methods.

There are several references in the circular to new building methods. Perhaps the most important of these is to the power which is conferred on the Board if a local authority refuses without reasonable cause to adopt a new material or method of construction which would reduce the cost of houses without unduly affecting their durability, suitability or appearance, to reduce the amount of the subsidy.

As in the 1923 Act the payment of subsidy to private enterprise is made by the local authorities, but as experience has shown that some local authorities have not adopted proposals for the assistance of private builders, the new Act makes

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plasterers' Masons' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/8½	1/2½	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/7½	1/8	1/7½	1/9	1/7	1/7	1/6	1/- to 1/3½	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/7½	1/7½	1/7½	1/8	1/7	1/7	1/6½	1/2½	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 492

provision in such cases whereby subsidy may be paid direct to the builder by the Scottish Board of Health.

The circular is on sale at H.M. Stationery Office, 120, George-street, Edinburgh, price 3d.

DOMESTIC WELFARE EXHIBITION

THE Domestic Welfare Exhibition promoted by the Glasgow Corporation opens in the Kelvin Hall on October 13. The leading features of the Housing and Health Exhibitions will be maintained, and many new attractions added. The Exhibition will run for three weeks. The classification of exhibits includes house furnishing, lighting, heating, and labour saving appliances and house decoration. The latter will comprise cements, plain or coloured, cement colouring and flooring materials of all kinds, including wood, parquetry, tiles and mosaic. Also wall linings, ornamental plaster, wall tiles, marble, glass-patterned, stained or coloured, paints, oils, varnishes, stains, distempers, wall-papers and ceiling coverings of all kinds, and decorative mouldings and cornices.

Arrangements have been made for the erection of a five-apartment cottage of steel construction within the Exhibition. The building will be rigid in construction, and well appointed in every way. There will be a class open to architects' apprentices and others not professional architects for a sketch design for a house, bungalow or villa, in any style. The awards will be made by a board of judges to be appointed by the Glasgow Corporation, who are promoting the exhibition. Schedules and forms of entry can be obtained on application to Mr. Cecil Sommerville, general manager, Kelvin Hall, Glasgow. Entries close on October 9.

HOURS OF LABOUR IN SCOTLAND

THE Scottish Regional Joint Wages Committee met recently in Glasgow and heard a report of a sub-committee who had had remitted to them the question of the working hours. The following is the decision arrived at:—

"That, in view of a national settlement having been reached in connection with wages, &c., on August 22, 1924, the agreement for the working hours week for Scotland be concluded in the following terms, in accordance with the provisions for working hours as contained in the constitution of the National Wages and Conditions Council:—

"'(1) That where the 44 hours week (8 hours per day for the first five days and four for Saturday) was in operation on May 22, 1924, the same shall be maintained, with the proviso that on jobs where no artificial light is reasonably possible, the hours may be reduced by half an hour during the first five days of each week during January and December, thus making 41½ hours per week, with half an hour for meals.

"'(2) That where other than 44 hours per week was in operation on May 22, 1924, the normal working week shall not exceed 46½ hours, and the same shall be maintained until altered by mutual agreement. In this case the operatives will be entitled to claim two meal hours. (Note.—This clause will not apply where the extended number of hours were being worked in violation of any understanding which had existed in the locality.)

"'(3) The provision for the half-hour for meals in Clause 1 to be subject to ratification by the National Wages and Conditions Council.'"

Clyde Bridge.

The Glasgow Statute Labour Committee has agreed to the plans of the City Engineer for the proposed bridge across the Clyde at Dixon-street.

Lord Lister Memorial.

A memorial to Lord Lister was recently unveiled in Kelvingrove Park by Sir Hector Cameron. The statue, which is the work of Mr. G. H. Paulin, A.R.S.A., is of bronze, mounted on a granite base.

RATES OF WAGES IN THE BUILDING TRADE

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam. (Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

(For rates of wages in the Building Trade in Scotland, see page 491.

CONTRACTS, COMPETITIONS, &c.

me contracts still open, but not included in this List, see previous issues. Those with an asterisk ertised in this number. Certain conditions beyond those given in the following information osed in some cases, such as that advertisers do not bind themselves to accept the lowest or any that a fair wages clause shall be observed; that no allowance will be made for tenders; and osits are returned on receipt of a bona-fide tender unless stated to the contrary.

ate given at the commencement of each paragraph is the latest date when the tender, or the names willing to submit tenders, may be sent in; the name and address at the end is the person from whom where quantities, forms of tender, &c., may be obtained.

UILDING AND PAINTING.

EMBER 24.—**Various Places.**—SUNDRY WORKS. or alterations in laundry at Brook Hospital, Hill, S.E.18. (2) New steel pale fencing at od Hospital, Ongar-road, Brentwood, Essex. ring wood girders at Belmont Institution, Surrey. (4) Sundry repairs, Hackney Ward, Gainsborough-road, Homerton, E. ing and repairs, Poplar Casual Ward, St. -street, Bromley, E.14. (6) Painting and S. Exmouth Infirmary, Grays, Essex. Office ard, Victoria Embankment, E.C.4. Deposit

BER 27.—**Barry.**—HOSPITAL ADDITIONS.— of additions and sundry works at the General and Surgical Hospital, Barry Docks. Mr. rdoe, A.M.I.C.E., Surveyor, Council Offices, ad, Barry. Deposit £2 2s.

BER 27.—**Edgware.**—FENCING.—(*a*) Erection e wall on the western boundary of land road, Edgware, 7 ft. high and 120 ft. long; and erection of about 366 yds. run of le iron fencing, &c., on land adjoining Chil- spital, Edgware, for the Guardians of the Union. Mr. C. W. Wyles, Clerk to the Guar- ion Offices, Edgware, between 10 a.m. and

BER 27.—**Portishead.**—HOUSES.—Erection of s, for the U.D.C. Mr. F. H. Smith, Surveyor uncil, Council Offices, Portishead. Deposit

BER 27.—**West Ham, E.15.**—SCHOOL.— of a secondary school on a site at Cumberland- stow, for the E.C. of the County Borough of m. Mr. John H. Jacques, Lic.R.I.B.A., to the Committee, 61, West Ham-lane, E.15. Deposit £2.

BER 29.—**Barnsley.**—PAINTING.—For the painting and decorating of the Administra- and Long Block, at the Kendray Hospital, for the T.C. The Borough Engineer, Fair- se Offices, Barnsley.

BER 29.—**Barnsley.**—PAINTING, &c.—(1) Ex- nting of the whole of the Institution premises, irmaries. (2) New bathrooms to Block 6, for Messrs. Crawshaw & Wilkinson, 13, Regent- rnsley.

BER 29.—**Dublin.**—CONVERSION.—Conversion N at Keogh (late Richmond) Barracks into 60 d (*b*) of blocks F and J at the same Barracks ats, for the Commissioners of Public Works. Healy, Secretary, Office of Public Works,

BER 29.—**Dumfries.**—POST OFFICE.—For of a new Post Office, &c., at Dumfries, for ice of Works. Architect, H.M. Office of -5, Drumsheugh-gardens, Edinburgh. De- s.

BER 29.—**Halifax.**—SUB-STATION.—For the of a sub-station at Hough, Northowram, for Borough Engineer, Crossley-street, Halifax.

BER 29. — **Leicester.** — PUMPING STATION NS.—For the extensions of the Abbey Pump- n, engine house, pump basement, &c., for the E. G. Mawbey, City Engineer, Town Hall,

BER 29.—**Merthyr.**—GARAGE.—Building of ance garage at Merthyr General Hospital. Office, 112, High-street.

BER 29.—**Morley.**—HOUSES.—Erection of on the Middleton-road Housing Estate, for Borough Engineer, Town Hall, Morley. 2 2s.

BER 29. — **Morley.** — PLASTERING.—Labour ials required in connection with the plas- k only for 26 houses, on Middleton Housing the T.C. Borough Engineer, Town Hall, Deposit £2 2s.

BER 29.—**Staines.**—COTTAGES, DRAINS, &c. of two five-roomed cottages of similar the construction of the necessary drains, &c., n Reservoir Works, both in the parish of ear Staines; also for the construction near ottages of the superstructure only of a house tely 28 ft. by 14 ft. by 13 ft. high to roof containing venturi meter recorders for the an Water Board. Office of the Board, Chief Department (Room 201), New River Head, venue, Clerkenwell, E.C.1. Deposit £5.

ER 29.—**Windsor.**—PAINTING.—For the re- of the Infirmary, Old Windsor, for the Board ns. Matron-in-Charge, Poor Law Institu- Windsor.

ER 29.—**Worthing.**—PIER PAVILION, RE- ON OF THE PARADE BANDSTAND.—(A) New n, consisting of light steel-frame and rein- rete building on screw piling, with small f entrance to pier to provide seating accom- r about 1,200 people (Contract No. 1); and onstruction of the parade bandstand enclo- ing of a light steel and reinforced concrete d screw pile foundation to provide seating tion for about 2,200 people (Contract No. 2), oration of Worthing. Borough Surveyor's icipal Offices, Tudor Lodge, Chapel-road, Deposit £3 3s.

SEPTEMBER 30.—**Barry.**—READING-ROOM.—For the erection of a branch reading-room at Barry Island, for the U.D.C. Mr. E. R. Hinchsliff, F.S.I., Public Offices, Barry. Deposit £1 1s.

SEPTEMBER 30.—**Belfast.**—RESCUE HOME.—For the removal of existing premises and rebuilding of rescue and maternity home, Malone-place, Belfast. Mr. Godfrey W. Ferguson, M.S.A., architect, 83, Royal-avenue, Belfast. Deposit £3 3s.

SEPTEMBER 30.—**Caerleon.**—PAINTING.—For the external painting of part of the Newport Mental Hospital buildings, for the Visiting Committee. Clerk and Steward at the Hospital.

SEPTEMBER 30.—**Carlisle.**—OFFICE, &c.—Erection of office and lavatory accommodation, open shed, mess room and store, at Public Slaughter Houses, for the T.C. Mr. Henry C. Marks, M.Inst.C.E., City Engineer, 18, Fisher-street, Carlisle.

SEPTEMBER 30.—**Coventry.**—PAINTING, &C.—For the external painting on the housing estates, Radford-road, London-road, and Gorton-road, for the Commissioners of H.M. Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

✱SEPTEMBER 30.—**Great Malvern.**—PUBLIC BATHS.—Erection at Malvern of new public baths, for the Malvern U.D.C. Mr. Alfred J. Taylor, F.S.Arc., 18, New Bond-street, Bath. Deposit £2 2s.

SEPTEMBER 30.—**Lynmouth.**—SCHOOL.—For the erection of a Council school at Lynmouth to accommodate about 380 scholars, for the Northumberland C.C. Mr. C. Williams, Director of Education, The Moothall, Newcastle-upon-Tyne. Deposit £2 2s.

SEPTEMBER 30.—**Maidenhead.**—HOME.—For the erection of a children's home at Cannon Court-lane, Furze Platt, near Maidenhead, for the Board of Guardians. Messrs. Albury, Rising & Morgan, 154, Friar-street, Reading. Deposit £1 1s.

SEPTEMBER 30.—**Neath.**—LAUNDRY ADDITIONS.—For additions and alterations to the laundry block and entrance-hall at the Glamorgan Farm School (Ty Segur), for Glamorgan C.C. Plans at School.

SEPTEMBER 30.—**Saffron Walden.**—LAUNDRY EXTENSION, &C.—For the extensions to laundry and other sundry works at Saffron Walden Hospital. Messrs. Pick, Everard, Keay & Gimson, architects, 6, Millstone-lane, Leicester.

SEPTEMBER 30.—**Scartho.**—ALTERATIONS.—For additions to the Council School at Scartho, near Grimsby, for Lindsey County Council E.C. Messrs. Scorer & Gamble, architects, Bank-street Chambers, Lincoln.

OCTOBER 1.—**Blackwell.**—HOUSES.—Erection of 20 parlour and 20 non-parlour type houses, for the R.D.C. Mr. A. H. Elliott, A.M.Inst.C.E., architect, 8, Union-street, Mansfield. Deposit £2.

OCTOBER 1.—**Burnley.**—TELEPHONE EXCHANGE.—For the erection of telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

OCTOBER 1.—**East Ham, E.6.**—FEEDING CENTRE.—Erection of a feeding centre on the school site in Dersingham-avenue, Manor Park, for the E.C. of the County Borough of East Ham. Borough Engineer, Town Hall, East Ham, E.6. Deposit £3.

OCTOBER 1.—**Felling.**—CLINIC.—For the erection of a School Clinic at Heworth, for the U.D.C. Mr. C. W. Hall, Council Buildings, Felling.

OCTOBER 1.—**Felling.**—HOUSES.—Erection of 20 houses on the Falla Park Estate, for the U.D.C. Mr. C. W. Hall, Architect, Council Buildings, Felling.

OCTOBER 1. — **London, N.1.** — ALTERATIONS AND ADDITIONS.—Alterations and additions at the Electricity Station, Eden-grove, Islington, N., and for alterations and conversion into offices and garage of No. 2, Burnard-place, Eden-grove, Holloway-road, Islington, N.7, for the Metropolitan Borough of Islington. Mr. C. G. E. Fletcher, Town Clerk, Municipal Offices, Tyndale-place, Upper-street, N.1.

OCTOBER 1.—**Sheffield.**—BATHS, &C.—For the erection of new district baths and manager's house, Langsett-road and Walkley-lane, Hillsborough, for the T.C. Mr. F. E. P. Edwards, City Architect, Town Hall, Sheffield. Deposit £2.

OCTOBER 1.—**Swindon.**—HOUSES.—Erection of 30 houses on the Hurst Estate, for the T.C. Mr. John B. L. Thompson, Borough Engineer, 34, Regent-circus, Swindon.

OCTOBER 1.—**Tuam (Galway).**—CHURCH REPAIRS.—Improvements and repairs to the cathedral church of St. Jarlath, Tuam, Co. Galway. Mr. R. M. Butler, F.R.I.B.A., 23, Kildare-street, Dublin.

OCTOBER 1.—**Wallsend.**—PAINTING.—For painting and decoration at The Hall, for the T.C. Borough Surveyor, Town Hall, Wallsend.

OCTOBER 1.—**Woking.**—WALL.—For the erection of a brick wall at Boundary-road, for the U.D.C. Mr. C. J. Wooldridge, Surveyor, Council Offices, Woking.

OCTOBER 2. — **Fulham.** — REPAIRS.—Execution of building and guttering repairs, pointing, &c., at the Infirmary, St. Dunstan's-road, for the B.G. Mr. E. J. Mott, Clerk to the Guardians, 129, Fulham Palace-road, London, W.6.

OCTOBER 2.—**Halifax.**—PAINTING.—For the outside painting of the Halifax Friendly and Trade Societies' Club. Mr. L. T. Wormald, Secretary, Halifax.

✱OCTOBER 3.—**Croydon, Surrey.**—ADDITIONS.—Additions to the hospital situate at North Cheam, Surrey, and which is now in use as the Croydon Borough Sanatorium. Mr. Robert M. Chart, F.S.I., Surveyor to the Croydon and Districts Joint Smallpox Hospital Board, of Chart, Son & Reading, Union Bank Chambers, Croydon. Deposit £1.

OCTOBER 3.—**Huddersfield.**—ADDITIONS.—For the erection of additions to kitchen at the Crosland Moor Institution, for the B.G. Mr. Joe Ainley, Architect, 55, New-street, Huddersfield.

OCTOBER 3.—**London, E. 1.** — STORES. — Erection of new central stores in the forecourt at the Royal Mint, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit, £1 1s.

OCTOBER 3.—**Long Eaton.**—HOUSES.—Erection of 54 non-parlour houses, for the Long Eaton U.D.C. Mr. H. Raven, C.E., Architect, The Hall, Long Eaton. Deposit £5 5s.

✱OCTOBER 3.—**Scarborough.**—HOUSES.—Erection of one block of 24 houses, for the T.C. Mr. Harry W. Smith, A.M.I.C.E., Borough Engineer, Scarborough.

OCTOBER 4.—**Glasgow.**—POWER STATION EXTENSION.—For the various works in connection with the extension of Dalmarnock Generating Station, for the T.C. City Electrical Engineer, 75, Waterloo-street, Glasgow.

OCTOBER 4. — **London, S.W. 1.** — DEMOLITION.—For demolition of temporary buildings at the War Office, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s.

✱OCTOBER 4.—**London, W.1.**—REPAIRS TO WALL.—Repairs to boundary wall abutting St. Mark's-road, at St. Marylebone Hospital, Notting Hill, W.10, for the Board of Guardians of St. Marylebone. Messrs. Constantine & Vernon, architects, 82, Mortimer-street, W.1. Deposit £1 Treasury Note.

OCTOBER 4.—**Renfrew.**—HOUSES.—For the various works in connection with the erection of 60 houses at Moorpark, for the T.C. Mr. Hamilton Neil, architect, 163, St. Vincent-street, Glasgow.

OCTOBER 6.—**Barnsley.**—PAINTING.—For painting the railings and gates to St. Mary's Churchyard. Borough Engineer, Fairfield House Offices, Barnsley.

OCTOBER 6.—**Cwmcarn.**—SCHOOL.—Erection of new infants' school at Cwmcarn, Mon, and alteration of the present school, for the Monmouthshire E.C. Mr. John Bain, F.R.I.B.A., County Hall, Newport.

OCTOBER 6.—**Holmfirth.**—WALL.—For taking down and rebuilding of retaining and fence wall on the Greenfield and Shepley main road, for the U.D.C. Mr. Geo. Bray, Surveyor, Council Offices, Holmfirth.

OCTOBER 6.—**Lurgan.**—ALTERATIONS.—For additions and alterations to Lurgan College, for the Governors. Mr. Robert Lynn, M.R.I.A.I., architect, 14A, Ann-street, Belfast. Deposit £1 1s.

OCTOBER 6.—**Stretford.**—SCHOOL.—For the erection of a central school in Gorse Park, for the U.D.C. Mr. Percy Howard, A.R.I.B.A., Architect, 88, Mosley-street, Manchester. Deposit £1 1s.

OCTOBER 6.—**Tarleton.**—HOUSES.—Erection of four cottages in Coe-lane, Tarleton, for the Lancashire C.C. Mr. W. H. Schofield, A.M.I.C.E., County Surveyor and Bridgemaster, Preston.

OCTOBER 6.—**Thundersley.**—SCHOOL.—For extensions to Thundersley Council School, for the Essex C.C. County Architect, Old Court, Springfield, Chelmsford. Deposit £1 1s.

OCTOBER 6.—**Warrenpoint (Ireland).**—HOUSES.—For the erection of 10 workmen's dwellings, for the U.D.C. Mr. S. J. M'Avoy, M.R.I.A.I., 66, University-avenue, Belfast.

OCTOBER 7.—**Dunmow.**—FARM.—Erection of a set of farm premises at Puttocks Farm, Dunmow, for the Small Holdings Committee of the Essex C.C. Mr. Chas. Lock, P.A.S.I., County Land Agent, Chelmsford. Deposit £1 1s.

OCTOBER 7.—**Evesham.**—POST OFFICE.—For the erection of a P.O. at Evesham, Worcestershire, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s.

✱OCTOBER 7.—**Hendon, N.W.9.**—BUILDING.—Building new single wards at Colindale Hospital, Hendon, N.W.9, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

OCTOBER 7.—**Liverpool.**—SCHOOL.—For the erection of new Council school, Springwood Estate, Garston, for the T.C. Land Steward and Surveyor, Municipal Buildings, Liverpool. Deposit £2 2s.

OCTOBER 7.—**Morley.**—HOUSES.—Erection of 48 houses on the Middleton Road Housing Estate, for the T.C. Borough Engineer's Office, Town Hall, Morley. Deposit £2 2s.

OCTOBER 7. — **Nuneaton.** — BAKERY. — Erection of bakery buildings, for the Nuneaton Co-operative Society, Ltd. Mr. W. F. Edwards, architect, 1, Newhall-street, Birmingham. Deposit £1 1s.

OCTOBER 8. — **Bath.** — POST OFFICE, &C.—For the erection of a P.O. and telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit, £1 1s.

✱OCTOBER 8.—**Greenwich, S.E.10.**—CONVENIENCE.—Construction of an underground convenience for both sexes at the foot of Blackheath Hill, Greenwich, for the Greenwich Metropolitan Borough Council. Borough Engineer's Department, Town Hall, Greenwich. Deposit £2 2s.

✱OCTOBER 8.—**Isle of Man.**—ELEMENTARY SCHOOL.—Erection of an elementary school providing accommodation for 500 children. Clerk to the Isle of Man Education Authority, Strand-street, Douglas. Deposit £1 1s.

OCTOBER 8.—**Rushen (Isle of Man).**—SCHOOL.—Erection of an elementary school for 500 children, with extra rooms and a house for the caretaker, at Rushen, for the Isle of Man Education Authority. Mr. T. R. Lewin, Clerk to the Isle of Man Education Authority Strand-street, Douglas. Deposit £1 1s.

OCTOBER 9.—**Farnworth, near Bolton.**—ALTERATIONS.—For alterations (to form a telephone exchange), for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s.

OCTOBER 10.—**Glasgow.**—PLUMBER AND SLATER WORK.—For plumber and slater work in connection with the erection of Mearnskirk Sanatorium, Mearns, Renfrewshire, for the T.C. Office of Public Works, 64, Cochrane-street, Glasgow. Deposit £5 5s.

OCTOBER 10.—**London, S.E. 9.**—PAINTING.—For external painting, &c., at the Well Hall Estate, Eltham, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s.

★OCTOBER 13.—**Croydon.**—HOUSES.—Erection of 48 houses (comprising 62 tenements) at Thornton-road, Thornton Heath, in two sections of 24 houses each, or as one tender for the whole, for the County Borough Council of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £2 for each section, or £4 for both sections.

OCTOBER 14.—**Guernsey.**—HOUSES.—Erection of 40 houses in Collings-road, and 10 or 12 houses at Sausmarez Mill, St. Martin's, for the States Committee for Homes for Workers, States of Guernsey. States Office, Guernsey, or at the office of Mr. Sydney Newcombe, architect, Greve d'Azette, Jersey.

★OCTOBER 16.—**Brighton.**—HOUSES.—Erection of 11 houses in Hereford-street, Brighton, for the County Borough Council of Brighton. Borough Surveyor, Town Hall, Brighton. Deposit £1.

★OCTOBER 16.—**Warrington.**—HOUSES.—Erection and completion of 54 houses on the Reynolds-street site, for the Housing Committee of the County Borough of Warrington. Borough Engineer and Surveyor, Town Hall, Warrington. Deposit £2 2s.

★OCTOBER 17.—**Trowbridge.**—HOUSES.—Erection of 20 houses in 10 pairs on the Rock Housing Estate, for the Trowbridge U.D.C. Mr. Walter W. Snailum, Church-street, Trowbridge.

OCTOBER 27.—**Salcombe.**—ALTERATIONS.—For alterations, &c., at the Salcombe Hotel, Salcombe. Mr. E. H. A. Barron, architect, 11, The Crescent, Plymouth.

NO DATE.—**Bonhill.**—HOUSES.—For the various works in connection with the erection of 27 blocks (comprising 112 houses), at Bonhill, Dumbartonshire, for the Western District Committee. Mr. Joseph Weekes, Architect, 88, College-street, Dumbarton.

NO DATE.—**Branston.**—PAINTING AND FOOTBRIDGE.—For painting three pairs of houses at Washingboro', and building a footbridge, for the R.D.C. Mr. Montagu A. Hall, A.R.I.B.A., architect, 3, Silver-street, Lincoln. Deposit £1.

NO DATE.—**Cardiff.**—STORE.—Ferro-concrete store, for the Wilts. United Dairies, Ltd. Messrs. Henry Budgen & Co., 95, St. Mary-street, Cardiff. Deposit £2 2s.

NO DATE.—**Cramlington.**—ADDITIONS, &C.—For additions, repairs and coating with rough-cast of the Primitive Methodist Manse, Cramlington. Rev. J. B. Wanless, Bourne Villa, Seaton Delavel.

NO DATE.—**Doobally.**—CHURCH.—For the erection of a new church at Doobally, Dowra, co. Cavan, for the Very Rev. F. Gilmartin, P.P. Mr. James Mackey, quantity surveyor, 58, Dame-street, Dublin.

NO DATE.—**Driffield.**—HOUSE, &C.—For the various works required in the erection of detached house, garage, engine house, &c., in Bridlington-road, Driffield. Messrs. Fred. Mitchell & Sons, architects and surveyors, 9, Upper Fountaine-street, Albion-street, Leeds.

NO DATE.—**Filey.**—HOUSES.—For the erection of a pair of semi-detached houses at Filey. Mr. Arthur Easton, architect, 1, Manor-street, Hull.

NO DATE.—**Gorseinon.**—BAKERY.—For erection of bakery, for the Pontardulais Co-operative Society, Ltd. Mr. W. T. Springall, Lic.R.I.B.A., C.W.S., Ltd., St. Mary-street, Cardiff.

NO DATE.—**Llandudno.**—PAINTING.—For painting, plastering, &c., required at the convalescent home, Plas Mariandir, Llanrhos, Llandudno. Mr. Fred Knowles, Secretary, Manchester and Salford Hospital Saturday and Convalescent Homes Fund, 12A, Piccadilly, Manchester.

FURNITURE, MATERIALS, etc.

SEPTEMBER 27.—**Bexley.**—KERB.—For about 1,980 ft. run of 12 in. × 8 in. dressed straight granite kerb. Mr. W. T. Howse, Surveyor, Council Offices, Bexley Heath.

SEPTEMBER 27.—**Bucklow.**—GRANITE SETTS.—Supply of granite setts, broken granite, tarred macadam, chippings, slag, and cinders, for the R.D.C. Mr. R. C. Cordon, Surveyor, 25, Station-buildings, Altrincham.

SEPTEMBER 29.—**Bishop's Stortford.**—GRANITE.—Supply of broken granite and granite chippings, for the U.D.C. Engineer and Surveyor, Council Offices, Bishop's Stortford.

SEPTEMBER 29.—**Loughton.**—GRANITE AND HOGGIN.—For 1,500 tons of railborne granite (1½ in.) and 500 yds. of hoggin, for the U.D.C. Mr. Horace White, Surveyor, Loughton, Essex.

OCTOBER 3.—**Bridgend.**—WATER FITTINGS.—For the supply to the Mid-Glamorgan Water Board of galvanised water piping, &c., for six months. Mr. Eiryn W. Davies, Manager, Water Board Offices, Bridgend, Glam.

OCTOBER 3.—**London.**—MATERIALS.—Supply of red and white lead to the Bengal and North Western Railway Co. Mr. E. A. Neville, managing director, 237, Gresham House. E.C. Charge 10s.

OCTOBER 4.—**Gellygaer.**—MATERIALS.—Supply of paving, kerb and channel, concrete fence posts, drain pipes, cement and lime, cast-iron goods, ironmongery, &c., to the U.D.C. Mr. F. Read, Surveyor, Council Offices, Hengoed.

ENGINEERING, IRON AND STEEL.

SEPTEMBER 27.—**Folkestone.**—CONSTRUCTIONAL STEELWORK, STEEL CASEMENTS, AND PATENT GLAZING CONTRACTORS.—(*a*) The supply and erection of cast-iron columns, steelwork in curved roof trusses, &c.; (*b*) steel casements; (*c*) patent roof glazing at the Concert Hall in Marine Gardens, for the Borough Corporation of Folkestone. Mr. A. E. Nichols, M.Inst.C.E., Borough Engineer and Surveyor, Corporation Offices, Folkestone. Deposit £3 3s.

SEPTEMBER 27.—**London, E.C.**—STEEL.—For (*a*) Spring steel; (*b*) mild steel plates and sheets; (*c*) M.S. angles, channels and bars; (*d*) best Yorkshire and grade "A" iron; (*e*) girder bridges, for the Bengal-Nagpur Railway Co., Ltd. Company's Offices, 1, 2, Gresham House, Old Broad-street, E.C.2. Fee 20s. per specification.

SEPTEMBER 29.—**Rochford (Essex).**—ALTERATIONS, HEATING AND HOT WATER.—Competitive tenders from contracting engineers, for the proposed alterations and additions to the heating and hot water supply services and boiler plant at the Rochford Union, for the Guardians. Mr. F. Broadhurst Craig, 1, Fitzroy-street, London, W. 1; and 22, Cooper-street, Manchester. Deposit £5 5s.

SEPTEMBER 29.—**Sheffield.**—SCREEN CHAMBER.—For the erection of a screen chamber in Ponds Dam Shude-lane, for the T.C. Mr. S. E. Fedden, Engineer, Commercial-street, Sheffield. Deposit £1 1s.

SEPTEMBER 30.—**Trowbridge.**—ROAD PLANT.—Supply of (*a*) 12 two-ton (British make) petrol lorries, side tippers, hand-operated; (*b*) four five-ton tandem quick reverse rollers, steam or internal-combustion engines; (*c*) tarspraying machines, minimum 500 gallons capacity; (*d*) six bitumen boilers, to the Wilts C.C. Mr. J. G. Powell, County Surveyor Trowbridge.

OCTOBER 1.—**Haslemere.**—CAST-IRON WATER MAINS.—For 2,027 yds. 6 in., and 340 yds. 2 in. cast-iron water main, &c., Mr. C. A. Best, Surveyor to the Council, Council Offices, Haslemere. Deposit £1 1s.

OCTOBER 1.—**Howdon.**—STEEL SHED.—For a steel shed at Howdon-on-Tyne, for the Tyne Improvement Commissioners. Mr. Albert Blacklock, Secretary, Tyne Improvement Commission Offices, Bewick-street, Newcastle-upon-Tyne. Deposit £2 2s.

OCTOBER 2.—**Askern.**—WATER MAINS.—For furnishing and laying of about 4,400 yds. of 9 in. cast-iron water mains, for the Doncaster R.D.C. Messrs. D. Balfour & Son, Engineers for the Works, 3, St. Nicholas Buildings, Newcastle-on-Tyne. Deposit £3.

OCTOBER 2.—**Norton.**—WATER MAINS, &C.—Furnishing and laying of 2,300 yds. of 5 in. cast-iron water mains, for the Doncaster R.D.C. Messrs. D. Balfour & Son, Engineers for the Works, 3, St. Nicholas Buildings, Newcastle-on-Tyne. Deposit £3.

OCTOBER 4.—**Lancashire.**—BRIDGES.—For the construction of two bridges (masonry and ferro-concrete structures) over the River Irwell, at the boundary of Bury and Radcliffe, for the Lancashire C.C. Mr. W. H. Schofield, County Offices, Preston.

OCTOBER 4.—**Llangeinor.**—FENCING.—Erection of 190 lineal yards of unclimbable wrought-iron fencing at Reservoir at Llangeinor, for Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, engineers, 23, Gelliwastad-road, Pontypridd. Deposit £2 2s.

OCTOBER 6.—**Dundee.**—ESPLANADE, &C.—For construction of a sea wall or bulwark extending to 3,200 ft., and 1,000 ft. of breakwater in rubble; also 1,300 ft. of 32 in. diameter outfall sewer, with reinforced concrete piles and groynes, for the T.C. Mr. George Baxter, City Engineer, 91, Commercial-street, Dundee.

OCTOBER 8.—**Birmingham.**—BRIDGE.—Supply and erection of steel girders, &c., in connection with the reconstruction of the bridge over the Tame Valley Canal, Salford Bridge, Lichfield-road, Erdington, for the T.C. Mr. Herbert H. Humphries, City Engineer, Council House, Birmingham. Deposit £2.

★OCTOBER 13.—**Aldershot, Hants.**—ARTIFICER'S WORK.—Maintenance Contracts, from October 15, 1924, at the Station hereafter mentioned in the South Aldershot Royal Engineer District of the Aldershot Command 1:—South Aldershot, including Ewshot and Crookham. Commanding Royal Engineer, R.E. Office, Headquarters, Stanhope Lines, Aldershot, Hants.

OCTOBER 15.—**Bedlington.**—CULVERT.—Construction of a concrete culvert and the diversion of the Sleekburn under Sleekburn Viaduct, near Bedlington Station, for the London & North Eastern Railway Co. Chief Engineer, North Eastern Area, York.

OCTOBER 15.—**North Seaton.**—VIADUCT.—For the reconstruction of North Seaton Viaduct, for the London & North Eastern Railway Co. Office of the Chief Engineer, North Eastern Area. York.

OCTOBER 28.—**Wellington, N.Z.**—BRIDGE SPANS.—For plate girder spans for Wairoa, Rangitaiki and Awakeri bridges, for N.Z. Public Works Board. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 31.—**Beaufort West (Cape Province).**—Electric power station plant, for the T.C. Department of Overseas Trade (Room 52).

NOVEMBER 3.—**Sydney, N.S.W.**—BRIDGE SPANS.—For metal work for superstructure of bridge, at Tom Ugly's Point, for Department of Public Works, Sydney. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160 Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND W WORKS.

SEPTEMBER 27.—**Birkenhead.**—STREET For street works in Norman-street, for th Chas. Brownridge, M.Inst.C.E., Borough E Surveyor, Town Hall, Birkenhead. Depos

SEPTEMBER 27.—**Harrogate.**—STREET W private street works in Chelmsford-road, Mr. C. E. Rivers, Assoc.M.Inst.C.E., Borou and Surveyor, Municipal Offices, Harroga

SEPTEMBER 27.—**Middleton.**—WATER M —For piping-in the open Goyt along Mill Middleton, including the construction of a s tank; laying new cast-iron water mains, a existing water mains, &c., for the T. Engineer and Surveyor, Town Hall, Middl

SEPTEMBER 27.—**Reigate.**—SEWER.—Fo tensions in Balcombe-road, Horley, for Mr. F. E. Traviss, Sanitary Surveyor, 48, Reigate. Deposit £2 2s.

SEPTEMBER 27.—**Surbiton.**—STONE PI —For the construction of about stoneware pipes for soil and surface w on the Westfield Lodge Estate, for the H. T. Mather, Surveyor, Council Offices, Surbiton. Deposit £1 1s.

SEPTEMBER 29.—**Carlisle.**—SEWERS.—F struction of a concrete and brick settlin laying of about 100 lineal yards of 9 in. sto and other incidental work at Stainton, fo Mr. J. C. Boyd, engineer, 18, Bank-stre Deposit 10s. 6d.

SEPTEMBER 29.—**Denholme.**—ROADS.— 240 super. yds. of stone setts, for the John H. Ingham, Council Offices, Denho

SEPTEMBER 29.—**Hanwell.**—CONVENI public convenience, Churchfields, for Surveyor, Council Offices, Hanwell.

SEPTEMBER 29.—**Millport.**—WATER For the construction of sand filters, clear and the providing and laying of about 8 in. and 6 in. pipes, for the T.C. Mr. J 2nd entrance, 204, St. Vincent-street, Glasgo £2 2s.

SEPTEMBER 29.—**Nottingham.**—CONVEN the erection of a ladies' lavatory at Bulwell City Engineer, Guildhall, Nottingham. D

SEPTEMBER 29.—**Totnes.**—ROADS.—For ing of Station-road, for the T.C. Mr. Ro strong, Borough Surveyor, Totnes.

SEPTEMBER 30.—**Dublin.**—CONCRETE laying of a reinforced concrete roadway for the Dublin Commissioners. City Municipal Offices, Lord Edward-street, posit £1 1s.

SEPTEMBER 30.—**New Malden.**—ROADS. ing up various roads, for the Maldens a U.D.C. Mr. Reginald H. Jeffes, A.M.I.C. and Surveyor, Council Offices, New Malde £2 2s.

OCTOBER 1.—**Barnet.**—ROAD.—For mak haven-avenue, for the R.D.C. Mr. A. Engineer and Surveyor to the Council, Co 1, Hillside-avenue, Boreham Wood.

OCTOBER 1.—**Birmingham.**—ROADS.— viding and laying granite kerbing and paving upon footpaths in Great Ha for the T.C. Mr. Herbert H. Humphries, C Council House, Birmingham. Deposit, £2

OCTOBER 1.—**Dinas Powis.**—STREET IM —Street improvement works in Elmgrove Powis, for the Cardiff R.D.C. Mr. Will Surveyor, Park House, 20, Park-place, Ca

OCTOBER 1.—**Hove.**—ROAD.—Making &c., in Valance-road. Mr. H. H. Sco Surveyor, Town Hall, Hove.

OCTOBER 1.—**Wallsend.**—PRIVIES CO For the conversion of cell privies into w Borough Surveyor, Town Hall, Wallsend

OCTOBER 3.—**Cylla and Deri Valleys.** WORKS.—For carrying out, for the Gelly of the construction of about 11 miles of and 9 in. diameter glazed stoneware and sewers, together with manholes, storm gauging chambers, and other incidental wo Wilcox & Raikes, 63, Temple-row, Deposit £7 7s.

OCTOBER 4.—**Chapel-en-le-Frith.**—S struction of detritus tanks and other alteration and extension of sewage outf the R.D.C. Messrs. Brady & Partingt Market-street, Chapel-en-le-Frith. Depo

OCTOBER 4.—**Chester.**—SEWER.—Cons surface water outfall sewer in concret cast-iron pipes, for the T.C. Mr. Charle Assoc.M.I.C.E., City Engineer and Su Hall, Chester. Deposit £1 1s.

OCTOBER 4.—**Honiton.**—BRIDGE.—For existing stone bridge and constructing concrete bridge on the Kahn Bar System Concrete Steel Co., Ltd.; also formin over the whole length of the bridge, for J. W. Jones, Borough Surveyor, Hon £1 1s.

OCTOBER 6.—**Beckenham.**—ROADS.— ing of Upper Elmers End-road, for the A. Angell, Surveyor, Beckenham. Dep

OCTOBER 6.—**Hemsworth.**—SANITA conversion of certain existing privies an into 18 w.c.s, at Grimethorpe, for the W. T. Lynam, Surveyor, Council Offic ham-road, Hemsworth.

OCTOBER 6.—**Hornchurch and Rainha** Construction of sewers, for Romford R.I Grant, Surveyor to the Council, 16A Romford.

6.—**Lancashire.**— ROAD IMPROVEMENT TION OF COTTAGES.—Improvement of erpool main road and erection of four Coe-lane, Tarleton, for the Main Roads Committee of the Lancashire County unty Surveyor's Office, County Offices,

R 6.—**London, N.W.3.**—REMOVAL OF ily removal and disposal of pulverised from the Dust Disposal Dept., adjoining litan Railway, West Hampstead Station. ne year or for three years, from April 1, Oliver E. Winter, M.Inst.C.E., Borough wn Hall, Haverstock-hill, N.W.3.

6.—**Manchester.**—BRIDGE WIDENING.— ning of Slade-lane Bridge over the London tern Railway, for the T.C. City Engineer's Hall, Manchester. Deposit £2 2s.

3.—**Warrenpoint (North Ireland).**—SEWER- he improvement of the sewerage, for the S. J. M'Avoy, M.R.I.A.I., 66, University- ast.

7.—**Gellygaer.**—ROADS AND SEWERS.— nd sewers on the Heolddu housing site, the Gellygaer U.D.C. The work includes filling, ballasting, metalling, kerb and paths, grass verges and tree planting, and Mr. P. Jones-Williams, Architect to the posit £2 2s.

7.—**Hendon, N.W. 9.**—ROADS.— macadam to roads, Colindale Hospital, V. 9. for the Metropolitan Asylums Board. e Board, Victoria-embankment, E.C. 4.

13.— **Coseley.**— SEWERAGE.— Stoneware sewers, manholes, pumping station, and at Princes End, for the U.D.C. Messrs. Son, & Watney, engineers, Prudential ichfield-street, Wolverhampton. Deposit

14.—**Southall-Norwood.**—CARRIAGEWAYS. facing carriageways in various streets. homson, Assoc.M.Inst.C.E., Engineer and the Council, Town Hall, Southall.

20.—**Fermanagh.**—ROADS.—For construc- , for the C.C. Mr. J. P. Burkett, County niskillen. Deposit £5.

.—**Knaresborough.**—SEWER.—Excavating ying main sewer at High Bridge, for the W. Lupton, surveyor, 14, Bower-road,

.—**Newbottle.**—CONCRETING.—For con- paving store yard, for the Newbottle and -operative Society, Ltd., Newbottle, Spring.

Competitions.

Competition News, pg. 466)

n Sales, Tenders, etc.

27.—**Lincolnshire.**—Messrs. Escritt ll sell, at the Estate Sale Rooms, Elmer tham (unless previously disposed of by y, the valuable freehold brickworks and luding Hoffman kiln, machine shed and fitter's shop and offices, &c., the whole an area of 11 acres, 1 rood, 29 perches . Auctioneers, Elmer House, Grantham.

1.—**Horley, Surrey.**—Mr. C. E. Clark hout reserve, at Market Field, Horley, e timber and builders' effects (bright, new). Auctioneers, Beddington House, near Croydon.

1.—**London, S.E.**—Messrs. Veryard & l, to clear site, without reserve, "Hazle- ch-road, Upper Norwood, useful building om demolition of the mansion. Auc- Norwood-road, S.E. 27.

2.—**London, N.W.**—Messrs. H. W. on (in conjunction with Messrs. Francis important unreserved sale at the works d, High-road, Willesden Green, N.W., ntractors' and decorators' stock, plant ry, several standards of well-seasoned r. R.W. goods, paint and glass, iron- achinery, &c. Auctioneers, 6, Great Bedford-row, W.C.1, and 10, Eastcheap,

2.—**Sunbury.**—Messrs. Duncan B. Gray ll sell, at Nuthall's Restaurant, Kingston- reehold building land, situate on the ior Estate. Auctioneers, 129, Mount- nor-square, London, W.1.

2 AND 3.—**Willesden, N.W.**—Messrs. & Moon (in conjunction with Messrs. h & Co.) will sell, without reserve, at the range-road, High-road, builders', con- decorators' stock, plant and machinery, andards of joinery timber. Auctioneers, es'-street, Bedford-row, W.C.1.

3.—**London, S.E.**—Mr. C. E. Clark will reserve, at Rollins Wharf, Canterbury- . S.E., large quantities of prime and new ous varieties. Auctioneers, Beddington ton, near Croydon.

7.—**Stockwell.**—Messrs. Joseph Hib- ill sell, without reserve, by order of the he premises, Lansdowne Works, Lans- ar "The Swan," Stockwell), the stock builder's and contractor's, comprising ill machinery, lorry, delivery van hold premises to be sold. Auctioneers, -green, Islington, London, N. 16.

—**Surrey.**—Mr. C. E. Clark will sell, , at Eastwick Farm Buildings, Lower- okham, Surrey, timbers and builders' owers, Beddington House, Beddington,

OCTOBER 9.—**London, E.C.**—Mr. Joseph Stower will sell, at Winchester House, Old Broad-street, E.C., freehold property containing the important area of 74,700 ft., or about 1¾ acres, on the north side of the main road between Bow Station and Bow Bridge, formerly St. Catherine's Convent. Auctioneer, 43, Chancery-lane, London, W.C.2.

✱OCTOBER 16.—**London, E.C.**—Messrs. C. C. & T. Moore will sell, at the London Auction Mart, a freehold and copyhold estate at Enfield. Auctioneers, 7, Leadenhall-street, E.C.3.

Public Appointments.

SEPTEMBER 29. — **Wolverhampton.** — Temporary Engineering Assistant required by the Corporation of Wolverhampton. Applicants must have qualified by examination through the Institution of Civil Engineers, the Municipal and County Engineers, or similar Institution. Applications, accompanied by copies of not more than three recent testimonials, to Mr. George Green, M.Inst.C.E., Borough Engineer, Town Hall, Wolverhampton.

✱SEPTEMBER 30. — **Lancashire.** — Architectural Draughtsman required by the Lancashire County Council in the County Architect's Department. County Architect, 16, Ribblesdale-place, Preston.

✱OCTOBER 2.—**Harpenden.**—Surveyor and Sanitary Inspector required by the U.D.C. Mr. Chas. S. Tuckey, Clerk to the Council, Clerk's Office, 23, High-street, Harpenden.

✱OCTOBER 8.—**London, S.W. 17.**—BUILDING INSPECTOR.—Building Inspector required in the Borough Engineer's Dept., by the Metropolitan Borough Council of Wandsworth. Mr. Ernest J. Elford, 215, Balham High-road, S.W. 17.

✱OCTOBER 10.—**Scarborough.**—Clerk of Works, to act under the direction of the Borough Engineer, for the various buildings and works carried out by the Borough Council of Scarborough. Mr. Harry W. Smith, A.M.I.C.E., Borough Engineer, accompanied by copies of not more than three recent testimonials.

OCTOBER 14.—**Auckland, New Zealand.**—Professor of Architecture required by Registrar, Auckland University College, Auckland. London Agent of the University of New Zealand, J. W. Joynt, M.A., 88, Gower-street, W.C.1.

✱NO DATE.—**London, S.W.1.**—Clerks and Foremen of Works required for temporary Government posts. Joint Substitution Board (Treasury and Ministry of Labour), Montagu House, Whitehall, S.W.1.

Housing Costs.

Mr. Wheatley (Minister of Health), speaking recently at Glasgow, dealt with the difficulty of ascertaining bed-rock prices for constructing houses, and appealed to municipalities to make a public test. For this purpose he suggested Glasgow Corporation should undertake a small housing scheme, sufficiently large to enable them to get bed-rock prices, make the best arrangements for organising their material, and collect through public appeal, if necessary, a good class of worker, asking them to do their best to keep a careful record of their costs. Let them see at the end of such a scheme at what rate and at what price working-class houses could be erected.

He invited public-spirited contractors to give a public demonstration of what it was possible to do to get their costs right down on a similar scale, and also said he would not mind if municipality competed against municipality in house building.

Damp Walls.

We have received from Messrs. Jenson & Nicholson, Ltd., a pamphlet, entitled "A Manual on the Treatment of Damp Walls." It is issued to assist those engaged in the prevention and cure of damp, and to enable them to select the material for the particular work in hand. The illustrations show, in a concise way, the conditions which may arise from dampness and other causes, and demonstrates the improvements that can be effected by the use of their various preparations. They state that Nepthelene has been specially produced to overcome the alkalinity of cements and plasters. A new wall (whether finished in Portland cement or patent plaster), over which Nepthelene has been applied can, it is claimed, be treated with decorative material with the assurance that the job will be as satisfactory and permanent as if the wall had been an old one. When applied prior to wallpapering, Nepthelene, it is further stated, considerably lengthens the life of the paper and prevents spotting and discolouration, and its action is also to stop efflorescence when paint or distemper is applied. Copies of this useful booklet can be had on application to Messrs. Jenson & Nicholson, Ltd., Goswell Works, Stratford, London, E. 15.

BUILDING OPERATIVES' CONFERENCE

THE National Federation of Building Trade Operatives opened their annual conference recently at Blackpool.

In the course of his presidential address Mr. T. Barron said the difficulties of the hours question would remain with them so long as there was not an attempt by the employers to realise the stern determination of their members not to be pushed back into the bad old days and ways of the past. While they accepted the responsibility of honouring agreements, either on hours or any other matter, they warned the employers that they could not take the present position of the working hours as in any way a permanent solution of the question. They believed that the employers' demand for longer hours was mere prejudice, without any economic warrant behind it; they were confident that in the end good sense would prevail, and that the employers would realise that in an industry calling for hard physical strain and for a great amount of travelling time to get to work, eight hours, with one meal hour, was both an economic and productive day.

Speaking of the men's claim for the guaranteed week, Mr. Barron said they were not asking for something for nothing, and they were aware of the fact that it was only by placing a penalty on the employers that they could hope that any thought would be given to the proper management of work and thus ensure that loss of time would be reduced to a minimum. Another injustice, that of requiring men to provide plant in the nature of expensive tools for the use and profit of employers without any recognition was so obvious that it required no elaboration. They had agreed with the employers to go into these matters, and there could be no permanent peace in the industry until their reasonable and just claims were met.

With regard to the Government housing scheme and the co-operation which had been promised by the employers and the operatives, Mr. Barron said he considered the advantages of the scheme were obvious. Their members would have a measure of security never hitherto enjoyed. Through this scheme, they believed they could gain what the workers had long been striving for, a measure of control in the industry in which they were engaged. It might only in this case be a small measure, but the seed was there, and with careful tending could be brought to full fructification in the future. They had entered into this scheme jointly with their employers, and were prepared to work with them, but they had never sold their freedom of action to deal with this question on their own lines. There had been rumours that the employers were not too willing to work under the scheme. In any case, the operatives were prepared to carry on, and assured the Government that they would carry on with or without the employers' intervention.

Building Trade Apprentices.

The Board of Education has recently issued a circular to local authorities with reference to the agreement concluded between the Minister of Health and the employers and trade unions concerned. This agreement will necessitate the augmentation of bricklayers, plasterers and tilers, and the circular states, in these circumstances the Minister of Health and the Board of Education are anxious to obtain information as to the facilities which can be utilised or provided by local education authorities for giving intensive training to apprentices—*i.e.*, youths normally between 18 and 22 years of age—in building trade subjects.

The proposed course will probably last three or six months, preparatory to entering the industry, but if the authority concerned are of opinion that some alternative course would be better adapted to the circumstances of their area the Minister and the Board will be prepared to consider their proposals.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at		Best Blue	
King's Cross	2 13 3	Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose ..	9 15 0
Do. Bullnose ..	3 8 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire brick:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends ..	32 10 0
		Two Sides and one End	33 10 0
Headers	22 10 0	Splays and Squints	31 0 0
Quoins. Bull-nose and 4½in. Flats	29 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.
Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
½ in. Shingle for Ferro-Concrete	14 0	" "
¼ in. "	15 0	" "
½ in. Broken Brick "	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

	£ s. d.
Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6 51/- alongside at Vauxhall in 80-ton lots.	
Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE.	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

	s. d.
Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4
HARD YORK—	
Delivered at any Goods Station London.	
Scappled random blocks. Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags. Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	.... £34 0	3 × 6	.... £24 10
4 × 9	.... 32 0	3 × 11	.... 30 0
4 × 8	.... 26 0	2 × 11	.... 30 0
4 × 7	.... 26 0	3 × 9	.... 26 0
3 × 8	.... 25 10	2½ × 9	.... 27 0
3 × 7	.... 25 10	3 × 4½	.... 25 0
2½ × 7	.... 24 0	3 × 4	.... 24 10

PLANED BOARDS.

1 × 11	.... £37 10	1 × 9	.... £36 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅜	21/-	1¼	33/6
½	24/-	1½	37/6
⅝	26/-		
1			

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	26/6
1¼	33/6
1½	38/-

MATCHINGS (BEST).

Inches	per sq.
¼	17/6
½	21/-
1	26/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 8

Dry Wainscot Oak. per ft. super, as inch	0	2	0 to	0	2 6
¾ in. do. do.	0	1	6 to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9 to	0	2 6
Cuba Mahogany	0	3	0 to	0	3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0	14	0 to	—	
American Whitewood planks, per ft. cube	0	12	0 to	0	14 0
Best Scotch Glue, per cwt.	4	10	0 to	—	
Liquid Glue, per cwt.	4	7	0 to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or	
Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
⅜ in.	16 10 0	⅜ in. to ½ in.	13 10 0
½ in.	14 10 0	⅝ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ½"&up.	Fittings. ¼"to¾" inclusive.	Flanges ½"&up.	Flanges ¼"to¾" inclusive
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 6½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 8
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 10 0	..	13 10 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	13 0 0	..
Hoop iron, basis price	16 10 0	..
" Galvanised	31 0 0	..
Soft Steel Sheets, Black—Ordinary sizes to 20 g.	15 0 0	..
" " 24 g.	16 0 0	..
" " 26 g.	18 0 0	..
Sheets Flat Best Soft Steel, C.R. & C.A. qual		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..
Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0 0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10 0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10 0	..
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..
Best Soft Steel Sheets, 26 g.	26 0 0	..
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pai coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	

NOTE—Country delivery, 30s. per ton extra; 3 cwt., 2s. per cwt. extra and over 3cwt. a cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s.

Old lead, ex London area, at Mills ..... per ton	31	0	0 ..
Do., ex country, carriage forward ..... per ton	32	0	0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB C IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
29/-	45/-	76/-	153/-	246/-	510/

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- p

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- p

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per

NEW RIVER PATTERN CROYDON BALL VALV

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228/

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

	1½ in.	1½ in.	2 in.
8 lbs. P. traps	33/-	41/-	56/- 101
8 lbs. S. traps	35/-	45/-	66/- 126

COPPER—	£ s. d.	
Strong Sheet ....per lb.	0 0 3	..
Thin " .... "	0 0 4	..
Copper nails .... "	0 0 3	..
Copper wire .... "	0 0 4	..
TIN—English Ingots "	0 0 6	..
SOLDER—Plumbers' "	0 1 2	..
Tinmen's .... "	0 1 4	..
Blowpipe .... "	0 1 5	..

PAINTS, &c.

Raw Linseed Oil, in pipes ....per gallon	
" " " in barrels .... "	
" " " in drums .... "	
Boiled " " in barrels .... "	
" " " in drums .... "	
Turpentine in barrels .... "	
" in drums (10 gall.) .... "	
Genuine Ground English White Lead, per t (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms "Park," "Supremus," "St. Paul's "Spedol" and other best brands 14 lb. tins) not less than 5 cwt. lots per ton deliver	
Red Lead, Dry (packages extra)	per t
Best Linseed Oil Putty	per c
Filocol	per c
Size. XD Quality	fl

[*Continued on page 499.*

* The information given on this page has compiled for THE BUILDER and is copyrigh this list is to give, as far as possible, the of materials, not necessarily the highest or and quantity obviously affect prices—a fact be remembered by those who make use of th

POSED NEW BUILDINGS & OTHER WORKS *

e lists care is taken to ensure the accuracy of the information given, but it may occappen that, owing to building owners taking the responsibility of commencing work s are finally approved by the local authorities, "proposed" works at the time of have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. District Council; R.D.C. for Rural District Council; E.C. for Education Committee; oard of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

PLAIN.—The U.D.C. has approved plans Messrs. Lee & Dunn for the erection of he Ritson Estate, Greencroft.—The M.T. expenditure by the U.D.C. upon the roads 3,615.

LA-ZOUCH.—Plans passed by the U.D.C. ungalow, on Nottingham-road.

r.—The Council have decided to reserve their housing estate, one for the erection school and another for the erection of a central day Continuation and Technical surveyor has submitted plans of schemes ewage disposal, and has been requested timates of the cost of each scheme.

ns approved by the T.C.: Flats, 12 and -street; extensions at Dorchester-street; n-road; two lock-up shops, Dorchesterine of sewer, Henrietta-road; bungalow, ne; lock-up shop, 4, Dorchester-street; omead Park; bungalow, First-avenue; factory, Harrington-place; four houses, ; house, 11, Fairfield-road; bungalow, e, Padleigh Hill; three shops and dwell-road, Combe Down; science buildings, hools; house, Oolite-road; lecture hall , Pulteney-mews.

-The T.C. proposes to purchase riverside st of £1,600 for the construction of a A site at the Elstow housing estate has d for the purposes of a new elementary nd stand is to be erected in the Square out £300. Thirty acres at £100 an acre to be acquired to provide for future the filters and service reservoirs at the Plans passed: Bungalow, Park-road, ıcas; house, St. Alban-road, for Mr. H.

Plans passed by T.C.:—Four villas, in ue, off Antrim-road, for Mr. Robert nitect, Mr. S. J. McAvoy; villa on Ballyor Mr. W. Murray, architect, Messrs. nedy; villa in Myrtlefield-Park, for Mr. architect, Mr. T. A. Eagar; two villas on for Mr. W. Evans; two villas on Knockrs. R. J. & T. Kerr, architect, Mr. Hugh illas on Bloomfield-road, for Mr. James ; villa in Ormiston-parade, for Mr. R. K. illas in Burmah-street, for Messrs. Cairns t, Mr. D. W. Boyd; villa in Hillsborough-W. Barton, architect, Mr. R. Barton; se on Falls-road, for Mr. P. Moran, archi-E. & J. Byrne; 10 villas in Glandore-Hugh Turtle, architect, Mr. Jackson G. villas in Downview-avenue, for Messrs. ons, architect, Mr. J. Seeds.

ans passed: Three houses, Bohemia-Messrs. T. S. Henley; war memorial, e.—Negotiations are proceeding with the Co. for land for a recreation ground, adopted a scheme for the conpromenade some 500 yds. in length at an of £10,000. The Town Clerk was apply to the Unemployment Grants assistance, and also to the M.H. for row the necessary money.

-The Bradford Third Equitable Building converting shop premises in Tyrrel reets into offices. The architects are Young & Co., Bradford.

-Plans passed by U.D.C.: House, on e's Estate, for Mr. Ayshford; bungalow, Rock, for S. Simmonds; bungalow at for A. Lenton; bungalow each at for Messrs. W. Rivers and C. M. Taylor t a meeting of the subscribers of the ge Hospital it was agreed that a new vided at a cost of £25,000.

;—The E.C. are pressing for a new lerthorpe. It is suggested that the to the Savage Trustees, situated thorpe-road and New Bridlington-road suitable site. There are to be erected re in the East Ward two intermediate for boys and girls.

Plans passed by T.C.:—Rebuilding of Oxford-place and Ditchling-road, or A. J. S. Russell; conversion into flats J. Barnes & Sons, for P. D. Goddard; Estate, Dyke-road, for E. Howarth; flats, "The Old Cottage," North-road, Cripps, for Mrs. Thomas-Stanford; and 6, Regent-street, A. Barnes, for . Ltd.; three houses and two garages, . A. Crouch, for J. Lewis; four houses, Ayling & Son, for G. Ayling; house, A. E. Porter, for W. Poiney; premises, l. Field & Cox, for Westminster Bank, of upper story into flat, 213, Preston-Eldridge, for Smithers & Sons, Ltd.; . Franklin-road, A. Carden, for R. ps and houses, Ditchling-road, W. A. furst; 19 houses, Mafeking-road, J. ling.

—The U.D.C. has decided to widen cost of £770.

Plans passed by T.C.:—House, Milton-. King; 18 cottages, Halingway, for

List of Contracts, Competitions, etc.

W. Saint, Ltd.; house, Huntingdon-road, for J. H. Phillips; extension to school of Agriculture, Tennis Court-road, for the Chancellor, Master and Scholars of the University of Cambridge; house, Cam-road, for E. E. Marshall, Mill-road; house, Milton-road, for W. Northfield.

CAPE TOWN.—The T.C. is to embark upon a scheme for developing the Rockland reclaimed area at Sea Point, and voted £5,000 for the purpose.—A scheme is being considered for converting the Round House Estate into a public park.

CARDIGAN.—The Cardigan and District Hospital Governors have in consideration an improvement and repairs of buildings scheme, estimated to cost £1,750.

CARMARTHENSHIRE.—The County E.C. is to lay-out playing fields for the Llandilo County Schools, and has obtained a site on which to erect a council school at Llandebie.—The Llanelly B.C. is considering the construction of a new main road to join the Tyissa district to the main Swansea–Lougher-road.

CHEPSTOW.—The B.G. is to extend the accommodation for vagrants at the workhouse.

COLWYN BAY.—The U.D.C. has instructed its Surveyor to draw up a scheme for the erection of a new pavilion to accommodate 1,000 persons on the west side of the pier entrance; also to present a plan for a covered way from the pier gates to the existing pavilion and for the provision of a bandstand at the pierhead.

COVENTRY.—The E.C. is submitting to the T.C. for approval, plans for an extension of Barr's Hill school; the cost is estimated at £4,979.

CUTNALL GREEN.—The Bradford Bridge, near Cutnall Green, is to be repaired by the Worcester C.C., at an estimated cost of £700.

DARLINGTON.—The Darlington Wesleyan Bondgate Circuit approved the suggested scheme for the erection of new Sunday schools and an institute in Bondgate, at an estimated cost of £10,000.

DIPTON.—Messrs. Bowes & Partners are proposing to erect a further batch of houses for their employees in Plunkett-road.

DUDLEY.—The Castle View House, in Claughton-road is to be reconstructed and adapted into a convalescent home.

DUNVANT.—The Glamorgan E.C. proposes the erection of an elementary school.

DURHAM.—The R.D.C. has resolved to seek borrowing powers for the construction of a new road from Haswell to Sherburn.

EASINGTON.—The B.G. has decided to carry out alterations and additions at the Institution at an approximate cost of £300.

EAST BARNET.—Plans have been passed by the U.D.C. for two houses in Park-road for the British Land Co., nine garages at Underhill for Messrs. Newton & Sons; conversion of Solway House, East Barnet-road, into three self-contained flats for Mr. W. S. Jackson.

ESHER.—Road widenings in the Esher and Dittons district are to cost £13,850.

EVESHAM.—The T.C. has decided to support the scheme for the proposed bridge across the River Avon opposite the Cheltenham-road, on condition that the cost to the Council does not exceed £7,000. In the circumstances, the Worcester C.C. has authorised the County Surveyor to prepare a scheme and estimate.

FALKIRK.—A new scheme for the erection of 282 houses, to be built on sites at Merchiston, Thornhill, Carmuirs, and the Stirling-road, is being prepared for the T.C. Proposed road works include widening Union-road, Camelon, at an estimated cost of £1,400; widening Merchiston-road at an estimated cost of £1,550; and widening Thornhill-road at an estimated cost of £1,250.

FALMOUTH.—The T.C. is arranging to rent Pendennis Castle from the War Office for housing purposes. The B.S. is to prepare plans for laying-out land adjoining the cemetery.

FAVERSHAM.—Plans passed by R.D.C.: Mr. P. E. Wildash, two bungalows at Loyterton, for Mr. Potter Oyler; Messrs. Whiting Bros., two cottages on Provender Farm, Norton, for Mr. W. Colthup; Messrs. S. & G. George, two cottages at Buckland, for Mr. A. L. Mercer.

GLASGOW.—The Corporation propose to purchase the Glasgow Harbour Tunnel and the property on both sides for £100,000, the object in view being the erection of a bridge over the Clyde between Finnieston and Mavisbank.

GREAT HOUGHTON.—Plans have been prepared for 150 houses, and negotiations are being entered for the purchase of 14¼ acre field in Rotherham-road. Another scheme for the erection of 52 non-parlour type is being prepared.

GRIMSBY.—The T.C. proposes to carry out works of sewerage at West Marsh, at a cost of about £3,000.

HALESOWEN.—The District E.C. is considering the erection of a Council school for the districts of Hill and Cakemore.

HALIFAX.—The Co-operative Industrial Society, Ltd., have acquired the St. Paul's Church Schools, and it is proposed to erect new co-operative stores upon the site.

HAMPTON (WORCESTERSHIRE).—The E.C. is considering the purchase of a site at Great and Little Hampton for a Council school.

HASTINGS.—The Water Committee of the T.C. proposes the purchase of land at Battle and Sedlescombe, totalling about 70 acres, for waterworsk purposes.—The Westminster Bank, Ltd., has acquired Nos. 27, Havelock-road and 1, 2 & 3, Bank-buildings for demolition and rebuilding.—Loans as follows have been sanctioned: £1,400 for road construction on Eversley housing site; £795 for sewers; £10,200 for foundations, retaining walls and drainage of the proposed White Rock Pavilion; £8,590 for eighteen additional houses at Eversley housing site.

HAYFIELD.—The M.H. has approved the R.D.C.'s scheme for conveying water from Harrymoor Kinder to supply the village of Mellor, which is five miles distant; the estimated cost is £14,300.

HEANOR.—Proposals are to be submitted by the U.D.C. to the M.H. for the erection of 115 houses forthwith.

HESTON AND ISLEWORTH.—Plans passed by U.D.C.:—P. Chase Gardener & Co., bungalow, Lampton-road, and seven houses, Bulstrode-avenue; R. Emmett, house, Jersey-road; P. H. Watkins, two houses, Martindale-road; D. A. de C. Bellamy, bungalow, Sutton-lane; Building Enterprises, Ltd., 32 houses and four bungalows, Lime Tree-road; J. Vincent, two houses, Bland's Farm; E. Williams, house, Park-road; J. Montgomery, four houses, Maswell Park; Building Enterprises, Ltd., bungalow, Church-road; E. A. Charlton, two houses, Elmsworth-avenue; P. Chase Gardener & Co., two houses, Whitton-road; E. W. Button, four houses, Martindale-road; Messrs. Lovatt & Co., house, Alexandra-road; E. Carter, bungalow, King's-avenue; Jones & Co., 10 houses, Wood-lane; Roper, Son & Chapman, bungalow, Martindale-road; J. P. Power, bungalow, Harvard-road; F. J. Pateman, two houses, Rollit-crescent; Building Enterprises, Ltd., two houses, Jersey-road; P. F. E. Carter, two houses, Cambridge-road; W. Ryde, bungalow, St. John's-road; H. Allen, house, St. Mary's-crescent; P. Chase Gardener & Co., eight houses, King's-avenue; H. Nightengale, bungalow, Martindale-road; T. H. Isted, two houses, Osterley-crescent; S. L. M. Avery, five houses, Clare-road; L. Fowler, bungalow, Argyle-avenue; Silwood Construction Co., Ltd., 32 houses, Grenville-avenue; R. Emmett & Son, house, Hibernia-road.

HUNSWORTH.—Plans passed: Conversion of old Mission Room into a house, for Mr. J. Gibson; houses at Moorhouse-lane, for Messrs. G. R. & R. H. Verity.

JARROW.—The T.C. has resolved to apply for permission to borrow £6,600 for the erection of 20 houses on its housing estate; and, further, to borrow £4,160 for the cost of the roads and sewers.

JEDBURGH.—T.C. has approved plans for rebuilding Station bridge, Townfoot bridge, and Inchbonny bridge at estimated costs respectively of £6,940, £6,550 and £6,330. The Jedburgh District Committee has already approved of the reconstruction of two other bridges under its sole control, at a total probable cost of about £30,000.

KEIGHLEY.—Sanction has been received by the T.C. to the clearance of the Westgate slum area. The net cost will be about £98,000. Accommodation will have to be found for 536 persons.

KIDDERMINSTER.—Plan passed: New slipper factory at Franche, for Mr. H. W. Buckland.

LANGLEY.—Police buildings are to be erected by the Worcester Standing Joint Committee on a site presented by Mr. J. Darby.

LAUNCESTON.—The T.C. has decided to erect 10 houses at a cost of £517 7s. per house, including site. The M.H. has conditionally approved.

LIVERPOOL.—An expenditure of £170,000 is contemplated by the Mersey Docks and Harbour Board on the construction of the north wall of the new Gladstone Dock. The wall will provide a loading-out berth about 600 ft. long.

LONDON (HACKNEY).—Plans passed by B.C.:—West & Brooks, Leyton, Ltd., two houses, Clapton Common; O. Abbott, factory premises, 45, Wallis-road.

LONDON (ISLINGTON).—A revised scheme has been prepared for the erection of 26 four-roomed flats and eight three-roomed flats at Holly Park, at a cost of £26,235.

LONDON (LEWISHAM).—Plans passed by B.C.:—T. A. Boughton, four houses, Newquay-road; Alfred Marsh, seven houses, Shell-road; G. P. Harding, five houses, Hither Green-road; H. D. Bennett, two houses, Baring-road; Eaglen Bros., six houses, Burnt Ash-hill; J. Watt, building, 8, Bellingham-terrace, Bromley-road; Arthur Miller, three houses, Stanstead-road; J. G. Stephenson, 100 houses on Downham Estate, for London County Council; Dibben & Co., Ltd., six houses, Warren-avenue; Kenneth T. Lomas, 145 houses on Downham Estate, for London County Council; W. Reynolds & Co., two houses and garages, Coniston-road; A. J. Glock, 17 houses, Ewhurst-road.

LONDON (SHOREDITCH).—The B.C. has authorised the exterior repair of houses on the Stonebridge Estate, at a cost of £5,000.

LONDON (STOKE NEWINGTON).—The L.C.C. intimates its intention to erect an elementary school for 640 children and capable of enlargement by 250 places.

LOWESTOFT.—Plans passed by T.C.: House, Beccles-road, for Mr. W. Parker; bungalow, Hall-road, for Mr. A. Spashett; bungalow, London-road, for Capt. Harvey; house, Yarmouth-road, for Mrs. L. Knight; house, Kirkley-road, for Mr. W. Bliss; shop, Milton-road, for Mrs. A. Houghton; bungalow, Yarmouth-road, for Mr. W. J. Croft; pasteurisation dairy, Parade-road, for Messrs. Overland & Son. The B.S. reports further damage to the beach through rough seas.

LUTON.—The sewer from Dunstable-road is to be extended, at a cost of £1,000, towards the bowling green area, where Mr. A. W. Oakley, builder, proposes to erect ten houses.—The Council has had revised plans for the covered market and proposed shops in Cheapside and Market-street, and decided to invite tenders forthwith.

LYTHAM ST. ANNES.—The improvement of the Ashton Marine Park at Fairhaven is being considered by the T.C. The proposals include increasing the lake to three times its present size, the erection of a bandstand, &c. The improvements are expected to cost about £16,000. Another project is the erection

of a new Town Hall. There are no definite plans, but £100,000 is mentioned as the probable cost.

MALVERN.—Worcester County E.C. has asked a sub-committee to report as to the need for a secondary school.

MIDDLESBROUGH.—The Housing Committee has decided to erect four shops on the Marton-grove housing estate at a cost of £900 each.

MONMOUTHSHIRE.—The Nantyglo and Blaina U.D.C. has made tentative arrangements with adjoining areas councils for the joint erection of an isolation hospital.—The Abersychan U.D.C. is to renew the Cwmavon river and railway bridges, and to improve Hospital-road.—A new council school to accommodate 650 children is to be built at Twmpath, Pontypool.

MYTHOLMYROYD.—The M.H. has held an inquiry into the application of the U.D.C. for sanction to borrow £1,000 for alterations to the Council offices at Scarbottom.

NELSON (GLAM.).—Five and a-half acres of land have been acquired by the Nelson Welfare Association for conversion to recreation purposes.

NEWBURY.—Plans passed: House, Andover-lane, for Mr. L. Simmons; two houses, Enborne-place, for Mr. S. E. Rawlings; house, Boundary-road, for Miss Watts; house, Oxford-road, for Mr. M. P. Coombs; two houses, Queen's-road, for Messrs. Slater & Griffin; house, Buckingham-road, for Mr. A. J. Chivers; conversion of West Mills into bacon factory, for Mr. J. Tifnail; the Gas Committee proposes the erection of new buildings.

NORHAM.—Plans passed by the R.D.C.: Bungalow at Horncliffe, for Miss Carr, and bungalow at Scremerston, to be used as a sub-post office.

NORTHALLERTON.—The U.D.C. has inaugurated an attractive house purchase scheme, which at present provides for the erection of 20 houses in pairs at Vicar's Croft.

NORWICH.—The City Council has decided that a further instalment of 100 houses are to be built.

OLDBURY.—Preliminary plans for secondary school buildings were submitted to the B.E., which suggested certain alterations.

PAISLEY.—Permission has been granted by the Dean of Guild Court to Messrs. R. Cochran & Sons, Ltd., warehousemen, 10–12, Smithhills, to erect in Gauge-street a substantial addition to their establishment. A feature of the new buildings will be an arcade. Sherwood U.F. Church have been granted permission to erect new halls in Glasgow-road.

PEMBROKESHIRE.—Plans passed by the Goodwick U.D.C.: Slaughterhouse, for Mr. J. Griffiths; house, for Mr. G. C. Evans, in Main-street.—The Haverfordwest R.D.C. is to spend, approximately, £6,000 in improving the northern district roads, and £1,875 on improving the main Black Bridge–Neyland road.

PERSHORE.—The Worcester C.C. proposes to construct an additional culvert, at a cost of about £600.—The construction of a new bridge, at a cost of £4,600, is proposed.—A special subjects centre is to be erected on the site of the infant's school, at a cost of £500.

PICKERING.—Plans passed by the R.D.C.: Two cottages, at Brompton, for Sir Kenelm Cayley.

PRESTON.—Plans passed by T.C.:—R. O. Harris, for H. Archer, house and shop, Deepdale-road; J. Nightingale, three houses, Addison-road; H. Heaton, for T Varley, house and garage, Addison-road; Ogden & MacGregor, for G. Vickers, house and shop, Trafford-street; A. H. Duckworth, for Mrs. Clitheroe, bungalow Ribbleton-avenue; Swarbrick & Gaunt, two bungalows, Inkerman-street; B. Crabtree, for Spencer & Abbott, 16 houses, Tiber-street, and eight houses, Frenchwood-avenue; F. Mallott, for Horrockses, Crewdson & Co. Ltd., conveniences, Primrose Hill; J. W. Grange, two houses, Lytham-road.

RHYL.—The U.D.C. has decided to apply to the M.H. for sanction to erect a further fifty houses.

RICHMOND (SURREY).—Plans passed by the T.C.: Mr. H. P. Carter, two houses, King's-road; Messrs. F. Taperell & Haase; Mr. A. H. Middleton, four houses, Taylor-avenue; Mr. H. Howes, house, Taylor-avenue; and Messrs. Legassick & Co., house, Taylor-avenue.

ROCHESTER.—Plans passed by the T.C.: House, Dark-lane, Mr. F. W. Dyster, for Mr. A. W. Hipkiss; bungalow, Mill-road, for Mr. F. J. Luff, for Mr. F. G. Luff; bungalow, Dark-lane, for Mr. J. Burns; staff quarters, St. Bartholomew's Hospital, Mr. T. H. McDermott, for the Trustees of Hospital; bungalow, Cornwall-road, Mr. F. Clarke, for Mrs. H. Clarke.

ROMFORD.—Plans for 30 bungalows to be built at Harold Wood, have been passed by the R.D.C.

SALTBURN.—The U.D.C. has decided to negotiate with the M.H. for a loan of £1,212 for housing purposes.

SEAHAM HARBOUR.—The U.D.C. has approved of plans submitted by Mr. J. W. Claxton, on behalf of Mr. J. S. Ankers, for the erection of two houses and shops at the junction of Princess-road and Dawdon Crossing.

SHEFFIELD.—The Joint Hospital Council has purchased Norton Hall and grounds, comprising 120 acres; it is proposed to erect a new children's hospital in the grounds. The hall is to be converted into an auxiliary Institute.—The Corporation propose to erect a new abattoir at a cost of £100,000; also to construct new baths at Hillsborough, at an estimated cost of £30,914.

SHIPSTON-ON-STOUR.—The P.C. has purchased two acres of land for a burial ground.

SKELTON AND BROTTON.—The U.D.C. is entering into an agreement with the Saltburn U.D.C. for the construction of a new outfall sewer at Old Saltburn in connection with a new sewerage scheme.

SMETHWICK.—Plans for the erection of a new secondary school have been approved by the E.C., at an estimated cost of £40,000. The building will accommodate about 330 girls.

SOUTH SHIELDS.—The Governors of the School of Art have placed before the B.C. a scheme for the erection of a new art school for the town.

STANLEY.—The U.D.C. has approved plans submitted by the Stanley Liberal Association for the erection of a new building at Clifford-road.

STOCKTON.—The T.C. has decided to construct a bridge or culvert over Lustrum Beck, at an estimate of £8,674.——The U.D.C. has instructed the M.O. to work in conjunction with the B.E. for the consideration of a suitable site for a new and modern small-pox Hospital. The B.E. has also been requested to prepare plans, and an estimate of the cost, for an additional observation block; an additional block to accommodate 16 beds, and extra staff accommodation at the Isolation Hospital.—Plans passed by the T.C.: Two bungalows at Barnard-street, for H. Lowry. The R.D.C. has approved plans for the erection of a detached bungalow at Preston, for R. Williamson, Stockton.

STOKESLEY.—Plans passed by the R.D.C.: House at Kirby, for C. W. Benson; bungalow at Swainby, for G. H. Clarke; bungalow, Yarm, for Mrs. Bell, and bungalow at Tame Bridge, Stokesley, for F. Brown.

SWANSEA.—The T.C. has passed plans for the following: House, Prospect-place, Sketty, for Miss M. E. Rowlands; house, Prospect-place, Sketty, for Mr. F. Tucker; two houses, Gower-road, for Mr. W. G. Connick; house, Middle-road, for Mr. E. Roberts; bungalow, Bayswater-road, for Mr. D. A. Williams; bungalow, Carmarthen-road, Fforestfach, for Mrs. M. Williams; bungalow, Bayswater-road, for Mr. A. E. Fursland; three houses, Peter-street, for Mr. J. O. Watkins; house, Summerland-lane, Newton, for Mr. I. Rosser; bungalow, Pentregethin-road, for Mr. G. Davey; four houses, Manor-road, Manselton, for Messrs. Thomas Bros.; house, Tycoch Estate, for Mr. L. A. Jenkins; house, Tycoch Estate, for Mr. F. G. Harries; house, Middle-road, for Mr. E. Thomas; two houses, Pentregethin-road, for Messrs. Harris & Macleod; bungalow, Tycoch Estate, for Mr. F. C. Butler. The Council has arranged to grant loans under the S.D.A.A. in respect of houses to be erected as follows: W. R. Crosby, St. John's-road, Manselton; Francis R. Miller, Tycoch Estate, Sketty; T. E. Jones, Higher West Cross-lane West Cross; Herbert Chown, fronting Overland-road, at top of Woodville-road, Mumbles; Rev. David L. Davies, Armine-avenue, Gower-road, Killay; Frederick C. Butler, Tycoch Estate, Sketty; Mrs. Clara E. Grove, Mumbles-road, near Blackpill; Mrs. A. L. L. Jones, Mumbles-road, near Blackpill; William D. Hughes, near St. Peter's Church, Caswell-road, Newton, Mumbles; John William Jenkins, corner of Main-road and Gwernllwyn-chwith-road, Peniel Green; Stanley Rutter, Higher West Cross-lane; W. S. Williams, St. John's-road, Manselton; Nicol Robertson, Tycoch-road, Sketty; Phillip Phillips, road leading to Tycoch Farm, Mynydd Cadle; Mrs. Elizabeth Surridge, Long Oaks-avenue, Uplands, Swansea; Arthur D. Gugan, Hendrefoilan-road, Sketty; Leonard A. Jenkins, Tycoch Estate, Sketty; M. C. Fry, Murton Cross, Blackpill; Davin John Evans, Tycoch Estate, Sketty; Mrs. G. M. Griffiths, Tycoch Estate, Sketty; Frederick G. Harris, Tycoch-road, Sketty.

SWINTON AND PENDLEBURY.—The Surveyor has been instructed to deepen the storm overflow drain in Worsley-road, to relieve the flow of sewage. A sub-committee is to report as to the provision of a convenience for ladies at the Moorside Recreation Ground. The Cromwell-road schoolyard is to be paved at a cost of £530.

TROWBRIDGE.—Plans passed by T.C.:—Villas, Frome-road, for S. H. Culverhouse and J. Smith.

TRURO.—Plans have been passed for a Town Hall, at an estimated cost of £9,000.

WEST DEAN.—The R.D.C. has been considering the question of the water supply. The scheme is a large one embracing about twenty parishes. The Council have obtained grants from the Unemployment Grants Committee and Office of Works. Messrs. W. H. Radford & Son, engineers of Nottingham, are to send the detailed plans to the M.H. The estimate is £45,000.

WESTHAMPNETT.—R.D.C. has received sanction to make grants in respect of 50 houses.

WEYMOUTH.—Plans passed by T.C.: S. J. Board & Son, for Mrs. Penney, detached villa, Burcleaves; Messrs. Jenkins, Hitt and Grant, Ltd., for Mr. H. F. C. Jenkins, bungalow, Bent-path-avenue; Messrs. S. Jackson & Son, for Mr. G. Plumpton Smith, villa, Alexandra-road; Mr. K. Openshaw, pair of semi-detached bungalows, Southlands-road; Mr. F. Greenaway, for Mr. F. Cater, villa, Alexandra-road; Messrs. Jesty & Baker, house, Clearmount-road.

WILLESDEN.—A scheme is to be prepared for the widening of Kilburn Bridge. A convenience is to be erected at Craven Park Junction. Tenders are to be obtained for the provision of mess room accommodation for hospital motor ambulance drivers.—Plans passed by the U.D.C.:—House, 7, Dollis Hill-lane, by Mr. F. Osler, for Dr. T. P. Nunn; 14 semi-detached houses, Oxgate-gardens and Edgware-road, for Mr. F. W. Brealy; six houses, Hanover-road, Kensal Rise, by Mr. H. Shaw, for Mr. F. Hilborn; new factory premises, Neasden-lane, Neasden, by Mr. S. A. S. Yeo, for The Royal Sovereign Pencil Co., Ltd.; twelve houses, Mount Pleasant-road, Kensal Rise, for Mr. C. W. B. Simmonds.

WIMBLEDON.—Plans passed by B.C.:—A. M. L. McKay, house, Copse Hill; Limpus & Son, house, Lauriston-road; W. H. Whitehead & Co., house, corner of Montana and Langham-roads; J. Browne, four houses, Albany-road; W. W. Gibbings, house, Wimbledon Hill; H. Coombs & Sons, two houses, Devas-road; W. R. Dibben, house, Copse Hill; H. Jeffery, Spiritualistic Church, Hartfield-road.

WORCESTER.—The Severn Commissioners have decided to erect another electric power station at Ironbridge.

FIRES.

KILMEADON (CO. WATERFORD).—Extensive flour mills belonging to Mr. J. O'Brien, of Waterford, have been destroyed by fire. The damage is estimated at £30,000.

SALISBURY.—Park Mills, Salisbury, a hemp and jute factory was destroyed by fire recently. The damage is estimated at several thousand pounds.

PATENTS

APPLICATIONS PUBLISHED.*

212,800.—J. W. Baker: Casement
212,822.—W. Wilkinson: Packing
212,828.—E. J. Owen: Building co
212,855.—J. H. Smith: Window cor
216,951.—J. Broadfoot & Sons, Ltd Robertson: Cement and filling ma
216,952.—J. Broadfoot & Sons, Ltd Robertson: Plastic material for the of moulded articles.
216,977.—R. Thompson: Dwelling
217,026.—J. Broadfoot & Sons, Ltd Robertson: Facing for insulating-sla in refrigerating-chambers.
217,027.—J. Broadfoot & Sons, Ltd Robertson: Insulating-slab for use in ing chambers.
217,033.—A. E. White (Bassick Co.
217,034.—G. W. Kemp and W. L Co., Ltd.: Chairs.
217,037.—H. R. Higgins: Easy settees.
217,038.—P. H. Bibby and A. Packing-case bolts.
217,057.—C. M. A. Bedson: castors.
217,082.—A. Lees: Pavement ligh
217,087.—O. H. Strubb: Bricks o blocks for toy buildings and in purposes.
217,095.—Holzveredelung Ges. a Trenkler: Process for hardening wo
217,145.—Nettlefold & Sons, Ltd., Ely: Door closers and checks.
217,146.—Nettlefold & Sons, Ltd., Ely: Door closer and check.
217,151.—D. Palmer-Jones and (Great Britain), Ltd.: Scaffolding.
217,258.—J. F. Taylor and W. Hinged brackets.
217,266.—R. Peale, sen., R. Pea Peale, jun.: Device for breaking up material in mines or the like.
217,279.—V. Lefebure: Concrete and plasters.
217,286.—J. E. Hodson: Device fo sliding windows in any desired positi
217,289.—J. Green: Wooden tub tures.
217,328.—J. Green: Wooden tub tures.
217,334.—S. M. Gully: Door latch
217,335.—G. D. Peters & Co., Ltd. LeClair: Windows.
217,343.—J. H. Amies: Cementi position.
217,361.—W. B. Whitton: Buildi
217,377.—D. Thornton and E. S. I Silica or refractory fireclay blocks ar
217,385.—G. C. Boliston: Ex lounges and settees.
217,388.—C. Pickstone: Manu mortar, artificial stone and concrete.
217,407.—T. Robinson & Son, Robinson, and J. Tweedale: Cutt tonguing wood.
217,408.—A. G. Pappadaki mechanism for doors.
217,411.—F. M. Fogarty: Circul benches.
217,471.—S. Turner: Material fo construction of tennis playing promenades.
217,478.—E. Bivert and I. E. Fir floor construction.
217,524.—D. Clarke: Jib cranes.
217,525.—A. B. Gibbons: Floor check for doors.
217,627.—D. Moir and H. Bucha for the manufacture centrifugally columns.
217,631.—H. Von Fremery apparatus.
217,633.—E. C. R. Marks (Ma Co.): Process and composition c colouring mortars and concretes.

* All these applications are now in which opposition to the grant of Pate may be made.

S CURRENT OF MATERIALS (*contd.*)

GLASS.

SH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
ourths ..	3¾d.	32 oz. fourths	8¾d.
hirds	4¼d.	32 „ thirds	10¼d.
ourths ..	5d.	Obscured Sheet, 15 oz.	4d
hirds	6¼d.	„ 21 „	5¾d.
ourths ..	6d.	Fluted 15oz. 6¼d.,21oz.	9¾d.
hirds	7¾d.	En'lled 15oz. 5¼d.,21 oz	7¼d.

rice according to size and substance for square-om stock.

SH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
d plate	4¼d.
h rolled	5¾d
h rolled	5¾d
red Rolled, Oxford Rolled, Baltic, Oceanic, ctic, Stippolyte, and small and large emish white	6¼d.
Ditto, tinted	9d.
d Sheet	6¼
e Rolled Cathedral	5¾d.
d do.	7¾d

ast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £	s.	d.
rnish	Outside	0	14	0
to	ditto	0	16	0
pal	ditto	0	18	0
pal	ditto	1	0	0
pal Carriage	ditto	1	4	0
tto	ditto	1	12	0
arnish	Inside	0	18	0
le Paper	ditto	0	18	0
pal Cabinet	ditto	1	2	0
pal Flatting	ditto	1	0	6
rying Oak.....	ditto	0	18	0
rd Drying Oak	ditto	0	19	0
pal Varnish	ditto	1	0	0
itto	ditto	1	2	0
itto	ditto	1	12	0
pan Gold Size		0	10	0
ack Japan		0	10	6
Mahogany Stain (water).....		0	12	0
ck Black.....		0	7	6
Black		0	14	6
g (patent)		1	5	0
and Brush Polish		0	17	0
Dryers in Terebine.....		0	9	0
Black Enamel.....		0	7	0

OLUMN FALLACIES

paper, entitled "Column Fallacies," fore the Institution of Structural Engi-me time back, Mr. E. H. Salmon dealt e following "fallacies":

hat Euler's limiting load merely implies from one type of stable equilibrium er, and does not involve the failure of mn.

hat the defect in Euler's formula is ect of the direct compressive strength.

hat the deflection of an ideal column definite function of the load.

hat the Eulerian length relations have licability in practice.

hat it is possible to prove the Rankine-formula theoretically.

hat the constants in the "eccentricity" the Rankine-Gordon formula are the those in the ordinary Rankine-Gordon

hat a "straight-line formula" is the column formula.

hat eccentricity of loading is the principal f weakness in columns.

hat the eccentricity of loading on the rvature are functions of the radius of

hat the bending stress in the ordinary erfectly direction-fixed at the ends is the middle and ends.

hat if given end conditions, the "free is a fixed proportion of the length of ary column.

hat there is a tension-side in the practical column.

hat the Considere-Engesser theory ues for the crippling load suitable for actical design.

hat a column with flat ends is fixed in at the ends, and that its failure is bout by the ends "swinging round."

hat a "solid" column is stronger than laced column.

hat in built-up columns, the moment of inertia about the two principal axes should be the same.

(17) That bottom plate columns are necessarily unscientific in design.

(18) That the ordinary theory of columns has any applicability in practice.

Dealing with No. 8, he said: There was a tendency in some quarters to regard eccentricity of loading as the prime, if not the only, source of weakness in columns, and the majority of semi-rational formulæ for columns contained terms allowing for either or both unintentional and intentional eccentricity. It was quite true that in a column with position-fixed ends, such as a round-ended specimen in a testing machine, eccentricity of loading had a great weakening effect, but if the ends were fixed in direction also, the eccentricity had no effect whatsoever. In practice, one or both ends of almost every column were attached to some other part of the structure, which attachment more or less fixed it in direction, often very imperfectly, but only in very rare instances was the member free to deflect as an eccentrically loaded specimen. Yet the secant formula in various disguises was quite commonly applied to such members. The attachments referred to usually resulted in external bending moments being applied to the ends of the columns, often exceedingly difficult to determine with accuracy, and too often neglected in design, but the effect of such moments is not the same as an eccentricity of loading, nor was the ordinary eccentricity formula applicable. On the other hand, initial curvature was inevitable in all columns, and alike weakened both position-fixed and direction-fixed columns. Its effects were by no means identical with those produced by eccentricity of loading. It greatly modified the distribution of stress in the ordinary direction-fixed column as compared with the ideal, perfectly straight, direction-fixed column, and it further had the effect of considerably increasing the shearing force as compared with eccentricity of loading. There was some justification, therefore, for the view that initial curvature was the prime cause of weakness in columns. Nevertheless, Howard, of Watertown Arsenal, who, with the possible exception of Tetmajer, must have conducted more experiments on columns than anybody else, regarded reduction in the quality of the material due to effect of past history, particularly cold-straightening and stresses set up during manufacture, local permanent sets, &c. (to which might be added annealing—in fact, any cause which lowered the elastic limit), as the chief cause of weakness in columns. He said that "variations of 25 per cent. and over in the elastic limit, as found in these plates and angles, would overshadow those considerations which find expression in empirical formulæ for strength and take no account of such variations."

In connection with "fallacy" No. 18, he said: the ordinary theory might be said to have originated with the experiments of Musschenbroek in 1729, who found that the strength of his specimens varied inversely as the square of their length. This discovery appeared to conflict with the ordinary beam theory as then understood, and led Euler to his famous investigation, which resulted in the well-known Euler formula. Euler himself was not a little puzzled by his result, and it started a fierce controversy which had never completely died out. The practical men said the theory was nonsense. Their attitude was well expressed by Robison (1822) who characterised Euler's memoirs as a "dry mathematical disquisition" based on assumptions which were "extremely gratuitous," and said that "the most important consequence of the compression is wholly overlooked." He therefore rejected Euler and the speculations "with which he was then amusing himself" as false and useless. The mathematicians confirmed Euler's results, and gave more rigid and stricter analyses in support, but the objections of the practical men still required an answer. One man, it was true, saw through the question—that somewhat unappreciated genius, Thomas Young—who, in 1807, pointed out that the differences under discussion were due to want of agreement between the assumed and actual conditions. Young, in 1807, first gave the correct theory for both eccentricity of loading and initial curvature (given as exercises for students!) and pointed out the now well recognised validity limit of Euler's formula, thus disposing of most of the difficulties. Possibly owing to his confused and obscure style the world in general ignored Thomas Young, and proceeded to make experiments—to prove or disprove the correctness of Euler. If all the well-known series of experiments be examined, from Hodgkinson onward (excepting only some of the American experiments), they would be found to be modelled on the Eulerian theory as a basis. Now, the Eulerian assumptions, although convenient for the mathematicians, were very difficult to realise in the testing machine, and so experimental conditions had gradually established themselves based upon the theoretical assumptions, but having essential points of difference. Hence had arisen differences between the theoretical and experimental findings, and great pains had been taken to reconcile them; but in spite of all the disputations, mathematical and otherwise, which the column theory had evoked, the battle of the formulæ still broke out afresh on occasion, and the merits of this or that expression as an interpretation of experimental results was laboured once more. Meanwhile, the dust of controversy had quite obscured the fact that widely as the theoretical and experimental results differed from each other, they both differed still more from the practical member.

The ordinary practical column was a relatively short, initially curved, member, not homogeneous, and usually built up of a number of separate elements. It was usually more or less rigidly connected to the other members of the frame of which it formed a part. It was therefore fixed both in position and direction at its ends, though the fixing was often very imperfect. Due to these quasi-rigid end connections, the column shares the general distortion of the framework, and in consequence had to carry bending moments transmitted through the end conditions. These bending moments were usually of the same "hand," so that S-shaped bending was the rule. The deflection curves usual in text-books had no validity in practice. The magnitude of these bending moments depended on the relative stiffness of the various members of the frame, and still more on the "give" of the connections. They could only be determined by consideration of the distortion of the frame as a whole, and were very difficult to determine theoretically. Nevertheless, he believed that anyone with the time and opportunity, who, forgetting the column theory as usually presented, would go to actual structures, and determine from them what actually happened to the members, would find himself in a new, very scantily explored region, and out of such determinations a new column theory would arise founded on practical facts, with frame distortion as the underlying basis.

TRADE NEWS

There are many and various methods of casting concrete piles *in situ*, but it does not necessarily follow the piles will answer the two essentials of being sound throughout their length and free from voids. Messrs. The British Steel Piling Co., Ltd., claim that a pile cast by the "Zenith" Vibro Concrete Pile Process is solid from toe to head, fills the hole completely, and keys itself to the soil. The idea, briefly, is to sink a tube to the required depth and to withdraw it 1½ in. at a time. During withdrawal the concrete is fed through the centre of the tube and rammed by the rim of the tube, which has an up and down motion (80 strokes per minute). This forces the concrete into the hole and results in a completely solid pile. Not only does this method guarantee a thoroughly workmanlike job, but it is claimed it can be done at half the price of pre-cast piles.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾″	1″	1½″	2″
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½″	1¾″	2″
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.
Deal wrot moulded and rebated	per foot cube	14

		1″	1¼″	1½
Plain deal jamb linings framed	per ft. sup.	1/8	1/9	2
Deal shelves and bearers	"	1/5	1/7	1
Add if cross tongued	"	2d.	2d.	2

STAIRCASES.

	1″	1¼″	1½″	2″	2½
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	-
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	-

		s.
Housings for steps and risers	each	0
Deal balusters, 1 in. × 1¼ in.	per ft. run.	0
Mahogany handrail; average 3 in. × 3 in.	" "	6
Add if ramped	" "	11
Add if wreathed	"	23

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2
Sash fasteners	11½d.	Mortice locks	5
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	1
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.
Rolled steel joists	per cwt.	17
Plain compound girders	"	20
Do. stanchions	"	23
In roof work	"	28

RAIN-WATER GOODS.

		3″	4″	5″	6
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7	4
Ogee Do. Do.	"	2/4½	3/1	3/10	4
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4
Do. nozzles for inlets	"	2/2	2/7	3/10	4

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt	59	
Do. Do. in flats	"	57	
Extra labour and solder in coated cesspools	each	6	
Welt joint	per ft. run.	0	
Soldered seam	" "	1	
Copper nailing	" "	0	

		½″	¾″	1″	1½″	2″	4
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2	
Do. service	"	1/8	2/2	2/7	3/10		7
Do. soil	"						
Bends in lead pipe	each					3/3	8
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	
Render, float and set in lime and hair	per yard sup.	2	
Do. Do. Sirapite	" "	2	
Do. Do. Keen's	" "	3	
Add sawn lathing	" "	1	
Add metal lathing	" "	2	
Portland cement screed	" "	1	
Do. plain face	" "	3	
Mouldings in plaster	per 1 girth	0	
One-and-a-half granolithic pavings	per yard sup.	5	

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	1
26 oz. Do.	" "	1	
Obscured sheet	" "	0	
⅛ in. rolled plate	" "	0	
¼ in. rough rolled or cast plate	" "	1	
¼ in. wired cast plate	" "		

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	
Knotting and priming	" "	0	
Plain painting 1 coat	" "	0	
Do. 2 coats	" "	1	
Do. 3 coats	" "	1	
Do. 4 coats	" "	2	
Graining	" "	2	
Varnishing twice	" "	1	
Sizing	" "	0	
Flatting	" "	0	
Enamel	" "	1	
Wax polishing	per foot sup	0	
French polishing	" "	1	
Preparing for and hanging paper	per piece	2/-	to

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges, percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of t

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ticulars quoted below have been y Messrs. Jordan & Sons, Ltd., Registration Agents, of 116 & 119, ne, W.C.2, from the documents the Companies' Registry.

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BUILDING AND CONSTRUCTION Co., 992). Registered July 1. 9-11, , Liverpool. Contractors, builders, al capital, £25,000.

SON & FOLLITT, LTD. (198,973). July 1. 13, Bessborough-gardens, , S.W. Slate merchants, &c. pital, £10,000.

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CONSTRUCTION Co., LTD. (198,960). une 30. Builders and contractors, al capital, £5,000.

N BRICK Co., LTD. (198,962). June 30. Brick and tile makers, at Newington-next-Sittingbourne, inal capital, £10,000.

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N BRICK Co., LTD. (198,658). ne 16. Rotherham-road, Dinning- am, York. Manufacturing bricks, ipes, &c. Nominal capital, £5,000.

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OUGH & SON, LTD. (199,309). ly 16. Knowle Top, Lightcliffe, . Joiner, cabinet maker, under- ding contractor. Nominal capital,

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TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

ABERDEEN.—For the extension of Rubislaw sub-station, for the T.C. :—
*G. Bisset & Son £560

BADSEY.—Additions to Council School, for Worcestershire E.C. :—
†Espley & Co., Ltd., Evesham..... £975

BARNSLEY.—For erection of 50 concrete houses in pairs, for the Housing Committee of the T.C. :—
‡The United Kingdom Housing Syndicate, Ltd..... £670 per pair

BLYTH.—Cleaning and painting schools, for T.C. :—
Morpeth-road School—
*Grant £166 13 6
Crofton School—
*Gray 148 10 0
New Delaval School—
*A. J. Smithson 214 5 6
Bebside School—
*J. Finlay 205 10 0

BRIGHTON.—For alterations to the National Kitchen, Preston Circus, for the T.C. :—
G. H. King & Sons £1,217
Gates & Son 1,190
T. R. Braybon 1,134
Field & Cox 1,085
Charles Kent 1,082
G. Lynn & Sons 1,073
W. & T. Garrett, Ltd. 1,050
*James Barnes & Sons, Brighton 1,036

BRIGHTON.—For the erection of electricity sub-stations, for the T.C. :—

	Preston Park.	*Lewes-road.*
Arthur Vigor, Ltd.....	£7,821 ..	£8,595
T. R. Braybon & Son	7,187 ..	7,581
J. W. Woolnough, Ltd. ..	6,990 ..	7,690
Field & Cox	6,625 ..	7,294
R. Cook & Sons, Ltd.	6,200 ..	6,730
*James Barnes & Sons, Brighton	6,119 ..	6,681

COVENTRY.—For extension of female mental wards, for the B.G. :—
*W. H. Penn, Coventry £1,048

COVENTRY.—For enlargement of Stoke Park Secondary School, for the T.C. The Secretary, Education Department, Council House. Mr. Geo. A. Steane, architect. Quantities by Mr. J. N. Binley, Much Park-street :—
*W. H. Penn, Coventry £10,531 19

COVENTRY.—For supply and laying of 105 yds. of 4 in. cast iron water main :—
*Whiteman & Co., Ltd., Coventry— 11s. 6d. per lineal yd.

DURHAM.—For erection of 14 houses at Ushaw Moor, in lieu of tender withdrawn, for the R.D.C. :—
*A. Elcoat, Auton Stile.

EAST BARNET.—For the construction of sewers and roads on Long-street housing estate, for the U.D.C. :—
*C. Ball, Letchworth £1,250

EXETER.—For erection of a reinforced concrete warehouse at Exeter, for Messrs. Rowe Bros. Messrs. R. M. Chalice & Son, architects, 7, Bedford-circus, Exeter :—
A. Wilkins & Sons, Ltd., Bristol £24,676 0 0
M. T. Sleeman & Sons, Exeter 23,560 0 0
E. C. Lea & Co., Ltd., Exeter 22,708 0 0
W. Brealy, Exeter 22,300 0 0
*R. F. Yeo & Sons, Ltd., Torquay 21,734 16 11

FALMOUTH.—Erection of two shops at Church Corner, for the T.C. :—
*Edwin Thomas £1,969

GEDDINGTON.—For erection of three cottages for the Northampton C.C. Mr. C. S. Morris, County Surveyor, Northampton :—
E. Archer & Son., Ltd., Northampton £1,798 0 0
C. R. Pettit & Son, Thrapston 1,752 4 0
O. P. Drever & Son, Ltd., Kettering 1,680 10 7
A. Lewin & Son, Ltd., Kettering 1,527 0 0
W. Lewis & Son, Kettering.. 1,518 17 5
G. & W. Patrick, Kettering.. 1,486 12 5
S. T. Abbott, Kettering..... 1,460 10 6
Harrod Bros., Kettering 1,450 14 0
*A. Johnson & Co., Kettering.. 1,327 0 0

GEDDINGTON.—For a new by-pass road and bridge :—
*Sir Wm. Prescott & Sons, Ltd., London £9,009 7

GEDDINGTON.—For reconstruction and widening Braunston (Castle) Canal Bridge in ferro-concrete :—
*G. F. Hartigan, Northampton £2,856 6 6

GOMSHALL.—For erection of a bungalow. Mr. F. Nash, architect, 6, New-square, Lincoln's Inn, W.C.2 :—
W. & G. King, Abinger Hammer..... £1,100
H. F. Thorpe, Cranleigh 900
F. H. Woods & Sons, Guildford 857

GOVAN.—For erection of new destructor works at Helen-street, for the Corporation :—
Total estimated cost is about £382,150.
*Heenan & Froude, Ltd., Worcester.

GRIMSBY.—Erection of tool house, mortuary and drying room, for T.C. :—
‡E. Heelas, Cleethorpes..... £552

H.M. OFFICE OF WORKS (accepted during August) :—

Building Works, &c. : Blackburn Post Office Extension—Painter: John Leaver & Son, Blackburn. Plasterer: W. H. Ainsworth, Blackburn. Plumber: W. H. Law & Sons, Blackburn. Slater: George Dewhurst & Sons, Blackburn. Steelwork: Foster Bros., Blackburn. Blaydon-on-Tyne Post Office—Alterations: A. Anderson, Newcastle-on-Tyne. Bridgeton. Glasgow, Employment Exchange—Painter: T. Hastie, Glasgow. Plumber: Hugh Twaddle & Son, Glasgow. Catterick Repeater Station—Erection of Steelwork: A. Lynn, Glasgow. Darwen Post Office—Erection: Robert Shorrock & Son, Ltd., Darwen. Hoylake Post Office—Plumber: Higginbotham & Sons, Bradford. London, Wood-street site—Pile Driving: John Gill Contractors, Ltd., London, S.W. London, The Mall—Relaying roadway: The Improved Wood Pavement Co., Ltd., London, E.C. Mossley Hill Hospital, Liverpool—Adaptation, &c.: J. W. Jones & Sons, Ltd., Liverpool. National Physical Laboratory—Steelwork: Dorman, Long & Co., Ltd., London, S.W. Newcastle (Staffs) Telephone Exchange—Asphalte: The Ragusa Asphalte Paving Co., Ltd., London. W. Steelwork: Redpath, Brown & Co., Ltd., Manchester. Portpatrick Wireless Station—Alterations, &c.: John Taylor, Clydebank. Redditch Post Office—Alterations, &c.: Harry H. Crump, Birmingham. Royal College of Art—Roofing Works: E. D. Winn & Co., Ltd., London, S.W. Rugby Wireless Station—Glazing, Painting and Plumbing: Higginbotham & Sons, Bradford. Sheffield, Beauchief, Telephone Exchange—Erection: W. & A. Forsdike, Ltd., Sheffield. Shoreditch—Erection of Flats: Chessums, Ltd., London, N. Stanley Housing Site—Roads, &c.: D. & J. Crombie & Co., Sunderland. Threadneedle-street Post Office—Fittings, &c.: The Educational Supply Association, Ltd., London, W.C.; John Greenwood, Ltd., London, E.C. Marble Work: Anselm Odling & Sons, Ltd., London, N. Western Telephone Exchange—Steelwork: Dorman, Long & Co., Ltd., London, S.W.

Painting, &c. : Charles Bell (Manchester), Ltd., Manchester; Campbell, Smith & Co., Ltd., London, W.; Dilliway & Co., London, W.; Waring & Gillow, Ltd., London, W.; E. D. Winn & Co., Ltd., London, S.W.

LEEDS.—For rebuilding of the Mexborough Arms Harrogate-road, Chapel Allerton, for Messrs. Joshua Tetley & Son, Ltd., Leeds. Messrs. Kitson, Parish & Ledgard, architects, of Leeds :—
Mason—Samuel Flockton, Leeds.
Asphalter—Tunstall's Rock Asphalte Co., Ltd., Leeds.

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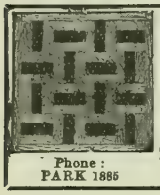
KIDDERMINSTER.—For extensions at the Policemen's Recreation Room, for the Watch Committee of the T.C. :—
*Chas. Walker & Son, Kidderminster .. £184

KIDDERMINSTER.—For the providing and laying of wood block paving upon a concrete foundation in Oxford-street, for the Highways Committee of the T.C. :—
*The Improved Wood Pavement Co., Ltd. £1,325 15 6

LONDON (SHOREDITCH).—Erection of 20 flats at Pritchard-street, for B.C. :—
*Chessum £13,600

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F. A. Roper	989 0	987
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Warnes & Son	910 0	910
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*Davies & Lloyd, Senghenydd, Glam. .. £4,430

NEWBURY.—Resurfacing Greenham and Newtown-roads, for the T.C. :—
*Partington Iron and Steel Co., Ltd... £4,030

NEWCASTLE EMLYN.—For erection of a house, for Mr. T. R. Randell. Mr. R. Jones, architect, Llandyssul :—
*D. R. James, Newcastle Emlyn.... £1,082

PETERSFIELD.—For painting exteriors of houses in Norveuil-road, for the U.D.C. :—
*W. H. Butler £135

ROMSLEY.—Erection of police cottage, for Worcester Standing Joint Committee :—
*Poulton & Davies £650

SEAFORD.—For the U.D.C. :—
Improvements to the Station approach—
*A. & H. Burgess £138 10 0
Paving in Sutton-road, Claremont-road, &c.—
*H. A. Chambers 1,606 13 6

SELKIRK.—For erection of 20 houses on the Goslawdales, for the T.C. The Burgh Surveyor, Municipal Buildings :—
*Inglis & Dickson, Selkirk—
8 houses £1,427 19 6
*J. J. & P. McLachlan, Larbert—
12 houses 2,335 12 3
Joiners
*Charles Brodie & Son, Selkirk .. 2,566 14 3
Slaters—
*Joseph Gibb & Son, Galashiels 646 17 8½
Plumber—
*Peter Ruthven, Selkirk 1,451 13 2
Plasterers—
*A. Clapperten & Son, Selkirk .. 1,288 9 10
Painters—
*The Norfolk Decorators, Ltd., Glasgow 247 3 1½

THURNSCOE.—For the erection of a sewerage disposal work, for the UD.C. Messrs. W. H. Radford & Son, Nottingham, engineers :—
The Provincial Construction, Co., Ltd., Sunderland (approx.)..... £25,000

TORQUAY.—Summer residence for Mr. W. J. H. Whittall. Messrs. Bridgman & Bridgman, F./A.R.I.B.A., architects, Torquay. Quantities by Messrs. Harris & Hills. Paignton :—

A. E. Brock, Torquay -.....	£2,095 7 3
J. Webber, Paignton	3,052 5 0
E. P. Bovey & Sons, Torquay ..	2,812 0 0
Wilkins & Sons, Torquay	2,676 5 0
R. Yeo & Sons, Torquay	2,539 9 3
F. Zealley & Son, Newton Abbot	2,468 10 9
*R. Spiller, Chard	2,398 0 0

TROWBRIDGE.—For the erection of 10 pairs of houses, for the T.C. :—
*J. T. Parsons, Westbury....per pair £960

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WAKEFIELD.—For the resurfacing of Wood-street and Westmoreland-street, for Highways Committee of the City Council :—
*The Limmer and Trinidad Lake Asphalt

WARRINGTON.—For resurfacing of S lane, for the T.C. :—
*Highways Construction Co.....7s. 6d

WORTLEY.—For erection of 20 house bridge, for the R.D.C. :—
*J. W. Bailey, Tinsley .....

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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

L.—No. 4261. OCTOBER 3, 1924.

PEACE IN THE BUILDING INDUSTRY

s reported that at the annual general meeting of the Jational Federation of Building Trade Operatives resolution was passed unanimously to the effect that he entire operative fraternity would resign from the Jational Wages and Conditions Council. If this course e adopted it is for the time being the end apparently nal settlements of disputes in the building trade, and ition may be a serious one. For the National Wages nditions Council has been for some years now the only npowered to settle disputes, in so far as it had been that no strike or lock-out should be declared until the n dispute had been referred to the joint national body ement. With this body removed, the way would be clear stant local disputes and consequent dislocation of the y.

irst sight it would seem to be a retrogressive course. tory of the organisation of the building trades, both e employers and the operatives, has shown a tendency om local government and towards national legislation whole. Consequently, to revert to sectional demarca- ust seem a retrogressive step, though it must be re- ed that for the last two years there has appeared to be a dissatisfaction with the joint council, judging from t that it has been necessary to submit the Council's to arbitration on more than one occasion.

eview very briefly the history of the movement may seful at such a crisis. In 1916, in common with a feeling throughout the industry, both sides became impressed desire to render their full share towards the creation of nd better industrial order. Towards the end of 1916 ls to this end were circulated and submitted to the l Federation of Building Trades Employers by the g Trades Council. Out of these arose the Building Parliament, which, though it preceded, soon became ted to, the Whitley Councils, which from 1917 onwards up in every industry with a view to obtaining industrial At this point a quotation from the introduction to the for the Builders' Parliament may have an interest ing on the present, and the resolution reported above drawing from the National Wages and Conditions : "Both employers and employed," says this intro- "have been the unwilling victims of a system of ism that has organised industry on the lines of a tug- and permeated the whole national life with sectional f thought and outlook."

at was the condition in 1916, it would not seem a pro- step to revert to sectional settlement in 1924. When et up in May of 1918, the Parliament became known Industrial Council for the Building Industry, and the included "Regularisation of Wages—Prevention of oyment—Employment of Partially Disabled Soldiers— l Training and Research—Continuous and Progressive ement—Publicity. Though the Parliament continued four years, and effected a certain amount of good, to an end, as all such bodies must which exist only as a mutual trust continues, when that trust and con- eased. The death blow was administered by the Foster and arising out of that the National Building Guild.

Out of the ashes of the Parliament, and even before its final decease, arose another joint body known as the National Wages and Conditions Council, functioning, as its name implies, in the settlement of disputes concerning wages and conditions of labour. Education and advancement were for the time being in abeyance. For a time this functioned well, all adjustments of wages being automatically arrived at on an agreed scale known as the sliding scale, based on the cost of living figures at the time of the periodic adjustments. But here again lack of confidence brought disagreement even with the interpretation of the meaning of terms of the document, which both sides had previously agreed as being the constitution of the joint council. As it must be presumed that both sides knew and understood what they were agreeing to at the time of the establishment of the Council—it was certainly discussed in sufficient detail—the failure to function can be only due to a loss of mutual confidence. So that in 1924 the industry is practically where it was in 1916. Circumstances actuate in wave motions, and the waves have rolled back. But as surely as they are now in retirement so surely will they progress forward again.

May this not be, therefore, yet another opportunity for a further effort towards the permanent betterment of the conditions of the industry? And in the making of that effort will it not be wise to give the fullest reflection possible to the cause of disruption in all past effort? It has been suggested in our columns on various occasions that the composition of the joint bodies may not have been sufficiently wide in its embrace, and that there are more than two parties that go to make up the building industry. There are three parts, if not four. And is it not reasonable to suggest that all parties concerned should be represented upon a joint board that is empowered to settle the conditions of that industry in which these parties are concerned? Can any lasting settlement ever be effected by two parties who conceive their interests to be opposed? Is not the mediation of some third party essential to such settlement? The final resort to arbitration, as in the case of the Fraser award and again more recently Lord Buckmaster's intervention, after all the avenues afforded by the National Wages and Conditions Council had been explored and failed in providing a solution, would seem to prov beyond doubt that a third party as mediator is essential.

If this is so, if it is a fact that no permanent ettlement can be reached between two parties to an industry and resort has to be made to a third party, to whom can such appeal be made more suitably than to a third party to the industry where such party exists? In the building trade this third party does exist, *i.e.*, the building owners, represented by their architects. To whom could it be more suitable to make final appeal in any matter in dispute between the employers and the operatives than to the architect? Who more fitted by training, knowledge, education, and experience? We should like to see representatives of the profession come forward with a properly considered scheme for the constitution of a joint board composed of all parties, to take the place of those composed only of two and which have failed: and let these representatives proceed with the requisite energy to see that their efforts meet with recognition and beneficial result.

NOTES.

Standardisation in Housing. In order to meet the urgent need of houses we see it argued that standardisation is necessary, with its accompaniment of monotony, if nothing else unpleasant. If the demand for houses can be met in no other way than that of mass production—which may be questioned—it is at any rate of the first importance that the original design shall be one which is in itself becoming. It is, unfortunately, the case that we have had to associate mass production with great poverty of taste, and it is evidently desirable that very much more care should be taken to secure some decency of form in what is to be reproduced so many times. In the case of pottery, the mass production of teapots and jugs, for instance, it is no great evil if the original design from which so many thousands are to be produced is in good taste and fitted to its use, and it is towards this that the manufacturer is moving, replacing foolish and exaggerated shape and vulgar ornament with better design. It appears to us that any scheme for mass production of houses should not be broadcast, but limited to districts taking note of local characteristics. Thus a standardised building suited to Glasgow would be unsuitable, let us say, in York, where local characteristics are different. When we come to consider how, in the first instance, to secure good design in all the parts of small houses or cottages, it is more difficult, for without sound architectural guidance—unless the matter be first entrusted to architects to scheme out something appropriate—we are likely to suffer from an accession of ugliness.

The Burden of Housing. Mr. J. E. Drower's series of articles in *The Times* under this heading show a refreshingly broad outlook and should be of the greatest value in familiarising the public with our problems. We find among the fundamental requirements in a house that "health, comfort and decency must be considered, and the eye must not be displeased." This sound advice shows how far we have advanced during the last few years, for a very short time ago one would have been branded as "unpractical" if one had suggested that there was the slightest objection to ugliness in a house. We are filled with envy when we hear that we must beware of flat cement roofs because "the rooms under are insufferably hot in summer." We wish we had been under one of these roofs last August!

Ivy. There exist two principal ways of destroying buildings, both equally efficient, but one quicker than the other—(*a*) dynamite, (*b*) ivy. The destruction wrought every year by the latter would be astounding could it be put into figures. Once ivy has attained a real grip on a building it will send its roots into every crevice of the wall, sucking the mortar into dry dust; its tendrils will wedge the stones apart, and its branches act as sails to catch the wind. The result is inevitable. or later during a storm the collapses and everyone attributes the action of time instead of attac blame to the ivy. But even if not these deadly attributes there nothing beyond a vague sentim to urge in favour of its existence old ruins that possess the slighte tectural value. Ivy has its plac suitable enough when restricted walls of no value or interest or tree stumps. There is no doubt, what we do about ivy and its need of a great deal more circum as to its control.

A £32 Cottage. There is a good interest in the stat a correspondent *Times* who describes how he b four-roomed thatched cottage, bu 40 years ago, and sold by two l "who, I imagine, built it" for £ price included the freehold la garden. A few years later it hands at £45, so there was no app worked by time in the characte building. The point is, as th spondent adds, "that it is now by a friend of mine, and thoug not 'modern conveniences' it 'to be incomparably warmer a comfortable to live in than the lately built in the village b authority at 30 times the cost.'" wit seems here to have been ca more than all the machinery of tion, and it suggests the consider





Bridgwater War Memorial: Details. Mr. John Angel, Sculptor. (*See also p.* 507.)



Bridgwater War Memorial: Detail.
MR. JOHN ANGEL, Sculptor.

give more play for this native ; this initiative of the handy o use his brains and apply his dent methods to the problem of . We are reminded of additions me years ago to a country house, g much reconstruction and altera- cluding a 40 ft. chimney stack, alterations and additions were lished by village labour, a handy ho could thatch or lay bricks, a fence as the need occurred ; the er, a labourer also from the village, asterer called in from the adjacent Under lay guidance the work ecuted in a very unconventional ut many were the cars which up in the by-road that passed se to see this effort of village anship, which, however, was mistaken for ancient work in spite riginal intention of the workers.

---

eed en. SOMEHOW or other we have to find means of liberating more of this personal initia- he correspondent goes on to "Can nothing be done to en- individual effort ? An English- still use his hands if he is given e." All this is well worth ponder- er. Our towns and country abound in men of robust practical learned in a hard school and fit with such work, but they are not Organisation fails us if it fails to men, or uses them so little, or s them that they have no power tive granted them. We feel in so stances that the housing scheme he machine rather than the man. had enough experience of the so- ude and uneducated to realise re often lies in him a power to do acking in the more theoretically

National Monuments. THE fact that some three hundred monuments are now noted as under the protection of the Office of Works is indication enough of the value to be attached to the persistent efforts in recent years for the preservation of places and things which by reason of beauty, tradition, or association claim a vital interest from the nation. Besides subjects of some outstanding importance, however, there are many which can only be preserved by the good will and intelligence of private owners, and the value of many modest but valuable old buildings is often ignored or overlooked unless the vigilance of a Society or a professional man is pertinently exercised. We should all be interested for the common good in helping to identify and preserve those relics of the past which still add to the charm and interest of our modern life.

Industrial Truce. IT is, perhaps, too readily assumed that to delay an evil may be to put it off altogether. But if a truce in industrial disputes could be arranged on such terms as would allow time and opportunity for trade to revive, should we even then be in a better position to estimate fairly and rightly the proper functions and values of capital and labour and of their relations to each other ? We doubt it unless we all give up the aim of making political capital our real objective. Then, of course, if there be any value in having a truce is it not in the hope that it may be made perpetual ?



The 24th Division War Memorial, Battersea.
MR. ERIC H. KENNINGTON, Sculptor. (*See p.* 506.)

GENERAL NEWS

Professional Announcement.

Mr. G. Alan Fortescue, A.R.I.B.A., has removed to 46, Dover-street, W. Telephone: Gerrard 3415.

The Berks, Bucks and Oxon. Architectural Association.

The "Year Book" of this Association has recently been issued. The Council state the year 1923 was one of steady progress in numbers and in activities; the membership, exclusive of honorary members, now amounts to 141.

Architects' Estates.

Mr. Arthur Eaton, of The Summit, Burton-road, Derby, architect and surveyor (net personalty £4,142), £6,594.

Mr. George H. Barrowcliff, of Loughborough, architect and surveyor (net personalty, £2,024), £10,482.

New Methods of Building.

The Committee which has been set up under the chairmanship of Sir Ernest Moir to inquire into new methods of house construction met recently. With a view to expediting their investigation the Committee would be glad to receive as soon as possible any further proposals for new systems of house building or for new materials. All communications on the subject should be addressed to the Secretary, Mr. T. H. Sheepshanks, Ministry of Health, Whitehall, S.W.1.

London University Lectures.

Dr. Percy Dearmer will lecture on the ten Tuesdays of the autumn term on "A Summary of Ancient Art," at King's College, Strand, commencing at 5.30 p.m. on October 7. The lectures, which will be illustrated by lantern slides, will deal, amongst other things, with the architecture of ancient Greece and Rome. Admission for non-members of the University is by ticket (price 1s.) obtainable at the door. A syllabus of the lectures can be obtained, post free, from the Lecture Secretary, King's College, Strand.

Liverpool.

The Medical Officer of Health has just issued his report for 1923, with observations up to June 30, 1924, in which he states that the position of the housing question is still an unhappy one. In the ten years preceding 1914 the number of houses built was 17,743, while during the ten years succeeding that period only 7,576 have been erected, although during these latter years the population has increased by 59,846, so that Liverpool at the present time is worse off as regards housing accommodation by rather more than 10,000 houses.

Proposed Town Hall, Greenwich.

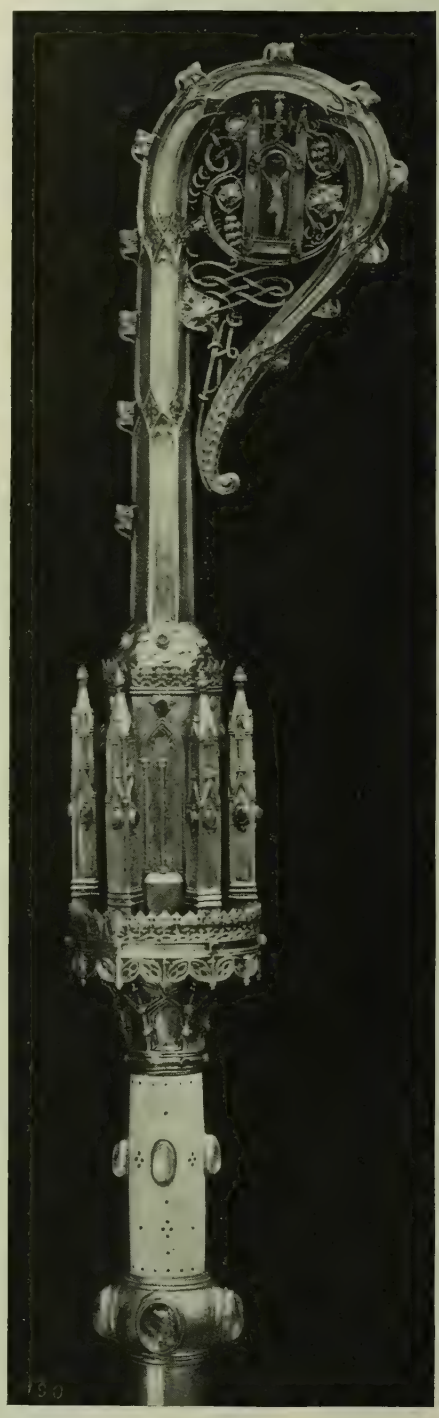
The Greenwich Borough Council recently gave consideration to a proposal to purchase the freehold of Charlton House, the residence of Sir Spencer Maryon-Wilson, Bart., and other buildings, together with the land, for £60,000. The special committee are of the opinion that, if the property is purchased, the question of the provision of additional houses should be uppermost. They also consider that the mansion is suitable for a town hall, and would be large enough to house every department of the Council. The cost of a new town hall, it is estimated, would not be less than £100,000.

Obituary.

Mr. J. J. McDonnell, F.R.I.A.I., died recently at Belfast. Born in 1857, he was a pupil of the late Mr. Timothy Heavy, F.R.I.A.I. The late Mr. McDonnell designed many Roman Catholic churches, convents, schools, &c., throughout the North of Ireland, the church and monastery of the Redemptorists at Clonard, Belfast, and the new Church of Our Lady of Lourdes at Toombridge, co. Antrim. St. Paul's and St. Brigid's Churches, Belfast, and the churches at Kilcoo and Teconnaught, co. Down were built to his designs. A member of the Royal Institute of Architects since 1884 and in later years a Fellow, he was a former President and member of the Council of the Ulster Society of Architects.

Exhibition Notes.

A rather exceptional little show of water colours is on view at the Grosvenor Galleries, in Bond-street. The delicate charm of drawings by Hester Frood will be much appreciated; and there are a number of drawings by Muirhead Bone, some of exceptional quality. His expression of the Doric columns in the Corinth drawing and a forcible water colour of Constantinople, with a sea view of Stromboli are things which arrest one amongst much that is vivid and attractive. James McBey has several telling sketches; and Sir D. Y. Cameron's small drawings lend distinction to the collection.



Silver Crozier for Maryland Cathedral U.S.A.

Designed by MR. EDWARD SPENCER.

(*See p.* 508).

COMPETITION NI

Freemasons' Hall, Nottingham

Messrs. John Howitt & Son have bee ful in a competition for the erection of in Goldsmith-street, Nottingham.

Bradford Masonic Hall.

The full result of this competiti follows: (1) £200, Messrs. Ross & 78, Manningham-lane, Bradford; Messrs. Eric Morley and Wm. Il Market-street and Sunbridge-road, (3) £100, Messrs. Longbottom & Teb mercial-street, Halifax.

Christian Science Church, Southp

Designs are invited for a new ch Sunday school at the First Church Scientist, Southport. Premiums of and £30 are offered respectively. The are Messrs. J. E. Sanders & Son, A. 219A, Lord-street, Southport, to whom tion should be made, accompanied by a of 10s., returnable only to those wh designs.

[Barrow Hill Memorial Club.

Applications are invited for pl specifications for the erection of a way of extension of the existing Ba Memorial Club, near Chesterfield. App cost, £4,000. Particulars can be obta the Secretary of the Club.

Other Competitions.

Other competitions still open inc following (the dates given are, first the s date, and second the issue of *The B* which full particulars were given) :— Hall (May 1). Manchester Art Gallery Aug. 22). Concrete Cottages (Oct. 31;

THE 24TH DIVISION MEMORIAL, BATTER

A London sculptor, Mr. Eric H. Ken has designed an original memorial to t in Battersea Park, London, of a famous Division. Three men of the Divisio closely together, with hands clasped full accoutrement. At their feet is snake which they have together Although the men are uniformed, this obtrude nor hide their essential h They stand straightly and firmly o inscribed boldly with name and date. its turn is supported on a circular ornament being the crests, badges and of the regiments, redesigned by the into a frieze. The Portland stone co carved by the sculptor, who worked model in plasticine in which the n under 14 in. in height; in actuality is 6 ft. 9 in. by 3 ft. 4 in. The inscript Miss Sampson, who helped with the around the cylindrical base.

CORRESPONDEN

The Architect's Debt to Rusk

SIR,—All those who acknowledge to Ruskin's teachings will be gratifi Halsey Ricardo's paper in the last iss *Builder*, and by your own references t all too rare sympathetic attitude le suggest that those who wish to ge Ruskin will be more successful if the "The Two Paths," "Lectures on Art of the lesser works, rather than atte read "The Stones of Venice" or th Lamps." Much of Ruskin's subsequ unknown to many who have absorbed mental writings, and in many re smaller pieces are even more importa is, too, his very first piece of ar criticism, the "Poetry of Architectu is a unique source of inspiration for th tural student.

MAX



Bridgwater War Memorial. Mr. John Angel, Sculptor.

[The illustrations of the Bridgwater War Memorial in this issue are photographs of the plaster cast. The memorial is in bronze.]

THE CHURCH CONGRESS EXHIBITION

No centre in England perhaps could have been chosen with such wonderful associations in regard to the story of the Church as Oxford. The whole atmosphere of the fine historic city is just the right one. Only once before has the Church Congress been held there, and that was so long ago as 1862, the year following its institution.

The Exhibition, which always takes place side by side with the Church Congress, is this year held in a specially erected building, it being impossible to find in Oxford a hall large enough for its display. The governing body of Christ Church kindly loaned a site in the Merton Field, Rose-lane. It is very near the Botanical Gardens and easily approached from the High-street. Here the two distinct sections of the Exhibition are arranged, the General and the Loan.

The General Exhibition.

This consists not only of a large number of exhibits of many of the larger and more important Church societies and religious and philanthropic organisations, but also consists of the stalls of a great number of well-known church furnishers, church publishers, noted artists and guilds of craftsmen. It is a very great opportunity for the display of really fine work. The publishers and their printers and binders generally do excellently. The help societies also make splendid displays of their activities; but somehow, with just a few exceptions, the work shown by the firms and their craftsmen in metal and wood, stone and marble, fail to impress, and the level is certainly not so good as it should be.

Generally, the craftsmanship is better than the design—this, over and over again, fails badly; at times we are back in the 60's and 70's of the last century. The lettering of many of the memorials shown is extremely poor. The fine work of Edward Johnston and Eric Gill has in no way been studied. Now students in all our craft schools are taught how to letter well. Why do not these firms obtain their services?

The silversmith's craftsmanship is certainly of a very high level, as illustrated in two or three of the artists' exhibits; perhaps nowhere could such fine work be seen. The very charming altar cross, candlestick and vases in silver, made for the Chapel of Wickham Abbey School, are quite perfect in their way. These have been designed by Mr. Edward Spencer, and they were made by the craftsmen of the Artificers' Guild, of Conduit-street, W. Their stall is filled with some of the most beautiful work of the modern silversmith. A crozier, designed also by Mr. Spencer and made by the Guild, has recently been sent to the States. It was made for the Cathedral of Maryland, and is excellent in its design, outline and execution. Most beautiful chalices, alms dishes, and a wonderful variety of other church and secular plate is extremely well shown.

Another well-known gold and silversmith, Mr. Omar Ramsden, is very well represented by many choice pieces of fine design and excellent craftsmanship. He pleads "that such vessels and ornaments as we may add to our cathedrals and churches should be worthy to be handed down to future generations as representative of our epoch." He has devoted himself to the study of ecclesiastical and ceremonial plate for many years and has executed many fine things. A large silver cross is shown by him, made for St. Michael's, Chester-square, W., a replica of the one that was recently stolen; and there are exhibited a great number of other excellent pieces, particularly fine altar crosses and candlesticks, as well as chalices and hanging lamps.

Messrs. Barkentin & Krall exhibit a great number of more orthodox pieces; nearly all are greatly influenced by old work. A fine rock crystal and silver cross is shown with its two charming candlesticks. Last year this firm made the remarkable silver reredos for the Lady Chapel of Saint Mark's Church, Philadelphia, U.S.A. Its width is nearly 7 ft., and its height 11 ft. Messrs. Keith & Co. and Messrs. J. Wippell & Co. also exhibit silversmiths' work. On the whole, with the exceptions mentioned, most of the other metal work is not very good.

The Bromsgrove Guild show details of two interesting windows, recently placed in the Cathedral Church of Hereford. Each consists of four lights, and they were designed by Mr. A. J. Davies. They are in memory of Bishop Stanbury, and certainly are extremely interesting specimens of recent glass work. There is a great deal of other glass work shown, but little of it calls for any note.

The Royal School of Needlework show some extremely good examples of their craft. A hanging, for the altar of the Lady Chapel of Southwark Cathedral, which has been kindly lent by the Dean and Chapter, could hardly have been more beautifully designed or worked. The designer was Mr. J. N. Comper. The subject is the Crucifixion.

Over it is placed a very fine frontlet for Hatfield Parish Church; in its original position it comes over a rose brocade frontal. The lettering is admirable. The designer was Mr. W. H. R. Blacking. The Great B
Westminster Abbey is also very g
was given by the Girls' Friendly So
memory of their men-folk who fell in
War. This also was designed by Mr

There are other exhibits of needle
the above call for special comment.

The Loan Collection.

The section of the Exhibition whi
many of its adherents look perh
forward to is the general display o
church plate, service books, ma
vestments and other needlework
annually gathered from the district
the meeting is held. Each district ha
peculiar and distinctive characteristic
and workmanship, and the Oxford di
its own traditions quickly recognisable
of its plate. It is this that makes th
display so fascinating. And again, th
other great advantage to the lover
beautiful works of art of the past;
of these fine pieces would never be se
by a very few had not these exhibi
instituted. This year these treasure
played in an annex of the great
hall and, as is usual, there are ve
beautiful pieces shown illustrating
the silversmith's craft. There ar
strikingly beautiful pieces made pr
1500, but the greater number are of
turies after.

The vicar and churchwarden of
Oxford, lend one of the earliest piece
shown (34). It is supposed to have b
for secular purposes originally, but
than 460 years it has been used as a
It belonged to a wealthy Oxford b
butcher who died before 1478. It
6 in. high, and weighs 12 ounces. Th
of the bowl is 4½ in. across and 2¾ in.
The design of the base is unusual an
compared with the fifteenth-century
cup at Caius College, Cambridge.

A splendid chalice (42) is lent by
and churchwardens of Old Hutton, Ke
is a fine example of great graceful
simplicity. The knob of the ste
six representations of the face of our
a very unusual occurrence. Its date is
to be about 1460, but there are no
all upon it. The foot is beautifully eh
engraved.

A similar chalice comes from Little
don (68). It is nearly 6 in. h
and the bowl is 4 in. in diameter. It
gilt, and the whole is a fine example o
craftsmanship. Another one, from th
of St. Faith, Bacton, Herefordshire
also of the same type and period (147



Window in Hereford Cathedral. Designed by MR. A. J. DAVIES.



Chalice and Paten.
signed by Mr. Omar Ramsden.

to have been worked by the same
t made the celebrated one at Nettle-
The great beauty of the design is
and the chasing of the figures is char-
of the finest fifteenth-century work.
ır fine chalices are the gems of the
, and the only examples of pre-
ion ones exhibited. Another very
y piece is the copper-gilt paten lent
car and churchwardens of Bredhurst,
(244). It is thought to be early
century. The cathedrals of Chiches-
coln, Worcester and York all have
a similar type and date.
arkable cup is loaned from Wraxall
Dorchester (324). Its height is only
The bowl is nearly straight-sided and
tapers to the bowl very effectively,
owl and the base and its stem are
with simple lines only. It is now
chalice, but obviously it was hardly
ed.
re also exhibited very many fine cups
ns of the two following centuries.
mmunion plate from Pattishall
Towcester (259), consists of a
set of five pieces, which include a
nd paten, a flagon, a tazza and a
is decorated with repoussé work,
ased, the whole being of silver-gilt.
esented by the Duchess of Dudley in

fine standing cup and flagon of
bout the same date is lent by the
churchwardens of West Pennard,
ry (154-5). Both are elaborately
with repoussé floral designs, finely
They are supposed to have been
plate, and they were given to the
1719.
er-gilt ciborium from the Church of
la-Zouch (84) is of unusual shape,
rather foreign in appearance.
large, weighing 41 oz. A similar
mongst the treasures of Lichfield
It is recorded as a chalice. "The
nble. Countess of Huntingdon gave
ust 28, 1677." It is dated 1676,
ving Gothic lines, it looks of earlier
hip.

As is natural, the plate of the time of Queen Elizabeth is extremely well represented. This was the great period for replacing the destroyed treasure of the churches. All the early pieces of this period, although so different in design and workmanship, are beautiful in their own way. The great ceremonial having changed, they also have changed—they have become communion cups instead of the splendid chalices.

From the church of Fifield-cum-Idbury, Oxford (66), is loaned a beautiful one with its cover, both dated 1576; and another is loaned by the vicar and churchwardens of Leigh Delamere, Wilts, of similar fine proportions and workmanship. It is dated 1577.

The plate sent from Easton Maudit Church, Northampton, is of silver-gilt, and consists of the chalice and paten and the flagon. The height of the chalice is 11¾ in., and the date is 1630. The flagon is dated 1672, and its height is 12½ in. These are very fine examples of the period.

A glass cup in a leather case also is loaned by the same church. It belonged to Bishop Morton. It is perhaps of rock crystal and of Italian workmanship. It is only about 5 in. high and elaborately engraved and gilded. It is lent by the rector and churchwardens.

The very fine silver-gilt grace cup of the City Church, Oxford (400), is now used as a chalice. It was made in 1606 and weighs nearly 20 oz., standing 16 in. high. It is a splendid piece of plate, and is the one fine steeple cup in the exhibition.

The great communion cups and flagons which followed from, say, 1680 to 1800, are very well illustrated. Two silver-gilt flagons dated 1718 are loaned from the church of Aldermaston, Reading, and one fine one is sent from the Abbey Church at Tewkesbury: it weighs over 54 oz., and was given in 1688. Another is loaned from Kirtlington Church, Oxford, and was made in 1723. One from the Church of Steeple Ashton, Trowbridge (174), made in 1736, weighs 84 oz., and is more than 14 in. in height.

At this period very little difference seems to have been shown between the plate used for the services of the church and the plate for domestic, college, or city companies' use; the secular type predominated. The fine subtleties of the early pieces become lost entirely and are not attempted again until the craftsmen of the Mid-Victorian period, under the influence of the Gothic revival and its leaders—Pugin, Barry, Scott, Street, Butterfield, and many others—again revert to old types out of which has sprung a tradition which has inspired such fine modern work of to-day. The early men were followed by Bodley, Bentley, the younger Scott, Sedding and others, and they did much to induce the individual craftsmen to produce charming things that have been gradually placed in our cathedrals and churches; and men like Henry Wilson, Bainbridge Reynold, Paul Cooper, Edward Spencer, and Omar Ramsden have all helped to continue the fine tradition of English metal craftsmanship.

In addition to the plate are gathered and exhibited excellent examples of old Italian and Spanish needlework as well as English. Some very recent work is also shown. The pall made in 1918, designed by Mr. C. G. Hare and executed by Messrs. Watts & Co., is a fine example. It belongs to the English Church Union. The other fine pall shown is lent by the Dean and Chapter of Westminster Abbey (49). It was designed by Mr. W. D. Carõe, F.S.A., and executed by Miss M. Hollier. It was given by the Actors' Church Union. Other fine pieces of needlework—two stoles—have been designed by Mr. J. N.



Altar Cross and Candlesticks, Wickham Abbey School Chapel.
Designed by Mr. Gowan Spencer.



Ciborium in Hand-wrought, Chiselled and Repousse Silver Gilt.

Designed by MR. OMAR RAMSDEN.

Comper, and are loaned by Worcester College. Oxford.

The setting provided for this exhibition is hardly worthy the great treasures gathered together. The exhibits are crowded; at least four cases more should have been provided. It is perhaps unwise not to confine the exhibits from the district and neighbourhood; a general collection is not wanted; it is the work of the locality that is so fascinating. Types of local craftsmanship should be sought for, and then it would be possible to compare them with other districts and careful study would be possible. The offer of a piece from a distance it would be well to resist. An old hall, such as a college hall, is the real setting for these precious things, and it is a little unfortunate that one could not be obtained.

The Exhibition of the Church Crafts League.

The exhibition of the Church Crafts League is held in the Hall of Keble College, one of Butterfield's great successes. The very fine decorated roof, with the great range of windows below it, and the panelling and portalling, all make a fine setting for such exhibits. All these extremely interesting buildings of Keble have been erected since the last Congress was held at Oxford in 1862. This Hall was erected in 1868, and the renowned chapel dedicated in 1873. It is an excellent place for the proper display of the arts and crafts, and one regrets the Loan Exhibition could not also have been held here.

The League was founded in 1899 with the object of infusing new life into the building, decoration and the furnishing of the churches.



The Marston Chalice.

Its aim is to act as a medium of communication between the Church authority and the artist. Its object is excellent. Ruskin and Watts were early patrons, and it has always exerted a very great influence.

At once, on entering the Hall, the great tryptich at the far end arrests attention. It is intended for the high altar of St. Teilo's Church, Cardiff. It is not quite complete, but a good detail drawing hanging near it shows the finished design well. It is of English oak, the central panel with a figure of Our Lord with adoring angels on each side; the wings also contain low relief figures of angels also. The whole is splendidly gilded and coloured. It certainly should form an extremely striking figure at the east end of the church. The architect is Mr. J. Coates Carter, and it was made by Messrs. Boulton & Sons. Quite near is another fine reredos with its side screen. It is for Buckland Church, Berkshire, and is apparently designed to take its place below a great window. It is treated in a thoroughly English traditional manner, having just a row of niches with their figures extending its whole width. They are all richly gilded and coloured. The crowning, cresting and cornice are apparently in ebonised oak, and give a pleasing effect to the gilding and colouring below. Finely



Chalice from Little Farringdon

woven altar frontal and hangings exhibited, as well as a well-pro cross with its candlesticks. These are gilded. Mr. Harold S. Rogers is the a

A very large wooden crucifix is hibited. The cross, of oak, is an u large and elaborately designed one, b a French cross at the Victoria and Museum. The figure seems of some so apparently to be coloured or gilded. side figures are not in position. The



15th Century Processional Cross, from Burford Church.



Silver Cross.
By the ARTIFICERS' GUILD.

n of the church to which it is going. ward is the architect.

Jessie Bayes also exhibits an altar th its companion candlesticks, in oak, nd coloured. The treatment of the n is rather weak, and would hardly short distance. The glass is well dis- nd consists of very good wood, very tter than that shown in the General on. Naturally the individual artist y from the bad trade traditions which long dying! The influence of the t the Crafts Schools in London is at ng.

l. E. Aldrich Rope shows a very well full-size cartoon for one of the r the east window of St. Chad's-far- ley. The whole scheme of the window well designed, and the detail is ex- Mr. J. Harold Gibbons is the

ree lights for the memorial window hurch of SS. Mary and John, Oxford, very well designed, and show a fine treatment of the glass, and the re very crisp and brilliant.

dward Woon shows some extremely g trial panels for a portion of the dow for the Parish Church of Prescot, erpool, as well as for the Church of a's, Halifax. Mr. A. K. Nicholson ented by a small panel of St. George, William Aikman exhibits some very n and coloured lights for the east of a small chapel and a large cartoon, of a memorial window for Minster in the Isle of Thanet.

these examples of glass work the good and quality of the glass has been to tell. It is in no way overloaded ur. The great influence of Christopher s illustrated in the noble windows at er Cathedral, and his disciples, has inctly felt.

d plaster panels are shown by Miss Rope. They are extremely pleasing, ing well-designed, modelled and The one used for the reredos of dren's Chapel at the Church of s, Norwich, must look very well in its Miss E. M. and D. A. Rope have roup of fine separate figures for a s Crib. All the figures are delight-



Figure of St. George, in Oak.
By Mr. H. J. Youngman.

fully modelled and coloured. The grouping is excellent, and an unusual feature is the representing of the Shepherds as Youth. The fine models group extremely well.

A figure of St. George is placed centrally in the Hall. It is of old oak, and is treated with originality. The hiding of the body of the dragon in the block of the pedestal is a sane way of avoiding a great difficulty which the majority of sculptors fail over. The design and vigour of the figure are excellent, and the limitation of the material used is well recognised. The sculptor is Mr. Harold J. Youngman, and he is to be congratulated on the spirit of his work.

Two other important crafts need to be noticed—the very beautiful case of illuminated books and script produced by Mr. Graily Hewitt and his assistants, and the excellent woven fabrics of Mrs. Hazard. Mr. Graily Hewitt's principal exhibits are the three altar books—the Gospel book, the Epistle book, and the Service book; only the first is complete, and a very interesting volume it makes. The illuminated capitals are excellent, and the general script is admirable. These books were executed with the help of his assistants —M. Walker, F. Raymond and I. Hurstock.

The hand-weaving shown by Mrs. Hazard, of Harleston, Norfolk, is unusually fine. These examples of linen and flax and wool and flax and silk are very pleasing and satisfying, and are particularly beautiful for altar frontals and curtains. Drawings and photographs of architecture, fittings and memorials are also shown on screens in the hall.

It seems distressing that with such excellent work possible so much that is mean and poor should still be produced and given by unconscious donors to our fine cathedrals and churches; a very great deal of it is unworthy of them.

It should be possible to obtain the help of still a greater number of real craftsmen to augment this Exhibition. The opportunity is a great one, and must influence the clergy and laity. It is the only way to obtain an appreciation of beautiful things, and it is a pity full advantage is not taken of them by all the great craftsmen.

New Books.

Messrs. B. T. Batsford's list of autumn announcements includes: "Elements of Design and Form in Classic Architecture," by Mr. Arthur Stratton, and "The American Architecture Law Manual," by Mr. Clinton H. Blake, jun., author of "The Law of Architect, Owner, and Contractor," etc.



Memorial Window, SS. Mary and John, Oxford. By Miss M. E. Aldrich Rope.

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ILLUSTRATIONS.

Free Library, Basford, Nottingham.

Two schemes for this library were submitted by Messrs. Ernest R. Sutton & Son, F. & A.R.I.B.A. in a competition arranged by the Nottingham Corporation in 1915, and were placed respectively first and second by the assessor, Mr. J. Alfred Gotch. Owing to the war the work was postponed. The Corporation has now decided to proceed with the erection of the library, but on a different site from that first selected.

Supervision, economy and convenience in working have been the keynote in the preparation of the scheme. The attendant in the lending library has a full view of all the book-cases, and commands the entrance and other rooms open to the public. The facings will be of red brick in 2½ in. courses and stone dressings. The roof will be covered with Bangor slates.

Free Library, Bulwell, Nottingham.

This scheme was submitted by Messrs. Ernest R. Sutton & Son, F. & A.R.I.B.A., in the competition arranged by the Corporation at the same time as the Basford Library.

Neatham Manor.

This old Manor House was probably first held by a religious order. Some Gothic moulded stones have been excavated in the grounds and probably a chapel or tithe barn at one time adjoined. The two old fireplaces and chimneys, which are of an unusual size, are presumably part of the old original building; the present house probably being built round them in the late Elizabethan or early Jacobean time. For the past 100 years it has been occupied as a farm house, and at one time seems to have been divided into two, and occupied by different tenants. With the exception of part of the north front the whole building above the ground floor is framed together with oak beams, and covered outside with red tiles: the roof is similarly tiled. On the removal of the ceilings it was found that the ceiling and floor joists were of wrought oak, and these and the beams and timbers in the walls and partitions ar all exposed to view.

This property, when acquired a few ago by Lieut.-Col. the Hon. Arthur Har Russell, was in a very dilapidated state he entrusted the task of restoring and bri it up to modern requirements to Mr. Mayell, J.P., Lic.R.I.B.A., Holland avenue, W.11. The work has now been pleted at a cost of over £8,000, by the foll contractors:—Messrs. Mills & Sons, Far general contractors; Tuke & Bell, Ltd., s system; Benham & Sons, Ltd., heating T. Hill, Farnham, electrical installation.

Neatham was before the Conquest he the Confessor, and at the time of the Doo survey by the Conqueror. King Stephen it to Waverley Abbey in 1147.

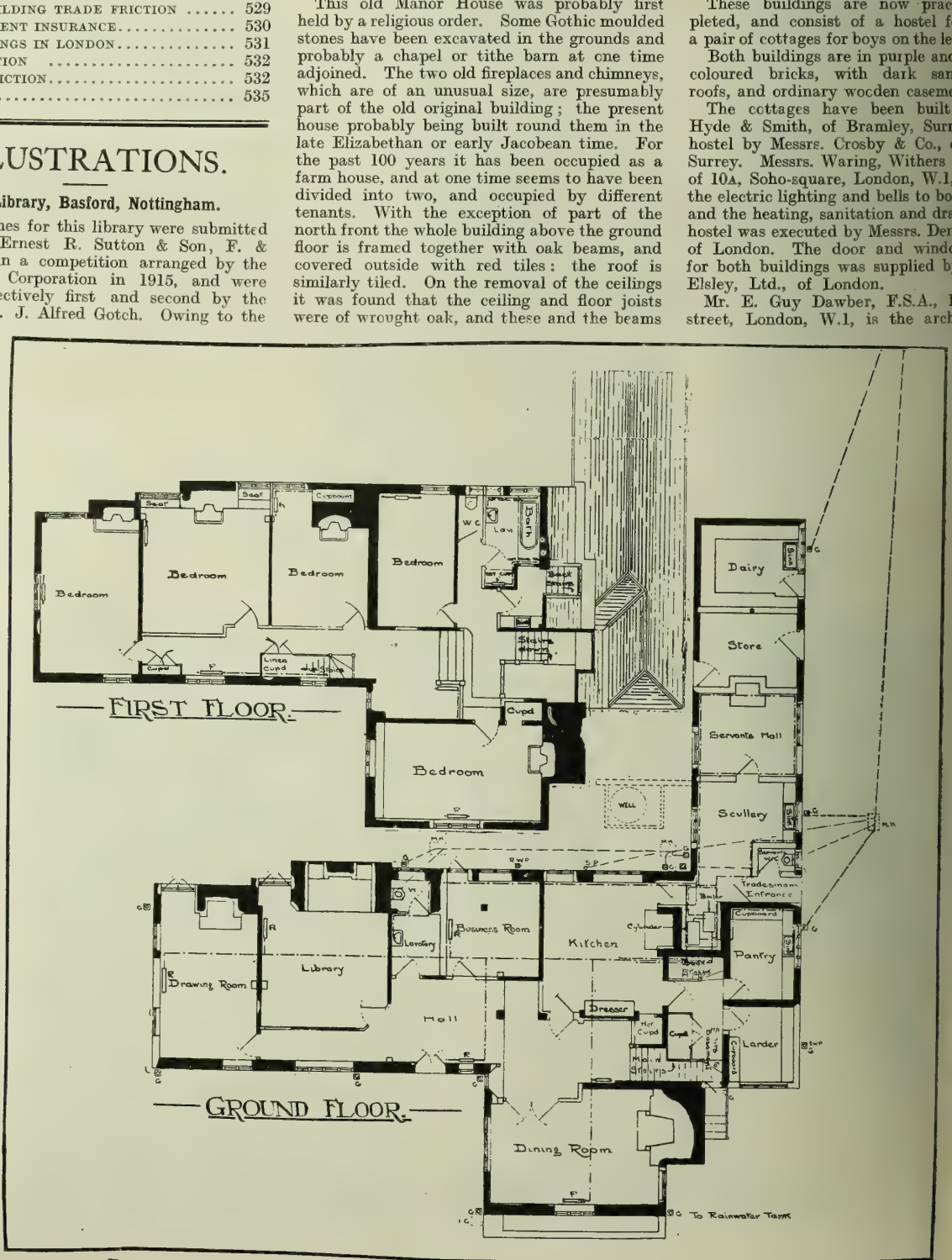
Lord Wandsworth Orphanage.

These buildings are now practically pleted, and consist of a hostel for girls a pair of cottages for boys on the left-hand

Both buildings are in purple and grey coloured bricks, with dark sand-faced roofs, and ordinary wooden casement win

The cottages have been built by M Hyde & Smith, of Bramley, Surrey, and hostel by Messrs. Crosby & Co., of Farn Surrey. Messrs. Waring, Withers & Chad of 10A, Soho-square, London, W.1, carrie the electric lighting and bells to both build and the heating, sanitation and drainage t hostel was executed by Messrs. Dent & He of London. The door and window furn for both buildings was supplied by Messr Elsley, Ltd., of London.

Mr. E. Guy Dawber, F.S.A., 18, Mad street, London, W.1, is the architect.



Restoration of Neatham Manor, Alton. MR. A. Y. MAYELL, Lic.R.I.B.A., Architect.

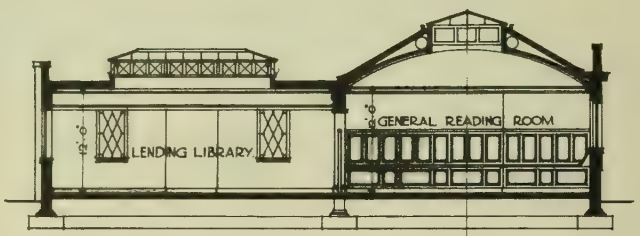




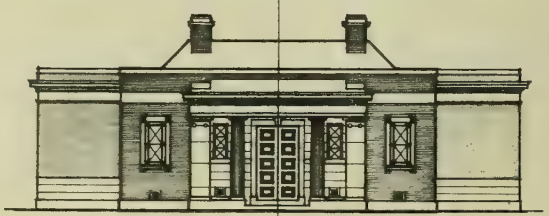
Restoration of Neatham Manor. Mr. A. Y. Mayell, Lic.R.I.B.A., Architect.


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PAVL WATERHOVSE STAPLE BVILDINGS HIGH HOLBORN

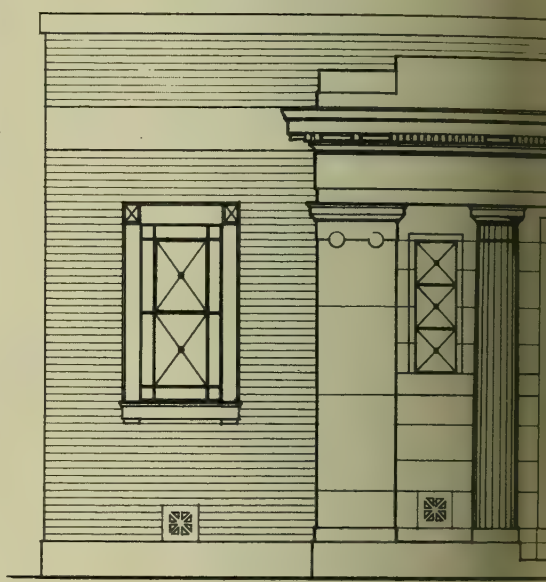
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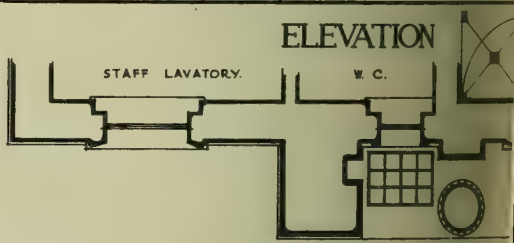
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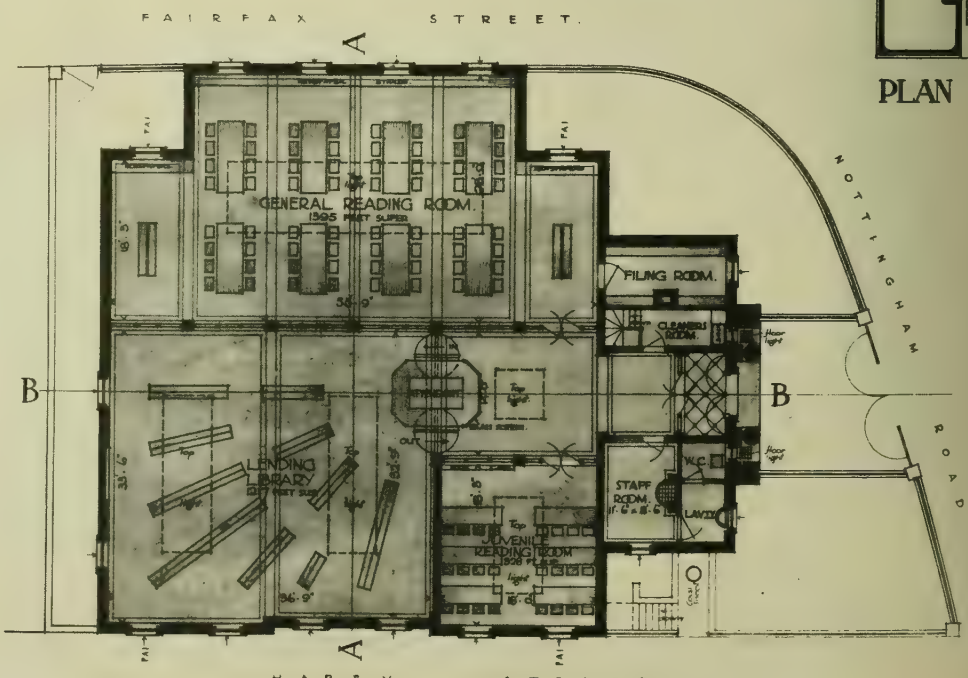
ELEVATION TO
NOTTINGHAM ROAD



ELEVATION



PLAN

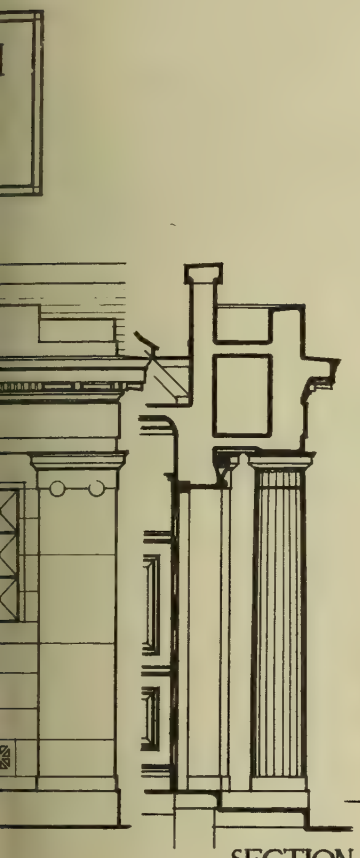


HALF IN

GROUND
PLAN

FREE LIBRARY, BASFOR

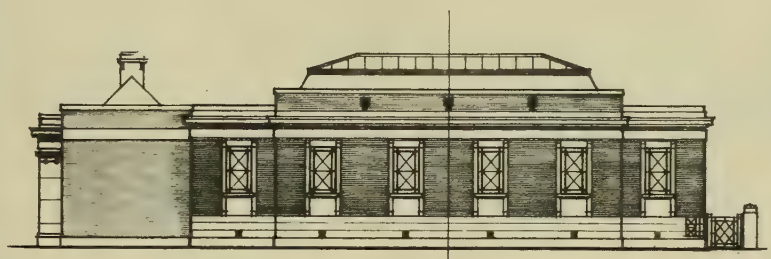
MESSRS. ERNEST R. S



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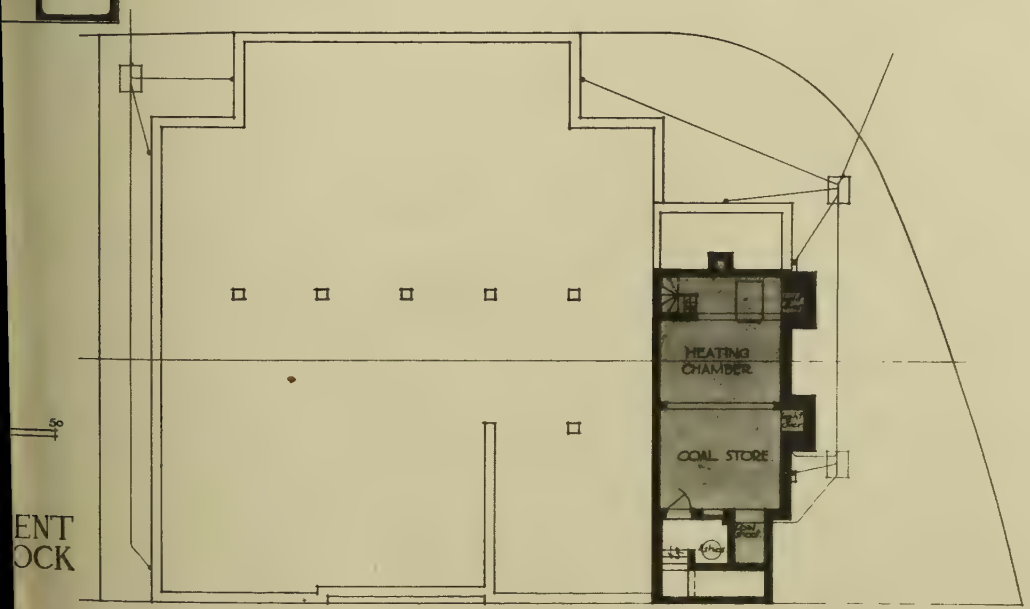


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ELEVATION TO
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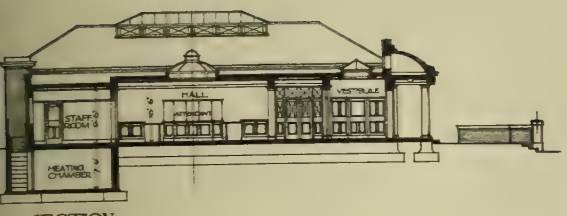
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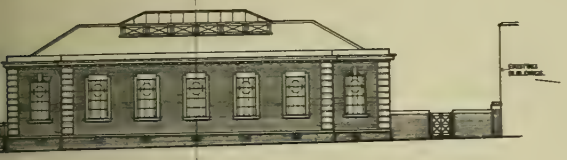
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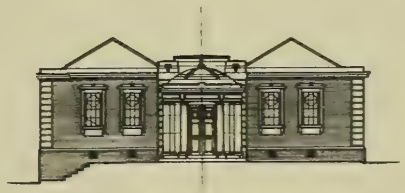
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ELEVATION TO
HIGHBURY ROAD



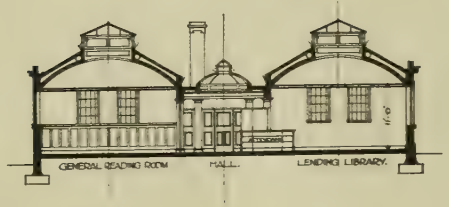
DETAIL OF FRONT



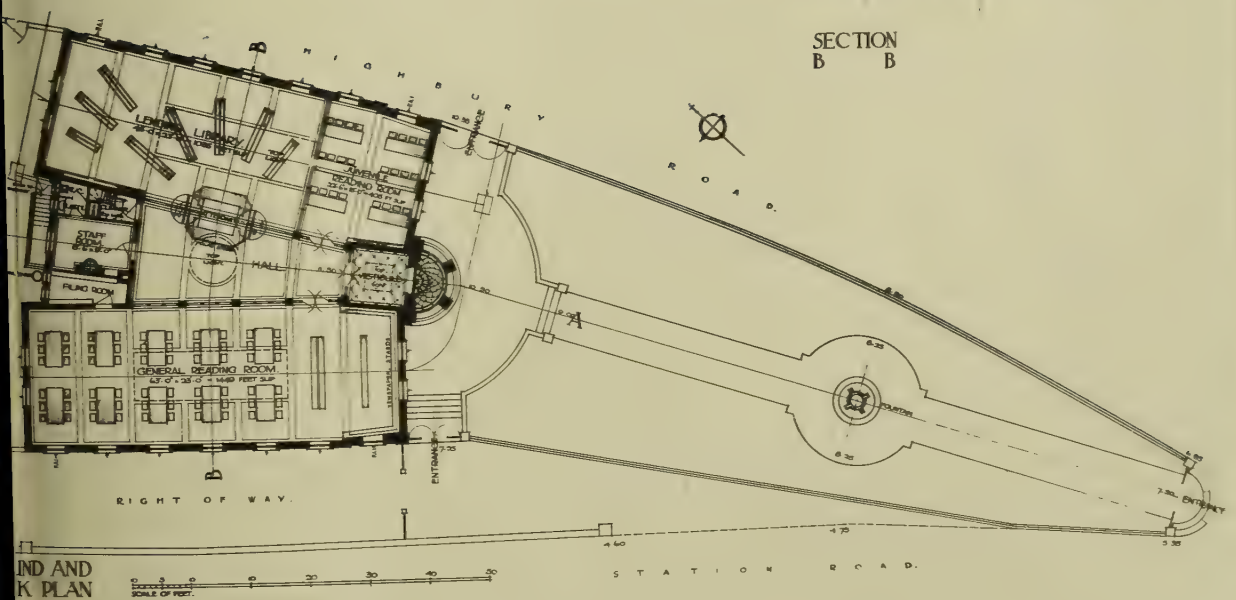
FRONT
ELEVATION



BASEMENT
PLAN



SECTION
B B



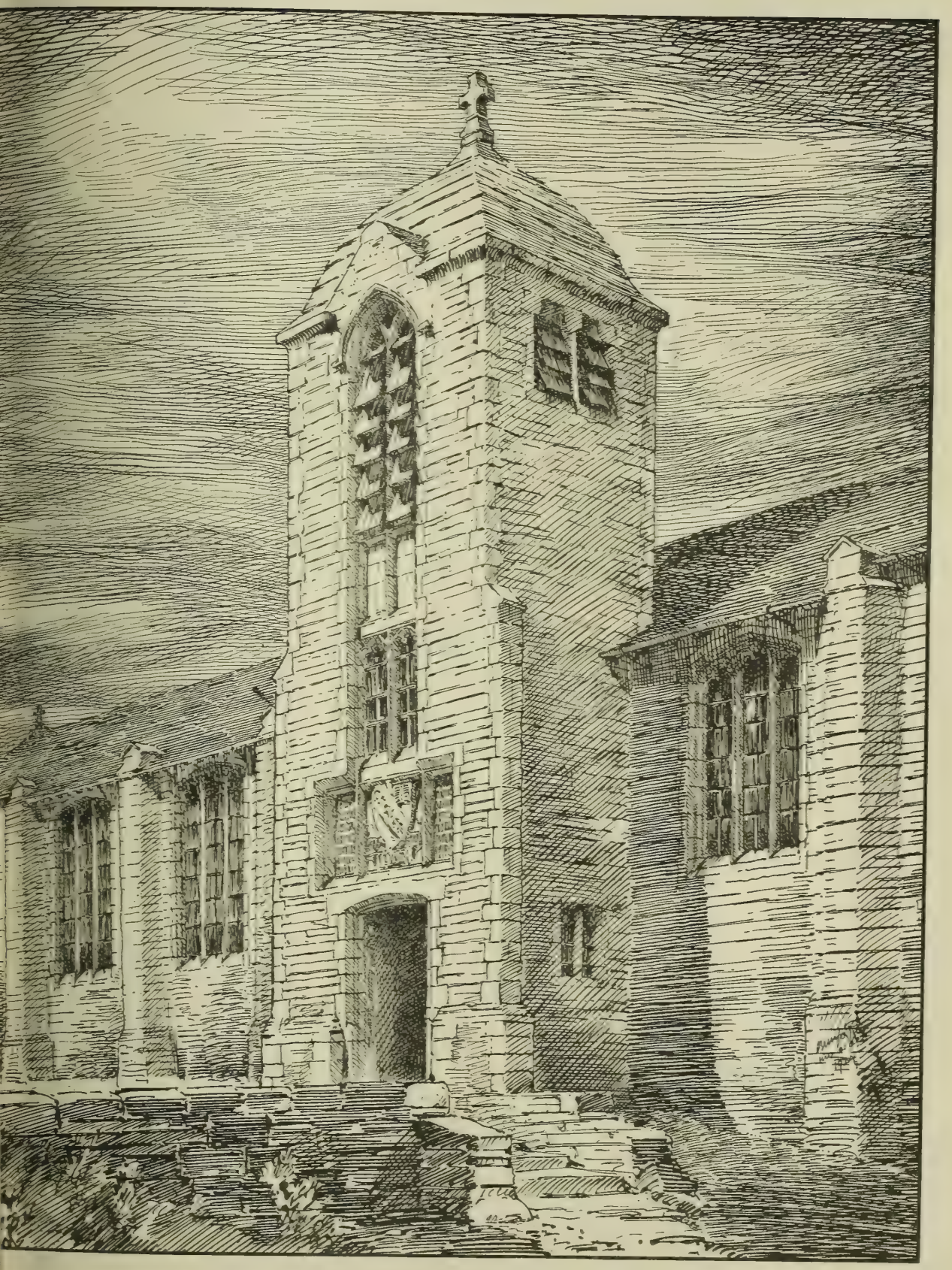
IND AND
K PLAN

DESIGN FOR FREE LIBRARY, BULWELL, NOTTINGHAM.

BY MESSRS. ERNEST R. SUTTON & SON, F. & A.R.I.B.A.



Mr. E. Guy Dawber, F.R.I.B.A., Architect.



Memorial Chapel, Monkton Combe.

PROFESSOR BERESFORD PITE & MR. J. S. HODGES, F. and A.R.I.B.A., Architects.

tch shows the entrance tower on the north side of the chapel, the whole of which forms the war memorial of the School. The s of local stone, coursed rubble externally, and sawn ashlar blocks internally. The contractors are Messrs. Coles & Son, of Bath.]

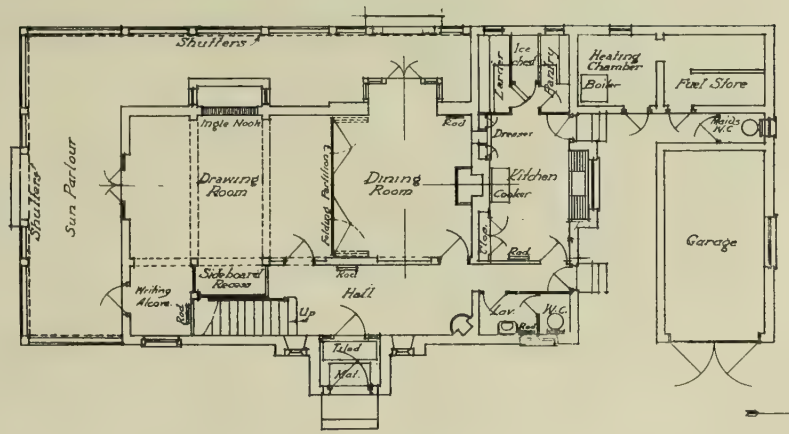
Cottage at Porlock, Somerset. Mr. Michael Waterhouse, A.R.I.B.A., Architect.



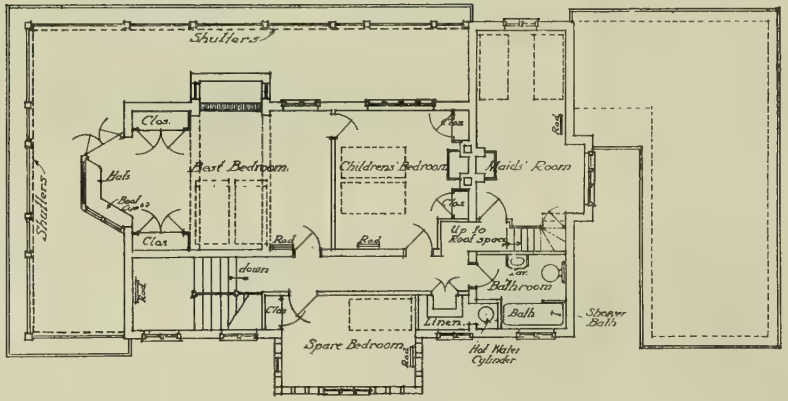
EAST ELEVATION.



SOUTH ELEVATION.



GROUND FLOOR PLAN.



FIRST FLOOR PLAN.

Scale of 10 5 0 10 20 30 40 50 60 70 Feet.

Scale 1 inch = 8 feet.

Proposed House, Long Island, U.S.A. MESSRS. SMEE & HOUCHIN, Architects. (*See p.* 521)

WESTMINSTER ABBEY RE-EXAMINED—VIII

By W. R. LETHABY.

FIRST AND SECOND WORKS OF HENRY III.

By the two works of the King I mean the building of the transepts, crossing, and the whole of the church to the east of these, including the Chapter House, in one effort; and then the extension towards the west in a second building period. Before the first work of the King was begun in 1245, a Lady Chapel had been built by the Abbots, and the foundation of this was laid in 1220 by the young King. The problems in connection with this chapel are well discussed by Mr. Westlake. I find it very difficult, however, to think that if, as is thought, this Lady Chapel occupied what is now the central area of the chapel of Henry VII, it could have been built in exactly this position before the work of 1245 was set out on the ground. The setting out of work was hardly ever accomplished accurately, and that the position, level, axis, and scale of plan of the old chapel should all have been perfectly suitable for incorporation in the new work seems to me next to impossible; and the junction in regard to heights must have been as difficult. The only material evidence for the exact situation of the chapel is a foundation which was found under the apsidal end of the main span of Henry VII's Chapel. On inquiring whether any memories were still held as to what was discovered, Mr. G. E. Wright (brother of the present Clerk of Works), tells me that he was present forty-eight years ago from last April, when the excavation for a grave was made. "In front of the Sheffield monument (in the N.E. chapel), when we took up the paving, we came on a stone wall nearly 3 ft. wide, 9 or 10 in. under it. They said it must have been the bottom of the wall of the early Lady Chapel. It was decided to try the other bay (the S.E. chapel), where we found the wall had been cleared away. I have no remembrance of bases or anything of that sort; the stones were roughly laid and rough axed, like the Norman work, and they came to the conclusion that the stones were of the Confessor's Church reused by Henry III. It showed that the old Lady Chapel had an octagon end, but there was not enough to give full width of the chapel." A sketch shows the wall between the two piers at the entry of the N.E. chapel. It would be easy to search this position again, but in the meantime it is not safe to assume that what was found was part of an apse of the old Lady Chapel. It might be a foundation wall of Henry VII's work, or part of a rebuilding by Henry III. A difficulty at once occurs as to the level, for the floor of Henry VII's Chapel is some 5 ft. above the level of Henry III's work and more still above the floor of the Confessor's Church. There is some evidence which suggests that the old Lady Chapel was rebuilt with the church, but until the foundation above described is re-examined and all possible evidence obtained, further argument is premature.

The great isolated Bell Tower, which stood on the north side of the nave seems to have been built before the work on the church was undertaken. The foundations were exposed when the new public buildings were recently erected, and I saw here a large number of piles which had covered a wide area. In the Virtue MSS. at the British Museum (23096) I have found the following note: "At Westminster, in the Sanctuary [the precincts], the Tower pulled down in 1750. In the foundation a stone found at the bottom, this date, thus, MCCXXIV. This stone building, called the Belfry, built before the present Abbey, refounded by King Henry III, but how much earlier unknown (I lately took the measures of it) was a castellated tower, square about 70 ft., and at one corner was great bells for the use of the Abbey Church."

It appears from the fabric rolls that a timber, lead-covered steeple was erected on the masonry tower while the first work of the church was in progress. An entry on the rolls for the fourth year of the works (1249) records a payment to *Magro Alex. ad pilos Be'fridi*—that is to Master Alexander, the carpenter, working on the spire of the Belfry. William and Roger, plumbers, were engaged on it in 1253.*

Two Works.—It used to be thought that the whole work of Henry III on the church extended only so far as the first bay to the west of the crossing, but Micklethwaite demonstrated that the building dedicated in 1269 included the Choir, which occupies a large part of the western limb of the church. There is evidence, moreover, to suggest that it had been intended to consecrate the eastern part of the church before the building of the Choir westwards was undertaken. On November 7, 1254, Henry III issued a mandate that funds should be provided "out of the money of the treasury or elsewhere to recall the workmen of the church of Westminster who have left as the King is informed" [a strike!] "so that the work may proceed, as the church consecrated at the latest on the Trans St. Edward, the quinzaine of Mich (Patent Rolls).

This proposed date would be October but, so far as we know, the King's inte not accomplished. Possibly the difficul too great, or the King determined in t time to take up the extension and c the whole together. In any case, it app the first work was so forward at the en that it seemed possible that it should cated in 1255.

It has been observed that the fabr 1253 shows that a special effort was that year. At one time no less than stone cutters were employed, and marblers, and parts were also being task or special agreement. Much finish was in hand. Lozenges for paving a tioned. 32 carpenters were employe time and 14 glaziers; plumbers and pain also engaged. Ade, the whitener, and were working steadily. The King w in France from August, 1253, to Janua and he doubtless intended that the glor fabric should be ready for consecratio Saint's day following his return. It be doubted that practically the whol first work including the transepts and House belongs to the period 1245–55 every detail must have been settled It is important to recognise that ev most characteristic of Westminster wa in the first half of the thirteenth cent

It was a great piece of work, but th with which it was done was not exc Viollet-le-Duc again and again calls atte

*In modern times it became confused with the Westminster Sanctuary or precinct in which it stood. In the transition time it was still known for what it was. In the Abbey records, a lease of tenements in the south part of the Great Belfry was entered in 1574. In 1578 the Sanctuary gate leading to King-street is mentioned, that is, the gateway to the Close. I may mention here that I find it ordered that "the Convent Kitchen, the Misericorde and St. Catherine's Chapel be taken down by the advice of the surveyor," in 1570. In 1575, tenements "where a chapel, late called St. Ermylles hill did stand," are mentioned, and in 1591 it was ordered "that the old Dorter and great room before be converted, one into a library, the other into a school."



Fig. 1.—Gable before Destruction.

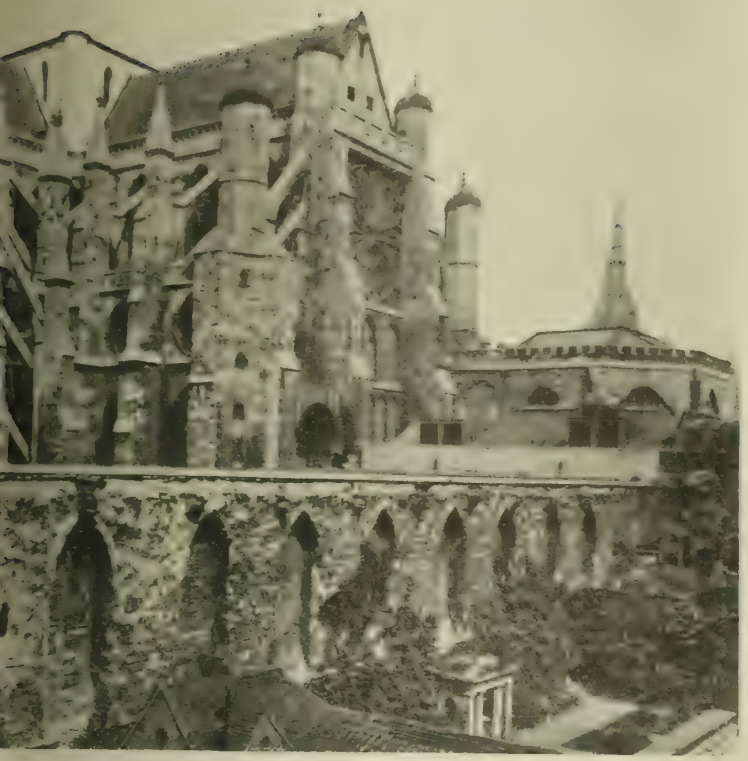


FIG. 2.—SOUTH TRANSEPT IN 1860.

ty with which immense works were rward in France. The character of , the records, and details of the agree in evidence that Westminster rmed to type in this respect. Yet we er at the co-ordinating ability which o much in so little time. Even the ered foundation required vast labour. walls stand on a great mass of con- ble wide enough for the projection of ses, it is some 10 ft. deep, 20 ft. wide and 30 ft. below.

e practical completion of the first was, the evidence suggests, a relaxa- t for several years during which other works were undertaken. On the f Prince Edward in 1254, the King aken to provide an establishment of ear, and money was hard to get. In King ordered that the roof of the el should be taken down and that it vaulted in stone—an order which mplies complete rebuilding. The s roofed about the same time and aving in the church were done. The e increasingly difficult politically and uilding can have been done in what Ramsay calls "the critical epoch time of confusion hard to follow." King issued an order that the monks v down the walls of the old church as estry by the King's seat, "so that it uilt as the work begun requires." must show an intention to resume t this was "the memorable year" rd Parliament when, as Matthew "Were never known so many folk ger."

John of Gloucester and Alexander, mason and carpenter of that date, l double wages when travelling to on for the church. This must mean aftsmen and materials for the work. year the mason died and it may be y of the second work above ground was done by him. This work can probably be assigned to the years 1260–1269. It is not more than a quarter as much as the first work, but the period includes that of the Barons' war. Money was still a difficulty and in 1267 the King had to pledge the golden images of the shrine for his immediate necessities.

There is a special freshness in the details of the new work, a subtle difference of spirit, and as will be shown below there are reasons which suggest that this new spirit was brought in by a master mason from the north.

Masons.

I discussed, in September, 1923, what is known about Master Henry (probably the same as Master Henry de Reyns), the King's master mason at Westminster from the commencement of the work in 1245. While admitting to the fullest degree study of French sources, all at Westminster seems to me so thoroughly re-thought and re-handled that I have no doubt that the foreign conceptions passed through the mind of an English master. On all the evidence known to me it appears most likely that Henry de Reyns had his name from Raines in Essex. The name Raynes is still not uncommon, and it is in a bookseller's catalogue before me. From what has been said of the progress of the works it appears that Master Henry had built the first work by 1254–5. It may have been his death about this time which put off its actual completion and consecration. I have now little doubt that a portrait head in the north transept is that of Master Henry.

(Master Radulphus de Dartford *cementarius* has also been mentioned, and I have found a note of another reference to him. He signed the document 17498 at the Abbey together with Odo the King's goldsmith, an important person of the earlier part of the King's reign. It really does look as if he might have been the master for the Lady Chapel begun in 1220, as suggested by Mr. Westlake.)

Master John of Gloucester succeeded Master Henry in the direction of the works about 1254–5.



FIG. 3.—TRIFORIUM (R. J. JOHNSON).

In 1255 he was exempted from serving on juries, and the Sheriff of Oxford was to permit this exemption. He was also granted "for his service to the King at Gloucester, Woodstock, Westminster, and elsewhere two robes with furs of good squirrels yearly for life from the Wardrobe, such as Knights of the household receive." In 1256 Master John, the King's mason, was granted the serjeantry Blechesdone. In 1257 he and Alexander the carpenter were appointed chief masters of all works of castles, &c., this side of Trent.

"Master John, the King's mason (*cementarius*), is named in a grant *c.* 1250 in the possession of the Corporation of Gloucester as holding land" (*Notes and Queries*, II, S. X). I doubt if Master John did much more than carry on at Westminster in an interim period. Records of other works exist. 1258, Dec. 1: The King commanded Master John, the King's mason, to cause to be repaired the chimney of the King's chambers in the Priory of Merton, and the Gardrobe and the King's Chancellor's chamber, and that the cost be charged to the King and allotted to the outgoings of the works at Westminster (Close Rolls, 42 Hen. III, Sharpe's Calendar).

The great mason died in 1260–1, and, as Mr. Westlake has shown, he died poor.

From the Calendar of Inquisitions (Misc. I, 298: Jan. 3, 50 H. III) it appears that "at the time of his death he was bound to the King in the sum of 80 marks by reason of arrears in the King's works. The debt was compounded for a yearly payment of five marks, but on inquisition being taken it was found that the income from his possessions was less than two marks a year." There was evidently trouble, and it looks as if the poor man was worried to death.

Master John was followed by Master Robert of Beverley, who brought Henry III's work to a conclusion. On the evidence of the fabric itself, which will be described later, I have come to think that all that is distinctive in the character of the second work must be ascribed to Master Robert. Although some of the changes in the Western extension of the Choir may have been intended from the first there are many alterations of detail. French influence is much less apparent, and there are no new direct borrowings in this part. This work is most sweet and beautiful. Fig. 5 shows an intentional variation in the piers east and west of the crossing, both of the first work.

In 1264 Master Robert is named as one of the wardens at Westminster receiving £100 for the works. The second work was thus proceeding at this time. The following year "Master Robert de Beverley, mason of the King's works of Westminster," was granted two robes a year from the Wardrobe, "so long as he be with the King in the said office in the same manner as Master John of Gloucester, sometime mason of the works, used to receive." In this year and the next he and Alexander the carpenter are called keepers of the works (Patent Rolls). His name appears in 1272 as witnessing a charter, together with Edmund the Goldsmith and William le Verrer, who must have been glazing the church. Robert of Beverley was still the King's master of works in 1284, he thus occupied the position for about 25 years. Probably work of his could be identified at the Tower. He was a very great mason.

The best approximation to an English architect's drawing known to me is one of tabernacle work surrounding a figure of Becket in the "Black Book of the Exchequer" (Fig. 4). It is so like the work of Villars de Honnecourt that it must be very similar to the original drawings for the Abbey. In the sixteenth century a house outside the north side of the nave was still called "Mason's Lodge."

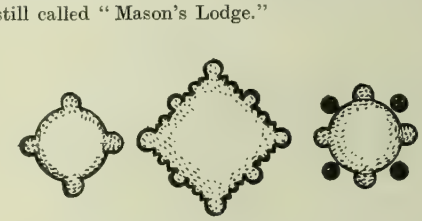


FIG. 5.—PLANS OF PIERS.

ORIGINS.—When I considered the question of sources of design before, I concluded that Reims Cathedral was the chief prototype. Now I would substitute Amiens. The principal borrowings from Reims were the apsidal chapels with their pair light windows and wall passage. The *planning* of the apse with the surrounding chapels was, however, founded on a study of more recent developments at Amiens. The setting out of the apse at Westminster is well analysed in "Gleanings." The centre of the radiating system is half a bay to the east of the last normal bay (Fig. 6). This gives a slight drawing in of the bay next the normal one, making thus an easy transition to the fully canted bays of the apse. The system of setting-out the *apse* (not considering the chapels), is similar to that followed at Beauvais Cathedral (V.-le-Duc, Vol. 7, p. 551), and also I believe at Amiens. Viollet-le-Duc proposed another

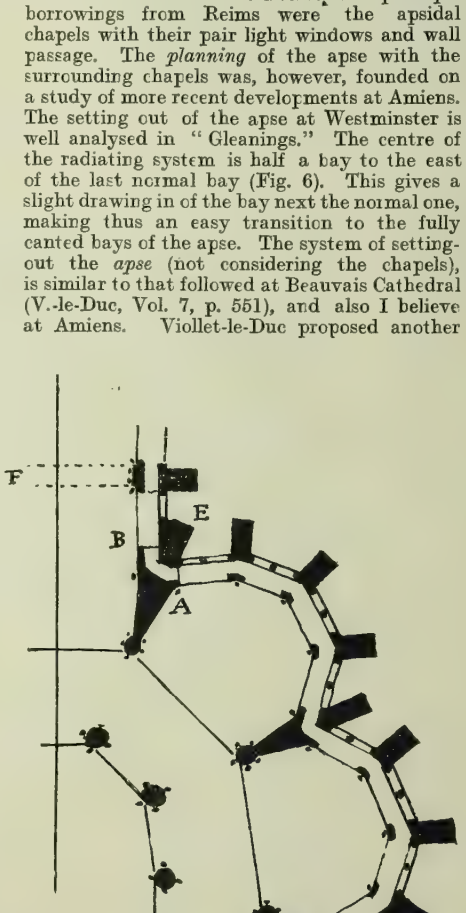


FIG. 6.—PLAN OF WALL PASSAGE.

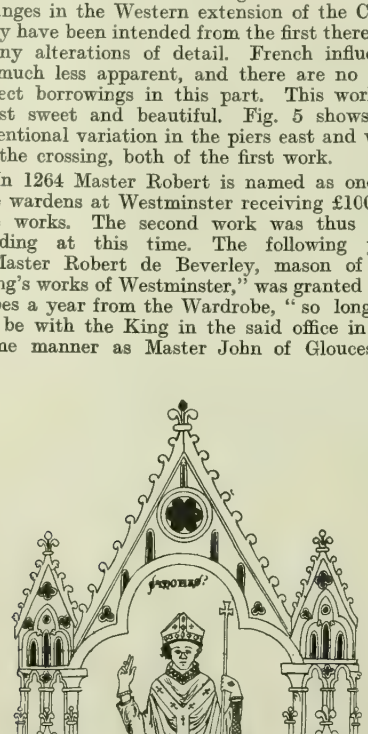
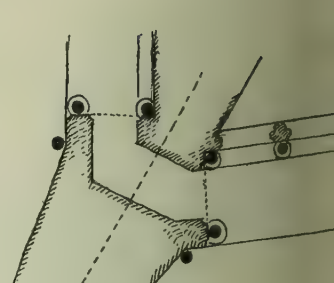


FIG. 4.—THIRTEENTH-CENTURY DRAWING.



A. B. ENLARGED.

system for Amiens, and this is acce
"Gleanings"; but the plan given in D
great monograph plainly shows the
drawing in of the lines at the beginnin
apse. At Hailes Abbey is an apse wh
suggested by Westminster, but its plan
a regular decagon. At Westminster th
and slender proportions of the interio
especially those at the crossing, appea
adapted from those at Amiens (Fig. 5
there also a low lantern tower seems
existed, such as was projected at the Ab

The "upright" unit bay of the
was also adapted from the same Ca
as also were many details, as has been
out in regard to the Chapter House a
north transept with its portals.

Returning to this last, I would call a
to the manner in which at Amiens the t
passage with its arcade passes across
of the nave at the same level as an outer
thus. . . .

——— The same arrangement i
. . . .

at the north front, Westminster. T
arcade in the "blank porch" (like
the Chapter House), is similar to an arca
within the western portals at Amiens.
has been shown of the detailed resem
between the sculptures of Amiens an
of the Chapter House will reinforce wh
said in the examination of the sculpture
portals. In the carvings of the west
the north transept of the Abbey a
adders stopping their ears with thei
their parent is at Amiens. Minor carvi
the wall diaper and rose decoratio
derived from Amiens. The dependence
minster on Amiens is so certain that it
evidence to turn back on the sour
Amiens, the west front must have be
advanced, some bays of the interior co
and the chevet out of the ground b
The remarkable rose window of Westmi
within a square may have been taken f
not now known, but *designed* for a
at Amiens. The western rose at Amie
an earlier type, but there are blank
around it filling out the square in whic
set (derived from Notre Dame), whic
well have been the original sugges
squaring the whole window as at West
Our master Henry, the mason, would h
some interesting conferences with th
at Amiens, who doubtless explained
"would do it" by sketches.

There are some striking corresp
between Westminster and the Ste.
at Paris, which, however, does not
have been begun before our church.
Durand, and Antheme St. Paul give
of building as 1245–8. The chief res
between the two works is in the s
censing angels in the spandrels of
the triangular windows of the triforium
minster, and the four light window
Chapter House resemble windows at
Chapelle, but there are windows of the s
at Amiens. The Ste. Chapelle itself
the east end of Amiens. Viollet-le-D
"The apsidal chapels at Amiens
closest resemblance to the Ste. Chap
to the same moulding profiles."

(This part will be concluded in our ne

THAMES VALLEY REGIONAL SURVEY

ecessity is now widely recognised for ete and thorough survey of a region mmencing the actual work of regional . and Messrs. Adams & Thompson, in iminary report, have wisely summarised ing facts and statistics relating to the Valley, leaving for later consideration posals for dealing with the region and r development.

sex and the Thames Valley are an part of London, and it is obvious that l survey of any part of the Greater rea must also have regard to the needs of London as a whole. It is te that Kingston and Hampton have their way to join with the ten local s included in the region, and it is hat the omission of these two authori- especially of the borough of Kingston, usly affect the usefulness of the work gional Committee.

ealing with the historical development ortion of the Thames Valley and its eauty and characteristics, in which particulars are given as to the origin h of the numerous Royal parks in the ne gradual growth of the region is a place of residence and recreation, for the middle classes. The wide- eposit of river gravel overlying the lay provides an excellent subsoil, and uch to do with the general healthiness ames Valley as a place of residence ; ne authors point out, there are many ere the gravel has been, or is being , to the general deterioration of the e neighbourhood. Very unsightly avation works come in for very proper tion, and it is all-important that the orities having the guardianship of the de should be alive to this very real the amenities of their district.

verside towpath between Hampton Hampton Court is at present very lected—neither Thames Conservancy authority accept responsibility—and e all places, the opportunity exists for finest riverside drives in the county. mple expedient of removing the fence oining Home Park, some miles of river ould be thrown open to the park and leasure ground secured with little or e to the nation. This is not touched he present report, and no mention is ne need for further river bridges across es. At Chiswick, at Richmond, and gton, new road bridges are badly nd it is to be regretted that this y report does not at least hint as to the for these. Useful statistics as to the n of population and the housing in the region are given, and it is to learn, on the authority of Mr. Secretary to the Middlesex Education e, that the gross cost of educating average attendance at the schools in y is £13 2s. per head, of which, speaking, 50 per cent. is defrayed by nment Grant, leaving a net cost of child to be met out of local rates. is that a house rented at £30 per d producing, say, £15 per annum in if all the rates went towards educa- d only yield sufficient revenue for the of two children per house. All other nses have to be met out of the rates ty of a higher rental value. The growth of small house property is to be a source of impoverishment to ather than the reverse, and a serious or the rating authorities will arise in

pping centres of this portion of the alley are principally Richmond, with nd Kingston with 2.3 shops per 100 ulation. Approximately 30 per cent. rking population of the whole region ved in London and an average of only t. are employed locally.

The Survey of the Industries shows that at present the Thames Valley District is comparatively free from factories, although how long this will continue is difficult to say. The riverside, where not already occupied by towing-path or dwelling-houses and gardens, does not afford many sites in close touch with rail communication, but it is rather remarkable that even in such districts as Chiswick and Barnes the distance from railways and docks has so far prevented the springing-up of any considerable number of factories.

On the subject of communications by road and rail, it is obviously difficult to deal with a small sector of the London area without reference to the rest, but the report gives in diagram form an interesting analysis of the relative volume of traffic on the principal roads. Railway time zones in an area such as this would not at first sight appear to yield much information, but when it is realised that it takes upwards of an hour to reach some districts not much more than 12 miles from London, it will be agreed that there is considerable room for improvement. The large open spaces and parks of the Thames Valley have long made this fortunate part one of the playgrounds of Greater London, and we hope that it will be many years before this character is changed.

ENGLISH PRIMITIVES

This name appears so to have established itself as the designation of a period of work which is often anything but primitive in any right understanding of the nature of art, that we have to accept it. We may instance, however, the case of the mural paintings at Eton, which are in the grace of the figures, the treatment of draperies, and the general accomplishment of the work, far from being so. In an account published by Mr. Humphrey Milford of his lecture at the British Academy on Mediæval English mural painting, Dr. Tancred Boronius deals with a subject of great interest, which has not had the attention bestowed on it that the importance of the subject claims. The writer affords us some occasional glimpses into the history of some of the paintings actually preserved to us, and tells us how a wall painting in St. Anselm's Chapel, Canterbury Cathedral, executed in the twelfth century, not long after its completion, had a wall built in front of it, thus remaining invisible for seven hundred years. "It was in this fashion," so he tells us, "protected against a fire which is known to have broken out in 1174, and when re-discovered some thirty years ago, emerged in a remarkably intact condition with the colours very fresh and vivid." The Byzantine influence is clearly discernible in this painting, which is a good example of that assimilation to which the twelfth-century English artist was directed.

The account of the evolution of subject matter, which took a new direction and which extended beyond more purely doctrinal representation in the fourteenth century, is to be regarded as an early impulse towards more democratic expression which the arts received at this time, through the influence of William Langland. There is actually an instance (at Broughton, Bucks) of Christ as Piers Plowman, appearing on horseback as a pendant to the figure of St. George. Geographically, so we are told, paintings of Christ as Piers Plowman cover an extensive area. Dr. Boronius gives an illuminating account of the artistic relations between England and Scandinavia in the thirteenth century. In 1248, Mathew Paris, monk of St. Albans, distinguished both in literature and art, was sent on visits to the Abbots and Convents of the Benedictine Order in Norway; and there is an oak panel painting, a wing of a retable in the church of Faaberg, which bears near resemblance to certain illuminations of the school of St. Albans. One among them may with some probability be assigned to Mathew Paris himself. As the writer states, "What would be more natural than to connect this panel with Mathew Paris's visit to Norway?" In any case, the coincidence is not without interest.

There is much else in the lecture which throws light on the history of English mediæval painting which has not received much systematic inquiry so far. Such fragments as have come down to us are in a very perished state or have suffered from restoration and defacement, but distributed throughout the country our churches still reveal the record of an art much practised in the England of that time. Much of it bears traces of merely local origin and is of rude and primitive character; but seldom without evidence of a certain power of design and dignity in the forms portrayed. Very free from over nicety or conscious theory these mural decorations are executed in a very direct way, seldom with much preparation of surface beforehand. In a good many instances, as in the paintings in the Chapter House of Westminster, a gesso-plaster ground seems to have been laid over the stone, probably the best possible surface for painting, and for security that could be invented.

We are not inclined to over-estimate the importance to ourselves of this ancient work which has passed with its time, and has not very much with which to address us now. We dwell too insistently on the past when we allow it to obscure our judgment in regard to present work. It is so much easier to be eloquent about painting which comes down to us with the halo that time sets round the twilight of the past. We may not live in this and it behoves us to greet with equal tolerance and understanding what our own time projects. Encouragement such as this is much more difficult, appreciation more rare because it asks so much more from us. The connoisseur of to-day who prides himself on buying nothing but old masters, detaches himself from the appreciation of what his own time holds for him, and we need to discountenance the assumptions of culture that often go along with it.

Dr. Boronius endorses a plea which has recently been made that a Corpus be formed of reproductions after the existing mediæval wall paintings scattered all over England. Such a publication would be of much value, as the excellent copies by Mr. E. W. Tristram go to prove; but we should, in such a case, beware of a provincial sort of patriotism usurping the place of fact as in the case of the attribution of the Eton wall paintings, manifestly of Flemish origin, to William Baker, an Englishman.

PROPOSED HOUSE AT LONG ISLAND, NEW YORK

The plans shown by the drawings on p. 517 are the first which have been prepared, and are still under consideration. The idea is for a moderate size house of Tudor character, planned in accordance with American custom for easy working. the sun parlour, with balcony over, being the special feature of the scheme. The chimneys would be of red brick with dark headers, and all walls finished in white cement. Electric radiators to be used in the drawing and dining-rooms, or gas fires if desired, but in either fireplace, if preferred, coal can be used. The passage to fuel store, &c., would be covered over.

A small guest's bedroom is built out over the hall below. Adjoining this is a linen room with hot-water cylinder, and bathroom with fitted lavatory basin, and w.c., the bath to have shower attachment with plate glass enclosure, and the room to be lined with Vitrolite in black and white. A lavatory basin would be fitted to each bedroom. Messrs. Smee & Houchin, of 82–85, Fleet-street, E.C., are the architects.

Old Westminster.

A lecture on "Old Westminster" will be delivered by Mr. Herbert A. Cox on October 6, in the Large Hall of the Institute. The lecture will commence at 7 p.m., and will be illustrated by lantern slides and a model to scale. Members of the public will be admitted on presentation of visiting card.

THE PENTALPHA METHOD OF DESCRIBING THE GREEK IONIC VOLUTE

By JOHN HALL, F.R.I.B.A.

THE accompanying diagrams are taken from a French book—no author's name—on Grecian Architecture of 1808 date, and the following is a description of the method of their construction.

Upon an axis A B C D describe the eye of the Volute equal to 3 parts and 1-3rd of a module. Through the centre of the circle draw an extended diagonal at an angle of 45 degrees E.F. With a radius of half the diameter of the eye describe from A as centre an arc at G; repeat this operation from C as centre, thus completing the arcs at G.

The method of constructing the pentagon, though of vital importance, is unfortunately not shown in the book of reference, yet after several attempts, however, I eventually discovered a solution of the problem which is as follows:—

From the axis G draw with a set-square a line 60 degrees to the vertical plane; produce this line until it cuts the lower part of the circle at H. From H, with a set-square, draw a line 45 degrees to the vertical plane, produced until it cuts the circle at I. Thus H I will represent one side of the pentagon. To complete the pentagon mark off upon the periphery of the circle the remaining distances, each of which must be equal to the side of the pentagon already evolved.

The next operation is to fill in the two figures, each having five points, the larger of which is shown in solid black line. With a set-square draw a line at 45 degrees to the horizontal plane, joining J L. From J draw a line joining it with H. Join I to L, then from K draw lines joining it to H and I respectively, thus completing the figure known as a five-pointed star. The five-pointed figure, shown in dotted line, is formed by first finding the centres of each side of the pentagon; then, with a set-square at 45 degrees to the horizon, join M and P. Join M to O and O to Q. Then from N join to P and Q respectively, thus completing the smaller five-pointed star.

Although the method of finding the various centres from which the volute is described is not explained in the book of reference, yet it will be seen in the accompanying drawing that they are arranged clockwise, and numbered 1, 2, 3, 4, &c., as on the original diagram. The line 3, 5, 8, drawn at 45 degrees to the horizon, is found by striking arcs from centre 10 as radius, while the centre 6 is found by striking stilted curves from centres 9 and * respectively. Before drawing the volute it will first be necessary to construct quadrants forming sections upon which the spiral is constructed. Thus by producing line I K we have the first section; by producing line K H, we have the second section; then, by producing a line from centre 3 passing through point X on the horizontal axis, we have the third quadrant. The remaining quadrants are found by producing lines H J; M O; N P; L I; and Q N.

To draw the Volute it will be necessary to set off a distance upon the vertical axis equal to three times the diameter of the eye, R. Then with centre I describe the first section, followed by using centre 2 for the second section of the volute. By using the remaining centres 3, 4, 5, 6, 7, 8, 9 and 10 in succession, the outer spiral of the volute will be finally completed.

To describe the inner spiral, or fillet, of the volute, mark off at R a distance equal to 1-3rd of the diameter of the eye. To find the centres of the inner spiral divide the width of the fillet, already determined, into eight parts, one of which will give us the distance of the new centres in relation to that of the old. With this $\frac{1}{8}$ part mark off the new centres, in every case below the original centres, thus being always $\frac{1}{8}$ part removed further from the arc already drawn. From these new centres proceed to describe the inner spiral in the usual way, as already stated.

I may say that the description accompanying the diagram in the book of reference is very meagre, as for example, instructions are given for finding only three of the quadrants. But by using the additional number of quadrants a better result is obtained. May I add that this diagram may prove useful as demonstrating a geometrical method of drawing a regular pentagon within a circle of any size.

The figures of the five-pointed stars will probably be of interest to members of all Craft Lodges. But particularly will the pentagon figure appeal to members of operative Masonic Lodges. Apparently these two figures, and probably the method of setting them out, was known to the early Egyptians. It will also be noticed that in addition to the outer pentagon, there are also within that figure, around its centre, two other regular pentagons, each having a different area.

CIVIL ENGINEERING*

THE author has covered in a general way most civil engineering operations and requirements. While essentially a book of engineering common-places and free from mathematics, the explanations of various methods of const and uses of material should prove usefu junior assistant engineer.

Specifications form a useful part section, it being necessary to avoid, as possible, variations of a scheme causing and omissions. In construction of works works often cause trouble, due to the character of the ground and inability t mine correctly what may be met with du progress of the work. The chapter on works and foundations provides information. The well-known pile for P= Wh/8d—is given, but must be tak guide and not as a general rule. No formula can be given. Many engineers p use test piles instead of the results of when fixing value of ground to carry loa

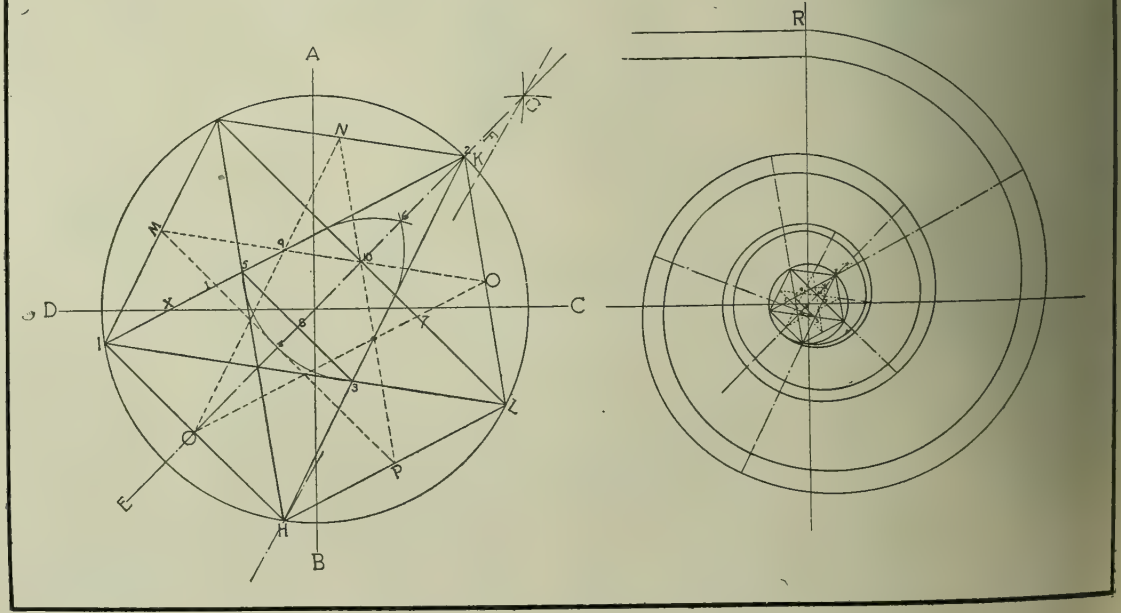
Surprises occur no matter what me adopted.

In a particular case trial borings had bee in connection with the erection of a pier ing into the sea: screw piles were driver 25 ft. below ground level, inclusive of abo into the chalk. During the application of tons dead weight test load to which each pile of every bay was subjected, at a poin 200 ft. from the shore, the pile sudden 20 ft. vertically. Subsequent invest showed a cavity in the chalk. While it that strength and durability, as mention the chief considerations governing the stones used by the engineer, porosit weathering qualities are frequently of co able importance, particularly under certa ditions. Thus, porous stones are liable integrate as a result of frost following period.

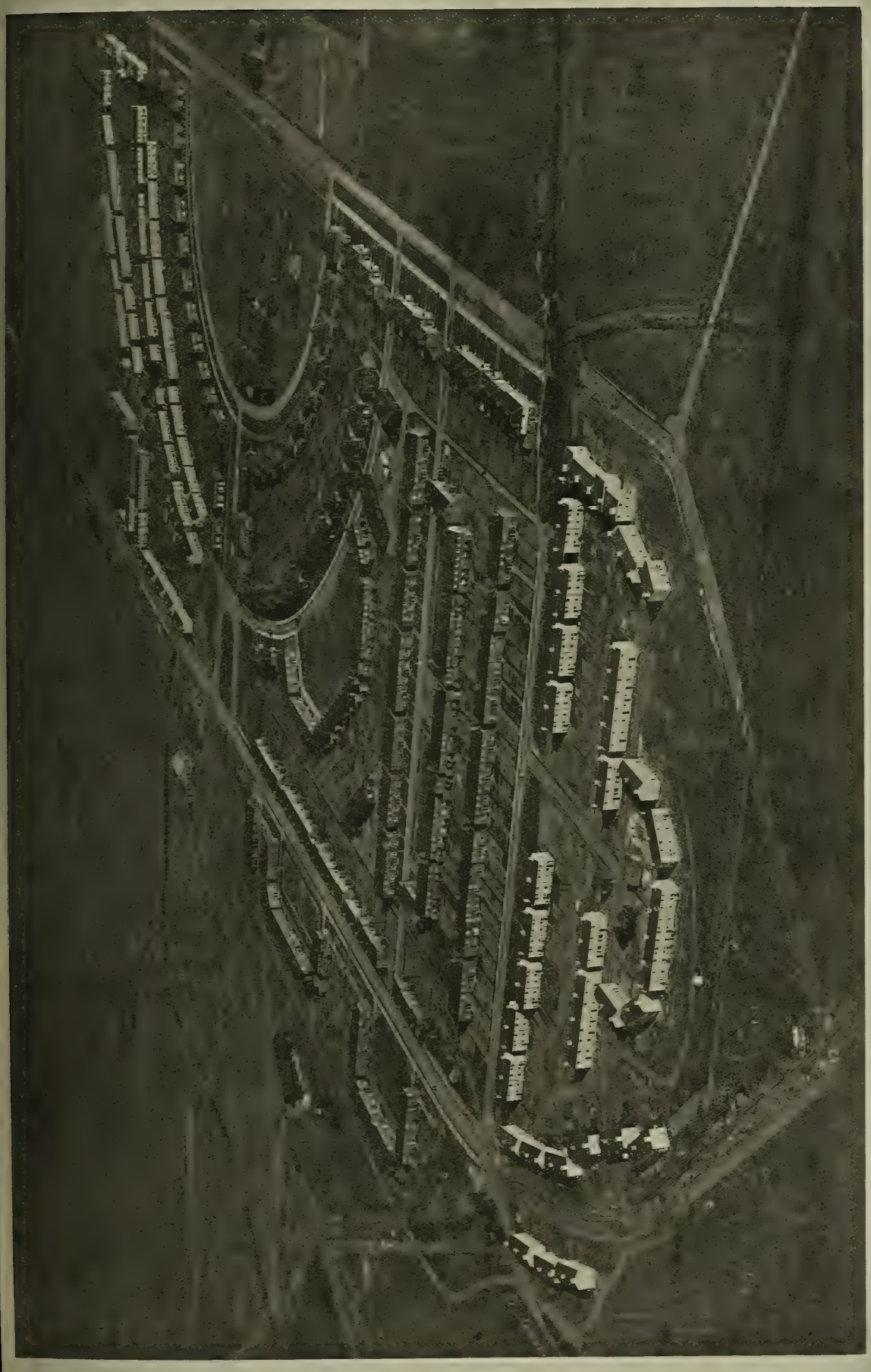
The most satisfactory means of ascer the properties of a stone are by actua this takes time and is costly. Reliable can be obtained by a petrological exami where sections of the stone are prepar the resulting slides examined under a scope. The apparatus required is sim expensive, and by no means difficult to A decomposed constituent can be dete this way. In this connection concrete, the aggregate is dry granite containing posed felspar, would be liable to serio traction. In metals, probably the most impurities are phosphor and sulphur; t producing cold shortness and the secc shortness or brittleness when hot.

We notice on page 98 that three wor a displaced letter due to a printer's erro may also account for Unwin's rule f diameter being given on page 165 as instead of $1.2\sqrt{t}$.

* AN INTRODUCTION TO THE PRACTICE OF CIVIL ENGINEERING. By E. E. Mann. (Macmillan & Co.) Price 7s. 6d.



The Pentalpha Method of Describing the Greek Ionic Volute.



Bird's-Eye View of Dormanstown. (See p. 524.)

MODERNISM IN ARCHITECTURE

At a meeting of the Birmingham Architectural Association some time back Mr. Howard Robertson said the subject of "Modernism in Architecture" had appealed to him for two reasons. The more important reason was that he believed that the present epoch marked a cleavage between two schools of thought in architectural design—which for lack of better definition he would term the "old" and the "new"—and the second reason, arising out of the first, was that he was particularly anxious, as one concerned in architectural education, to provoke discussion on the wisdom, or otherwise, of departure from certain traditions which the majority of architects were following at the present time.

It was an open question whether or not architecture of the present day was an expression of the real convictions of the designer, and whether the majority of architects were creative artists in the sense of evolving buildings which had beauty derived from an ennobling function, and not beauty in the form of an applied garment which was incompletely convincing owing to its unsuitability and frequent hindrance of function, independently of any question of plagiarism or pastiche.

In his opinion there existed a majority of architects who were designing in accordance with their ideals; but he believed those ideals were not innate but had been formed through the influences of poorly directed education, social snobbery, and mental inertia, assisted by the pressure of modern conditions. The remaining minority of architects appeared to be divided into the class which was attempting without ideals to live by supplying the article for which it assumed a demand, and the class which was thinking and acting with independence, receiving some support but innumerable rebuffs.

The trouble at present was that architects were failing to benefit by the heritage of tradition, and failing to add to it, possibly because its grandeur had intimidated them, and also because they had depended upon it instead of attempting by original thought to make tradition themselves. They had overlooked the great essentials of architectural composition; they had not seriously attempted to analyse or formulate them, and they had steadily piled up an immense accumulation of data regarding architectural features and details which they had allowed completely to dominate them. Curious and charming ornament arising perhaps from the naïveté of its designers, all the happy accidents and interesting conceits which were killed by repetition and copyism, were habitually thrown on the architect's screen, and in a voice charged with emotion students were adjured to sketch and measure! Sketch and measure by all means, but not to make a magpie's hoard! Not to be satisfied with a gloating over details, but to understand principles, proportion, scale, fitness, to analyse beauty, so as to be fitted to attempt it in buildings in which none of the detail motifs which they had plotted might be appropriate. Blind worship of the past, vague allusiveness regarding great buildings whose claims to greatness were seldom logically explained, the idea that no architect could originate until he had been through a period of undigested pseudo-antique or mediævalism, the dictates of fashion, all constituted so many hindrances to the production of a living architecture which aimed at the most beautiful possible combination of function and expression, suitable to and adorning the period in which they lived. The classic vocabulary which they had acquired and utilised in most of their architecture to-day was extremely flexible. It provided good or mediocre solutions for nearly every problem, solutions decent if not inspiring, and its motifs were capable of being handled with comparative freshness by an able designer. But in the deceptively easy manipulation of classic form lay the great danger. They had been vulgarised and misused through this very quality, and the rival glories and grandeurs of Greece and Rome had been butchered and cast into the gutter together. The traditional architecture of antiquity, so satisfying in many of its forms, instead of being reserved for those buildings whose civic purpose was traditional, and where a traditional treatment was therefore expressive, had been utilised as the universal cornucopia. Its output had now produced saturation, the not unlimited vocabulary was being exhausted, stagnation was setting in, and there were signs of reaction and revolt against its domination. Such a revolt was an inevitable and healthy sign of vitality and an evidence of independent thought. As long as any definite style or type of architecture was sufficiently flexible and suitable it would satisfy, provided that a desire to design in that style was really spontaneous on the part of the architect. As soon, however, as they found the combination of inadequacy to express function with beauty, and decadent vulgarisation and style dominating conception, the desire was aroused to create new forms more beautiful, more expressive, in which externals and mannerism were thrown overboard in favour of a reversion to main principles which in the process of decay had become submerged. As soon as a style became a manner, into which, to quote Mr. Roger Fry, the architect translated, and in which he no longer lived, that style was dead.

Such a situation was, he believed, being reached to-day. Architecture was generally decadent; they had only to look at the largest and most recent achievements of some of the foremost architects to realise it, and the time had come for an examination of the means for remedial action.

To achieve progress they must eliminate prejudice against experiment; they must study, and try to benefit by, the attempts of architects in other countries to design and not copy; they must broaden their outlook on the students' training, and they must remove all external hindrance from architectural progress as far as lay in their power. The heavy hand of so-called "scholarship," with its excessive cult of Greece and Rome, a competition system which offered the premium to any plan that was simple and cheap and which almost completely disregarded architecture, and a general attitude on the part of architects and their patrons of sluggish repression towards the so-called "modern"—all these must be overcome.

That it should be practically indispensable for an architectural student to utilise the recognised forms of classical or Renaissance architecture in order to win the biggest architectural prizes of the profession was as unfortunate as was the insistence of a City Corporation that its new buildings should embody the orders. As regarded competition architecture, the encouragement to beauty of design was very slight. The fashionable dictum seemed to be that the best plan was always the simplest, a very dangerous half-truth, as the simplest-looking plan in a set of designs might be the very worst in the collection. Competitions seemed to be judged entirely on apparent simplicity of plan (which should preferably be completely symmetrical), and pitiable elevations did not seem to weigh against the selection of such schemes. It was safe to say that at the present time a design such as that of the new town hall in Stockholm would have had practically no chance of being premiated in this country.

Bartlett School of Architecture.

The following election has been made at University College, London: To the Bartlett Entrance Exhibition, tenable in the School of Architecture, of the value of £40 a year for five years—Mr. W. F. B. Lovett, of the Dunstable Grammar School.

THE ROMANCE OF MIDDLE AGES

Sir Banister Fletcher recently g introductory lecture of a course of twe University Extension Lectures on M Architecture, at the Central School and Crafts, Southampton-row.

He dealt first with the nature of the to be given under the auspices of the Un of London during the coming sessio explained that he would deal with the architectural history on broad lines popular point of view and trace its ev in the different countries of Europ referred to architecture as a visible ex of civilisation uniting and embracing th arts, and pointed out that all modern was founded upon old art, although ada order to conform to existing conditions. tecture being the basis of all design, a ledge of it was necessary not only to d and art students, but practically the community. The author and novelist, settings of their historical novels, the jo and the photographer, who largely dea buildings, the connoisseur of the accesso and the teaching profession, all required ledge of this essential and enthralling All who travelled required a knowledge subject, since the lands they visited a closed book without that knowledge. over, the architectural work of the pres was stimulated and refined by a right s the best work of the past.

Sir Banister illustrated his lecture with slides, and showed that mediæval archi was a continuous evolution from the arched or Romanesque period to the p arch or Gothic period, and was the re forces and tendencies underlying the life of mediæval times. Views were comparing the architecture of the periods of history, so as to form a con link with the other courses of lecture Banister hoped to introduce the atmosp the mediæval period and form a sense of tion between architecture and history, formed the stage upon which it had enacted.

The next lecture will deal with a mediæval cathedral.

STEEL FRAME BUILDI

Anyone looking through the pages brochure recently issued by Messrs. D Long & Co. would, we think, be much im by the variety and extent of steelwork out by this well-known firm all over the The advantages of steel-framed buildi apparent enough, and if the construction of the buildings could be made clear the would be happy enough. It is not appar however, how we are going to fit our the idealities into practical works, and w realise from the pages of a striking b like this from Messrs. Dorman-Long t value and efficiency of steel-framed b will for long to come triumph over ar forms of construction we yet know of f mercial purposes.

It is satisfactory to see that we hav country a firm so well equipped for carr steelwork in such a variety of forms sort of place and conditions. The p. 523 shows the admirable housing they have so far carried out, which is ing illustrations of their enterpris readers will have noticed that their E stand at Wembley was designed by Si Lutyens.

The Hackney Institute.

The prospectus of the Hackney Inst 1924–5 has recently been issued. The tural and building trades department courses in architecture, building con carpentry, and joinery, woodworking m work, plumbing, and painters' and d work.

OOK REVIEWS

d Years of Portland Cement. By Davis, M.Inst.C.E.I., M.I.Mech.E., xxii + 282 pp.; 41 illus. (London: te Publications, Ltd.) Price, cloth g, 21s.; leather, 25s.

lume has been specially written to entenary of the invention of Portland 1824. In addition to a complete the growth of the cement industry arly days until it has arrived at its sition as one of the most important n the world, a mass of information the different methods of manufacture e period under review. The value sumer of the improved methods of re in modern cement works is shown t that whereas in 1852 the tensile f the neat Portland cement on the s only 100 lbs. tensile per sq. in. at , present-day cement has a strength per sq. in. at the same period. The so often made that Joseph Aspdin, er of Leeds, was the inventor of ement, as we know it to-day, is not y the author, whose researches have the conclusion that Aspdin was the the name "Portland cement" only, similar cements were made earlier te of Aspdin's patent (1824) by Vicat nd Frost in England.

me contains a summary of the Port- t specifications of the world, and a of information which should be of l architects, engineers, and builders n interest in the materials they use, chemists and geologists. An appen- n full the early patent specifications d cement by Higgins, Parker, Frost, Ransome, Stokes, Hurry and Aspdin. e is well bound, and has been produced tive manner suitable to the important mmemorates.

Cottage Construction. By H. Bryant old, M.S.A. With special chapters by adogan Rothery, Paul Willough- S.Arc., E. W. King (Past-President, Wales Federation of Building Trades' yers), E. J. Strange (Past-President, te of Builders), M.R.San.I., A. C. N, A.S.San.I., R.P. Vols. II and III. 19s. 6d. per vol. (London: Caxton ning Co., Ltd., Clun House, Surrey- W.C. 2.)

bination of theory and practice which make up of scientific modern building n is well illustrated in these volumes nd Cottage Construction.

volume of the series dealt with the pects of the provision of dwellings, n of design with the site and the es of disposition and arrangement of nnection with the points of the com- e second volume begins with a de- f the actual work to be done on the ning the foundation and footings, the e adopted to keep the house dry, and ar practical points. The problem of sloping ground is dealt with, and a on retaining walls will afford comfort readers.

this subject can with safety be dealt efly may be questioned, especially in e statement on a preceeding page in with the levelling of the site. "Ter- be carried on without retaining walls eight is not great, the soil is fairly he dead load of the house is low or the solid subsoil." While this may encouragement to the over-cautious, me a terrible trap to the optimistic only experience can decide the appro- s to be assigned to the expressions " and "fairly good." The distance e of the terrace from the wall base be taken into consideration.

ately the figures given on page 6 for ions of retaining walls are also in- ne optimistic side, and the statement certain circumstances "little more than a facing wall is needed, if built on a slope with buttresses, say a brick thick," is very minutely dependent upon the exact angle of "slope" in connection with the angle of repose of the materials to be supported, and, while this is a matter of general knowledge among constructors, the reader who happens to be ignorant of it will be the one to deceive himself.

The statement "Burnt clay, dug from the site, and broken up, also makes a suitable aggregate for foundation work," might be fairly qualified for the inexperienced by the addition of the caution that thorough burning of the clay is essential to its durability. In most cases the dangers arising from lack of caution are forcibly put before the reader. "Asphalt should only be laid while hot on a dry surface. Excess of moisture on the under surface is likely to cause steam, which gives rise to bubbles and these may burst, so destroying the seal . . ." and vitiating the damp-excluding properties for which the asphalt has been applied.

Some useful hints are given concerning the cause and cure of dampness in walls, and the contention that vegetation should be allowed on walls in the interests of picturesque appearance is combated by the author, who has removed the roots of Virginian creeper from the inside of a 12 in. wall, the roots causing cracks in the walls and peeling away of the plaster.

In connection with brickwork the types of bricks in general use are described, the R.I.B.A. standard of brick dimensions quoted, and several figures given for quantities of different bricks, and crushing and safe strength under live or dead loading.

Bond and reinforcement of brickwork and examples of the use of ornamental brickwork in chimney pieces are also described.

Stonework and masonry are briefly treated as not coming so frequently into ordinary house and cottage construction, and the question of lime or cement mortars and the use of special hollow brick-blocks is debated. The difficulties attendant upon the use of faced and lined walls and veneered walls are pointed out in a separate chapter.

"Mud walls of every description," writes Mr. Newbold, "being composed of non-conducting materials prove cool in summer and warm in winter They, therefore, go far to make comfortable houses. However, they require care not only in building, so as to make them as solid as possible, and to give them the utmost protection, but constant attention as to upkeep. If defects are early detected and remedied at once, the walls will remain weatherproof and stable practically indefinitely, for there are well-authenticated examples of quite ancient cob cottages in Devonshire and *pisé de terre* houses in France."

Half-timber work and its modern equivalent the portable frame building, receive attention, even sham timbering being noticed, but concerning this last we are happy to endorse the author's concluding remark: "it is not a method to be recommended."

The up-to-date wall linings and the more conservative alternative of plaster are compared. For detachable wall finishings it may be claimed that they facilitate the drying out of a house since they do not contain the amount of water that goes to the composition of plaster.

Something like one-third of Volume II is devoted to the discussion of concrete, under the chapter headings of "Concrete: Mass Construction," "Concrete: Blocks and Slabs," "Concrete: Pre-cast Work," and "Concrete: Reinforced Construction."

The third volume continues the treatment in detail of various parts of the house, "ceilings," "roofs and roofing," and "staircases" being dealt with in turn. Under the heading "Carpentry," different methods of shoring and scaffolding are illustrated, and a list of knots used in tying a pole scaffold is given. The knot shown in Fig. 8 is, however, the "cow" and not the "clove" hitch, as described in the text. Fig. 23 correctly illustrates the clove hitch which has the advantage over the "cow" that it is made tighter by pulling on either one or other or both ends of the rope and holds from the moment it is tied.

A great deal of detailed information on "Sanitation and plumbing" (including hot water supply) is contributed by Mr. A. C. Martin, A.R.San.I., who has also written a chapter on "Waste disposal work." Both chapters are excellent. Instructions as to "Outbuildings and Boundary Walls" are followed by Mr. Paul Willoughby's contribution on the "Conversion of Cottages." The plans for conversion are distinctly reasonable.

The third volume is concluded with a chapter on "Repairs" and an index applying to the three volumes as a whole. The work is illustrated by many diagrams, photographs, and by coloured plates reproducing working drawings of house and cottage designs by various architects.

The Builders' History. By R. W. Postgate. Published for the National Federation of Building Trade Operatives by the Labour Publishing Co., Ltd., 38, Great Ormond Street, London, W.C.1. Price 12s. 6d. net.

The National Federation may well congratulate itself upon its choice of a historian. Mr. Postgate has produced a work of extreme interest, and one that has entailed a vast expenditure of labour and research in all parts of the country. So much of the information here contained was otherwise destined to oblivion that this volume will no doubt eventually take its place as the standard work on the trade union movement from its earliest beginnings to the present day.

The outstanding personality in the history of trade unionism is unquestionably that of Robert Owen. Starting life as a model factory owner, he became a pioneer in communistic settlements in America, and when they (naturally enough) failed, he founded co-operative communities or co-operative societies for production. Owen wielded an extraordinary influence over his followers and as time passed appears to have lost to a great extent his mental balance. His dogma that "man's character is formed for, and not by, him" might have been a harmless error if he had not attempted to force this belief and others of the same kind, with their consequences, into his programme of reform, and thereby brought the whole trade union movement to disaster in 1834.

Another commanding personality who, we are glad to say, is still with us, is Robert Applegarth. Beginning his constructive work in 1858, when he was 24 years old, Mr. Applegarth grasped many truths that appear to-day to have eluded the intelligence of many trade union leaders. His essential sanity and breadth of vision were well illustrated in a speech delivered in 1866: "With regard to strikes he would tell them at once that he did not approve of that way of doing business, except in cases of absolute necessity and when every other means had been tried and failed to accomplish the desired object. If they had any grievances they should write to their employers, and if they refused to agree to their terms, or took no notice of their appeals, the best thing was not to strike, but to lay their claims before the public; and the masters would then be compelled to state their objections, on which the public would pass their opinion, which they might consider as the verdict of a jury. If the public agreed with the employers it was of no use for the Society to press their case any further, and if public opinion was with the men it would be no use for the masters to try to hold out any longer, for it was not out of the employers' pockets that the advance of wages or the reduction of hours would come; as in all such cases it was the public and not the masters who had to 'pay the piper.'"

Compare these words with the advice now given on page 448 of this book:—"Their attitude (i.e., that of the employers at the Building Parliament) to-day should warn us to beware of thinking that control of the industry can be achieved by any method of conciliation and constitutionalism. 'We are respected only when we are feared,' and the building workers can attain their victory only by reliance upon their own strength, not upon any appeals to the masters' better nature." It is astonishing that a book written in so impartial a spirit should end with such advice. Mr. Applegarth

saw that the public is and must be the final arbiter, and he realised that a strike that has not public sympathy behind it cannot succeed. Do the trade unions still believe—in spite of all the lessons of the past—that the public is to be made to concede demands irrespective of their justice? Can they still imagine that just demands will get a fair hearing when they are coupled with threats? If so it would appear that the lessons of this excellent history have been so much experience wasted, and the days when Labour will take its rightful place are as far off as ever. The policy of force is as deplorable and futile when wielded by Labour (even if it had it to use) as it is in the hands of employers or anyone else.

Labour often seems to imagine that the man who actually lays the bricks or the man actually behind the gun is the only person who does any real work; the architect who designs the whole structure and the general who plans the whole campaign are treated as though they ought to be thankful to get any recognition at all. Trade unionism is a necessity and, wisely guided, can be a great power for good.

We congratulate the author upon the successful completion of an extremely difficult task which has resulted in a volume as well presented and as attractively written as it is cheap at its price.

Modern Wood-Working Machinery By STAFFORD RANSOME, M.Inst.C.E.

There is a vast store of information in this book for all who are interested in, or will be interested in, wood-working machinery. The operative who reads this work will find much that he would otherwise be unacquainted with. He must benefit by the better understanding he will have of the machine which, as a worker, he is called upon to use. The manager will be better able to advise upon the policy of adopting this or that machine which will be necessary to carry out certain work. The proprietor who finds it necessary to become acquainted with wood-working machinery will be well advised to peruse this work carefully.

It must be understood that the book is written for Colonial and foreign buyers, as well as for the home purchaser, but there are a few further essential points to consider when deciding to lay down a plant. Mention might be made of the Home Office Regulations which may become very costly to meet if not kept fully in mind when the lay-out is considered; also many operatives need more complete instruction upon such important subjects as balance, allowance for throw, and maximum rate of feed, giving satisfactory results in different kinds of material under varying conditions. The manager and proprietor would be able to approach new schemes with more confidence if some approximate idea of cost, based upon a few typical lay-outs, could be given, and a few hints upon rating charges would be invaluable. Even if these several points do not directly apply to the purchaser, they would serve to remind him that there may be restrictions in his district or country that he must conform to. The comparative values in different places are not difficult to compute. Although these points occur to one as being necessary, the book is nevertheless a useful addition to the shelves of all who have an interest in working machinery.



FIG. 2.



FIG. 3.



FIG. 1.

Books Received.

BUSINESS FIRST PRINCIPLES. By Shepherd. (London: Business Builders. Price 1s. net.

LONDON. By George S. C. Swinton. (Lo John Murray.) Price 1s. net.

OLD DOMESTIC ARCHITECTURE IN HOL Edited by F. R. Yerbury. (London: The tectural Press.) Price 25s.

A HUNDRED YEARS OF PORTLAND CE 1824–1924. By A. C. Davis. (London: crete Publications, Ltd.) Price 21s.

PERSPECTIVES. By Albert C. Fr (London: Drane's.) Price 10s. 6d. net.

ANCIENT AND MEDIÆVAL ARCHITECTURE Theodore Pignatorre. (London: D Price 21s. net.

LIVERPOOL CATHEDRAL. By Vere E. ((Liverpool: Littlebury Bros., for the Liv Cathedral Committee.) Price 1s. net.

TABLES OF STEEL COMPOUND GIRDER F. B. Mason. (London: Chapman & Price 10s. 6d. net.

MAP OF ROMAN BRITAIN. (Southar Ordnance Survey.) Price 4s.

LONDON. (Odhams Press, Ltd.) Pr net.

GOOD AND BAD MANNERS IN ARCHITE By A. Trystam Edwards. (London: Allan & Co.). 6s. net

THE HISTORY OF THE TEMPLE C LONDON. By J. Bruce Williamson. (L John Murray.) Price 21s. net.

A HISTORY OF ARCHITECTURE. Banister Fletcher. (London: B. T. B Ltd.)

CHIMNEY DEMOLITI

THE illustrations on this page sh method adopted by Mr. W. Larkins fo a chimney at Bedfordwell Waterwo cently. The chimney stood on bu and had a head weighing nearly 50 ton buried itself 20 ft. into the ground. N or explosives were used, but the base wa cut into until it toppled over. Fig. 1 sh thin lath inserted into the gap to give of a sudden settlement. Fig. 2 sh beginning of the fall. The men ha seconds to get clear of the scaffold Fig. 3 shows the chimney about to fa a foot of the mark for which it was int

CHITECTS' AND LDERS' INQUIRY BUREAU

glad to give questions and answers ccept responsibility for contributed cially on legal matters.

appeal to our correspondents to queries on paper of a size easily ritten as legibly as possible, or in typescript?—Ed.

Preparation of Designs.

TO MR. C. R. MILLINGTON.]

established that an architect holds amongst other things, to shield his ll possible liabilities, and that it is art of his undertaking, to ascertain, ply with, the requirements of all ocal statutes regulating buildings, ocality of the buildings; and, with tory legislation, such as by-laws, them. See James *v.* Masters (1893,) Ignorance of them may mean t will be called upon for a fine, or to rt or the whole of a building. (See Smethwick Local Board, 1890, 59, 50.) An architect is, however, not have a minute and accurate know- aw; but he must have a knowledge l rule of law governing and applic- rofession. (See Jenkins *v.* Betham, 168.)

oved failure of his duty, in law, an y be sued for total loss thereby is client; whether that exceeds or f the remuneration agreed upon. e acts without due care and skill, s entitled to dismiss him. (See Baxendale, 1854, 9 Exch. 351; Broadstairs Local Board, 1890; dson on Building Contracts, 159; *v.* Cornelius, 1858, 5 C.B. (N.S.), er, an architect may forfeit his neration, wholly or in part, because t holds himself out to be skilled in not recover for services which he known would be useless.

that an architect must make him- ed with all matters which appertain ts of his client, and, the exercise of , in so far as he has access to infor- as the existence of a town-planning d the provisions of the Town s are, or should be, well known by n.

although it may be a hardship, it r that failure to acquaint himself stence of a town-planning scheme is client's enterprise is a neglect of part of the architect, and the con- he client, express or implied, is en. "TOWN PLANNING."

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hout suggesting a ruling upon the ing point raised by your corres- ay interest him to hear of a some- l case. A certain bank extension in a narrow street in a Midland l working drawings were prepared es taken off. On the plans being the local authorities, the informa- en in the strictest confidence that ening scheme was to be applied to n question, the set back frontage destroying the arranged plans. the clients fully admitted the archi- to their full proportion of fees on ed scheme, and the local authorities ill compensation in this respect. l difference between this and the by Mr. Millington, is that, while ing schemes must be kept secret, nt, to prevent gambling in values, town-planning scheme must be ed to encourage building enterprise. give the instance for what it is "FRATER."

House "Fit for Habitation."

[REPLY TO "INQUIRER."]

SIR,—The enquirer does not state if he was served with a notice under Section 94 of the Public Health Act, 1875, or Section 28 of the Housing, Town-Planning, &c., Act, 1919. If the former, it is open to him to abate the nuisance by doing such works as he thinks will suffice and relet the house, leaving to the local authority any action which it may think fit to take before a Court of Summary Jurisdiction as to any default in complying with the Section.

If the latter, then, under Section 28 and following sections, the local authority has far larger powers; for, though it would appear from the marginal note to Section 28 that it is only confined to repairs, it is thought that the powers given to the local authority by this section go much further, and are not thus restricted.

Unless inquirer can show that works that he proposes to do will make the house in all respects reasonably fit for human habitation, he must comply with the requirements of the notice; and he should get in touch with the local authority and endeavour to settle with it the minimum to satisfy the requirements of the section, especially as in certain circumstances the local authority can do the work required to be done, and recover the expenses incurred.

The inquirer does not say if a closing order has become operative. If there be one and he relets or occupies he is liable to a fine, *i.e.*, £20.

"LEGALITY."

Rights of Light.

[REPLY TO "SURVEYOR."]

SIR,—In reply to the inquiry of "Surveyor," in a recent issue of *The Builder*, the subject of natural illumination has received little or no attention in technical literature. The National Physical Laboratory, Teddington, made numerous investigations for the Home Office Committee on factory lighting, but the Report of that Committee (Cd. 8,000) is now out of print. A résumé of British and foreign research into the subject was embodied in a paper read by Messrs. P. J. & J. M. Waldram before the Illuminating Engineering Society in 1923, together with a description of methods of predetermining the effect of altering existing obstructions, both on natural light and the access of direct sunlight. Copies of this paper can be obtained from Messrs. Batsford.

There are one or two old works, Molesworth's "Obstruction to Light," for example, copies of which can be found in some technical libraries; but the accuracy of the methods which they recommend is not, except as regards direct sunlight, borne out by modern research. I am informed that arrangements are in progress for including the subject in the programme of sessional papers to be read at the R.I.B.A. this year.

A paper bearing more directly upon the effect of natural light on rental and capital value is also in course of preparation by one of the authors of the paper published by Messrs. Batsford.

"P. J. W."

Cavity Walls, &c.

[REPLY TO W. F. KENNELLY.]

SIR,—The concrete slab system mentioned in *The Builder* of September 26 appears to me to be the most satisfactory up to the present, and the speed of building should be, I think, 60 to 70 per cent. faster than building in brickwork. It would be interesting, however, to compare the cost of building a house with cavity walls (as mentioned) with that of brickwork, and I should be glad if any of your readers can enlighten me as to whom and where I could obtain full particulars of this system.

"BUILDER."

Rendering Accounts.

SIR,—I have been a reader of *The Builder* for some years, and through your Architects' and Builders' Inquiry Bureau I should be pleased to receive the following information, viz.: What is the correct method for rendering accounts for jobbing and building works other than works contracted for. Is it usual to give every item of material and labour with the price against each item?

Also, what is the recognised fair gross profit to add to materials and labour for jobbing and other works? Any information upon these points will be greatly appreciated, as I have been in the building business some little time and often have difficulties with accounts.

"YOUNG BUILDER."

Concrete Blocks v. Brickwork.

SIR,—In reply to "Surveyor," I may say that as a general rule the London builders have not sufficient room to make concrete blocks, otherwise their use would be general in London, for they are much cheaper and a building can be erected in half the time that it takes for bricks. A properly made concrete block is waterproof on the "face," and no condensation will appear on the inside.

There is a machine on the market which, with one man, will make 150 blocks, 18 in. by 9 in. by 6 in. in eight hours. This is equal to 1,200 bricks, and each block, which is equal to eight bricks, can be produced at 3½d. each. Rock face, pebble dash, rough cast, or imitation stone finish can be given to these blocks, and colour finish can also be employed to advantage.

There is also a great saving in mortar, for a concrete block only requires the same amount of mortar as used for four bricks, and a concrete block can be laid in the same time that it takes to lay three bricks, thus there is a saving also of labour.

J. WOOLLARD.

Sand Lime Bricks.

SIR,—Your note upon the abundance of brick earth in this country as the cause of the non-use of sand lime bricks is so very correct that any word added thereto will be uttered with the utmost diffidence. There is, however, an acknowledged shortage of bricks, and it is difficult to understand this in the light of the abundant natural supplies of the raw material. It can only indicate some influence of a purely artificial character at work. If there is anything in this, any competitive method that can be found to stimulate the limitless potentialities of brick-making should be encouraged in every way, and the sand lime brick does seem to answer very well as a substitute. The concrete cement block cannot at present compete, owing to the relative costs of the component parts of brick and cement, in their raw state; but the sand lime brick starts on sound ground and should do well in this country at any rate for a time.

"COMPETITION."

Grano-Paving.

SIR,—We have it dinned into us from a very early stage of studenthood, that cement should not be beaten up again after it has commenced to set, and yet the usual practice of laying cement grano-paving is to allow the surface to initially set, and then scour it to a fine surface. The result, when performed by skilled workmen, is a very fine hard surface that has been observed to wear well in many instances. Can any reader explain this apparent ambiguity?

"STUDENT."

Brands of Timber.

SIR,—The quality of timber with which we have been served since the war days has rendered the job of supervising building doubly difficult and responsible. Probably the only safe way finally to judge timber is by the brand, and as these have been much altered of late years, a sound source of information is missing. Could any reader inform me where an up-to-date list of timber brands can be obtained? Many timber merchants seem very shy of giving this information.

"CAUTIOUS."

THE BUILDING TRADE

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A., F.R.San.Inst. (Barrister-at-Law).

XIV.—DEFECTS AND MAINTENANCE.—PENALTIES AND LIQUIDATED DAMAGES.

It is obvious that the system of visiting the works at intervals does not bind the architect to detect every defect in its initial stages—and the "Conditions of Engagement" set out by the Royal Institute of British Architects provides that "constant superintendence of the works does not form part of the duties undertaken by him and is not included for"—in the scale of charges.

Defects and Maintenance Clause.

For the above reason, and in the interests of both parties, contracts usually include a "defects and maintenance" clause—which protects the employer against damage from defective work and its results within a reasonable time—usually six months—and, on the other hand, determines the period of liability, in respect thereof, on the part of the contractor. The contractor must be allowed opportunity to make good the defects complained of.

The contractor cannot be held liable for damage from "wear and tear" during this period, unless such wear and tear is the direct result of defects for which he is liable. He is, however, liable for defects the causes of which may not be ascertained until after the period of maintenance. It is only in very aggravated circumstances that a contractor can be held liable for defects appearing after the expiration of the period; the architect's final certificate of satisfactory completion provides the contractor's release, unless fraud or collusion can be proved. But the contractor is at any time liable for defects pointed out to him during the maintenance period.

Fire—Frost—Inclement Weather.

A clause for "defects" only does not impose liability for damage from these causes; but if "maintenance" is included the contractor must prudently insure against fire, and make any allowance necesary for climatic difficulties, as he will then be liable for all these, during the period fixed.

Improper Work.—Opening Up.

Usually the architect is empowered to order the removal of bad work, during the currency of the contract; but it would appear that, with the expiration of the maintenance period and the granting of his final certificate, his power ceases.

The architect may also demand that work be opened up for the purposes of inspection, up to the end of the maintenance period, if he has reason to believe defects may thereby be disclosed.

Sub-contractors.

The general contractor should, in all cases, see to it that sub-contractors undertake liability for all matters connected with their sub-contracts, where liability is laid on himself by the general contract, if such is his intention. However, if a sub-contractor is engaged directly by the employer, the general contractor can only be liable for defects or damage in the work, if he has expressly contracted to take over this responsibility.

Penalties and Liquidated Damages.

It is usual to protect the employer against undue delay by fixing a sum—per day or week—to be paid as a fine or penalty, during the period following the agreed date of completion.

A penalty is recoverable up to the amount of actual damage or loss caused; liquidated damages is the exact sum named, being taken as the previously ascertained loss to the employer in respect of delay.

In an action for damages, the Court may interchange these two terms, in construing the phraseology of the contract, according as the intention of the parties is ascertainable. Because in practice they are often used carelessly, the one for the other.

Anson's Rules.

These are useful as a guide to the correct employment of these two terms:—

1. If a contract is for a matter of uncertain value, and a fixed sum is to be paid for the breach of one or more of its provisions, the sum may be recovered as liquidated damages.

2. If a contract is for a matter of certain value, and on breach of it, a sum is to be paid in excess of that value, this is a penalty and not liquidated damages.

3. If a contract contains a number of terms, some of certain and some of uncertain value, and a fixed sum is to be paid for the breach of any of them, this is probably a penalty.

These rules may be applied to the clause fixing the date of completion.

Rule (1) would apply where the clause fixed a fine per diem or per week in delay in completion. And it would therefore, correct to describe these "liquidated damages" in a building

Bonuses for Earlier or Punctual Co

It is sometimes offered, in conjunc the penalty clause, that bonuses will if the work is completed punctually the date fixed. These bonuses may claimed by the contractor, even if is delayed *beyond* the fixed date, w if, he can show hindrance on the pa employer, as having prevented him fr ing them. For instance, hindrance the advent on the work of sub-co controlled directly by the employer agent, has been successfully pleade reason why bonuses should be paid general contractor, whose work was delayed, when otherwise he would ha pleted, and earned the bonus.

Building Surveyors' and Inspectors' Ass

A meeting of this Association w recently at Liverpool. It was arra hold the next two quarterly meeti January 10 and April 4, 1925, at Ma and Liverpool respectively, and to in members of these towns to arrange fo or lectures to be given at each meetin Association also decided to offer a three guineas for the best paper submi "Reinforced Concrete."

COMPARISON OF PRICES OF BUILDING MATERI BETWEEN AUGUST 4, 1914, AND OCTOBER 1,

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	Sept. 1, 1924. £ s. d.	Oct. 1, 1924. £ s. d.	Rise d M (Pe
Bricks—					
Best Stocks	1 16 6	3 3 6	4 3 6	4 3 6	
Flettons	1 14 0	2 7 8	2 13 3	2 13 3	
Glazed	13 0 0	17 17 6	23 0 0	23 0 0	
Thames Ballast	5 9	17 0	10 6	10 6	
Thames Sand	7 3	17 0	15 6	15 6	
Shingle (¾"in.)	—	15 0	14 0	14 0	
Portland Cement	1 17 0	3 8 0	2 18 0	2 18 0	
Ground Blue Lias Lime	1 0 0	2 2 6	2 4 6	2 4 6	
Grey Stone Lime	1 8 0	2 7 0	2 11 9	2 11 9	
Bath Stone	1 7½	1 7	2 9½	2 9½	
Portland Stone	2 4½	2 10½	4 4	4 4	
Good Sound Building Timber—					
4 in. × 11 in.	16 10 0	53 0 0	34 0 0	32 0 0	
3 in. × 7 in.	13 0 0	46 0 0	25 10 0	23 10 0	
3 in. × 11 in.	15 0 0	50 0 0	30 0 0	28 0 0	
2 in. × 11 in.	—	51 0 0	30 0 0	28 0 0	
2 in. × 7 in.	—	46 0 0	24 0 0	23 0 0	
3 in. × 4 in.	—	—	24 10 0	24 10 0	
Slates—					
24 in. × 12 in.	—	—	37 12 6	37 12 6	
22 in. × 12 in.	—	—	34 0 0	34 0 0	
20 in. × 10 in.	—	—	25 12 6	25 12 6	
16 in. × 10 in.	—	—	17 12 6	17 12 6	
16 in. × 8in.	—	—	13 15 0	13 15 0	
R.S. Joists	9 10 0	—	13 10 0	13 10 0	
Iron—					
Common Bars	9 0 0	16 10 0	13 10 0	13 10 0	
Mild Steel Bars	9 5 0	21 0 0	12 10 0	12 10 0	
Steel Bars	9 5 0	19 10 0	13 0 0	13 0 0	
Cut Nails	11 10 0	29 0 0	20 10 0	20 10 0	
Sheet Lead	22 15 0	40 0 0	43 0 0	44 0 0	
Glass—					
15 oz. Sheet	2	7	3⅜	3⅜	
21 oz. „	3	8	5	5	
26 oz. „	3½	9	6	6	
Raw Linseed Oil	2 4	8 4	3 11	3 11	
Turpentine	2 6	11 0	5 11	5 11	
Ground English White Lead	30 5 0	60 10 0	57 0 0	57 0 0	
White Lead Paint	—	83 10 0	80 5 0	80 5 0	
Red Lead	28 10 0	47 0 0	52 0 0	52 0 0	

ON BUILDING TRADE FRICTION

e received the following letter from nks, Organiser, A.U.B.T.W. :—

rave your indulgence to deal with points raised by your correspondents *der* of September 19 and 26. In the I agree with Mr. Steffens when he ie desire for an exchange of views on In some way the present relations e London builders and operatives go a change if the present chaotic are to be improved; certainly it redit to any of us. If more publicity n on the actual negotiating proceed- ht be the means of assisting in a of affairs existing.

onal settlement has proved, as some pated, to be no settlement at all so on is concerned. We did expect, in e facts and circumstances existing e dispute, that any terms of settle- ted would have provided either ns, or some machinery whereby the would have been dealt with. Instead mediately we settle down to apply es in terms of National settlement round to exactly the same position or to the dispute.

ult is it we have again arrived at ? Have our National representa- or have the London builders failed e the spirit and intention of refer- don ? Or is it the stupid pursuit of he operatives which is the cause ?

to the settlement the London uncil met a few days after the dis- osed for the purpose of discussing g agreement on outstanding differ- employers insisted before any dis- vages should take place we were to -hour week. To this we demurred, t that in our opinion clause 5 of the ttlement was an instruction by way o go into not only hours, but wages matters. The operatives proposed eed by way of inquiry into all these h the idea of reporting results of ie members of both parties, but pposed. In view of the deadlock it ggested from our side that we invite ves from the National body to meet ves of London employers and nd thus try to effect an agreement. employers took up a negative

tives' policy was directed broadly to differences under clause 5 in the curing agreement. We feel the atisfactory situation does neither continual unrest in shops and on tly business to employers, building more especially to trade unions. p but think employers are badly led; raining at the letter of terms of vithout regard to the facts of the ion, and simply ignore the spirit side of the problem. There can be relations getting back to normal in nosphere.

, in the interests of all, that after ion the employers will take a w. If not, do they imagine the ext spring, will accept in a docile ½-hour week ? No; he will be ed at the attitude taken up by the he result being more and more

gs me to the argument used by one respondents, to the effect that the a big majority of cases, wants s. What a singular thing the able to gauge the requirements of s better than their own represen- ere are some operatives who have for a 44-hour week; they never for 50, or, for the matter of that, eek. Trade unions cannot allow dominate its activities any more I.B.A. can look with favour on un- or extreme selfish elements domi- nating its policy. I would suggest to any employer it is not wise to lend too free an ear to such cases; the union is the authority. We could with just as equal force point out many builders do not agree with the policy of the L.M.B.A., but we accept that Association as the authoritative body for builders in London.

Apart from the main reasons on the hours' question, there are special reasons why the employee in London insists on a 44-hour week. Mr. Steffens, in your last issue, draws attention to time spent travelling. There is not another centre where the operative puts in so much time in this direction. Again, the L.M.B.A. insist upon the employee working 8½ hours a day with one break, viz., dinner hour. This cannot be done, except at the cost of efficiency. Just imagine a man or youth day after day having only one hour break in ten or ten-and-a-half hours occupied in work and travelling. I estimate the majority of employees to be in this position in London. This is neither rational nor human, and I am sure such a proposal is not based on the knowledge of the power of any physical frame responding so far as efficiency goes. The 44-hour week is worked in other centres; the London operative thinks he is just as much entitled to it, or more so, for reasons stated.

There are, in spite of differences of opinion, strong reasons why immediate steps ought to be taken to straighten out our differences. A Micawber attitude is unwise. No agreement will be worth the paper it is printed upon without the confidence of the operative is at the back of it. I would strongly urge an inquiry, and as a result submit terms to the rank and file. These could be alternative in character. The men are beginning to kick against the bureaucratic method of settling his working conditions; there must be some attempt made to place more direct responsibility upon him; this is one way of getting confidence.

INDUSTRIAL PEACE

An article by Sir Robert Hadfield which recently appeared in *The Times* contained some tables showing the number of working days which had been lost in each year of this century by trade disputes, and, as we have so often done in these pages, he makes an estimate of the money loss in wages arising from this cause. Thus, from 1900 to 1923 he shows that 315 million working days were lost, representing an estimated sum of £157,000,000 in wages, and this sum represents the loss only to those directly involved in the dispute, and not to those indirectly involved.

It is always impossible to calculate the loss to the country as a whole from every dispute, therefore particular interest is given to the example which Sir R. Hadfield gives as to indirect loss suffered by those employed by his firm, and he states that in the years covered by the period 1919 to September this year the wages lost amounted to £730,000 from disputes in which his workpeople were not involved and from which they derived no benefit. It is significant to find such an experienced Trade Unionist as Mr. George N. Barnes in his recent work, "Industrial Conflict: The Way Out," also referring to the waste of productive energy through strikes and lockouts, and urging the necessity of peaceful methods for the settlement of disputes, and it is especially remarkable that he should advocate the making of voluntary associations of employers and employees legal entities which shall be sueable at law for inconsiderate action inimical to the public interest. We have always strongly deprecated the placing of bodies outside the law of the land in the manner that was first inaugurated by the Trade Disputes Act, 1906. That Act did not make combinations of employers or workmen legal entities, but placed them altogether outside the law as irresponsible bodies, and it is a totally anomalous position.

We may allude to one point not mentioned in the article we have referred to, but which we believe is inimical to industrial peace, viz., the Act which in 1913 gave political powers to Trade Unions. We all know how careful we are to avoid political discussions in any matter of ordinary life, as religious and political opinions are considered sacrosanct to the individual himself, and any interference with those opinions is justly resented and stirs up strong feeling at once.

The Trade Unions are industrial bodies having recognised and very important functions to perform in relation to industrial affairs, but by this Act they have been converted into political bodies, and all the heat engendered by politics has been imported into their system, often to the embarrassment of the leaders themselves.

One of the first steps to attaining industrial peace would, in our opinion, be to attempt to sever the industrial from the political aspect of industrial affairs, and to keep the two questions in watertight compartments, as far as is possible. The Labour Party are now in a position to organise any political caucus apart from the Trade Unions, and are fully entitled to do so, but the importation of politics into industrial questions on the face of it cannot make for peace, and we should wish to see those great industrial bodies, the Trade Unions, restored to their true functions: the regulation of industrial conditions of labour.

PAINTS AND VARNISHES*

This work claims to be written from a strictly practical standpoint. The author has had twenty years' experience in the industry, and it is safe to assume that during this period he has had many opportunities not only of obtaining a first-hand knowledge of the practical application of chemistry in connection with painters' and decorators' materials, but that he has been able to bring his theories into line with the industrial needs of users of such materials. The book is printed on excellent paper, in a good, clear type which is easily readable. The matter is contained in 267 pages, and is very carefully indexed. A full description of the methods of analysing raw materials and finished products is included. It thus provides a much-needed book of reference for all who find it necessary to know more about the materials they propose purchasing than can be ascertained by ordinary rule of thumb or experience. In many books of this type the chemical terms used are not easy for the layman to understand, but in this case the author has used the term by which the material is known in the works, and has given the chemical equivalent in addition, thus making it quite easy for anyone with but little previous knowledge to understand what is meant. Generally, his descriptive matter is very clear and lucid. The book is very conveniently arranged in three parts.

Part I deals with: Paints, their composition, properties and uses. It explains the machinery used in the manufacture of paint, white and coloured, enamels, anti-corrosive and anti-fouling paints, distempers and cold-water paints.

Part II deals with: Inorganic and organic pigments, their preparation and properties. A good general description of the method of manufacturing white lead is given; the Dutch, Chambers and Thenards, and other processes being explained. Lime oxide and lithopone receive considerable attention, and the newer white pigments, antimony oxide and titanium white, are described.

Part III deals with: Varnishes, lacquers, and japans. In the first chapter there is a general introduction to varnishes, &c., colophony, soft resins, balsam fossil gums, and raw materials receive a considerable amount of attention. In the two chapters following, drying oils, linseed oil, solvents and diluents are dealt with. The chapter devoted to varnish is invaluable. The final chapter is devoted to Brunswick blacks, japans, and stoving enamels.

The book is well illustrated and the diagrams are excellent.

* "The Chemistry of Paints, Pigments and Varnishes." By J. Gauld Bearn, D.Sc., A.T.C., F.C.S. (London: Ernest Benn, Ltd.). Price, 30s.

UNEMPLOYMENT INSURANCE

THE Umpire appointed under the Unemployment Insurance Acts has recently delivered a decision on a point under the Act of this year. The principal Act of 1920, by section 8. subsection (1), disqualified an insured contributor from receiving benefit during a stoppage of work due to a trade dispute; but section 4 subsection (1) of the Act of 1924 has amended this provision by providing that subsection (1) of section 8 of the principal Act shall not apply, amongst other cases, where the stoppage arising out of the dispute " is due to an employer acting in a manner so as to contravene the terms or provisions of any agreement existing between a group of employers where the stoppage takes place, or of a national agreement to either of which the employers and employees are parties."

The facts of the case appear to be as follows: On June 18 there was a stoppage of work in the South Liberty Colliery, Bristol, and the cause of the stoppage was a dispute as to whether or not the employers were bound to pay wages in accordance with a " National Wages Agreement " made between the Mining Association of Great Britain and the Miners Federation at the end of May, but signed on June 18. The Bristol owners on the day previous to the signing of this agreement had resigned from membership of the Mining Association.

The Umpire found that the employers were members of the Bristol Colliery Owners Association, which Association is a constituent member of the Mining Association of Great Britain, and the National Agreement purported to be made by that Association on behalf of all its constituent Associations and the Bristol district was expressly included: That the Mining Association had power to make national agreements; and although it was provided that no local questions relating to wages could be taken out of the hands of a local association except at their request, as by the rules of the Association all questions were to be decided by vote, it must be inferred that the members were bound by such vote. Then, as to the question of resignation, the Umpire held that the Bristol owners were in fact members of the Mining Association when the agreement was made, and although they gave notice of resignation the day before the agreement was formally signed, that resignation had not become effective, as by the rules of the Association twelve months' notice was required. In the result the Umpire held that although the Bristol owners had protested that they would not be bound by any National Wages Agreement, yet by their membership of the Mining Association they were parties to the National Agreement, and the stoppage of work was due to an employer acting in contravention of a national agreement within the meaning of the section, and the men were entitled to unemployment insurance.

It will be seen that in these days of combines of both employers and employed the decision is of great importance.

The first part of section 4 subsection (1) of the Act of 1924 is as follows: " Subsection (1) of section 8 of the principal Act (which imposes a disqualification for the receipt of benefit during a stoppage of work) shall not apply in any case in which the insured contributor proves that he is not participating in, or financing or directly interested in, the trade dispute which caused the stoppage of work, and that he does not belong to a grade or class of workers, members of which are participating in, or financing or directly interested in, the dispute, or that the stoppage is due "—here follow the words quoted at the commencement of this note relating to contravention of agreements by employers, and it will be seen that where a breach of agreement takes place, then even those men participating in the dispute and possibly actually on strike can claim benefit. Where a deliberate direct breach of agreement has taken place between an employer and those directly employed by him, caused solely by the employer, it may appear reasonable that the men who suffer from the breach should not be deprived of benefit, but in these days when associations of employers and of men are formed on a large scale and agreements are framed comprising all sorts of conditions to be applied over a wide area, it is obvious questions must arise which may require adjustment, but it appears to offer an incentive to cease work if unemployment pay should be deemed to be secured to those participating in the dispute. It is thus as well to point out that this is not the case either under the section or this decision, as after the stoppage of work has taken place it still has to be proved by the insured contributor that the stoppage, in fact, was due to contravention of an agreement by the employer, that is to a breach of contract and faith on his part. All the same, the slightest variation of a contract would appear to make the section apply, and it may be doubted, therefore, if it will not tend to encourage a litigious rather than a peaceful spirit into industrial affairs.

ESTIMATING BUILDING COSTS *

THIS work on building costs in America is well printed, classified and illustrated. It contains chapters on most of the branches of the building trade, including excavations, concrete, ferro-concrete, stonework, joinery, structural steelwork, plumbing, plastering, electric lighting, heating, &c., and in each of these trades the costs of various materials and labours are clearly stated. It is interesting to notice that in New York a bricklayer will lay 1,000 common bricks on a 16 in. warehouse wall in 6¾ hours. American bricks are slightly smaller than the London stock brick. List prices of polished plate glass are given, and the discount of 75 per cent. is stated. It is a very long time ago since such discounts were allowed from plate glass tariffs in England.

In each chapter hints are given as to the best method of carrying out the work in each trade, which should prove useful. A considerable section of the book is taken up with information on " Appraisal of Buildings," and it is claimed that by the use of the data given it is easy to estimate the cost to reproduce almost any building constructed since 1890, of which the original cost is known, and thus many pages are filled with tables and examples of building costs, the reliability of which is claimed as an essential feature of the book.

Being a work of reference for A money values are stated in doll system of measuring differs fro London practice. The book is a v of information and can be reco contractors and their assistants, a business it is to use such informati

NATIONAL FEDER OF MASTER PAI AND DECORAT

THE annual meeting of the Nati tion of Master Painters and D England and Wales was held Newcastle.

The President, Mr. J. W. Alder, i of his address, said the man who decorator must spare no effort to r efficient and to enlarge his know wonder of design and the mystery o if by reason of a prospering and grow the opportunity of personal part craft processes was denied him, sound knowledge of these process greater, for he had to direct the wor mand the respect which was given only to those whose craft knowledg This matter of personal efficiency sh first, but alone it was not enough. follow a concern for the efficien welfare of the whole craft, and organisation.

There was, in the records of the ear of the old National Association Painters, evidence of a wonderful pri a desire to safeguard good craftsma to do all that was possible to ach standards. That was the foundatio the organisation was built, and thos knew the work that had since been the most convinced of the rightness that the founders adopted.

He did not wish to imply that the side of their calling was a negligible Federation cared not only for ideals tions, but for the material welfare of i But the basis, the foundation of al had done and hoped to do, was pride itself, and in the efficiency with delighted to follow it. Before all h the work of education. Painting which when served faithfully by it offered to the community a service o might well be proud, and as to whi little need to keep silent.

The following officers were elec dent, Mr. J. F. Butterworth, Manc vice-president, Mr. H. S. Mannin treasurer, Mr. Foster, Burnley; se W. G. Sutherland.



Barclays Bank, Tavistock.

MR. A. FOSTER, Architect.

[The Beer stone on this building was worked, fixed, and cleaned down by the F Co., Ltd., of Seaton. The builders were Messrs. J. Kersmill & Sons, of T

* " Estimating Building Costs and Appraising Buildings." By Frank E. Barnes, C.E. (New York: McGraw Hill Publishing Co., Bouverie-street, E.C.) Price 25s.

EW BUILDINGS IN LONDON

tock-square.—ADDITIONS.—Erection of ditions and the completion of the Theo- l College, Tavistock-square, W.C.1, as arters for the British Medical Association. rand, W.C. Sir Edwin Lutyens, R.A., rchitect, and Messrs. Ford & Walton, e builders.

on.—A start will be made almost imme- upon the building of the new "Sargent" at the Tate Galleries at Millbank, S.W chitects are Messrs. Romaine-Walker & , of 6, Old Bond-street, W., who also d the Gallery for Modern Foreign Art at k, now being erected by Messrs. Holland en and Cubitts, Ltd. The entire cost is defrayed by Sir Joseph Duveen. The tors are Messrs. Holland & Hannen and Ltd., Gray's Inn-road, W.C.

on.—As the result of a limited competi- . A. E. Lambert, a Nottingham architect, n appointed to supervise the erection of v memorial and primary halls at the Wesleyan Church. The building is to accommodate 400 to 500 persons and clude classrooms, cloakrooms, lava- &c.

vick.—The Civil Services have purchased f about 20 acres on the banks of the which they propose to lay out on modern a sports ground. Five football pitches, is courts, four cricket pitches, and a green will be provided. Over 20 of the ourts will be of the hard court type. A , containing dressing-rooms, shower and baths, a large hall, committee rooms, bar, es, &c., and quarters for a resident man have been designed by Mr. E. A. F.S.I.

's Green.—CHURCH.—Work has recently commenced on the completion of ael's Church, Golder's Green. The cost about £10,000.

nt-street.—A new building is being at 137–141, Regent-street, for Messrs. & Gill, by Messrs. Hall, Beddall & Co., nder the direction of the architects, Yates, Cook & Darbyshire. The follow- some of the sub-contractors: Steelwork, Dorman, Long & Co., Ltd.; stone front, The South Western Stone Co., Ltd.; f floors, Messrs. Diespeker & Co., Ltd.; , Messrs. Lawford & Co.; heating and ion, Messrs. Mumford, Bailey & Preston, lectric lighting, Messrs. Tredegars, Ltd.

r-street.—A building at 35, Baker- s being reconstructed by Messrs. Hall, & Co., Ltd., for the Union Assurance Ltd., under the direction of Mr. Geo. T. . A new general office and manager's ave been formed on the ground floor, v sanitary accommodation provided in cement. The upper floors have been d as suites of offices, and the staircase en remodelled to facilitate access to

's-road.—Plans are in course of prepara- the rebuilding of the remaining portion ld premises of William Whiteley, Ltd., n's-road, W.2. The general design and n will be similar to the block already The section to be dealt with extends t 200 ft. in Queen's-road and goes back similar distance. The new premises of six floors, with large display s on the ground floor, spaced between of grey granite. The façade will be with Portland stone, whilst construction y will be on a steel framework, with R.C. d a flat roof. The architect is Mr. W. reen, A.R.A., 5, Pickering-place, S.W.1.

am Junction.—Plans have been prepared Charles Living, junior, P.A.S.I., 75, The Stratford, E.15, for a new synagogue at n Junction, S.W. The new edifice will be including gallery, of accommodating 0 persons. Brick construction is to be with a roof of asbestos slates carried on usses. The interior decorations will of plain distemper, on plaster. The rk, including floors, will be of oak.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2¾
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

(For rates of wages in the Building Trade in Scotland, see page 539.

NEW INVENTION

Concrete Blocks.

THE British Manufacturers' and Inventors' Guild, of 5, Cornwall-street, Birmingham, have sent in particulars of a new type of concrete block, known as "Maseyk's Ventilated Concrete Block."

In this system it is stated a system of horizontal and vertical ventilation combine to make the inner face of wall completely dampproof, equal to that obtained by cavity brick walls, with a saving of 25 per cent. in material.

The top face and one end of these blocks have a 3 in. by ¾ in. rebate along each side, to give a bond to the wall and act as a guide gauge for placing the next layer of blocks in position, and the arrises of these rebates act as a gauge for the thickness of mortar.

Unskilled men, it is stated, can master the laying of these blocks in a day under skilled supervision, or skilled men using 36 in. by 9 in. by 9 in., or 27 in. by 9 in. by 9 in., or 18 in. by 9 in. by 9 in., can build walls in half the time necessary with bricks.

The system of ventilation commences with inlets on the outer face at dampcourse level, the outlet being at top of wall wherever finished. No galvanised iron ties are required on any walls.

The blocks can be made by machines at the rate of from 80 to 100 blocks an hour in 36 in. by 9 in. by 4½ in.; other sizes proportionately.

Where unskilled labour is largely employed it is recommended that walls be built from dampcourse level to wall plates or gable tops without joists. The joists are then carried on, say, 6 in. by ⅜ in. iron plates, built into wall angles as the job proceeds, at any desired height, on which trimmer joists, cut to clear the walls, may rest.

A CLAIM FOR BUILDING ALTERATIONS

IN the Shoreditch County Court recently, before Judge Cluer, a firm of jobbing builders sued Mr. Mark Rabinowitz. a wholesale cabinet manufacturer, to recover £50, being the balance of an account rendered and agreed upon in November, 1923. The plaintiff claimed that he had carried out the alterations at the premises of the defendant according to contract, and had rendered accounts amounting to £584 19s. He had received £530 on account, the last being in November for £20, when he agreed to take for the balance of £54 19s. the sum of £50, now sued for. On the other hand, the defendant pleaded that the payments had been made on the understanding that the plaintiffs would complete their work, but they had failed to do so, and it would cost £40 to carry out the uncompleted work; besides which he was asking for £20 as damage done to his cabinets and side boards through the rain coming through the defective roof, which the plaintiffs were supposed to have put in repair.

Mr. B. M. Goodman appeared as counsel for the defence, and the plaintiff in person.

In his evidence, the plaintiff said that he had no papers to produce in connection with the case, as he had been turned out of his house, his furniture was in store, and he could not get at them. When he took the £20 in November, it was agreed to settle his account finally for £50. In cross examination, he agreed that the receipt he gave said on it, "£55 balance: work to be finished." He went on to say that the £50 was agreed upon after that, and said it was a pity that that fact was not written in, but it was due to him not being a good scholar. The defendant had always complained about the work whenever he asked for any money. Since the arrangement of the £50, he had never been near the defendant except to ask for money, as he had done all the work there that he intended to do. It was true he had had a letter that the roof was leaking and was spoiling cabinets, but the fault was that it was a brick roof, which was spongy and allowed the water to get through. He also got a letter to say that if the work were not completed by January, defendant would have to get it done by someone else, but he never replied to it. This closed the plaintiff's case, and Mr. Claude William Dennis, manager to Messrs. Francis Dodd & Co., surveyors, gave evidence, and said that it would cost the defendant £52 8s. to complete the work which the plaintiffs had agreed upon originally.

Mr. Justice Cluer said if they, on the accounts sent in for £54 19s. completed the work themselves, they would have more than enough in hand to do it. It only left the matter of the £20 for the damaged cabinets and sideboards.

Mr. Goodman said they would not press for that, and Mr. Justice Cluer then gave judgment for the defendant, with costs.

RENT RESTRICTION

NOTICE OF INCREASE UNDER NEW ACT.

THE first case decided under the Rent Restrictions (Notices of Increase) Act, 1923, is now reported, Landrigan *v.* Simons (*Weekly Notes*, December 5), and is therefore of importance. The case arose in connection with premises in Francis-street, which were within the Rent Act, 1920, and of which the plaintiff was tenant and the defendant landlord.

In January, 1923, the landlord had served upon the tenant a notice to increase the rent, but no notice to determine the tenancy had been given. The tenant had apparently paid the increase, for on May 2 she took out a summons in the County Court claiming £26 18s. 11d., sums which she alleged had been paid in excess of rent. The County Court Judge had held that as no notice to quit had been given the increase in rent was not legally claimable by the landlord, on the authority of Kerr *v.* Bryde (1923 A.C. 16, *The Builder*, November 17, 1922), and he gave judgment for the plaintiff, but the landlord appealed, and on the appeal the following contentions were raised:—(1) That the Rent Restrictions (Notices of Increase) Act, 1923, was retrospective; (2) that the point of law as to the general efficacy of the notice having been raised at the trial it was open to the landlord to invoke in aid the new Act on appeal, although that Act was not passed at the time of the original hearing; (3) that the new Act was in the landlord's favour certainly as regards the rent up to December 1, and that with regard to the rent since that date the proviso at the end of section 1, subsection (1) (*a*) was not intended to cut down the effect of the general enactment.

It must be noticed before dealing with the judgment delivered by the Divisional Court that the case was heard in the County Court, June 5, 1923. The Rent Restrictions (Notices of Increase) Act was passed and came into force June 7; the appeal was heard November 22 and judgment given December 19. The Divisional Court held (1) the Act of 1923 was retrospective, (2) that although it was not passed at the time of the original hearing it was applicable on the appeal, following the case Stovin *v.* Fairbrass (1919, *Weekly Notes*, p. 217; *The Builder*, July 25, 1919), and (3) the Act validated increases of rent, although no notice to quit was given, by making notice of increase take the place of a notice to quit, but as regards the sums paid everything done up to December 1, 1922, was to remain undisturbed, and the position was crystallised as at that date. The Court is reported as having laid it down that the first part of section 1 of the Notices of Increase Act was not cut down by the last words of the proviso to that section beginning with the word "but."

To make the decision clear it is necessary to refer to the Statute itself. Section 1 subsection (1) commences "Where notice of intention to increase rent has, whether before or after the passing of this Act, been served upon a tenant in conformity with subsection (2) of section 3 of the principal Act (the Act of 1920) "and a notice to terminate the tenancy was necessary in order to make such increase effective, the notice of intention to increase the rent shall have effect, and shall be deemed always to have had effect, as if there were or had been also a notice to terminate the existing tenancy on the day immediately preceding the day as from which the increase is or was first to take effect, or on the earliest day thereafter on which, if it had been a notice to terminate the tenancy it would have been effective for that purpose, and in the latter case a notice of increase served before the passing of this Act shall be deemed to have had effect as if such earliest date had been specified in the notice as the date from which the increase is to take effect."

Before passing to the proviso we may point out that the wording of this part of the section clearly indicates an intention to make the Act retrospective in this connection, as has already been held in this case, and as we pointed out in our note to Michael *v.* Phillips (*The Builder*, March 30, 1923), a case affirmed on appeal, all the Acts have a retrospective effect, so far at least as increases of rent are concerned.

Proviso (*a*) is as follows: "Nothing in this Act shall entitle a landlord after the passing of this Act to recover from a tenant, in respect of any period before December 1, 1922, the increase of rent made valid by this Act, or any sums which have been recovered from the landlord before that date by means of deductions from rent or otherwise, or any rent due before that date which has not been paid by reason of deductions having been made therefrom, and section 14 subsection (1) of the principal Act shall not apply to an increase of rent rendered valid by this Act which was paid by, or recovered from, a tenant prior to December 1, 1922."

Subsection (1) of section 14 of the principal Act, here referred to, made any sum (whether paid before or after the passing of that Act) paid in respect of rent which was made recoverable by the landlord by that Act, or by any Act repealed by it, recoverable by the tenant, and the effect of the proviso therefore appears to be that a "validated increase of rent," that is an increase of rent made valid by the Notices Act, 1923 [see section 1 subsection (1)] cannot be recovered by a landlord in respect of any period before December 1, 1922, if paid by or recovered from the tenant, but that date be recovered back by the tenant.

It may, however, be noticed that whereas the first part of the proviso and the latter part appear to the same apply to "validated increases" as far as the landlord is concerned, the latter portion goes further, "or any sums which have been recovered from the landlord before that date by means of deductions from rent or otherwise or *any rent* due before that date which has not been paid by reason of deductions having been made there-from," these words seem not limited to "validated increases."

In conclusion, we may point out that the facts of this case do not appear to have raised the question as to rent so far back as December 1, 1922, as in the short report of the case at present available it appears the increase was first demanded from January, 1924, and it is stated to have been treated as a "validated increase," but the report does not state what the circumstances of the tenancy was, and it therefore must be assumed that the notice of increase was sufficient as validly to determine the tenancy in accordance with the provisions of section 1.

We may have to revert to this case when fully reported.

The Royal Naval Hospital, Plymouth

An extension of the Royal Naval Hospital, Stonehouse, Plymouth, has just been commenced. It is estimated the work will cost over £30,000.

CONTRACTS, COMPETITIONS, &c.

e contracts still open, but not included in this List, see previous issues Those with an asterisk ised in this number. Certain conditions beyond those given in the following information d in some cases, such as that advertisers do not bind themselves to accept the lowest or any hat a fair wages clause shall be observed; that no allowance will be made for tenders; and its are returned on receipt of a bona-fide tender unless stated to the contrary.

given at the commencement of each paragraph is the latest date when the tender, or the names ling to submit tenders, may be sent in; the name and address at the end is the person from whom ere quantities, forms of tender, &c., may be obtained.

LDING AND PAINTING.

4.—London, S.W. 1.—DEMOLITION.—ion of temporary buildings at the War he Commissioners of H.M. Works, &c. anch, H.M. Office of Works, King Charles- 1. Deposit £1 1s.

4.—London, W.1.—REPAIRS TO WALL.— oundary wall abutting St. Mark's-road, ebone Hospital, Notting Hill, W.10, for f Guardians of St. Marylebone. Messrs. & Vernon, architects, 82, Mortimer-street, it £1 Treasury Note.

—Renfrew.—HOUSES.—For the various nection with the erection of 60 houses for the T.C. Mr. Hamilton Neil, archi- Vincent-street, Glasgow.

6.—Barnsley.—PAINTING.—For painting and gates to St. Mary's Churchyard. ineer, Fairfield House Offices, Barnsley.

.—Cwmcarn.—SCHOOL.—Erection of new ol at Cwmcarn, Mon, and alteration of chool. for the Monmouthshire E.C. Mr. .R.I.B.A., County Hall, Newport.

5.—Dublin.—PAINTING.—For painting t Tuberculosis Hospital, Pigeon House- County Borough. Mr. J. J. Murphy,

—Holmfirth.—WALL.—For taking down g of retaining and fence wall on the Green- ley main road, for the U.D.C. Mr. Geo. or, Council Offices, Holmfirth.

3.—Lurgan.—ALTERATIONS.—For addi- terations to Lurgan College, for the Ir. Robert Lynn, M.R.I.A.I., architect, et, Belfast. Deposit £1 1s.

—Stretford.—SCHOOL.—For the erection school in Gorse Park, for the U.D.C. ward, A.R.I.B.A., Architect, 88, Mosley- ester. Deposit £1 1s.

—Tarleton.—HOUSES.—Erection of four e-lane, Tarleton, for the Lancashire C.C. chofield, A.M.I.C.E., County Surveyor ster, Preston.

—Thirsk.—PAINTING.—For painting the utside wood and iron work of the build spital, Sutton-road. Mr. W. Swarbreck, Deposit 10s. 6d.

.—Thundersley.—SCHOOL.—For exten- lersley Council School, for the Essex C.C. ect, Old Court, Springfield, Chelmsford.

—Warrenpoint (Ireland).—HOUSES.—For 10 workmen's dwellings, for the U.D.C. voy, M.R.I.A.I., 66, University-avenue,

—Bradford.—CONVERSION.—For the con- ice premises into dwelling houses at ornbury, for the Corporation. Mr. , Town Clerk, Town Hall.

—Dunmow.—FARM.—Erection of a set es at Puttocks Farm, Dunmow, for the s Committee of the Essex C.C. Mr. A.S.I., County Land Agent, Chelmsford.

—Evesham.—POST OFFICE.—For the O. at Evesham, Worcestershire, for the of H.M. Works, &c. Contracts Branch, Works, King Charles-street, S.W. 1.

—Garston.—SCHOOL.—For the erection l school, Springwood Estate, for the oration. Mr. W. Moon, Town Clerk, lings. Deposit £2 2s.

—Hendon, N.W.9.—BUILDING.—Build- wards at Colindale Hospital, Hendon, Metropolitan Asylums Board. Office ctoria Embankment, E.C.4. Deposit £1.

— Leeds.—EXTENSIONS.—For the required in the extension of the Elec- Whitehall-road, for the T.C. Mr. G. W. ect, 1, Mark-lane. Deposit £2 2s.

—Liverpool.—RECONSTRUCTION.—For nd reconstruction of premises, Nos. 131– -street. Mr. W. Moon, Town Clerk, lings.

—Morley.—HOUSES.—Erection of 48 iddleton Road Housing Estate, for the Engineer's Office, Town Hall, Morley.

— Nuneaton.—BAKERY.—Erection of gs, for the Nuneaton Co-operative fr. W. F. Edwards, architect, 1, New- ingham. Deposit £1 1s.

—Whitstable.—HOUSES.—For the erec- s, in blocks of four, in Hamilton-road, Mr. J. Dunn, Surveyor and Water il Offices. Deposit £1.

— Bath.—POST OFFICE, &C.—For P.O. and telephone exchange, for the f H.M. Works, &c. Contracts Branch, Works, King Charles-street, S.W. 1.

OCTOBER 8.—**Blackpool.**—PAINTING.—For the outside painting of the Victoria Hospital. Mr. W. J. Cunliffe, Secretary, Victoria Hospital.

✱OCTOBER 8.—**Christchurch, Hants.**—BUILDING WORKS.—Works at Farmiloe House Institution, for the Christchurch Union:—(1) Alterations and building additions to the laundry, (2) alterations to old Female Infirmary, (3) provision of surgery &c., at the Cottage Homes, for the Guardians of the Churistchurch Union. Mr. Percy C. Ford, Clerk to the Guardians, Fairmile House, Christchurch, Hants. Deposit £2 2s.

✱OCTOBER 8.—**Christchurch, Hants.**—EXTENSIONS AND ALTERATIONS.—Extensions and alterations in connection with the laundry machinery and equipment, for the Guardians of the Christchurch Union. The Guardians, Union Offices, Fairmile House, Christchurch, Hants. Deposit £2 2s.

OCTOBER 8.—**Greenwich, S.E.10.**—CONVENIENCE.—Construction of an underground convenience for both sexes at the foot of Blackheath Hill, Greenwich, for the Greenwich Metropolitan Borough Council. Borough Engineer's Department, Town Hall, Greenwich. Deposit £2 2s.

OCTOBER 8.—**Isle of Man.**—ELEMENTARY SCHOOL.—Erection of an elementary school providing accommodation for 500 children. Clerk to the Isle of Man Education Authority, Strand-street, Douglas. Deposit £1 1s.

OCTOBER 8.—**Nottingham.**—ADDITIONS.—For alterations and additions to premises, Nottingham-road and Zulu-road, New Basford. Mr. W. J. Board, Town Clerk. Deposit £1.

OCTOBER 8.—**Rushen (Isle of Man).**—SCHOOL.—Erection of an elementary school for 500 children, with extra rooms and a house for the caretaker, at Rushen, for the Isle of Man Education Authority. Mr. T. R. Lewin, Clerk to the Isle of Man Education Authority, Strand-street, Douglas. Deposit £1 1s.

✱OCTOBER 8.—**Woolwich, S.E. 18.**—ADDITIONS.—Completion to the partially constructed additional story to receiving ward at the Woolwich Union, Plumstead High-street, S.E. 18, for the Guardians of the Poor of the Woolwich Union. Messrs. Whincop & Channer, 47, Thomas-street, Woolwich, S.E. 18.

OCTOBER 9.—**Bucknall.**—ADDITIONS.—For the erection of a two-ward block at the Infectious Diseases Hospital, for the Stoke-on-Trent T.C. Mr. E. B. Sharpley, Town Clerk.

OCTOBER 9.—**Farnworth, near Bolton.**—ALTERATIONS.—For alterations (to form a telephone exchange), for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s.

OCTOBER 9.—**Haslingden.**—HOUSES.—For the whole of the work required in the erection and completion of brick houses on the Syke Side Estate. Mr. W. Musgrove, Town Clerk, Municipal Offices.

OCTOBER 9.—**Near Chacewater.**—BUNGALOW.—For the erection of a bungalow. Mr. J. C. Mann, 15, King's-parade, Uxbridge-road, Southall, Middlesex.

OCTOBER 10.—**Drumcondra.**—SCHOOL.—For building a new national school at Crawford-avenue, for the Rev. —. Wall. Messrs. Ashlin & Coleman, architects, 7, Dawson-street, Dublin. Deposit £2 2s.

OCTOBER 10.—**Glamorgan.**—VARIOUS.—Pyle Cross, new mixed and infants' school, near the Cross Roads; Resolven, new girls' school and adaptation of old mixed department for boys; Cymmer (Port Talbot), new boys' school; Heolycyw council school, erection of new boundary wall. Mr. T. Mansel Franklen, Secretary of E.C., Glamorgan County Hall, Cardiff.

OCTOBER 10.—**Glasgow.**—PLUMBER AND SLATER WORK.—For plumber and slater work in connection with the erection of Mearnskirk Sanatorium, Mearns, Renfrewshire, for the T.C. Office of Public Works, 64, Cochrane-street, Glasgow. Deposit £5 5s.

OCTOBER 10.—**Liverpool.**—EXCAVATION.—Excavating and building foundations for the new tram works and car depot, Edge-lane. Mr. W. Moon, Town Clerk, Municipal Buildings. Deposit £3 3s.

✱OCTOBER 10.—**London, N.W.6.**—EMPLOYMENT BUREAU.—Erection of a juvenile employment bureau to adjoin the Pound-lane Schools, Willesden, for the Willesden District Council. Mr. F. Wilkinson, M.Inst.C.E., Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W.6.

OCTOBER 10.—**London, S.E. 9.**—PAINTING.—For external painting, &c., at the Well Hall Estate, Eltham, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s.

OCTOBER 10.—**Queensbury.**—REPAIRS.—For the provision of a bath and lavatory, and for repairs, &c., at Queensbury Catherine Slack Council Schoolhouse. Mr. B. Leah, Education Office, Bingley.

OCTOBER 11.—**Bangor.**—ADDITIONS.—For the erection of laundry premises and disinfector house at the St. David's Hospital, Carnarvon-road, for the Bangor and Beaumaris Union. Mr. B. Evans, Clerk to the Guardians, Union Offices, St. David's Hospital.

OCTOBER 11.—**Chapel-en-le-Frith.**—PAINTING.—For outside painting at the Poor Law Institution, for the B.G. Mr. L. Jagger, Clerk to the Guardians, Union Offices.

OCTOBER 11.—**Crowland.**—RETAINING WALLS.—For the erection of a new bridge, retaining walls, &c., for the Holland C.C. Mr. Wm. A. Rogerson, County Surveyor, Sessions House, Boston.

✱OCTOBER 13.—**Croydon.**—COTTAGES.—Erection of 12 cottages at Beddington Sewage Farm. Beddington-lane, near Croydon, for the County Borough Council. Borough Engineer, Town Hall, Croydon. Deposit £2 2s.

OCTOBER 13.—**Croydon.**—HOUSES.—Erection of 48 houses (comprising 62 tenements) at Thornton-road, Thornton Heath, in two sections of 24 houses each, or as one tender for the whole, for the County Borough Council of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £2 for each section, or £4 for both sections.

OCTOBER 13.—**London.**—STAIRWAYS.—For the construction of two stairways to the existing subway under the Victoria-embankment, near Westminster Bridge. Mr. J. Bird, Clerk of the L.C.C. Deposit £3.

✱OCTOBER 13.—**Shrewsbury.**—ENGINEERING WORK, ALTERATIONS, PAINTING, &C.—(1) Engineering work, including heating, hot and cold water supply work, re-setting two Cornish boilers, with all new pipework, and the provision of an electric lighting plant, and X-ray apparatus and laundry appliances, at the Berrington Hospital at Cross Houses, near Shrewsbury. (2) Alterations to the buildings at the Hospital. (3) Painting and decorating at the Hospital, for the Guardians of the Atcham Union. Messrs. Henry Lea & Son, consulting engineers, 1, Newhall-street, Birmingham, for quantities of engineering; and Mr. G. W. Deakin, architect, 22, Castle-street, Shrewsbury, for quantities for alterations and for painting and decorating. Deposit £3 3s. for each set.

OCTOBER 14.—**Guernsey.**—HOUSES.—Erection of 40 houses in Collings-road, and 10 or 12 houses at Sausmarez Mill, St. Martin's, for the States Committee for Homes for Workers, States of Guernsey. States Office, Guernsey, or at the office of Mr. Sydney Newcombe, architect, Greve d'Azette, Jersey.

✱OCTOBER 14.—**London, E.2.**—FLOORING.—Laying of composite floors at the Children's Homes, High-road, Leytonstone, for the Bethnal Green Board of Guardians. Mr. C. Faulkner Jones, Clerk to the Guardians, Administrative Offices, Bishop's-road, Bethnal Green, E.2. any week day between the hours of 10 a.m. and 12 (noon), and 2 to 4 p.m., Saturdays excepted. Deposit £2.

✱OCTOBER 15.—**Aldershot.**—WORKS CONTRACT FOR REPAIRS AND MATERIALS.—Works contract from October 24, 1924, at the Blackdown and Deepcut Station. Commanding Royal Engineer, Royal Engineer Office, Marlborough Lines, North Aldershot, Hants.

OCTOBER 16.—**Brighton.**—HOUSES.—Erection of 11 houses in Hereford-street, Brighton, for the County Borough Council of Brighton. Borough Surveyor, Town Hall, Brighton. Deposit £1.

✱OCTOBER 16.—**London, S.W. 2.**—REPAIRS AND REDECORATION.—Repair and redecoration of (1) The Mortuary and Coroner's Court, High-street, Lambeth, S.E. 1, and (2) The Mortuary, Wanless-road, Loughborough Junction, S.E. 24, for the Lambeth Borough Council. Mr. Osmond Cattlin, Borough Engineer, Town Hall, Brixton-hill, S.W. 2.

OCTOBER 16.—**Warrington.**—HOUSES.—Erection and completion of 54 houses on the Reynolds-street site, for the Housing Committee of the County Borough of Warrington. Borough Engineer and Surveyor, Town Hall, Warrington. Deposit £2 2s.

OCTOBER 17.—**Trowbridge.**—HOUSES.—Erection of 20 houses in 10 pairs on the Rock Housing Estate, for the Trowbridge U.D.C. Mr. Walter W. Snailum, Church-street, Trowbridge.

OCTOBER 18.—**Clacton-on-Sea.**—HOUSES.—For the erection of 44 houses on the Croft Estate, for the U.D.C. Mr. Geo. T. Lewis, Clerk to the Council, Council Offices.

✱OCTOBER 21.—**London, S.W.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange in Battersea, London, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W. 1. Deposit £1 1s. (Cheques payable to the Secretary.)

OCTOBER 22.—**Whittingham.**—VARIOUS.—Various work is required for the erection of sixteen cottages on a site near the Whittingham Mental Hospital, as follows: (1) Roads and sewers; (2) brick and stonework; (3) slating; (4) plastering; (5) woodwork; (6) plumbing. Mr. L. Cotman, Clerk to the Committee of Visitors. Deposit 10s. 6d. each.

✱OCTOBER 23.—**Rochford, Essex.**—ALTERATIONS.—Alterations, &c., to the Post Office, Rochford, Essex, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 25.—**Usk.**—BUILDINGS, &C.—For the erection of buildings for the Agricultural Institute, comprising residential block, scholastic block, additions to dairy, and power house. Mr. C. Dauncey, Secretary, County Hall, Newport, Mon. Deposit £2 2s.

✱OCTOBER 27.—**London, S.E.18.**—LAVATORY ACCOMMODATION.—Erection of additional lavatory accommodation at the Guardians' Offices, 394, High-street, Lewisham, S.E.13, for the Guardians of the Poor of the Lewisham Union. Guardians' Offices, 394, High-street, Lewisham, S.E. Deposit £1 1s.

OCTOBER 27.—**Salcombe.**—ALTERATIONS.—For alterations, &c., at the Salcombe Hotel, Salcombe. Mr. E. H. A. Barron, architect, 11, The Crescent, Plymouth.

NO DATE.—**Heckmondwike.**—EXTENSION.—For the extension of offices for the Heckmondwike and District Co-operative Society, Ltd. Architect's Department, Co-operative Wholesale Society, Ltd., Balloon-street, Manchester. Deposit £1 1s.

NO DATE.—**Knaresboro'.**—EXTENSION.—For extension to Female Infirmary, for the B.G. Mr. J. Houfe, architect, Albert Chambers, Albert-street, Harrogate.

NO DATE.—**Llandudno.**—PAINTING.—For painting, plastering, &c., required to be executed at the Manchester and Salford Convalescent Home, Plas Mariandir, Llanrhos, Llandudno. Mr. F. Knowles, Secretary.

NO DATE.—**Swansea.**—HOUSE.—For the erection of a house on the Mumbles-road, Blackpill, Swansea, for Mrs. Nordhoff. Sir Charles T. Ruthen & Co., architects, Bank Chambers, Heathfield-street.

✱NO DATE.—**Trongate, Glasgow.**—STEELWORK.—Supply and erection of approximately 600 tons of steelwork required for picture playhouse proposed to be built in Renfield-street, Glasgow. Messrs. George Green, Ltd., 182, Trongate, Glasgow.

NO DATE.—**West Hunslet.**—PREMISES.—For new premises, for the West Hunslet Liberal Club. Messrs. F. W. Rhodes & Son, architects, Upper Wortley, Leeds.

FURNITURE, MATERIALS, etc.

OCTOBER 4.—**Gellygaer.**—MATERIALS.—Supply of paving, kerb and channel, concrete fence posts, drain pipes, cement and lime, cast-iron goods, ironmongery, &c., to the U.D.C. Mr. F. Read, Surveyor, Council Offices, Hengoed.

OCTOBER 6.—**Northwich.**—MATERIALS.—For the supply and delivery of about 650 tons of 10 in., 9 in. and 6 in. cast-iron pipes and specials. For laying about 6,700 lin. yards of 10 in., 9 in. and 6 in. water mains and works in connection therewith, including river and railway crossings, for the U.D.C. Mr. J. A. Cowley, Clerk of the Council, The Council House, Northwich. Deposit £3 3s. each.

OCTOBER 8.—**Buckhaven.**—ROOFING.—For the supply of corrugated asbestos cement roof sheeting for the erection of a compressor house, for the Buckhaven and Leven Gas Commissioners. Mr. R. Leslie, Clerk to the Gas Commissioners, Council Chambers.

OCTOBER 10.—**South Africa.**—PIPES.—For the supply and delivery of cast-iron pipes and specials, for H.M. Commissioners. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 11.—**Bootle.**—GRANITE.—For supplying (*a*) 105 lineal yds. of straight granite kerbs and 25 lineal yds. of circular granite kerbs, (*b*) 500 lineal yds. of straight granite channels and 50 lineal yds. of circular granite channels, (*c*) 250 lineal yds. of granite crossing stones, for the Corporation. Mr. J. Spencer Tumilty, Town Clerk.

OCTOBER 13.—**Edinburgh.**—CEMENT.—For the supply of Portland cement to the Tramways Depot, Shrubhill. Mr. A. Grierson, Town Clerk, City Chambers.

✱NO DATE.—**London, N.**—BALLAST.—Tenders required for 400 yds. of Thames ballast delivered to "Brasted," Hermitage-road, Harringay, N. 4.

ENGINEERING, IRON AND STEEL.

OCTOBER 4.—**Lancashire.**—BRIDGES.—For the construction of two bridges (masonry and ferro-concrete structures) over the River Irwell, at the boundary of Bury and Radcliffe, for the Lancashire C.C. Mr. W. H. Schofield, County Offices, Preston.

OCTOBER 4.—**Llangeinor.**—FENCING.—Erection of 190 lineal yards of unclimbable wrought-iron fencing at Reservoir at Llangeinor, for Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, engineers, 23, Gelliwastad-road, Pontypridd. Deposit £2 2s.

OCTOBER 6.—**Dundee.**—ESPLANADE, &C.—For construction of a sea wall or bulwark extending to 3,200 ft., and 1,000 ft. of breakwater in rubble; also 1,300 ft. of 32 in. diameter outfall sewer, with reinforced concrete piles and groynes, for the T.C. Mr. George Baxter, City Engineer, 91, Commercial-street, Dundee.

OCTOBER 6.—**Manchester.**—BRIDGE WIDENING.—For the widening of Slade-lane Bridge over the London & North Eastern Railway, for the T.C. City Engineer's Office, Town Hall, Manchester. Deposit £2 2s.

OCTOBER 7.—**Leeds.**—STEELWORK.—For the structural steelwork required in the extension of the T.C. Electricity Works, Whitehall-road, for the T.C. Mr. G. W. Atkinson, architect, 1, Mark-lane, Leeds.

OCTOBER 8.—**Birmingham.**—BRIDGE.—Supply and erection of steel girders, &c., in connection with the reconstruction of the bridge over the Tame Valley Canal, Salford Bridge, Lichfield-road, Erdington, for the T.C. Mr. Herbert H. Humphries, City Engineer, Council House, Birmingham. Deposit £2.

OCTOBER 13.—**Aldershot, Hants.**—ARTIFICER'S WORK.—Maintenance Contracts, from October 15, 1924, at the Station hereafter mentioned in the South Aldershot Royal Engineer District of the Aldershot Command 1:—South Aldershot, including Ewshot and Crookham. Commanding Royal Engineer, R.E. Office, Headquarters, Stanhope Lines, Aldershot, Hants.

OCTOBER 14.—**Eastbourne.**—TIDAL FLAPS.—For the removal of existing tidal flaps, &c., in the valve chamber, Langney Point, and the supply and fixing of new tidal and sluice valves. Mr. Leslie Roseveare, Borough Engineer, The Town Hall. Deposit £1 1s.

OCTOBER 15.—**Bedlington.**—CULVERT.—Construction of a concrete culvert and the diversion of the Sleekburn under Sleekburn Viaduct, near Bedlington Station, for the London & North Eastern Railway Co. Chief Engineer, North Eastern Area, York.

OCTOBER 15.—**North Seaton.**—VIADUCT.—For the reconstruction of North Seaton Viaduct, for the London & North Eastern Railway Co. Office of the Chief Engineer, North Eastern Area, York.

✱OCTOBER 24.—**London, E.C.4.**—LIFT.—Erection of a new lift at the G.P.O. (South), Queen Victoria-street, E.C.4, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 28.—**Wellington, N.Z.**—BRIDGE SPANS.—For plate girder spans for Wairoa, Rangitaiki and Awakeri bridges, for N.Z. Public Works Board. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 31.—**Beaufort West (Cape Province).**—POWER STATION.—Electric power station plant, for the T.C. Department of Overseas Trade (Room 52).

NOVEMBER 3.—**Sydney, N.S.W.**—BRIDGE SPANS.—For metal work for superstructure of bridge at Tom Ugly's Point, for Department of Public Works, Sydney. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

NOVEMBER 20.—Chile.—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W.1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160 Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

OCTOBER 4.—**Chapel-en-le-Frith.**—SEWER.—Construction of detritus tanks and other work in the alteration and extension of sewage outfall works, for the R.D.C. Messrs. Brady & Partington, engineers, Market-street, Chapel-en-le-Frith. Deposit £5.

OCTOBER 4.—**Chester.**—SEWER.—Construction of a surface water outfall sewer in concrete tubes and cast-iron pipes, for the T.C. Mr. Charles Greenwood, Assoc.M.I.C.E., City Engineer and Surveyor, Town Hall, Chester. Deposit £1 1s.

OCTOBER 4.—**Honiton.**—BRIDGE.—For taking down existing stone bridge and constructing a reinforced concrete bridge on the Kahn Bar System of the Trussed Concrete Steel Co., Ltd.; also forming a new road over the whole length of the bridge, for the T.C. Mr. J. W. Jones, Borough Surveyor, Honiton. Deposit £1 1s.

OCTOBER 6.—**Beckenham.**—ROADS.—For the widening of Upper Elmers End-road, for the U.D.C. Mr. J. A. Angell, Surveyor, Beckenham. Deposit £2.

OCTOBER 6.—**Carlisle.**—ROADS.—For street works required to be done in making-up Lismore-place. Mr. Henry C. Marks, City Engineer, 18, Fisher-street. Deposit 10s.

OCTOBER 6.—**Hemsworth.**—SANITARY.—For the conversion of certain existing privies and ashpits, &c., into 18 w.c.s, at Grimethorpe, for the R.D.C. Mr. W. T. Lynam, Surveyor, Council Offices, 29, Rotherham-road, Hemsworth.

OCTOBER 6.—**Hornchurch and Rainham.**—SEWERS.—Construction of sewers, for Romford R.D.C. Mr. W. J. Grant, Surveyor to the Council, 16A, South-street, Romford.

OCTOBER 6.—**Lancashire.**—ROAD IMPROVEMENT AND ERECTION OF COTTAGES.—Improvement of Preston-Liverpool main road and erection of four cottages in Coe-lane, Tarleton, for the Main Roads and Bridges Committee of the Lancashire County Council. County Surveyor's Office, County Offices, Preston.

OCTOBER 6.—**London.**—PAVING.—For paving Marham-gardens, Lyminge-gardens, and Collamore-avenue, Wandsworth; Spalding-road (part), Furze-down-drive (part), and Hepworth-road, Streatham; Longstaff-road (part), and Longstaff-crescent, Southfield, for the Wandsworth B.C. Mr. D. A. Nicholl, Town Clerk, Council House. Deposit £1 1s.

OCTOBER 6.—**London, N.W.3.**—REMOVAL OF REFUSE.—Daily removal and disposal of pulverised house refuse from the Dust Disposal Dept., adjoining the Metropolitan Railway, West Hampstead Station, N.W.6, for one year or for three years, from April 1, 1925. Mr. Oliver E. Winter, M.Inst.C.E., Borough Engineer, Town Hall, Haverstock-hill, N.W.3.

OCTOBER 6.—**Manchester.**—PAVING.—For the draining, paving, with concrete, flagging with artificial flags, &c., Collingwood-road, Rusholme, from Slade-lane, for a distance of 241 yds. in a westerly direction, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

OCTOBER 6.—**Northwich.**—MAINS.—For laying about 6,700 lineal yds. of 10 in., 9 in., and 6 in. water mains and works in connection therewith, including river and railway crossings. Mr. J. Arthur Cowley, Clerk of the Council, The Council House, Northwich. Deposit £3 3s.

OCTOBER 6.—**Warrenpoint (North Ireland).**—SEWERAGE.—For the improvement of the sewerage, for the U.D.C. Mr. S. J. M'Avoy, M.R.I.A.I., 66, University-avenue, Belfast.

OCTOBER 7.—**Dudley.**—ROAD.—For the construction of a road at Blowers Green, Dudley, for the G.W.R. Mr. A. E. Bolter, Secretary, Paddington Station, W.

OCTOBER 7.—**Gellygaer.**—ROADS AND SEWERS.—New roads and sewers on the Heolddu housing site, Bargoed, for the Gellygaer U.D.C. The work includes excavation, filling, ballasting, metalling, kerb and channel, footpaths, grass verges and tree planting, and drainage, &c. Mr. P. Jones-Williams, Architect to the Council. Deposit £2 2s.

OCTOBER 7.—**Hendon, N.W. 9.**—ROADS.—Laying tar macadam to roads, Colindale Hospital, Hendon, N.W. 9, for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C. 4. Deposit £1.

OCTOBER 8.—**Walton-on-the-Naze.**—ROAD.—For the completion of a new main road, from Walton-on-the-Naze to Frinton-on-Sea, for the U.D.C. Mr. S. Nicholson, Clerk to the Council, Town Hall, Walton-on-the-Naze. Deposit £1 1s.

OCTOBER 10.—**Oxford.**—WIDENING.—For widening foundation, drainage and contingent works, on a section of the London-Oxford-road, approximately 3¼ miles in length. Mr. A. E. Cockerton, County Surveyor, 8, New-road, Oxford. Deposit £10.

OCTOBER 11.—**Birmingham.**—SEWER.—For the construction of about 32 yds. egg-shaped brick and concrete sewer, and 919 yds. stoneware pipe sewers. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2.

OCTOBER 11.—**Hemsworth.**—CONVERSION.—For conversion of six existing privies and ashpits, and erection of six new w.c.'s at Bond-street, Kinsley, near Pontefract. Mr. A. Wright, Clerk to the Council, Council Offices, Barnsley-road, Hemsworth, near Pontefract.

OCTOBER 13.—**Abertysswg.**—SEWERS.—For laying 1,090 yds. of 6 in. and 688 yds. of 9 in. storm water sewer, &c., at Abertysswg, for the Rhymney U.D.C. Mr. W. H. Trump, Clerk, 57, High-street, Rhymney.

OCTOBER 13.—**Barnes.**—ROAD AND SEWER. construction and drainage of an extension to avenue, East Sheen, for the U.D.C. Mr. Tomes, Surveyor to the Council, The Coun High-street, Mortlake.

OCTOBER 13.—**Coseley.**—SEWERAGE.— and cast-iron sewers, manholes, pumping sta other works at Princes End, for the U.D.C Berrington, Son, & Watney, engineers, Chambers, Lichfield-street, Wolverhampton. £5 5s.

OCTOBER 13.—**Hebburn.**—HOUSES.—For th of 37 houses on the Hedgeley-road site. Mr. Clerk to the Council, 2, Coquet-street.

OCTOBER 14.—**Southall-Norwood.**—CARRI —For resurfacing carriageways in variou Mr. J. B. Thomson, Assoc.M.Inst.C.E., Eng Surveyor to the Council, Town Hall, Southa

OCTOBER 15.—**Chorley.**—HOUSES.—For th of 60 houses on the Highfield Estate, for the Mr. Jno. Mills, Town Clerk. Deposit £2 2s.

✱OCTOBER 15.—**Hove.**—WOOD PAVI viding and laying wood paving in Goldst between Clarendon Villas and the south s railway bridge (about 4,370 yds. super.) for th Council of Hove. Borough Surveyor, T Hove.

OCTOBER 15.—**Ilkley.**—HOUSES.—For erec houses on a site abutting upon Leeds-roa U.D.C. Mr. F. S. Eckersley, Clerk of th Town Hall.

OCTOBER 16.—**Ely.**—HOUSES.—For the 94 houses, for the Cardiff City Council. Brown, Town Clerk, City Hall, Cardiff. Dep

OCTOBER 17.—**Southampton.**—MAINS.—F 2,000 yds. of 36 in. and 6,250 yds of 33 in water mains. Mr. R. R. Linthorne, To Deposit £3 3s.

OCTOBER 20.—**Burntisland.**—RESERVOIR. construction of a storage reservoir, &c., on Stenhouse Farm. Messrs. Brown & Gilm Town Clerks, Town Clerks' Office.

OCTOBER 20.—**Fermanagh.**—ROADS.—For tion of roads, for the C.C. Mr. J. P. Burke Surveyor, Enniskillen. Deposit £5.

OCTOBER 20.—**Greenford.**—DRAINAGE.— extension of the main drainage system, about six miles of 7 in., 9 in., and 12 in. se holes, &c. Mr. A. Lloyd Jones, Clerk to th New Broadway Chambers, New Broadwa Deposit £3 3s.

OCTOBER 22.—**Great Ouseburn.**—ADDITI alterations and additions to Great Ouseb school: (*a*) Excavator, Mason, and Brick Carpenter and Joiner; (*c*) Slater; (*d*) Plu Plasterer; (*f*) Painter, for the West Riding Education Department, County Hall, Wake

OCTOBER 25.—**Plygyrhiw.**—ROAD.—For struction of two sections of new road at Plyg Penlan, near Llandyssul, for the Carmarthe Mr. R. W. Jones, County Surveyor, Coun Carmarthen. Deposit £3 3s.

Competitions.

(*See Competition News, page 5*

Auction Sales, Tenders

✱OCTOBER 7.—**London, S.W.**—Messrs. & Yates will sell, without reserve, at 255, Clap S.W., timber, fittings and building mate demolition of aircraft buildings. Reger Auctioneers, 365, Norwood-road, S.E.27.

OCTOBER 7.—**Stockwell.**—Messrs. Jos bard & Sons will sell, without reserve, by o owner, upon the premises, Lansdowne W downe-road (near "The Swan," Stockwell), and plant of builder's and contractor's, timber, saw mill machinery, lorry, deli the valuable freehold premises to be sold. A 15, Newington-green, Islington, London, N

OCTOBER 8.—**Surrey.**—Mr. C. E. Clar without reserve, at Eastwick Farm Buildi road, Great Bookham, Surrey, timbers ar effects. Auctioneers, Beddington House, near Croydon.

✱OCTOBER 9.—**London, E.C.**—Mr. Jos will sell, at Winchester House, Old Broad freehold property containing the import 74,700 ft., or about 1¾ acres, on the north main road between Bow Station and formerly St. Catherine's Convent. Auc Chancery-lane, London, W.C.2.

✱OCTOBER 11.—**London, E.C.**—Messrs. Moore will sell, at the London Auction Mar and copyhold estate at Enfield, Middl tioneers, 7, Leadenhall-street, E.C. 3.

OCTOBER 16.—**London, E.C.**—Messrs. Moore will sell, at the London Auction Mar and copyhold estate at Enfield. Auc Leadenhall-street, E.C.3.

✱OCTOBER 21 AND 22.—**Swindon, Wilts.** Clark will sell, without reserve, at the Depot No. 18, Swindon, Wilts. (near Swi G.W. Railway), final clearance sale of tim and building materials. Auctioneer, Ral York-road, Wandsworth, S.W.18.

Public Appointmen

✱OCTOBER 6.—**London, W.1.**—Full required immediately for the Departmen and Architecture at the Polytechnic, W.1. Apply for forms from the Director

OCTOBER 8.—**London, S.W. 17.**—B SPECTOR.—Building Inspector required in Engineer's Dept., by the Metropolitan Bo of Wandsworth. Mr. Ernest J. Elford, High-road, S.W. 17.

BER 8.—**Watford.**—Assistant]in the Borough Department required by the Borough of Watford. Mr. D. Waterhouse, Borough Municipal Offices, 14, High-street, Watford.
BER 9.—**Smethwick.**—Architect to assist in ration of the Council's Housing Schemes, ndertake other architectural work as may ed by the Smethwick County Borough Mr. Frank Chapman, Town Clerk, Council nethwick.
R 10.—**Scarborough.**—Clerk of Works, to the direction of the Borough Engineer, for s buildings and works carried out by the Council of Scarborough. Mr. Harry W. M.I.C.E., Borough Engineer, accompanied of not more than three recent testimonials.
BER 13.—**Greenwich, S.E.10.**—Office Clerk n the Borough Engineer's Department by olitan Borough Council of Greenwich. Mr. J. Simpson, Town Clerk, Town Hall, Green- S.E.10.
: 14.—**Auckland, New Zealand.**—Professor cture required by Registrar, Auckland Univer- ge, Auckland. London Agent of the Univer- w Zealand, Mr. J. W. Joynt, M.A., 88, Gower- C.1.
DATE.—**Edinburgh.**—Foreman of Works re- temporary service at Edinburgh. C.R.E., District, 29, Rutland-square, Edinburgh.
ATE.—**Gold Coast.**—FOREMAN OF WORKS.— of Works required for the Public Works t, Gold Coast, for two tours of twelve to months' service, with possible extension. nts for the Colonies, 4, Millbank, West- .W. 1, quoting clearly at the head of letter

ATE.—**London, N.7.**—Teacher of Brickwork t once for two evenings a week at the Polytechnic Institute, Holloway, London, plications to be sent to the Clerk to the

ATE.—**London, S.E.1.**—Architectural Assis- ired for temporary engagements in the Department of the London County Council. o the Council, County Hall, Westminster E.1.

OING EDUCATION IN ASHIRE & CHESHIRE

TING of the Lancashire and Cheshire Trades Teachers and others interested eld on October 18, at 2 p.m., at the r College of Technology, under the hip of Mr. D. W. Steele, of Wigan.

t will be given on the work done by ommittee which is composed of (*a*) of the Manchester Branch of the of Builders, and (*b*) Building Trades This joint committee was formed conference between the Manchester the Institute of Builders and Building engaged in the various Technical f Lancashire and Cheshire, held in r on October 13, 1923.

ging progress has been made as a the meetings held, and the friendly p now established should, with a e of effort, produce beneficial develop- all sections of the building industry.

owing is the agenda for the meeting :— ort of teachers' representatives on ittee appointed to meet the Institute rs. Mr. E. M. Pearson, Preston. g Examinations and the necessity for rtificates. Discussion introduced by Riley, Rochdale. (3) Training for itions in the building industry. Dis- roduced by Mr. F. E. Drury, Man- 4) The introduction of trade courses. introduced by Mr. W. F. Anderson, 5) Any other business.

ipals, teachers, employers, employees interested in technical education and r the building industry are invited to orrespondence to Mr. W. F. Anderson, School, Bolton.

Drury-lane Theatre.

of the steady trend of the public e cinema is seen in the conversion f the theatres into picture houses, -sighted management of Drury-lane alising this, has not been left behind rch. It has set before its public f the Arabian Nights par excellence. s full of thrills and adventure, with airbanks in the title role; and, the long queues which are seen waiting at the box office, it looks the "Lane" will draw all cinema spacious and comfortable house—not but many times, where "The Thief " may be seen twice daily.

BRITISH COMMERCIAL GAS ASSOCIATION.

Dr. C. W. Saleeby lectured last Monday before the members of the British Commercial Gas Association, at the Town Hall, Liverpool.

In the course of his remarks, he said the secret of the power of light was that it exalted the self-defending powers of the blood. They could not expect the results of true sunlight by sitting behind a window. A substitute for window glass was needed in hospitals and other places where children were cared for. Quartz would serve the purpose, but it would be extremely expensive. It was time they restored the light of day to their cities. He advocated the school in the sun, for normal as well as ailing children. A recognition of the value of sunlight and fresh air was the flight of hospitals from the cities to the country. Several London hospitals were moving in that direction, and Sheffield, "a smoke cursed city," had a scheme to transfer its four hospitals into the country, a park having been bought for the purpose. The result of the abolition of coal smoke in New York was that between 1905 and 1919, pulmonary tuberculosis was reduced one-half, and there had since been an even greater fall.

On Tuesday, Mr. H. Wade Deacon delivered his presidential address. In the course of his remarks, he said in Liverpool, though they had some tall chimneys which were not blameless, yet it was true to say that, in the bulk, the domestic hearths were the greatest sinners. It was only necessary to think for a moment of what St. George's Hall, the Art Gallery, the Town Hall, the Dock Offices, to name only a few of their chief architectural attractions, would look like to-day if they had not been blackened and disfigured by the smoke from those open domestic fires to which they were accustomed. Let them think of the sad change that must occur in the colour of the stonework of their new cathedral in the course of only a few years, not to mention the more serious question of decay, if they continued to employ raw coal in their fireplaces.

In England, they had not the advantage of a great supply of water power possessed by some of their competitors in other countries, and the consideration of the possibility of obtaining a quantity of such power by damming the Severn was only now entering upon its early stages. As they had no oil wells, the one great source of power in their own land was—for the present, whatever the future might bring—coal; and as their stores of coal were being used up rapidly, it was necessary, in the national interests, that the utmost possible use be made of the coal they had. The vital importance of this matter was a subject which the gas industry would have to lay, with all the force it could command, before any Government which considered the question of the power resources of this country. The important point to bring constantly and plainly to the notice of all who were considering power schemes was that the term "power" must be restricted to the limited meaning of "motive power," and not be used to include the provision and use of heat, as such, and that the problem of coal conservation and utilisation must be considered as comprising two separate main considerations: (1) The economic utilisation of coal as a source of smokeless, labour-saving motive power; and (2) the economic utilisation of coal as a source of smokeless, labour-saving fuel. While the answer to the one might be largely—it was by no means wholly—"electricity," the answer to the second was almost entirely "gas and coke."

In conclusion, Mr. Deacon said not only existing conditions, but any conceivable conditions, must involve conflicting interests, and, so long as there were conflicting interests, there must always be the possibliity of strife. The great object of reasonable men was to remove, as far as they could, the causes which led to such violent and really anti-social acts as strikes and lock-outs. Much might be done, he thought, by trying to understand each other's point of view, in spite of difficulties which often undoubtedly existed, and by deliberately cultivating an attitude of readiness to believe in each other's honesty and good will. It was because he believed that co-partnership helped to form that attitude that he was a firm supporter of it wherever it could be applied.

PATENTS

APPLICATIONS PUBLISHED.*

217,654.—T. G. Allen: Systems of raising liquids.
217,658.—F. Jordan and F. Andrew: Kitchen table.
217,664.—D. H. Remfry: Construction of bridges.
217,669.—British and Foreign Industrials, Ltd., and J. G. Nash: Kitchen and similar tables.
217,692.—A. Rowlands: Kitchen ranges.
217,713.—E. Lumb: Building blocks.
217,718.—D. J. Munro: Construction of silos.
217,759.—H. K. Bromhead: Balanced window sashes.
217,791.—C. H. Harrison: Manufacture of reconstructed stone
217,802.—F. R. R. J. Pearce: Ventilators for rooms
217,812.—J. H. Delaney: Production of vermiculated appearance in artificial stone and like building materials.
217,813.—O. J. Looney: Locks.
193,062.—Jones & Laughlin Steele Corporation: Metallic structural elements.
218,720.—J. Hodson: Manufacture of basic bricks, furnace linings and retorts.
218,752.—J. R. Torrance, W. G. Hamblin and Torrance & Sons, Ltd.: Adjusting device for the rolls of grinding, crushing, pulverising, and other machinery.
218,760.—T. Debenham: Manufacture of concrete pipes.
218,764.—G. Meroni: Wooden furniture.
218,785.—R. Reinisch: Office desks.
218,810.—M. Haramiishi: Ferro-concrete walls.
218,819.—C. F. Hyde and S. Knott: Roads, floors, and like surfaces.
215,301.—C. T. Weymann: Apparatus for operating vertically-sliding windows.
218,858.—J. H. James: Latches for doors.
218,867.—L. Lombardi: Central heating of buildings.
218,874.—Armstrong Siddeley Motors, Ltd., and J. D. Siddeley: Manufacture of plywood.
206,480.—J. Deny: Folding seats.
218,876.—R. Hickton and W. Bagguley: Brick-making machines.
218,933.—M. J. Adams: Fire-places.
211,478.—Anaconda Sales Co.: Process for manufacturing roofing elements by electrolysis.
218,958.—G. Crowther: Supports for drilling braces and scaffolding.
217,947.—L. J. Hancock and T. R. Hancock: Heating apparatus.
217,949.—P. E. Sabine: Sound-absorbing plaster.
217,970.—P. Dumont: Lime-kilns.
218,015.—Benham & Sons, Ltd., and C. R. Allensby: Radiators for heating buildings.
218,027.—J. A. Davenport: Reinforced concrete beam construction.
218,042.—H. Landmark: Manufacture of jointless floorings.
218,060.—H. T. Tallack: Surveyors' levels.
218,075.—E. B. Praceiq: Preparation of pulverulent fuels for the purpose of converting their ashes into hydraulic cements.
218,093.—E. Debongnie: Arched roofs.
200,519.—R. Faure and G. Bourrelly: Heating apparatus.
205,053.—M. Nola: Metallic joints for composite structures.
218,121.—M. Lombardi: Radiators for heating buildings.
218,127.—J. U. A. Ohlsen: Process for producing impermeable, strong, and acid-proof tubes, bricks, and other articles from diatomic earth.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

PROPOSED NEW BUILDINGS & OTHER WORKS *

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ADWICK.—The Council has decided to build 300 more houses.—The Colliery Company are providing another 300.

ALTRINCHAM.—The Board of Management of the Altrincham Hospital are proposing to install a new X-ray department in their institution, estimated to cost £3,000.

ASHBURTON.—Steps are to be taken for the erection of a new head master's house at the Grammar School. The Devon County Architect is to assist the governors by the preparation of plans and estimates.

ASHTEAD.—Plans approved by the Epsom R.D.C.: House off Leatherhead-road, for Mrs. M. B. Jackson; bungalow, Links-road, Mr. W. Brown; house, Warren Estate, Mr. O. J. Humbert; house, Harriotts-lane, Mr. H. B. Hibbert; house, corner of Agates-lane and Barnett Wood-lane, Messrs. Paterson & Moyle; house, Harriotts-lane, Mrs. F. Lawson.—The Clerk was given power to deal with the acquisition of land in Barnett Wood-lane, where houses are being erected by Messrs. Paterson & Moyle, in order to widen road.—The Council agreed to steps being taken to acquire land to widen Ottways-lane between The Orchard and Whitehouse Farm.—The Council agreed to a larger drain pipe being laid to prevent further damage to cottages by surface water from Farm-lane.—Land has been purchased in Barnett Wood-lane for housing.

ASHTON-IN-MAKERFIELD.—The D.C. have under consideration the question of taking over the Old House site on the assisted housing scheme on terms to be arranged, or the disposal of the site for the erection of houses by private enterprise.

ASHTON-UNDER-LYNE.—The Sites and Buildings Sub-Committee of the E.C. has resolved to recommend to the T.C. that an application be made to the M.H. for power to borrow £8,080 for the purchase and alteration of Trafalgar-square School.

BANSTEAD.—The Epsom R.D.C. are to negotiate for land for widening Salisbury Court-road.

BARNSTAPLE.—It is proposed by the Devon C.C. to erect a pavilion at the Hawley Sanatorium, at a cost of about £2,000.

BEDWELLTY.—The U.D.C. propose building 16 houses at Argoed and 14 at Aberbargoed. The work is to be carried out by the Surveyor at a cost of £8,880 and £6,810, respectively.—The Council are to provide a cemetery. The Surveyor submitted an amended scheme for road widening at Bedwellty at an estimated cost of £300.

BIRMINGHAM.—The Birmingham Public Works Committee propose to erect 1,204 houses. The majority of the new dwellings will be of concrete, and will be erected on various sites at Billesley, Washwood Heath, Belcher's-lane, and Shortheath-road, Erdington.

BLACKPOOL.—Application has been made to the T.C. for the sale of a plot of land at Woodhouse Farm, Carleton, for the erection of a church.

BOLTON.—The Corporation is pushing forward with its scheme to extend the Town Hall building nearly to double its present size, and, in addition, erect new buildings in the shape of a crescent beyond the extension. It will cost over a million pounds, and as most of the property surrounding the Town Hall has now been acquired by the Corporation a start should be made early next year. The plans are being prepared by Messrs. Bradshaw, Gass & Hope, architects, 19, Silverwell-street, Bolton.—The Housing Committee have approved plans for another 55 subsidy houses in various parts of the Borough.—The E.C. has approved arrangements for taking over Lostock Industrial School to make it an open air school.

BOWLAND.—Plans are being prepared by the surveyor to the West Riding Education Authority for repairs and alterations to Grindleton-lane Ends School.

BRAINTREE.—The Housing Committee has received the sanction of the M.H. for the erection of cottages at Black Notley, Rayne, and Cressing. The Council decided to apply to the M.H. for sanction to the erection of a further 22 houses—eight at White Notley, six at Fairsted, and eight at Shalford—and also for the necessary loan.

BRIDLINGTON. — Plans approved by the T.C.: Messrs. Walker, Son & Field, house, Kingsgate, for Mrs. J. M. Chambers; Mr. F. Vaux, house, Sixth-avenue, Sand's Cottage Estate, for Mr. F. Vaux; Mr. L. Stewart, house, Road No. 1, Priory Estate, for Mr. H. Morton; Mr. F. Vaux, house, First-avenue, Sand's Cottage Estate, for Mr. F. Vaux; Mr. F. Vaux, house, Sixth-avenue, Sand's Cottage Estate, for Mr. F. Vaux; Mr. C. F. Johnson, house, Mayfield-road, for Mr. A. Webber; Mr. C. L. Waite, two houses, Road No. 3, Priory Estate, for Mr. W. Witting.

BRIGHTON.—A new sub-station is to be erected in Preston at a cost of £6,000.—About £1,500 is being spent on sea defence works between Brighton and Rottinghean.—It is proposed to build a tidal swimming bath at the cost of £60,000. The Borough Engineer is to prepare plans.

BRYNMAWR.—The U.D.C. is to proceed with its unemployment relief schemes for a new filtration bed at the reservoir, and various roads improvements, at a cost of £8,000.—Plans for a new road to Blaenavon are being prepared by the C.C. surveyor, and the scheme is to cost £12,000.—The Council have also resolved to offer the Heathcote Pond to the local Miners' Welfare Committee for development as a recreation park.

BUDLEIGH.—The Council reported the M.H. had sanctioned the borrowing of £950 on behalf of Mr. Robertson for the building of houses.

BURNLEY.—The General Purposes Committee of the Corporation have approved of a scheme for the construction of three tennis courts and a shelter at Scott Park, at a cost of £2,000.—The B.S. has been instructed to prepare a report on the portion of the Palace House site proposed to be used for a central school.—There was no opposition to the scheme for the extension to the sewage works at Altham, estimated to cost £14,000, at the M.H. inquiry.—The R.D.C. are to make application to the M.H. for sanction in respect to the Council's scheme for the construction of 20 houses.

BURY.—The Sewering, Paving, and Streets Committee approved plans for five pairs of houses in Manchester-road, a house in Brandlesholme-road, and grand stands on the Bury Football Ground and Bury Sports Field.

CARDIFF.—Foundations for 12 houses have been laid in Portmanmoor-road, Splott, in connection with the scheme of 42 houses to be erected.

CHORLEY.—The M.H. have approved a new scheme for the erection by the T.C. of 60 houses on the Highfield Estate.

CLACTON-ON-SEA.—As a war memorial for the R.C. Church, it has been decided to provide a lych-gate and to carry out the design of the gate in carved oak, with a tiled roof and a tablet on the inside.

CLEVELEYS.—The Building Plans Committee of the Thornton Council have approved the following plans: House, The Grove, Cleveleys, for Mr. Hartley; pair of houses in Fleetwood-road, for R. H. Booth & Co.; four houses in Slinger-road, for Mr. J. Eyres; pair of houses in Devonshire-avenue, for E. W. Roskill, Ltd.

CLITHEROE.—The T.C. agreed to terms imposed by the M.H. in connection with the erection of 32 houses on land in Henthorn-road.

COBHAM.—The Epsom R.D.C. propose to prepare a town-planning scheme.

COLNE.—The M.O. has been instructed by the T.C. to prepare a report upon the adaptation of the cottage home in Barrowford-road, in connection with the work of maternity and child welfare.—The T.C. have under consideration the widening of Wanless Bridge and the approaches thereto.

COLWYN BAY.—A new assembly hall is to be built at Penrhos College, at a cost of about £15,000.

CONWAY.—The Conway and Llandudno Councils Joint Committee decided to proceed to the construction of the first section of the proposed new main road between the two towns. This involves the widening of the existing section from Tynycoed Hill to Fan Tom. The M.T. have agreed to the scheme which includes the construction of a new road from Llandudno to Deganwy.

COVENTRY.—The E.C. recommends the extension of Stoke Park School and the extension of Barr's Head School.—The Electricity Committee proposes extension of mains, at a cost of £19,356.

COWES.—The M.T. have sanctioned the scheme for the shore road, in continuation of the esplanade, in a westerly direction, linking up with Gurnard, which is part of Cowes. The cost of the new road is estimated at £15.000.

DAWLISH.—The U.D.C. has prepared a scheme for improving the Exeter-road, at a cost of about £5,000.

DERRYCONNER—The B.E. have granted £3,000 for the erection of a national school.

DIDSBURY.—Shops adjoining the Co-operative Stores in Wilmslow-road have been acquired by the Manchester and Salford Equitable Co-operative Society, Ltd., for the purpose of future extensions.—The Union Bank of Manchester, Ltd., have acquired premises in Wilmslow-road for conversion to a branch bank.

DOVER.—Compulsory powers are to be sought to purchase property for the Buckland Bridge and Crabble Hill improvements.—The M.H. has raised no objection to the Council proceeding with a scheme for heating the town hall, &c., before receiving sanction to the loan.—The T.C. has passed plans for the rebuilding of the Archcliffe Fort Inn, Limekiln-street, by Messrs. A. Leney & Co.—For the erection of 15 houses at Dodd's-lane a tender of £8,169 is recommended, and for 10 houses in Buckland a tender of £6,637 is recommended.—The B.S. has been asked by the Housing Committee to submit a report as to the use of a site in the town for the erection of houses on an economic basis without the assistance of the Government subsidy, the purchase of land, the provision of roads and sewers, and all other expenses being taken into account.—The Town Clerk is to inquire if the M.H. will be prepared to give sanction to the borrowing of money for the erection of houses without State assistance.—The tramway track in High-street is to be renewed at a cost of £2,450.

DUBLIN.—Plans passed by the Corporation:—Bungalow, Killester, co. Dublin, for Mr. R. Brophy; house, Church-avenue, Drumcondra, Mr. P. J. Pigott; bungalow, Castle-avenue, Clontarf, Mr. M. T. Molloy.—In converting Kilmainham Courthouse for use as a District Court, £1,400 is to be spent.

DUNDEE.—The congregation of St. Mary's R.C. Church have decided that their war memorial shall take the form of considerable alterations and improvements to their buildings.

EDINBURGH.—The following plans have been approved by the Guild Court: Thomas Fulton, four garages at 127, Trinity-road, Leith; T. S. Henderson, seven bungalows at Queen's-road, Blackhall; Mrs. M. W. Dickson, or M'Kelvie, bungalow at Gra
Messrs. M'Kendrick & Co., eight houses at
avenue; G. Paterson, three houses at Temple
Corstorphine; G. Roberts, villa at Ravelst
Church of Scotland Residence for Students
Tees; conversion of two houses at 22, 24,
street into hostel; T. Anderson, six houses
brae-avenue.—The Scottish Rugby Union w
interim warrant to excavate and lay the fou
the grand stand at their new ground at Ros

EDMONTON.—U.D.C. passed plans: Deta
at Bush Hill-road, by Mr. S. P. Chapman:
houses at Seaton-street, for Mr. R. Wallis;
detached houses at corner of Bury-street
Anne's-grove, by Mr. E. Kimprou; church
Stephen's Church, by Messrs. Baines & Son;
at Nos. 48 and 50, The Green, by Mr. F. S
and generator building at Anglo-America
depot, Picketts Lock; six houses in Ridge-
Messrs. Collins & Jones; detached house a
Ridge-avenue and Church-street, by Dr. A.
—The U.D.C. propose to build 82 houses
foundations. The total estimated cost is £4

ESHER.—The Council have adopted a roa
scheme, to cost £13,850.

ETON.—The R.D.C. passed plans for the
Four bungalows, Wraysbury, for Mr.
bungalow, Slough-road, Datchet, for Mr. R
cottage, Farnham Common, for Mr. C.
four houses, Burnham, for Mr. J. Hyd
Langley, for Mr. R. Hawes; house and shop
Common, for Mr. W. S. Taylor; house,
Royal, for Mr. W. Squire; sewer on the Slou
Estate, for the Slough Trading Co.; ho
Poges, for Mr. McCurd; house, Farnham
Mr. W. Metzner; 12 bungalows on the
Estate, Wraysbury, for Mr. G. N. Sma
Gerrards Cross, for the Circle Land Co.
Langley, for Mr. P. S. Edwards; bungalow
for Mr. F. Smith; four houses, Burnham,
Smith; three bungalows, Denham, for
Products Co., Ltd.; 10 bungalows, Wray
Mr. A. Reffell; bungalow, Hitcham, for
Haycock; pair of cottages, Iver, for M
Dutton; bungalow, Burnham, for Mr. J.
bungalow, Iver, for Miss E. J. Neale;
Wraysbury, for Dr. Whitla; 12 bungalow
bury, for Mr. J. Perrin; roads on the Fairfie
for Mr. J. Perrin: two bungalows, Horto
C. E. Masters; bungalow, Cippenham-lane,
for Mr. E. Stockwell.

EXMOUTH.—The Devon County Architect
instructed to prepare plans for extension
Secondary School.

FAILSWORTH.—On the recommendation of
veyor's Committee, the Council resolved
application to the M.H. to borrow £6,022 f
street works.

FETCHAM.—The Epsom R.D.C. approved
house in Eastwick-drive, for Mr. W. H. Gr
bungalow, in Lower-road, for Mr. F. W. Tr
bungalow in Lower-road, for Mr. A. M. Mc

GODSTONE.—The M.H. has forwarded
sanction to the borrowing by the Council o
of £890, for the purchase of land at Limpsfie
erection of dwellings for the working class
Surveyor submitted the house and lay-o
formally approved by the Titsey Estate, a
resolved that tenders be invited by advertis
the erection of 12 houses on the Estate.

GREAT BOOKHAM.—Plans passed by th
R.D.C., of houses for Mr. E. Fox, Mr. W. A. M
Mr. L. Davis, Mr. W. E. Pickett, Mr. H. W.
Mr. O. Higby, Mr. D. W. Scarlett (three
on Lower-road), Mrs. A. Conisbee, Mr. B.
Mr. N. C. T. Hartley (four bungalows on N
Eastwick Park), Mr. A. H. C. Adams, Mr. G.
Mr. C. Barter, Mrs. E. Sweeney, Mr H. A
Mr. F. Barnes, Mr. H. L. Oddy, Mr. C. J.
Mr. A. S. Chugg.

HALE.—The D.C. are proposing a schem
erection of 24 houses at Hale Barnes.

HAWKMOOR.—The M.H. has approved th
of the Devon C.C. to enlarge Hawkmoor S
by the provision of accommodation for
children.

HEANOR.—The U.D.C. decided to submit
to the M.H. for the erection of 115 houses.

HEYWOOD.—The T.C. have passed the
mitted by Mr. A. Kershaw for extensions to
Hooley Bridge, Heywood.

HITCHIN.—An inquiry has been held in
an application by the U.D.C. for an im
scheme in the town's slum area, of whi
street is the centre.

HORSHAM.—The R.D.C. have made app
the Public Works Loan Board for a loan of
the erection at Crawley of dwellings.

HUNSLET.—Plans have been handed in fo
room at Halton. No provision had been m
mortuary. Estimates were received, and it
that the erection would cost about £350.
then decided to advertise for tenders. Th
reported that the laying of a proper path in
Colton, would cost about £160.

HURST.—The D.C. approved plans submi
W. H. Robinson, of "Berwyn," Higher Kin
the erection of two bungalows in Broadoa

ILFORD.—Plans passed by the U.D.C.:
two houses, 16–18, Woodstock-gardens; F.
cock, house, 99, Aldborough-road; F. F
houses, 29–35, and 48–66, Stainforth-road,
road, and 1, Brancastor-road; F. Fort
houses, 12–14, Newbury-road and 11–13,
F. F. Goddard, bungalow, 1, Baxter-road;
ton, two houses, 3–5, Hamilton-avenue;
10 houses, 66–84, St. George's-road; P. E.
20 houses, 11–49, Ethelbert-gardens; P.
Ltd., six houses, 51–55 and 59–63, Ethelb
A. Smith, house, 175, Breamore-road; H.
four houses, 24–30, Wards-road East; A.
houses, 153–159, Breamore-road; W. H.

* See also our List of Contracts, Competitions, etc.

nd 14–16, Levett-gardens; W. H. Knox, 36, Parkway; P. E. Brand & Co., Ltd., lbert-gardens; Suburban Developments lay-out plan of roads and sewers. Estate; J. A. Dartnall, conversion into e House," High-road, Chadwell Heath, o adjoining; Melbourne & Spyers, 28 road and sewers, 1–55, Horstead-road; er, five houses and shops, 217–225, d; A. P. Griggs, 12 houses, 120–142, P. Griggs, road and sewers, The Drive; rd., eight houses, 1–15, Avery-gardens; 18 houses, 1–35, Cavenham-gardens; Co., Ltd., house, 65, Ethelbert-gardens.

BT.—The C.C. proposes to undertake e of all the roads in the island.—The litional accommodation at the mental r consideration.

A new cattle market is to be erected, 101.

Plans for a Catholic Central School for eld-road South have been approved.

—Plans passed: Two houses and shop, for Mr. H. O. Roberts; two houses, for Mr. Williams; shop, Lloyd-street, nd; house, Conway-road, for Mrs. nsion to recreation room, East-parade, ; house Colwyn-road, for Miss Hind; at Ormes-road, for Mr. David Davis.— ave instructed their architect to prepare manent building at the Craigydon sub-

BETH).—Negotiations are taking place mbeth B.C. and the local B.G. for the e Council of Princess-road Workhouse, n closed, for conversion into flats.

PLAR.—The Council propose to erect lane.

e T.C. has under consideration a scheme of new baths at a cost of £30,000.

e R.D.C. passed plans for several mission hall at Wickham Bishops for xtensions are to be made to the water apel-lane, Tolleshunt Knights, to the road. The cost is to be about £140.

—The following works are proposed by ent Committee of the City Council for nemployment:—The new Valley-road, n Smedley-road to Hazelbottom-road, 00; Nuthurst-road, 50 ft. wide, from ecreation Ground to Moston Collieries, Hall-lane, 50 ft. wide, from Wilmslow-L.N. Railway, including the widening of nslow-road, £37,000; a new road, 50 ft. rch-lane, Harpurhey, to Thorpe-road, ,220.—The Chapter and Churchwardens ter Cathedral have decided to erect a outside the Cathedral to the late Dean Dr. J. G. McCormick.—The Diocesan proposing to erect on the Wilbraham-state a new church estimated to cost itute £10,000, and a rectory £3,000.— Glenday, rector of St. Alban's Church, Cheetwood, is raising funds for the he church and churchyard, estimated

—The T.C. are inviting tenders for con-

TDFIL.—The T.C. has purchased land nnection with a proposed new bridge rd.—The Housing Committee is con-te of the proposed 90 houses to be displaced from insanitary areas to be Miners' Welfare Fund recommends a towards laying out the Coffee Tavern reation ground.—Plans prepared by n & Richards, the architects for the al library, have been submitted to the and the Library Committee has now a site at St. David's.—Application is r loans of £6,700 for improving and ad from Penybryn to Merthyr; £900 he Merthyr–Aberdare road.—Rocky-g is to be widened at an estimated cost g's-plane is to be widened at a cost of S. has been instructed to prepare ning the main road at Quaker's-road

TPSTEAD.—Devon County Surveyor has me for improving the Tavistock main of £2,417.

—A proposal is on foot to transform Barracks into houses.

e East Riding coroner has asked the ide a mortuary for the town. It has erect one in the Council Buildings

ans of a new institution for mental sed to be erected at Hawkhead Estate, pproved by the local District Board of otal cost is estimated at £92,537.

es.—Plans passed by the City Council: e-road, for Mr. Maycock; building of ge at the Cathedral Gateway, for the ter; house in Lincoln-road, for Dr. Alexandra-road, for M. H. G. Allen: ad, for Mrs. Pike.

—The U.D.C. has received sanction ty of Home Affairs for the borrowing ke advances under the Small Dwellings

e E.C. have under consideration the ol adjoining Deepdale Council School. Heathwood.—The Streets and Building ved plans for the erection of about 30 ks and Baths Committee are consider-e provision of new baths.—A contract into for the purchase of the Friends' and adjacent property in Friargate by isation.

as passed: Addition to Messrs. s premises, Brewhouse-lane; house, Chartfield-avenue; houses in Kingston and Portsmouth roads.

RAWMARSH.—The U.D.C. have under consideration a scheme for bringing up-to-date the Waterworks, at a cost of £11,600.

REIGATE.—The R.D.C. Surveyor made a report on the proposed improvement of the roadway at Lawrence Farm Pond, Buckland. The work would involve the draining off of the water from the whole pond, with the construction of a concrete retaining wall approximately 100 ft. long, and containing about 19 cubic yards of ballast. The wall would be carried to a height of about 6 ft. above the present road level.—Plans approved: Bungalow, Mill Hill-lane, Betchworth, for Miss Surridge; bungalow, Westfield Farm, Lowfield Heath, for Mr. E. Zambuni; house Balcombe-road, Horley, for Mr. H. H. Ross; bungalow, Masons Bridge-road, Horley, for Mr. F. J. Morley; house, Oakwood-road, Horley, for Mr. Sawyer; cottage, Vicarage-lane, Horley, for Mr. A. G. Cook; two houses, Balcombe-road, Horley, for Mr. H. H. Ross; bungalow, Margery, Kingswood, for Mr. C. W. Smith; cottage, Parkwood-road, Nutfield, for Mr E. A. Tickner; three houses, Holmesdale-road, Nutfield, for Mr. C. E. Pease.

ROCHDALE.—The Sub-Committee of the E.C. have decided upon a site for the erection of an elementary school at Whitworth.—The B.G. have sanctioned a scheme of extensive building operations at their institution, the expenditure not to exceed £18,780.—The Lowerplace Liberal Buildings Co., Ltd., have in hand a proposal for the erection of new Liberal Club premises.

ROMFORD.—The foundation stones were laid in connection with the new hospital accommodation, for the B.G. The scheme will cost £98,000.—The M.H. permission to grant financial assistance in respect of 200 houses has been received by the R.D.C.

ROMSEY.—Plans passed by the U.D.C.: House, Plaitford, for Mr. F. Peck; bungalow, Winchester Hill, Romsey, for Mr. H. W. Walden; bungalow, Whitenap, Romsey, for Mr. W. G. Grace; bungalow, Awbridge, for Mr. C. Reynolds; bungalow, Mile Hill, Romsey, for Mr. G. W. Lawne.

ROYTON.—In the County building programme for the year 1925–6 is a new Council school to be erected in High Barn-street.

SALFORD.—Plans passed: Transformer sub-station, St. Paul's School, Moor-lane, Broughton.

SCARBOROUGH.—The Town Clerk has been instructed to complete the agreement with the vendors of Londesborough Lodge, which the Corporation are purchasing for £6,060. The Corporation intend to use it as a museum and also as a conference centre.

SEDGEFIELD.—The R.D.C. passed plans Two houses, Church-lane, Ferryhill, Mr. G. L. Sakeld: house, Coxhoe, Messrs. M. R. Draper & Sons; bungalow Windlestone, Mr. W. Bainbridge.—A committee has been appointed to consider the most desirable line of the proposed new road between Foxton and Sedgefield.

SHAW.—Plans were submitted to the T.C. for the erection of a Young Men's Institute for the Shaw Wesleyan Chapel and Sunday School.

SHERINGHAM.—The U.D.C. passed plans: House, Norfolk-road, Miss Smith; house, St. Austin's-grove, Mr. A. Prior.

STOKE-ON-TRENT.—The T.C. has approved schemes for extensions at the Longton sewage works, at a cost of £6,000, new storm water tanks, &c., at the Burslem works, at a cost of £11,500; and storm water outlet main at Hanley, at a cost of £1,400.—Reports are to be circulated amongst members regarding the proposed provision of abattoir accommodation.—Negotiations are proceeding for the acquisition of land at Hartshill for a proposed cemetery extension and for a recreation ground.—The B.S. has been instructed to carry out renovations at the Burslem Old Town Hall.—Coal storage accommodation is to be provided at the central power house, at a cost of about £2,500.—Sanction has been given for a loan of £7,500 for the erection and equipment of an elementary school at Oakhill.—The Cannon-street brickworks are to be purchased for £5,700, and a depot is to be established there at a cost of £750.—The Star and Garter-road, at Longton, is to be widened, at a cost of £22,500.—Extensions and improvements are proposed at the Etruria gas works at a cost of £64,000.—A loan of £3,000 has been sanctioned for extensions to buildings and provision of plant at Hanley destructor works.—A porter's lodge and visitors' waiting hall are to be erected at Bucknall Hospital, at a cost of £2,800.—Land is to be purchased at Hanley-road and developed as a housing site.—A scheme of drainage is to be carried out at Burslem cemetery at a cost of £6,600.—The B.S. has prepared plans for extending Vivian-road, Fenton, along the frontage of Fenton Park, at a cost of £4,270.—A storm water sewer is to be provided, at a cost of £5,740, to relieve flooding in Brook-street, Hanley.—The L.M.S. Railway bridge at Scotia-road, Burslem, is to be rebuilt, the cost being put at £17,000.—Plans have been passed for a bridge over Elgin-street, Stoke, for the Empire Porcelain Co.—Plans have been passed for alterations at the Imperial Picture House, Burslem.—The B.S. has prepared plans for nine houses at Hill-street, Burslem.—A site at Eaton-street, Northwood, is to be purchased for housing.—Land at Cowper-street, Fenton, is being purchased, and plans for houses, &c., are to be prepared by the B.S.

STREATHAM.—Plans passed: Houses, Hill House-road; new streets from Streatham Vale; houses, Upper Tulse Hill; five houses, Stockfield-road.

SUTTON COLDFIELD.—Plans passed by the T.C.: House, Jockey-hill, for Mr. T. W. Bladon; house, Broadfields-road, for Mr. H. T. Jones; bungalow, Jockey-road, for Miss E. Facer; four bungalows, off Sheffield-road, for Mr. T. W. Harbidge; house, Tower-road, for Mr. W. Watson; house, Walmley Ash-road, for Mrs. Hart; house, Somerville-road, for Mr. S. Heatley; bungalow, Fox Hollies-road, for Mr. E. Clink; cottage, Hill Village-road, for Mr. H. J. Thornton; house, Lindridge-road, for Mr. F. Burgess; shop and house, Lichfield-road, for Mr. H. G. Guest; house, Penns-lane for Mr. A. B. Adams; house, Penns-lane, for Mr. Jex; bungalow, Rectory-road, for Mr. W. Pickering; house, Stonehouse-road, for Mr. Fellows; house, Stonehouse-road, for Mr. C. G. Mackay; house, Stonehouse-road, for Mr. Pryce; house, Sherifoot-lane, for Mr. W. H. Aarons; four houses, Tower-road, for Mr. W. Watson; house, Vesey-road, for Miss M. J. Hook; four houses, Western-road, for Messrs. Blackband & Grimson; house, Western-road, for Mr. J. B. Southall; bungalow, Whitehouse Common-road, for Mr. H. Tidy; house, Walmley-road, for Mr. R. H. Walcot; house, Vesey-road, for Mr. E. R. Martin.

SWANSEA.—The Swansea Water Committee is to apply for a loan of £20,000 for the extension of water mains.

THORNTON.—The following plans have been approved by the Building Plans Committee of the T.C.: House and garage for Mrs. Robinson; pair of villas, Lancaster-avenue, for R. Lancaster & Sons; pair of villas, Gordon-avenue, for R. Lancaster & Sons; and pair of houses, Lawsons-road, for Mr. S. Haywood.

THURCROFT.—The erection of an hotel in Green Arbour-road has been commenced.

TORQUAY.—Tenders are being invited by the Devon C.C. for the erection of nurses' quarters at Whitecliffe.

TORRINGTON.—The Great Torrington Town and Alms Land Charities have asked for assistance of the Devon C.C. for widening of Rothern Bridge on the Bideford main road.

TOTTENHAM.—The U.D.C. passed plans: Seven houses, Higham-road, J. E. Large; hall, billiard room, &c., at 8, Bruce-grove, Trades and Labour Council; roads and sewers, Williamson's brickfields, Green-lanes, Harringay; two houses, Mount-pleasant, F. Moore.

TRIM (IRELAND).—The U.D.C. has approved plans for the new technical school.—Application for sanction to a loan of £1,500 in connection with the rebuilding of the Town Hall has been made by the U.D.C.

TUNSTALL.—Funds are being raised by the Catholic congregation for the erection of a new church.

UPMINSTER.—The P.C. has received the formal sanction from the M.H. for the purchase of Clock House.—Provision has been made for the borrowing of £800 for the purchase of land for public walks and pleasure grounds; £900 for the provision of a parish hall. It was decided to apply to the Public Works Loan Commissioners for the necessary money.

WALTHAMSTOW.—The U.D.C. passed plans: Factory restoration, Forest-road, Hookway & Cook; cottage, 16, Hervey Park-road, Miss M. McNamara.

WARLEY.—The County Architect of Worcestershire has prepared plans for a police station, estimated to cost £3,500. The plans have been passed by the Standing Joint Committee.

WARRINGTON.—The T.C. has passed a scheme for widening Manchester-road by the setting back of the Cemetery wall throughout its entire length.—The T.C. has adopted plans prepared by the B.S. for a concrete bridge in place of the existing Buttermilk bridge.—Mr. S. P. Silcock has been appointed architect for the Lymm generating sub-station.—The Town Clerk is to negotiate with Lord Lilford for land for housing schemes.—The B.S. has been instructed to invite tenders for the erection of a further 54 houses on the Reynolds-street site.—The Corporation are going to widen Knutsford-road, the setting back of the river wall and the rebuilding of Black Bear Bridge; the cost of the scheme is estimated at £43,000.—The Corporation are in negotiation for the Bewsey Estate (68 acres) and 33 acres adjoining, for the erection of 1,100 houses.

WATH.—Plans have been approved for the erection of a new cinema at an estimated cost of £20,000, inclusive of land and fittings.

WAYLAND.—Plans passed by the R.D.C.: Church hall at Eccles; bungalow at Carbrooke.

WEST BROMWICH.—The Joint Committee of the West Bromwich and Walsall Poor Law Unions has decided to erect buildings.

WESTHAMPNETT.—The Council agreed to the purchase of a suitable building site in Chalcroft-lane, North Bersted, and reported that the M.H. had approved of the proposals of the Council to make grants in respect of fifty additional houses.—The Committee reported having given instructions for the preparation of lay-out plans in connection with the sites which it is proposed to acquire at North Bersted, Walberton, and Yapton.

WEST HARTLEPOOL.—Plans passed by the T.C.: West Hartlepool War Memorial Committee, eight Cottage Homes, Ryehill-gardens and Elmwood-road: Mr. J. L. Fairless, house, Caledonian-road; Miss Graham, house, Caledonian-road; Mr. J. McGowan, two-storied cottage, Station-lane, Seaton Carew.

WHITBY.—Plans for two houses to be erected by Mr. W. Poole on the Ruswarp Hall Estate have been approved by the U.D.C.

WIGAN.—The Corporation are proposing converting their property known as "The Elms," and "Bank House," into four dwelling houses to plans prepared by the B.S.

WITHERNSEA.—Plans passed by the Council: House on Queen's-promenade.

WITAINGTON.—The Manchester Corporation are proposing to erect a new library on the site of the present premises at the corner of Wellington-road and Wilmslow-road, at an estimated cost of £14,000.—The Congregational Church, Palatine-road, which was destroyed by fire in 1914, is to be rebuilt at an estimated cost of £15,000.

WORCESTER.—The T.C. has under consideration the provision of a secondary school for girls.

WORTHING.—The Governors of the Worthing Hospital approved plans for the building of a new administrative block.

YORKS.—The West Riding C.C. intend to entirely remake the Great North-road from Doncaster to Red House, a distance of four and a-half miles, at a cost of £100,000. An asphalt footpath is also to be provided.

FIRES.

WYMONDHAM.—A fire took place at the saw mills of the Briton Brush Co. recently.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by in

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

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Best Stocks	4 3 6
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Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fletton, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire brick:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
Headers	22 10 0	One Side and two Ends	32 10 0
Quoins. Bullnose and 4½ in. Flats	29 10 0	Two Sides and one End	33 10 0
		Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
⅜ in. Shingle for Ferro-Concrete	14 0	" "
½ in. "	15 0	" "
⅝ in. Broken Brick	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to 51/- alongside at Vauxhall in 80-ton lots.	£3 3 6
Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto ditto "	2 1½
2 in. self-faced random flags Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	26 0	3 × 9	26 0
3 × 8	24 0	2½ × 9	26 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	23 0	3 × 4	24 0

PLANED BOARDS.

1 × 11	£34 10	1 × 9	£32

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅜	21/-	1¼	32/6
½	23/-	1½	37/6
⅝	25/-		
1			

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches	per sq.
1	25/-	⅜	16/6
1¼	32/6	½	20/-
1½	37/6	1	25/-

MATCHINGS (BEST).

BATTENS

Inches	s. d. per 100 ft.
¾ × 2	2 6

SAWN LATHS.

Per bundle				0	2 6
Dry Walnscot Oak, per ft. super, as inch	0	2	0 to	0	2 6
⅜ in. do. do.	0	1	6 to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9 to	0	2 6
Cuba Mahogany	0	3	0 to	0	3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0	14	0 to	—	
American Whitewood planks, per ft. cube	0	12	0 to	0	14 0
Best Scotch Glue, per cwt.	4	10	0 to	—	
Liquid Glue, per cwt.	4	7	0 to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	⅝ in. to ⅞ in.	13 10 0
⅜ in.	14 10 0	1 in. to 2⅞ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up. inclusive.	Fittings. ½"to¾" inclusive.	Flanges ¾"&up. inclusive.	Flanges ½"to¾" inclusive.
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28½ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

	£ s. d.		£ s. d.
IRON—			
Common Bars	13 10 0	to	14 10 3
Staffordshire Crown Bars—good merchant quality	14 10 0	"	15 10 0
Staffordshire "Marked Bars"	17 0 0	"	18 0 0
Mild Steel Bars	12 10 0	"	13 10 0

METALS (*Continue*

	£ s. d
Steel Bars, Ferro-Concrete quality, basis price	13 0
Hoop iron, basis price	16 10
" Galvanised	31 0
Soft Steel Sheets, Black—	
Ordinary sizes to 20 g.	15 0
" " " 24 g.	16 0
" " " 26 g.	18 0
Sheets Flat Best Soft Steel, C.R. & C.	
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 10
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10
Flat and Galvanised Corrugated She	
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	21 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 10
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 10
Sheets Galvanised Flat, Best quality—	
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10
Best Soft Steel Sheets, 22 g. and 24 g.	24 10
Best Soft Steel Sheets, 26 g.	26 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.	20 10

METAL WINDOWS—Standard sizes s plete houses, including all fitting coats, and delivery to job, average to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	

NOTE—Country delivery, 30s. per ton 3 cwt., 2s. per cwt. extra and over cwt., 1s. 6d. per cwt. extra. Cut to siz

Old lead, ex London area, at Mills per ton	31 0
Do., ex country, carriage forward per ton	32 0

PLUMBERS' BRASS WOR

Delivered in London.

NEW RIVER PATTERN SCREW DOWN IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ i
29/-	45/-	76/-	153/-	246/-

NEW RIVER PATTERN SCREW DOWN UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
41/6	62/-	92/-	174/-	300/-

NEW RIVER PATTERN SCREW DOWN

½ in.	¾ in.	1 in.
39/6	60/-	116/6

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.
7/6	10/-	14/-	23/-	30/-

DOUBLE NUT BOILER SC

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
7/6	11/6	17/-	29/-	36/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.
10/-	12/-	20/-	24/-

NEW RIVER PATTERN CROYDON BALL

½ in.	¾ in.	1 in.	1¼ in
35/-	56/-	98/-	162/-

DRAWN LEAD P. & S. TRAPS WITH SCREW.

	1¼ in.	1½ in.	2
8 lbs. P. traps	33/-	41/-	56
8 lbs. S. traps	35/-	45/-	66

COPPER—	£ s.
Strong Sheet per lb.	0 2
Thin "	0 2
Copper nails "	0 2
Copper wire "	0 2
TIN—English Ingots "	0 2
SOLDER—Plumbers' "	0 1
Tinmen's "	0 1
Blowpipe "	0 1

PAINTS, &c.

Raw Linseed Oil, in pipes per	
" " " in barrels	
" " " in drums	
Boiled " " in barrels	
" " " in drums	
Turpentine in barrels	
" in drums (10 gall.)	
Genuine Ground English White Lead (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine "Park," "Supremus," "St. "Spedol" and other best br 14 lb. tins) not less than 5 cwt. k	
	per ton
Red Lead, Dry (packages extra)	
Best Linseed Oil Putty	
Filocol	
Size, XD Quality	

[*Continued on next*

The information given on this pa compiled for THE BUILDER and is co this list is to give, as far as possib of materials, not necessarily the highe and quantity obviously affect prices be remembered by those who make us

RRENT OF MATERIALS (contd.)

GLASS.

EET GLASS IN CRATES OF STOCK SIZES.

Per Ft.		Per Ft.
.. 3½d.	32 oz. fourths	8½d.
.... 4½d.	32 „ thirds	10½d.
.. 5d.	Obscured Sheet. 15 oz.	4d.
.... 6½d.	„ „ 21 „	5½d.
.. 6d.	Fluted 15oz. 6½d. 21oz.	9½d.
... 7½d.	En'lled 15oz. 5½d.,21 oz	7½d.

cording to size and substance for squares ck.

LLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
e	4½d.
ed	5½d
ed	5½d

lled. Oxford Rolled. Baltic, Oceanic. Stippolyte, and small and large white ..... 6½d.
tinted ..... 9d.
et ..... 6d.
ed Cathedral ..... 5½d.
do. 7½d
ate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
rriage	ditto	1 4 0
.....	ditto	1 12 0
.....	Inside	0 18 0
er	ditto	0 18 0
binet	ditto	1 2 0
arting	ditto	1 0 0
ak.....	ditto	0 18 0
ving Oak	ditto	0 19 0
rnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
old Size		0 10 0
pan		0 10 6
gany Stain (water).....		0 12 0
ck.....		0 7 0
.....		0 14 0
ent)		1 5 0
rush Polish		0 17 0
in Terebine.....		0 9 0
Enamel.....		0 7 0

V COMPANIES.

culars quoted below have been Messrs. Jordan & Sons, Ltd., gistration Agents, of 116 & 119, e, W.C.2, from the documents he Companies' Registry.

ANIELS & Co., LTD. (198,707). ne 18. 1, Military-road, Colchester, per, slate, cement, and general chant. Nominal capital, £40.000.
T & Co., LTD. (199,598). Regis- 14, Sovereign Mews, Cambridge- Painters, decorators, contractors, l capital, £3,000.
CARTER, LTD. (199,627). Regis- 30. 480, Fulham-road, S.W.6. contractors, &c. Nominal capital

STEEL ERECTING CO. LTD. egistered July 31. Contractor for of steel and other constructions. tal, £2,000.
BROS. (BUILDERS), LTD. (199,640). ly 30. Builders and contractors. tal, £7,000.
MAKINS, LTD. (199,621). Regis- 195, Uxbridge-road, Shepherd's Builders, decorators, contractors, capital, £1,000.
ARP, LTD. (199,508). Registered ilders and contractors. Nominal).
MORGAN, LTD. (199,419). Regis- Chez Nous, South View-road, t, Essex. Builders and contrac- minal capital, £1,000.
ON, LTD. (199,712). Registered ilders and contractors. Nominal).
BUILDING AND CONSTRUCTION . (199,700). Registered August lon-road, Isleworth, Middlesex. minal capital, £2,000.
DIXON (SCARBOROUGH), LTD. gistered August 1. Joiner, general contractor. Nominal

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Stirling.—BATHS.—The Miners' Welfare Committee have agreed to subscribe the sum of £7,000 towards the cost of providing the proposed public baths.

Drumoyne.—HOUSES.—The Housing Department of Glasgow Corporation propose to build 10 steel houses and a block of timber houses at Drumoyne.

Milngavie.—HOUSES.—The T.C. proposes to proceed with the erection of 36 houses on Section No. 2 of the housing scheme.

Torry.—SCHOOL.—The Aberdeen E.A. proposes to erect a new intermediate school; negotiations are taking place for a site.

Helensburgh. — REBUILDING. — Considerable progress has been made with the initial work in connection with the rebuilding of the West Church. Plans have been prepared, measurements taken, and schedules issued.

Edinburgh.—CHURCH.—Under the will of the late Mr. W. Crambe Reid, of Edinburgh, his trustees are directed to build a church on the south side of Edinburgh, to be named the "Reid Memorial Church." This has to be built from the residue of the estate, which may amount to £45,000 or £50,000.

Montrose.—CONVERSION.—The T.C. has approved plans for the conversion of a gospel hall in Mill-street to quarters for the nurses in the service of the Montrose Nursing Association.

Perth.—GRAND STAND.—The directors of the St. Johnstone Football Club propose to erect a grand stand on the Muirton site, and have now accepted offers amounting to £9,500 for the work.

HOUSING PROGRESS IN SCOTLAND

THE following figures show the progress that has been made in State-aided housing schemes in Scotland to August 31, 1924:—

	Completed.	Under Construction.
1919 Act	22,620	2,798
Private Subsidy Schemes.....	2,324	—
Slum Clearance Schemes.....	533	1,708
1923 Act	618	4,471
	26,095	8,977

Of the total number of houses completed and under construction under the 1923 Act, 1,918 are by the local authorities, and 3,171 by private enterprise.

Scottish War Memorial.

A memorial was recently unveiled at Beaumont Hamel to the 51st (Highland) Division. The memorial takes the form of a granite cairn, rough-hewn, 19 ft. in height, and surmounted by the statue of a Highlander. The total cost of the Highlanders' memorial has been about £8,000. The architect of the memorial is Mr. A. G. Bryett, A.R.I.B.A., London, and the sculptor, Mr. G. H. Paulin, A.R.S.A., Glasgow. Messrs. M'Donald & Creswick, Ltd., Edinburgh, are the contractors for the bronze work; Messrs. Garden & Co., Aberdeen, for the granite work; and Messrs. Soille Frères, Brussels, for the paving and building.

Change of Address.

Messrs. The Sunlight Enamel and Paint Co., Ltd., have removed to 31–32, Grosvenor-place, London, S.W.1.

The London Brick Co.

Messrs. The London Brick Co. & Forders announce a further interim dividend of 5 per cent. (making 10 per cent.) on Ordinary Shares.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/5½	1/5½	1/5½	1/6	1/5½	1/5½	1/6	1/1½	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/7½	1/8	1/7½	1/9	1/7	1/7	1/6	1/- to 1/3½	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 531

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty cambor or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½″	1¾″	2″
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1″
Deal wrot moulded and rebated	per foot cu	
Plain deal jamb linings framed	per ft. sup.	1/8
Deal shelves and bearers	"	1/5
Add if cross tongued	"	2d.

STAIRCASES.

	1″	1¼″	1½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers		
Deal balusters, 1 in. × 1¼ in.	per ft. ru	
Mahogany handrail; average 3 in. × 3 in.	"	
Add if ramped	"	
Add if wreathed		

FIXING ONLY IRONMONGERY (INCLUDING SCRE

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hing	
Casement stays	1/2	letting in to floo	
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	pe
Plain compound girders	
Do. stanchions	
In roof work	

RAIN-WATER GOODS.

		3″	4″
Half-round plain rebated joints	ft. run	1/11	2/4½
Ogee Do. Do.	"	2/4½	3/1
Rain-water pipes with ears	"	2/9	3/7
Extra for shoes and bends	each	4/4	5/11
Do. stopped ends	"	1/11	2/4½
Do. nozzles for inlets	"	2/2	2/7

PLUMBER.

Milled lead and laying in flashings and gutters	per	
Do. Do. in flats		
Extra labour and solder in coated cesspools	ea	
Welt joint	per ft.	
Soldered seam	"	
Copper nailing	"	

		½″	¾″	1″	1½″
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5
Do. service	"	1/8	2/2	2/7	3/10
Do. soil	"				
Bends in lead pipe	each				
Soldered stop ends	"	1/2	1/8	2/1	2/10
Red lead joints	"	11d.	1/-	1/3	1/11
Wiped soldered joints	"	2/10	3/6	4/-	4/11
Lead traps and cleaning screws	"				14/7
Bib cocks and joints	"	6/4	9/7	15/4	41/-
Stop cocks and joints	"	15/4	17/2	25/8	64/-

PLASTERER.

Render, float and set in lime and hair	per yard
Do. Do. Sirapite	"
Do. Do. Keen's	"
Add sawn lathing	"
Add metal lathing	"
Portland cement screed	"
Do. plain face	"
Mouldings in plaster	per 1 g
One-and-a-half granolithic pavings	per yar

GLAZIER.

21 oz. sheet plain	per too
26 oz. Do	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
½ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per yar
Knotting and priming	"
Plain painting 1 coat	"
Do. 2 coats	"
Do. 3 coats	"
Do. 4 coats	"
Graining	"
Varnishing twice	"
Sizing	"
Flatting	"
Enamel	"
Wax polishing	per foo
French polishing	"
Preparing for and hanging paper	per pie

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The

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SEWERAGE*

that this book has run into nine
h a total issue of twenty-six thousand
ie evidence of its utility, and coming
en of an expert of the standing of
olwell every reliance may be placed
nformation therein and respect be
ne opinions expressed.

is divided into two parts, respec-
g with sewerage and sewage disposal.
ne fundamental principles of sewerage
ealt with at considerable length,
sections dealing with the collection
signing of schemes, details of con-
supervision and maintenance. In
smaller of the two parts, devoted
sposal, the principles are first stated,
hen the various methods by which
es are applied are briefly set out.
nree appendices dealing respectively
g sewage, the State Health Board
s as to plans, and a list of sewage
lants in the United States.

is dealt with in sections relating
the composition and amount of
recasting future population; rates
nd run off from the surface; sizes
of sewers and the velocity of flow
ushing, cleaning and ventilation of
nholes, junctions, inverted siphons,

does not instruct how to design a
cheme, but it gives information of
value for the design of any scheme.
with practical hints and, although
take the place of practical experi-
dy, either precedent to or contem-
herewith, would be greatly bene-
y to the student but to the practising
Those who are engaged in allied
construction, which only incidentally
ry matters, would get a better view
ective of the subject than by reading
her books that have been published,
hus be the better able to understand
hise with the difficulties of any pro-
e is danger, however, to the inex-
the bare enumeration of various
ich have been tried from time to
ut an accompanying explanation
they are inapplicable to general
pointing out the troubles which
rom their adoption. For instance,
ion of house drains through special
himney breasts (p. 97) is mentioned
nment, but no sanitary engineer
of permitting such an arrangement

be expected the examples quoted
trations used are taken from Ameri-
and some of the terms used may
r to many British readers; but
is unmistakable and the principles
all the world over; it is one of
ks written in America which are
ble to this country. There are
ers which may be referred to and
criticised, without it being inferred
etract unduly from the value of
The method of building up of a
ell set out (p. 62), but the non-
l reader might find some difficulty
eing the meaning of the letter *f*.
pecial reference to or explanation
ortional velocity and discharge
g p. 64. Most British engineers
are very grave disadvantages in
in. pipes for house drains (p. 79).
steps are suggested for rendering
for pollution from sewers to enter
through services to flushing tanks
00). The statement that the air
ated sewers is generally purer
d in theatres, churches, &c. (p. 94)
lification. In dealing with the
sewers it is stated that "in
re deposits in sewers are much
more common than in this country, elaborate flap valves and seals are used in the house-connections in a number of cities" (p. 96). There are, of course, still a few sources of deposit left here as a relic of the past, but further information as to the elaborate flap valves on house connections would be interesting. It is customary in this country to use the same horizontal scale for plans and sections. Differing scales are recommended on p. 134, although on the accompanying diagram similar scales are employed. The suggestion that floats should be followed night and day for three or four days in order to test the flow of the tidal currents from an outfall sewer could only apply to a discharge in the upper reaches of a tidal river and should be so qualified. "Flight sewers" (p. 165) are not explained in the section to which cross reference is made (Art. 38). All manholes illustrated are circular on plan, British practice in general favours a rectangular shape, although many circular ones are built. The special combination manhole for storm water and house drainage sewers (p. 196) is an atrocity that is hardly likely to be copied here. The practice of ventilating a sewer into a flushing chamber (p. 200 and 201) is not a good system, and if the pipe is intended as an overflow it should be trapped. Catchpit-gullies of 500 gallons capacity or thereabouts (p. 205) are illustrated as being the normal practice. Nothing so large is customary here under any circumstances, and pot gullies are not referred to. Sewers and drains are recommended to be graded by stretching a cord vertically over the pipes (p. 264); the British system of sight rails is not referred to. The reference to rotary sewage distributors (p. 384) is very brief, as it is believed there is only one in America; on the other hand, considerable space is devoted to fixed sprays. The index is an extensive one, but there is so much in the book that it is not to be wondered at that there are a number of omissions.

The Designing, Constructing and Sewerage Systems and Sewage Treat-By A. Prescott Folwell, M.Am.Soc.C.E. (London: Chapman & Hall, Ltd.)

TRADE NEWS

The directors of Messrs. Bell's United Asbestos Co., Ltd., have declared an interim dividend on the ordinary shares of 6d. per share, being 2½ per cent. (actual), less income tax, on account of the profits of the current year.

The offices of Messrs. The British Pipeless Central Heating, Ltd., have been transferred to 57-61, Pershore-street, Birmingham.

Messrs. The Vulcanite Co., Ltd., inform us that the flat roof of the Nurses' Home at Reading, recently illustrated in *The Builder*, was covered with their patent vulcanite roofing, and the top surface finished with ½ in. of tarmacadam. The area covered was approximately 7,000 super ft.

New Methods of House Construction.

The committee which has been set up under the chairmanship of Sir Ernest Moir to inquire into new methods of house construction met recently in London. With a view to expediting their investigation the committee would be glad to receive as soon as possible any further proposals for new systems of house building or for new materials. All communications on the subject should be addressed to the Secretary, Mr. T. H. Sheepshanks, Ministry of Health, Whitehall, S.W. 1.

Building Trades Operatives.

At the resumed meeting of the National Federation of Building Trades Operatives at Blackpool, a resolution was passed asking that each society affiliated to the Wages and Conditions Council be recommended to give six months' notice to terminate the present agreement, with a view to setting up an agreement which would be more in accordance with the circumstances operating in the industry. It was stated that the bricklayers' and plasterers' societies had already given notice to do this. The notices will probably be tendered before September 29, to take effect on March 25, 1925.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

*** Denotes *accepted*. † Denotes *provisionally accepted*.**
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

BEDLINGTON.—For erection of a Secondary School for the Northumberland C.C. Mr. C. Williams, Director of Education, The Moot Hall, Newcastle:—

*Henry Kelly, Ltd., Newcastle-upon-Tyne	£21,919 8 7

BOLTON.—For electrical installation at Fishpool Institution, Townleys Hospital, and the Hollins Cottage Homes, for the B.G. Divided between:—

*Bolton Corporation	£1,537 10
*Farnworth District Council	1,742 15

BRIDLINGTON.—For covering reservoir at waterworks, for the T.C.:—

*Squires & Son, Selby	£4,208 8

BRIDLINGTON.—For erection of a house in Lamplugh-road, for Mrs. J. Newton. Mr. F. Vaux, architect and surveyor, Danesmoor Chambers, Quay-road:—

*John Sawdon, Bridlington	£1,075

CHELMSFORD.—For erection of 50 houses (42 slated, eight tiled, including drainage, paths and fences) on the Boarded Barns Estate, for the T.C. Mr. E. J. Miles, Borough Engineer, Town Hall:—

	Steel Sashes.	Wood Sashes.
*G. J. Hawkes & Sons, Chelmsford	£22,351 8 4	£22,459 16 4
T. J. Bailey, Chelmsford	22,409 0 0	22,539 0 0
A. Holmes, Chelmsford	22,587 10 0	22,678 10 0
H. Potter, Chelmsford	22,860 0 0	22,990 0 0
W. Jones, Ltd., Westminster	22,929 7 4	22,954 7 4
F. J. & A. A. Lowe, Writtle	—	23,505 10 0

COLNE.—For construction of relief sewers in the Primet Bridge District, for the Corporation:—

*James Byrom, Ltd., Bury	£8,020

DENTON.—For erection of 10 houses, for the U.D.C. Messrs. Thorpe & Collier, MM.S.A., architects, 66, Deansgate, Manchester. Quantities by same:—

F. Livesley & Son, Denton	£7,200 0 0
Fred Booth, Gee Cross, Hyde	7,162 5 6
J. Bramall & Son, Hyde	7,100 0 0
John Newton, Gee Cross, Hyde	7,083 6 6
J. Hinchliffe, Dukinfield	7,050 0 0
D. Turner & Son, Denton	6,800 0 0
J. Clayton & Sons, Denton	6,120 11 0
J. Hardy & Son, Denton	6,000 0 0
*J. B. Catlow, Denton	5,950 0 0

DUBLIN.—For additional waiting-room at the Tuberculosis Dispensary, Charles-street:—

‡Municipal Workshops	£930

EPSOM.—For erection of 20 houses in Banstead and Feltham, for the R.D.C.:—

*A. Bean, Banstead	£9,780

HALESOWEN.—For construction of a portion of the new Cakemore-road:—

*G. Law	£4,391

HEMSWORTH.—For erection of 18 houses at Highfields, for the U.D.C. Mr. A. Wright, Surveyor, Council Offices, Barnsley-road:—

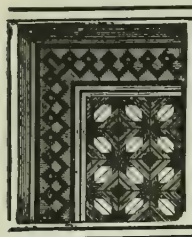
De Burgh & Sprakes, Doncaster	£9,119 5
G. B. Hillier, Hemsworth	9,000 0
W. Hanley & Sons, Hemsworth	9,000 0
*W. Jennings & Sons, Barnsley	7,915 10

SALFORD.—For sewering, levelling and paving:—

*Wilson & Wilkinson, Pendleton—Street behind Nos. 193–231, Bolton-road, Nos. 2-44, Fairfield-street and gables Nos. 211 and 213, Bolton-road, and Nos. 22 and 24, Fairfield-street, Pendleton	£461 10 2
Street behind Nos. 197–251, Littleton-road, Nos. 1–55, Mackenzie-road and gables, Nos. 223 and 225, Littleton-road and Nos. 25 and 27, Mackenzie-road, Broughton	713 16 2
Street behind Nos. 2–50, Mackenzie-road, Nos. 1–45, Hafton-road and gables, Nos. 28 and 30, Mackenzie-road and Nos. 23 and 25, Hafton-road, Broughton	578 6 2
Street behind Nos. 253–289, Littleton-road and Nos. 2–42, Valencia-road, Broughton	364 16 0
Street behind Nos. 1–41, Valencia-road and Nos. 2–42, Ukraine-road, Broughton	368 18 0
*Bethell & Sons, Sale—Marston-road, Broughton, from junction of Waterpark-road towards Leicester-road, to a point 163 lin. yds. in an easterly direction	1,575 13 0
Edward-avenue, Pendleton, from Weaste-lane to a point 166 yds. in a south-westerly direction	1,509 10 0
Hugh Oldham-drive, Broughton, from Lower Broughton-road to the end	1,220 10 5

IFIELD.—For erection of 12 houses, for the Horsham R.D.C. :—
*R. Easton £5,345

IFIELD.—For erection of four houses, for the Horsham R.D.C. :—
*W. Sired & Sons, Horley £2,210



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SALFORD.—For the erection of a static transformer sub-station in Rectory-street, Prestwich :—
*J. F. Moore, Eccles..... £976

SHERBURN HILL.—For erection of a concert hall in connection with the Miners' Welfare Scheme, for the Sherburn Hill Colliery Welfare Committee. Mr. F. Charlesworth, Heather View, Littletown :—
A. Rowe, Horden, near Durham £2,315 11 10
*Whittingham Bros., Shadforth, Durham 2,280 0 0

ST. PANCRAS.—Steelwork for boiler house at power station, for B.C. :—
‡E. C. & J. Keay, Ltd., Birmingham.. £4,951

STEETON (YORKS.).—For erection of seven houses for the Keighley R.D.C. Mr. J. N. Clarkson, Clerk, 40, North-street, Keighley :—
Mason—
Thomas Atkinson, Eastburn.. £1,660 0 0
Slater—
William Thornton, Bingley .. 210 0 0
Joiners—
Ernest Turner, Ltd., Keighley 856 15 8
Plasterers—
John Greenwood & Son, Cross-hills 390 0 0
Plumber—
Abraham Speak, Keighley 357 0 0
Painter—
R. Robinson, Bradford 75 0 0
Subject to approval of M.H.

TOTTENHAM.—For erection of 104 houses on the White Hart-lane Estate, for the U.D.C. :—
*Perry Bros., Ealing £55,412
(Subject to approval of the M.H.)

TOTTENHAM.—For construction of roads and sewers :—
*G. Bell & Sons, Ltd. £6,879
(Subject to approval of M.H.)

WALLASEY.—For carrying out the works "B" and "C" of the Seacombe Ferry Improvements :—
"B"—
*The Cleveland Bridge and Engineering Co., Ltd. £47,589 18
"C"—
*Nott, Brodie & Co., Ltd..... 29,926 17

WAYLAND.—For the erection of four houses at Watton, for the R.D.C. :—
*Peeke-Vout & Sons £1,384

WEST HARTLEPOOL T.C.—
*W. W. Brazell :
Fencing, 4s. 8d. per lin. yd.
Gates, £3 5s. each.

WITHAM.—For erection of 20 houses for the U.D.C. Mr. W. P. Perkins, surveyor, Witham :—
*M. Richards & Son, Witham, Essex—£466 15s. per house for parlour type.
*W. Wager & Son, Witham—£384 3s. 9d. per house for non-parlour type.

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

XVII.—No. 4262. OCTOBER 10, 1924.

OUR OLD BRIDGES

NOTWITHSTANDING the prevalence of what we may call a very sensitive sentimentalism in these modern days, we are still much bound in our public actions by the grosser forms of utilitarianism and money values. We permit a freedom of speech which s at long-cherished ideals. We note and control the deadly ers of selling cigarettes after 8 p.m., but we allow street c to develop the most serious dangers to the amenity of life. We allow food supplies to be exhibited and trans- d with no protection against the contamination of dust dirt—we strain at a gnat and swallow a camel. Thus we eminded with every fresh issue of the annual reports of Society for the Protection of Ancient Buildings that it h the greatest difficulty the work of that Society is carried ccessful results in the endeavour to preserve to the country ld traditional beauties by road, river and hill. The present t has to deplore two signal losses, but there is much we n danger of losing besides the more widely known and well rtised examples of ancient work. Who is there amongst who delight in beauties of the road and field who cannot memories of many a charming old bridge which in its ct setting of road, river, field, and trees, makes a picture 7s remembered with joy? Yet in the minds of thousands set great store by common sense and practical values, nore uncommon sense of line, tone, proportion and colour, he doubtful values of mere beauty do not count for much e the existence of an old bridge is concerned. How narrow, steep, how unscientific it is! How it interferes with the ess of the motor car, how needlessly expensive to keep in r! How completely out of touch it is with the guiding hts of modern life which insist on speed, luxury, economy ommon sense! You could hardly defend these old bridges ey fall before the juggernaut of modern progress, for their ant of good is only that they form the centres of pleasing es and keep alive something of our old traditions. We therefore, glad that the Society for the Protection of nt Buildings is directing attention to the danger of our many of the most characteristic and beautiful objects our roadways can show. There is always a chance of nent and interest being worked up about the loss of nent and well-known examples of old bridge building, ll over the country there still exist old bridges which are e mercy of local councils and with little or no public nent to speak out for their preservation. In some cases may be inexorable arguments for their destruction, but lieve that many might be preserved even if that involves ng them as by-pass ways over streams and making a new across at another point; they might at least serve for trian or light traffic, and all motor vehicles forbidden use. If the public feeling can be aroused to the value of iful things it may stem the tide of soul-destroying mies and mere dollar values. Of course this point of view e decried with much show of reason, but if we still believe fe is more than meat and the body than raiment we shall it that amidst all the really necessary needs of modern ss and modern improvements we still cherish our price- nd may we not say necessary?—heritage of beauty and

ny a charming rural scene would lose beyond recovery ef point and interest if it were robbed of an old bridge. akers of our old bridges builded better than they knew, hilst providing for practical necessities in the best way ould, were really endowing with lasting charm many an e spot in our countryside. Guided by a subconscious f values, in proportion and accent, they followed the of tradition in craftsmanship and detail so far as they would serve. Seldom, indeed, was any attempt made at purely ornamental effect, but ribbed arched soffits, quaintly spreading cutwaters, and varied arch outlines provided variety and interest to general outlines of great simplicity. All over the country from north to south and east to west our old bridges have given us a heritage of abiding delight, and we should see to it that this phase of building art may be treasured and preserved as far as practical necessities permit. That the march of progress must not be delayed we may fully agree, but by-pass roads, modern churches, great valley reservoirs, ferro-concrete bridges, and the like present-day developments should not be allowed to rob us of all the special values attaching to old values in traditional building.

Much might be said as to the protection of ancient buildings in relation to the efforts which are being made to secure it. Even now, in the report before us, we have a note of wonder as to how "it could be credited that any civilised community would tolerate such a deed" as the destruction of the old Court House at Barking. And further on we read of the destruction of the Star Inn and neighbouring houses at Bury St. Edmunds, with the remark that "it is indeed deplorable that this loss should have come about at the hands of a municipality." A warning is uttered against any undue feeling of security as to the fate of the City churches and the necessity is urged of constant vigilance in the matter. If such illustrations as those we give from the report before us do not convince people of the charm and value of our ancient buildings, and the importance of a society for their protection, no further argument would probably count. We can only hope that increasing support will be given to a society which recognises the great value of our ancient buildings and devotes so much effort of a purely voluntary kind to enforce and preserve this value. A merely platonic interest in its work is not enough, for the report says the work which lies before the society is altogether beyond its present capacity, and if the wastage of ancient buildings is to be stemmed, a considerable increase in members and funds must be immediately obtained. We have dwelt specially on the importance of preserving old bridges, but the efforts for their preservation are often lost for need of a scientific report by an engineer of recognised ability to show that the Society's suggestions were practical as well as sentimental, and that it is able and willing to spend money in defence of a beautiful and interesting bridge.

This is only one example of the Society's need for income. To give another though an allied instance on the same subject. When the Committee learned that the Ministry of Transport had asked the County Councils to apply for grants for the widening or reconstruction of their narrow or otherwise inconvenient bridges, it at once approached the Ministry and was sympathetically received. It was told, however, that the Ministry had not the means to make so full an examination into the archæological side of the question as it would desire to do, but that it would welcome information from this point of view from the Society. The Society's staff is barely able to cope with the work that is normally before it, and to find out what bridges were threatened all over England and then to discover which of these were valuable was clearly beyond its capacity; that is for any result to be forthcoming soon enough to be of use.

Lord Howard de Walden made a very pertinent allusion to the acquisition of treasures for our Museums whilst we are letting slip away from us valuable ancient records such as cannot be housed in glass cases. For ourselves we deplore the vandalism that goes on abroad, and yet slowly the streets of our towns and villages are being stripped of their local character and distinction.

NOTES.

Slow and Costly Building.

IT is so difficult to overcome the inertia (arising from various causes) which bars the way to improvement and progress, that we welcome any signs of help which promise to break it down. Such help is, we think, to be found in the attempt by Mr. Bromley to arouse architects to some action in the fight against slow and costly building. We hope our readers will find in his paper on this subject, which we publish this week, some stimulus to more definite action by the profession. Mr. Bromley says the "ca' canny" cancer is sapping the industrial life of the nation. The price per cubic foot of building is about the same in America as in this country, though wages there are about double. Is it not worth while for the R.I.B.A. to sift this discrepancy to the bottom? It is to be regretted, says Mr. Bromley, that Sir Henry Tanner's letter published in *The Builder*, April 11, 1919, was disregarded. In this, he advocated a thorough investigation with regard to the cost of building, and suggested a mixed commission of the R.I.B.A., the Surveyors' and Builders' Institutes, and the trade unions. Is it wise for us to fold our arms and wait for others to do something? What can be done about this ca' canny blight and the failure of apprenticeship (once the glory of England)?

Housing Solutions.

WE do not feel there is much room for optimism in recent solutions put forward to meet the housing difficulty. Such schemes, even though able to provide us with all-steel construction houses, at one a fortnight, may prove of uncertain advantage, for we cannot eliminate other considerations, the gravity of which does not appear to be sufficiently regarded. To build in tens of thousands houses which hold no quality of character, is surely not the only way to meet such an emergency. It would seem almost as though some paralysis had fallen over the wits of men, that we cannot find it possible to build in more attractive and becoming character. In any case, do not let us, if the machine is to replace the man, congratulate ourselves on having done much for the welfare of human life. We do not under-rate the urgent nature of the problem, but how it strikes a correspondent will be understood from the following suggestion: "Far better it appears to me than to surrender to the factory method would it be to subsidise directly the worker himself, and let him build his own house. Give the responsible workman, under suitable provisions, a sum of money, say, £250, and the land to build on, and let him make his own home. We do not find that large housing schemes prove less expensive; on the contrary, they are far more so. Such a scheme may not satisfy the theorist, but it appears that the alternative now offered is likely to be far worse than anything that the workman himself, with such an impulse directing his experience and practical knowledge, is likely to achieve." In any case, to eliminate, as is proposed, the skilled man as the solution of the housing difficulty, and to think that the "unsatisfactory output of skilled labour" is to be overcome by doing without him altogether, is not only mistaken but fraught with danger.

Work and Unemployment.

ANOTHER point of vi regard to housing i flected in the foll from a correspondei "There can be no doubt that behi the other problems and difficulties face us now there stands the dark sh of unemployment as a standing mena us all. No one with a spark of d manhood should be content to r a dole if there is employment to be Whilst the outstanding difficulty i way of carrying out the great ho schemes is the shortage of s labour, we are burdened with unem ment because the labour we so urg need is not available. Everyone is a that it is hopeless to expect we carry out the Government housing with the skilled labour which is avai If buildings could be erected largely out skilled labour a great part o difficulty would vanish. Here the is the opportunity for a new ty building, and demonstrations such have had during the last week have fore a vital interest."

The Minister of Health.

MR. WHEATLEY, Minister of Health, s ing at Birmingham o housing question, i ported as having attributed the sho of men and materials to insecurity had prevailed in the building indu and to have twitted Mr. Chamb with having done nothing to inc the personnel and material durin time as Minister, as though he hi had already accomplished the soluti both these questions, apparently re as to personnel on new apprentices. there are two sentences in his s



From the Report of the Society for the Protection of Ancient Buildings.

The Old Post Office, Tintagel, Cornwall.



St. Philip's Church, Rugby.
MR. H. B. CRESWELL, F.R.I.B.A., Architect. (*See p.* 552.)

if correctly reported, are far more t to explain than the above state- as, according to the report, he said first place that owing to rent ion he was now in a position to ll advantage of the law of supply mand, whilst almost in the next e he said that by the legislation posed he would suspend the law of and demand as affecting the price ding materials. How are these atements to be reconciled one with the other? A restriction on rents, according to Mr. Wheatley, is no restriction on the law of supply and demand, whilst restrictions on the prices of building materials suspend that law. He went on to say that manufacturers and merchants by doubling output would be able to double profits without adding a penny to the price, and that may well be the case, but he did not explain how the restricted landlord was to make good his rent. We have always endeavoured to take an impartial view of the housing question, but it is difficult to do so when the Minister makes it a political question, as he did in his speech at Birmingham. Housing might well be left outside the political arena, but Mr. Wheatley in another speech even characterised a general election as "a class struggle."

Coal Smoke and Fog.

WITH the short and colder days of autumn and winter before us we may expect and shall no doubt get the usual fogs with which we are familiar at this time of the year, but whether they be vapour fogs, which are inevitable more or less all over the country, or smoke-laden fogs depends in some measure upon ourselves. The result of the general emission of smoke from chimneys is known to most of us, but in our familiarity with an evil we may lose sight of its extent. Lord Newton, who was chairman of the Ministry of Health Committee on Smoke and Noxious Vapours Abatement, puts the case with some force when he says, "Smoke is a national nuisance. It is injurious to health, partly because it pollutes the air we breathe, partly because it hangs over our towns and cities and deprives their inhabitants of the beneficent effects of sunlight. It affects seriously all buildings and all forms of vegetation. It is costly in many other ways—in creating fogs, for example, with all their concomitant accidents and delays, and in adding vastly to the expenditure on washing, lighting and decoration. And lastly, owing to the incomplete combustion of raw coal, it incidentally represents a considerable misuse and waste of our limited fuel resources."



From the Report of the Society for the Protection of Ancient Buildings.

Rowsley Bridge.

GENERAL NEWS

Professional Announcements.

Mr. F. Malcolm Burr, M.S.A., has removed to 30, Finsbury-square, E.C.2. Tel.: Clerkenwell 1553.

Mr. F. E. Wapshott, M.S.A., F.S.I. (formerly Chief Surveyor for the South-Eastern Counties at the Ministry of Health), has resumed private practice as architect and quantity surveyor at 139A, High-street, Tonbridge, Kent. Tel.: Tonbridge 360.

Mr. S. Lunn Whitehouse, L.S.A., has opened an office at 3, New-street, Birmingham.

Annfield Plain.

The design of Messrs. A. & F. Manuelle, Ltd., London, has been accepted for the Annfield Plain War Memorial.

The Surveyors' Institution.

The first ordinary general meeting of the Session 1924–5 will be held on November 10, at 8 p.m., when the President (Sir Edwin Savill), will deliver his opening address.

Brighton School of Art.

Mr. J. L. Denman, A.R.I.B.A., is giving, on Friday evenings, lectures on architecture at the Brighton School of Art. In each instance technicalities are avoided so that they may be comprehensible to the uninitiated.

Soane's Museum.

An interesting House and Art Collection is now open free to the public at Sir John Soane's Museum, 13, Lincoln's Inn-fields, on Thursdays and Fridays in October, from 10.30–5, and will continue open on these days in November, from 10.30–4.

"R.A." Railway Posters.

Three more posters of the "R.A. Series" have been produced by the London Midland and Scottish Railway, and will be exhibited at the principal stations on the system during the present week. These are "Warwick Castle," by Mr. Adrian Stokes, R.A., "Conway," by Sir David Murray, R.A., and "Coal," by Mr. G. Clausen, R.A., a further addition to the posters representing British Industries.

The National Gallery.

The collection of pictures bequeathed to the Nation by Dr. Ludwig Mond is now arranged at the National Gallery in Room XXVI, where the group of Wertheimer portraits by Sargent has recently been hanging. The works exhibited comprise the whole of Dr. Mond's Bequest to the Gallery, with the exception of the famous Mantegna "Imperator Mundi" and two panels by Cima.

British Commercial Gas Association.

Mr. John Henry Ellis is the newly-elected President of the British Commercial Gas Association, which has just concluded at Liverpool its thirteenth annual conference.

COMPETITION NEWS

Harrogate Infirmary.

The assessor, Mr. S. D. Kitson, has made the following awards in this competition:—(1) Messrs. Elcock & Sutcliffe, 21, Northumberland-avenue, W.C.2; (2) Messrs. Lanchester, Lucas & Lodge, 19, Great Russell-street, W.C.2; (3) Professor Beresford Pite, 19, Great Russell-street, W.C.2.

Dundee School Competition.

Mr. John Arthur, the assessor, has made the following awards in the competition for designs for the new advanced school in Blackness-road, for the Dundee Education Authority:—(1) Messrs. Maclaren, Soutar & Salmond, (2) Mr. J. O. Allan, Aberdeen, (3) Messrs. Allan & Friskin, Dundee.

Monument to Sir Wilfrid Laurier.

In this competition, a design submitted by Mr. Emile Brunet, a Montreal sculptor, has been accepted by the Canadian Government f memorial which is to be erected on Parli Hill, Ottawa.



From the Report of the Society for the Protection of Ancient Buildings.

16th-Century Court House at Ba now demolished.

Other Competitions.

Other competitions still open inclu following (the dates given are, first the sen date, and second the issue of *The Bui* which full particulars were given):—M Hall (May 1). Manchester Art Gallery (Ja Aug. 22). Concrete Cottages (Oct. 31; Se Christian Science Church, Southport (no se in date announced: Sept. 26). Barro Memorial Club (no sending-in date annou Sept. 26).



Photo: F. R. Yerbury.

General View of Toledo. (*See p.* 548).

ACE IN THE BUILDING INDUSTRY

eading article last week we referred
l of peace in the building industry,
pparent want of confidence between
rties, the Federated employers and
who regulate the wages and con-
which peace and smooth working
an industry of enormous importance
allied interests. We suggested that
e which we should like to see estab-
not been secured by the direct
s of two of the principal parties
third and no less important party
ther two, *i.e.*, the building owner
l by the architect, should take some
cussions and decisions which affect
tally as anyone, and that for the
nother attempt should be made
an Industrial Parliament for the
ndustry in which representatives of
ctural profession should take part as
n some measure during the short
f the Industrial Parliament which
d in 1918, but which came to an
2 for reasons explained in our last
making these suggestions last week,
eating them in this issue, we do so
y conscious prejudice, nor do we
t this failure to achieve peace in an
such vital importance to the nation
e is due to any indifference to the
the industry, or that either the
ade employers or their operatives
in good will. On the contrary, we
y are just as anxious as anyone to
sting terms and conditions which
liable to violent alteration with little
ning. But the fact remains that
reason or other there is consider-
t in an industry which, consider-
rs of work which are before it, should
ago settled down to carry out that
because of the unsettled condition
ustry and because we believe that the
wner, whose interests are at least as
as those of any other party concerned,
represented through his architect,
ve suggested the resuscitation of the
rades Parliament, or the creation of
ody.

rom the letters and communications
ceived since our last issue, our sug-
been very favourably received, and in
the letters we print below we have
that there would be considerable
all events from the architectural
for a scheme for the creation of such
We believe we are right in stating
rofession heard with regret of the
of the Building Trades' Parliament,
he R.I.B.A. offered their services
ecent strike to each side impartially.
we know of the circumstances, we
oubt that the Council of the R.I.B.A.
ort any well-considered proposals
g with the employers and operatives
joint Board, satisfactory to all
ld be established. We say this
architect, as the custodian of the
the building owner, knows that
fullest co-operation of all parties
the successful execution of building
e interests of all parties, including
d operatives, are bound to suffer.

EY TATCHELL, F.R.I.B.A., writes :—
upporting the views so admirably
your leading article of the 3rd inst.,
me that too much emphasis cannot
the necessity for the inclusion of
the Councils of the building indus-
nly is he, equally with the con-
the operative, dependent on the
his living, but he also represents
he building owner—upon whom,
aid and done, the industry depends
existence, although this fact would
ve been ignored throughout the
iations.

The architect, as an arbitrator, would approach any difference between the operatives and employers with understanding, and his intervention would, in my judgment, do much to bring about a better feeling.

Underlying the differences which have arisen is the discontent felt by the skilled operatives from the knowledge that the unskilled in other occupations receive better rewards for their labour and without the long apprenticeship and the purchase and maintenance of tools which is their portion.

MAJOR HARRY BARNES, in the course of an interview, congratulated *The Builder* on its entering into a search for a way out of the present unsatisfactory state of the building industry, and said that everyone was on common ground in the desire for peace in the building industry. He said that up to the present the architect had been no party to adjustments of wages and conditions, and any suggestion that he should share in these adjustments required careful consideration.

He held strongly the view that there might be much closer co-operation on the part of architect, builder and operative in promoting a high standard of craftsmanship and material in the industry.

In this province there was much ground for agreement and little room for dispute, and he would be very slow to take any step that would imperil the prospect of such a growing co-operation.

On the proposal that architects should sit as a joint board together with builder and operative for the purpose of reconciling differences as to wages and conditions, he was very doubtful. Such a position would not only be very onerous, but also very delicate, involving all the difficulties of arbitration without its decisiveness.

On the suggestion that the architect might act as arbitrator in appeals by either or both parties he was more inclined to look with hope.

The builder was at the present time prepared to accept the decision of an architect arbitrator on differences with the building owner as to the proper remuneration of the builder, and it might be that the operatives would be ready to extend the same confidence to the architect.

It appeared to him that if the Royal Institute of British Architects received a clear indication from both parties that they would favourably consider the establishment of a permanent tribunal for the settlement of disputes in the building industry consisting of, say, three architects, assisted by technical assessors, one from the operatives' side and one from the employers' side, it would no doubt feel the responsibility of the situation and with the greatest earnestness consider whether such a position could be advantageously to all parties and the industry as a whole taken up by representatives of the Institute.

Without some such indication he thought it hardly likely that the Institute would feel itself justified in initiating such a proposal.

MR. JOHN E. YERBURY, Lic.R.I.B.A., writes:—

SIR,—I have so often advocated the creation of a wider Joint Council for the Building Trade, and expressed the regret I have always felt at the failure of the Building Trade Parliament that I am delighted to find in your leader for October 3 an appeal for further consideration and for a scheme prepared by architects.

It is all too obvious that there is at the present time a complete lack of confidence between the two parties directly affected by the almost continuous strikes and lock-outs which have disorganised the industry. There is very little doubt that both sides are badly led, inasmuch as the leaders on both sides are inclined to be Napoleons rather than Solomons. In your columns—and others—I have constantly advocated a Conciliation Council or Joint Board, with representatives appointed by the two parties directly concerned and by the community they serve; and I have many times pointed out that public opinion can always decide the result of strikes or lock-outs and therefore should be well informed as to the facts. Absolute truth being unattainable, what is honestly held to be the truth will prevail; propaganda to gain the public support is resorted to by both sides, and justice is not necessarily done by a settlement brought about by this means; and where public opinion is long in doubt it is the long purse which wins.

In 1912 (I think) I first put forward the suggestion in your columns many times repeated since, that the most satisfactory Council for the building industry might be set up in the following manner, by the appointment of representatives from—

a.	Each of the Operatives' Trade Unions	say 12
b.	An equal number of Employers ..	„ 12
c.	An equal number from the Community appointed by Operatives ..	„ 12
d.	An equal number from the Community appointed by Employers..	„ 12

An independent Chairman appointed by the Minister of Labour.

I have suggested that representatives under *c* might be chosen by such bodies as the Working Men's College, Workers' Educational Association, the Co-operative Wholesale Society, Club and Institute Union, The Settlement Association, and other bodies which exist for the object of helping the workers, and whose sympathies are assured.

Representatives under *d* might be appointed by the R.I.B.A., the A.A., the Surveyors' Institute, the Institute of Civil Engineers, Institute of Mechanical Engineers, and other professional bodies.

A permanent secretary of first-rate ability, an expert in building matters, would be appointed, and a proper constitution drawn up.

Voting should be by secret ballot, and decisions binding for a fixed period.

If those most concerned would accept such a Board there would be no great difficulty in drawing up a Constitution; but until the principle of giving a voice to the long-suffering community has been approved by the employers and the operatives it is not much use the new united body of architects "coming forward with a properly considered scheme."

There are many who are anxious to help towards reconstruction if their help is acceptable to those most intimately concerned.

Alloa War Memorial.

Alloa War Memorial was unveiled recently by Earl Haig. The Memorial, on which is inscribed the names of 350 men of the town who fell in the war, is from a design by Sir Robert Lorimer, A.R.S.A.

Aberdeen Art Diplomas.

The governors of Robert Gordon's College, Aberdeen, had reported to them recently that the diploma of the Aberdeen School of Art had, on the authority of the Scottish Education Department, been awarded as follows: In drawing and painting (5)—Caroline E. Calder, James H. Gair, May Johnston, Marjory Lorimer, and Margaret Mitchell; in design and decorative art (3)—Ellen F. Finster, Lilia A. Marshall, and Dorothy Rose; in sculpture (1)—Jessie S. R. Johnston; in architecture (10)—Henry J. Brown, Arthur Campbell, James C. Clark, William Glashan, Frank A. G. Inglis, Robert S. Lawrie, Caroline M. Ross, Dorothy E. Sofer, W. C. Walker, and Thomas R. Wood. It was also reported that diplomas awarded in previous sessions to the students mentioned below, had, likewise on the authority of the Department, been endorsed in respect of the successful completion of courses of post diploma study: In drawing and painting—Andrew R. Summers; in design and decorative art—Winifred Mordaunt and Jeanie R. Reid; and in architecture—James S. Dawson and Alexander M. Stewart.

THE ARCHITECTURAL ASSOCIATION EXCURSION TO SPAIN.—I

BY A MEMBER OF THE PARTY.

To SEE Spain was even an ambition of mine, and the excursion arranged by the A.A. provided the final inducement of companions (in the words of Dr. Johnson) " whose acuteness would help any inquiry and whose gaiety of conversation and civility of manners are sufficient to counteract the inconveniences of travel in countries less hospitable than we have passed." It provided also the more practical benefits of a route selected, habitation secured, and the pleasing certainty that there would be someone with Spanish not restricted like mine to the word " manana." These expectations similarly reacting on some thirty other minds produced the 1924 excursion of the Architectural Association, of which the following diary is a bare and purely personal record.

September 11.—Paris. Found our party at the Quai d'Orsay Station somewhat shaken by a tempestuous crossing, but sufficiently alert to have seized all available corner seats.

September 12.—Irun, Spanish soldiers and Customs officials! Signor Mugurutza, the first of our Spanish architect hosts, appeared, and after a word from him we were slipped through the Customs without examination. The train picked its way among the Pyrenees, which do not adhere neatly to the border line, but sprawl over the country for fifty miles or so on either side. Any of the places we passed looked lovely enough to spend our whole holiday at, but the way of an architect is not among green pastures. Soon the country assumed an air more recognisably Spanish. Donkeys carrying panniers, and mules with citizens high perched on their sterns, contributed local colour; and small towns with white houses and ornate churches increased our assurance that we really were in Spain, till finally the name Vittoria painted upon a station settled the matter as effectively as that battle settled the Peninsular War. What is pardonable in Pepys may be considered irrevelant in an architectural diary, and I reluctantly refrain from a fully detailed account of our first Spanish meal, with its surprising variety of meats and its generous allowance of olive oil. Suffice it to say that this lunch, combined with the warmth of the train, introduced many of our party to the charms of the siesta.

The Ebro was crossed and another landmark reached—Burgos, with its cathedral plainly visible. The west front looks somewhat spiky and deficient in scale, but we never had an opportunity of examining it, or the town, which had a most attractive air. Thereafter valley succeeded valley, each bounded by hills and each tawnier and barer than the last as we approached the bare plateau of Old Castile. Now and again small woods of umbrella pines appeared, and, where irrigation existed, a few vines, but in general the landscape had almost the effect of a desert, and an occasional distant town or village had in the clear air a strangely unreal appearance. Farmhouses or cottages there were none, and apparently cultivation, if it exists, is conducted from the villages. At Medina the beautiful brick-built Castillo de la Mota presented itself to our view, and later, when the sunset had turned the whole landscape into a sea of red and gold, we espied Segovia. A moon almost at full rose from behind the Sierra, and a great enchantment fell upon us.

Then Madrid, greetings from Signor Gatierrez and other gentlemen who were later to prove the extent of their kindness, a flash-light photograph, and a long drive through the streets of a strange city. Finally the Residencia de Estudiantes was attained, dinner (at 11 p.m.) eaten, and after a stroll in the moonlight we retired to bedrooms of monastic simplicity and impeccable cleanness.

September 13.—A free day! The Residencia, with its red-brick walls and broad eaves and green tiles, looks charming in the brilliant sun, as does Madrid with its wide tree-planted boulevards. To the Prado Museum, where a feast of Velasquez, El Greco, and Goya awaited us. The variety of Velasquez astonished one. Las Meninas and the Philips I had anticipated, but not the joyful Los Borrachos nor the exquisite little landscapes. Goya, too, delighted me; but El Greco I failed to comprehend. Madrid is very much a modern city, and it is quite easy to avoid seeing anything of it older than the eighteenth century. A system of parks and boulevards lies to the east, and another to the west, and towards these the most important streets radiate from the central Puerta del Sol. By means of irrigation the trees that plentifully adorn the boulevards retain their freshness even in September, and, thanks to these and to the clear air and brilliant sunshine, the best parts make a brave show. It must be confessed that few of the modern or semi-modern buildings show a very high standard of architectural merit, but there is nothing petty or timid about the building projects, and new constructions seem to be plentiful. We strove this day to enter into the inner life of the city by attendance at cafés. Shoes are immediately " shined " when one sits down, so that in Spain, apparently, your tippler is revealed by the lustre of his feet.

September 14 (Sunday).—Up betimes, and by train to Alcala de Henases, which lies to the north-east—no distance by the map, but the train makes much of it. We were met by the Mayor, who in person conducted us to the ancient University, which once boasted 12,000 students—more than the present population of the town. The façade of the college is delightful in its golden-coloured stone, with baroque windows and doorway. Sad to see so much of it mouldering to a ruin. The lecture hall has a low gallery and a wall pulpit and coffered ceiling, both richly coloured. Churches there were in plenty—the little chapel of the University with a Moorish ceiling in wood; Sta Maria, with a curious curly Gothic vault; Sta Magdalena, in rich Baroque; and the fine collegiate church, known as La Magistral, now being rather painfully restored. The finest building is the old Palace of the Archbishops of Toledo. Its patio, surrounded by a two-storied arcade, has exquisite detail, and there are handsome rooms within —over-restored alas! Not yet fully equipped with the steel legs and rubber neck of the complete tourist, we returned to Madrid wearied, but not without having first raised our voices in a shout of " Viva Alcala " to the Mayor, who had nobly waited with us for the train a whole hour.

September 15.—Toledo is a large programme for a single day. It seemed so before we started; much more so when we had finished. There is something terrible and barbaric in its setting. The yellow Tagus flows in a deep gorge round the rock on which it stands, and all around lie bare sun-baked hills. A narrow bridge takes us across, and we enter the labyrinth of narrow streets by a Moorish gateway in the walls. Jews and Romans, Goths and Moors and Christians all have left their mark on Toledo. The last-mentioned have left in the cathedral the greatest monument that the city possesses, and it is in many respects the finest in Spain. Hemmed in as it is by buildings, it is difficult to get a satisfactory view of the exterior, which reflects the long period of nearly three hundred years during which building went on. Most remarkable eyes was the effect of vastness prod the lofty double aisles, almost equal selves to the nave of some English ca The choir and high altar, enclosed in Spanish cathedrals, have the appea buildings within a building. Their is dazzling, and the brilliant light fall the magnificent series of stained-glass adds colour of the most gorgeous kind more than anywhere, one derives pression of the wealth and power of the in Spain. Several churches of Tole originally mosques or Jewish syn Santo Tomé is an example of the fi Santa Maria la Blanca of the seco horse-shoe arches and arabesque show clearly enough that it was Moorish workmen, and the strange which were added by the Christians interesting than attractive. The ex the convent of San Juan de Los Reye a very interesting composition with ornamented octagonal lantern. The storied cloisters are most ornate and vitality, but the interior of the c scarcely as fine as we had expected. interlude from sight-seeing we enjo hospitality of the Mayor of Toledo, ceived our party at the Ayuntamient Hall), and as an additional relief prevailing ecclesiasticism we enjoyed to the most charming house of El Greco contains a great many of the smalle of that master.

September 16.—To avoid congestion mind, another " free " day has been us in which to see a little more of The sixteenth-century bridge of Sego pleasant Plaza Mayor and the little church San Justo were the best th saw; but after lunch it was announc we were to visit the royal palace at vitation of King Alfonso. The pala sound, if not altogether inspired exampl eighteenth-century architecture, and effective when seen from the low which falls rapidly away on the wes interior is almost never accessible, were greatly favoured in being allowe it in its entirety, for many of the ro magnificent. Innumerable tapestries the walls, many of them after Goya, Camara de Girardini stands out as on most delightful rooms I have ever s has a ceiling of porcelain in a baroque manner, and walls of richly dered silk. After walking through miles of apartments our flagging energ revived by a royal tea and a few speeches were made on both sides.

September 17.—The main party sta early for Segovia, proceeding thither but a small group who had dance morning revolted and took a leisurely train direct to Segovia. I understand so doing we missed some very fine an sive architecture and scenery, but at we arrived fresh and in proper mood ciate the charm of the place. It is set amid surroundings that are more fe friendly looking than most of the Spani and with sunset the naturally red colo landscape assumed marvellous tints. evening there was full of pleasure as we acquaintance of the aqueduct, the and the little square full of soldiers an

Liverpool Architectural Society: T Scholarship.

A travelling scholarship of the val for one year is open to members of the Architectural Society under the age computing the age the time spent in may be deducted. The scholarshi awarded for the best design submi residence on a site fronting a bouleva petitions, marked " Honan Scholarsh be delivered at the Society's Rooms, 1 ton-street, on January 1, 1925, and must have been Associates or Stude Society on December 31, 1924.



. R. Yerbury

Avilla Cathedral. (*See p.* 548).

THE IMPERIAL COLLEGE OF TROPICAL AGRICULTURE, ST. AUGUSTINE, TRINIDAD

THE various illustrations which we publish this week of this college are from the sketch designs and working drawings for the College, prepared by the architect, Major H. C. Corlette, F.S.A., F.R.I.B.A. The perspective view was drawn by Mr. H. Chalton Bradshaw, A.R.I.B.A., and the model from which the two photographs were taken was made by Mr. J. B. Thorp, of 98, Gray's Inn-road. This model, with another of the sugar factory now being erected, is exhibited at Wembley, in the West Indies Pavilion. The north wing only of the College is being built at present, and will be completed this year. The long elevation for a comprehensive scheme is merely a preliminary study, suggesting a method by which the north wing now being built can be extended if required to provide for future needs.

Both the general plan and the elevation of the north wing have been revised since the preliminary designs were prepared. Strict economy was an essential condition to be observed in working out the plans and external elevations; and in accepting this requirement, the endeavour has been to rely upon practical planning and structural essentials for the production of any architectural quality. Tropical conditions of climate and the purpose for which the building was required were, therefore, allowed quite freely to dictate what the structural and architectural form might be without regard for preconceived ideas of archæological "style."

The first necessary condition to be observed was to keep the building indoors as cool as possible. Conditions of cost did not permit the provision of galleries or verandahs, on the north and south ends. But these parts will be sufficiently protected by other methods. The need for a free movement of air through the building was met by exposing all the laboratories and class rooms to the prevailing east winds. This involved a building with as much of its length as possible spreading north and south, with open galleries on the east and west fronts. These galleries are a practical necessity, but they also have a definite architectural value by giving variety to the building which grows naturally from the changes produced by contrasting those parts in high light with those in more or less deep shadow. The projecting portions in the centre, and on the north and south, should also help in the same way. Structurally, the building is a simple application of the use of supporting posts and beams, carrying the floor and roof slabs, with necessarily much repetition. All the work is being executed in reinforced concrete. The building, when completed, will be left as it is to bleach in the sun, after the removal of the shuttering. The cornice is an essential structural member of the building, and not only an architectural device. It forms part of the roof slab which is carried out to overhang the vertical line of the walls and piers, and provides a deep shadow down the external surfaces. It is supported underneath by small cantilever beams which run out above each of the piers; and between these another light beam is used to connect with the cantilevers and, at the same time, produce the outer member of the cornice itself. The flat roof is asphalted and whitewashed. There are practically no outer walls as such. The whole space between the piers is occupied by steel casement windows, or doors where required under the galleries, and teak louvres, which, in most instances, are made to be movable. Inside the casements, behind the glass, where no galleries occur, provision is made for hanging Venetian blinds made of corrugated aluminium slats. These will give a necessary control over the amount of light admissible at certain times of the day, and reduce what is known as "sky-glare." With the various precautions indicated, it may be said that the aim has been to provide what might be called a practical educational workshop, under tropical skies, in which a maximum inducement to mental activity is to be encouraged by conditions that may, it is hoped, be accompanied with a minimum of physical difficulty.

The local river gravel and sand used for the concrete with English cement is already taking a greyish-white colour, something like Portland stone. This will help the general colour scheme in view by effectively aiding the clear definition of lights and shadows. Other elements of colour will be introduced by the with their panes of glass, and the louvr The steel frames of the windows an and also the Venetian blinds, will be green. The teak louvres, having suff naturally in their composition, will b they are, and not painted. In the cornice and sill courses, and the caps a of the piers, a little variety of colou vided in detail by the use of narrow bands.

The planning of the building has be as flexible as possible, so that any e of the main structure if required can b provided for and any re-arrangement internal accommodation adopted as demands. The spacing of the piers, e the west projecting block, follows a dimension, so as to reduce costs, simp construction and calculations for s and concrete, and the cutting of steel the required lengths. The partitions the several class rooms and laborato removable. This will facilitate the in the size or allocation of rooms, or the of bench fittings, that may become n as the use of the College develops a requirements become apparent. All the tory drainage has been arranged to m probable future needs, so far as possib necessary channels and "falls" fo drains are provided between the st beams in the floors. The beams are tr coupled or doubled beams, so that n tural part of the steel in them could be if any acids did succeed in getting be channels.

The architect's local representative H. C. Amies; and the general cont Messrs. Foster & Dicksee, Rugby and l local representative, Mr. G. D. Brough contractors, &c.: specialist for reinforc crete calculations, &c., Mr. A. A. H. Sc Old-square, W.C.; Cement and steel Messrs. Davey & Bell, 37, Norfolk-street, cement, "Tunnel" Brand; steel for re ment, Dorman, Long & Co.; steel w and doors, Henry Hope & Sons. Sme Birmingham; asphalte, Thos. Faldo laboratory and drain pipes Doulton Lambeth; glazing, Pilkington Bros., St. Lancs; septic treatment of sewage, Bell, 27, Lincoln's Inn-fields.



St. Philip's Church, Rugby: Nave, Chancel and Aisle.

MR. H. B. CRESWELL, F.R.I.B.A., Architect. (*See p.* 552.)

COST AND SPEED OF BUILDING

nteresting innovation in meetings of tural societies took place on Tuesday, r. A. Nelson Bromley, F.R.I.B.A., read before the Nottingham and Derby tural Society and the officials of the Federation of Building Trades Opera-

id some recent articles in the *American Evening Post* had encouraged him to the important subject of "Slow and Building." The following was taken eading article in that paper for July 26, Britain is in a bad way and there is in blinking the fact. . . . The shortage may go from bad to worse an anyone now cares to predict. . . . *don Spectator*, which is not given to ate statements, declares that it is a scandal, and constitutes a national And yet it is men more than money r the most formidable obstacles to the ousing of the British workmen. . . . neless cobbler has the homeless brick-hank. . . . The number of persons in the building trades is smaller by han it was in 1913. This is not due to emand for labour, but to the oppressive exercised by Building Trades Unions number and ratio of apprentices per- be enrolled. . . . These arbitrary ns have lately been somewhat relaxed to any decisive extent. . . . The ors and the profiteers in building are tarred with the same brush."

he visited the United States in 1913 the price per cubic foot of building t the same as in this country, and that ges about double in America. His Mr. Watkins, who had this year from the States, practically found the ng.

sted the Royal Institute of British s would sift this discrepancy to the It was to be regretted that Sir Henry letter published in *The Builder* of 1919, was disregarded. In that letter ated a thorough investigation in regard st of building, and suggested a mixed on of the R.I.B.A., the Surveyors' n, and Builders' Federation and the ons. He sincerely hoped, however, Royal Institute would now take up ct seriously, for he was of the opinion vital importance to this country.

cessive cost and slowness of building his opinion, from various causes:—

client frequently did not give the sufficient time to prepare his drawings. rican generally took twice as long to is drawings as we did, and in conse- uilt with astonishing quickness, thus is client unproductive capital and the disturbance to business, if they ling additions, to a minimum, and also g loss and inconvenience to adjoining The question of all fittings and should be settled by the client before rawings were completed.

architect must have all details pre- re quantities were taken out, and press upon the client the importance g estimates from builders who had on for carrying out good quick work. money, and if the work was carried a low estimate might prove the most he end.

builder must have the best machinery ting his work. He must treat his and remember that within reason it much a question of wages but of good, quick workmen. Some clients refused to enter into contracts subject s.

manufacturer of building materials ember that excessive prices bearing excessive profits, restricted the use of factures, and that good profits could ith a larger output at lower prices. st of some materials used in building now tended to reduce the standard of new buildings so that cheaper materials had to be submitted.

(5) The workman must give of his best, and he would get better wages. The slowing down of labour was not only dishonest, but it produced unemployment and increased the cost of the workman's own living. The serious nature of the limitation of output could be understood from the following particulars given him from a trustworthy source:—A considerable number of houses were built in 1912, and again in 1920 similar houses were erected by the same builder. It was found that the number of hours taken by bricklayers and labourers in 1920 was practically double the number of hours taken in 1912. He must say, however, that many men had of late worked exceedingly well for his firm, and he felt sure that if architects would take the workmen into their confidence and point out to them the serious results of slowing down labour much good would result.

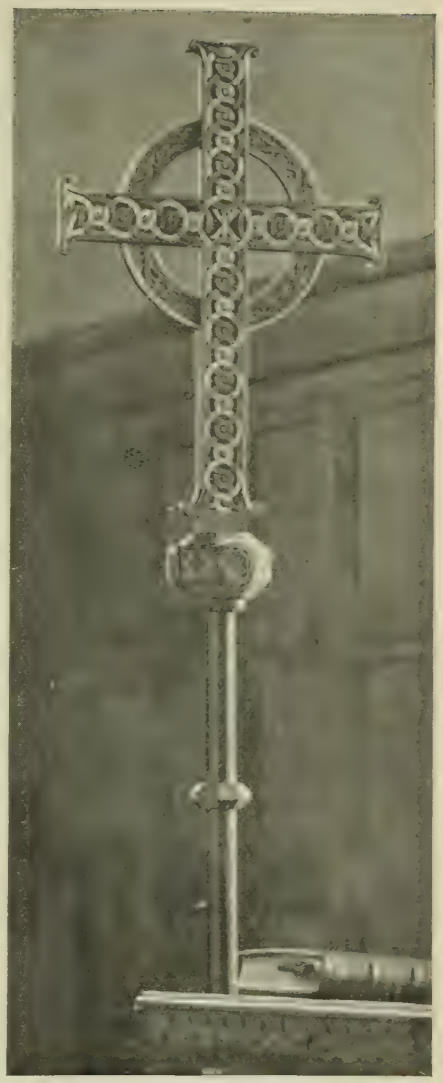
He again quoted from the *Saturday Evening Post*, July 19, 1924:—"A fundamental reason for a good deal of the British unemployment, for which there is no legislative remedy, lies in a stiff-necked trade unionism which, with its limitation of output fetish has done as much to prevent a return to the industrial normality as the dole. This, coupled with the strike, has contributed largely to the industrial plight in which Britain finds herself. . . . Not only is the British worker slacking on his job, but once at work, he is obsessed by a curious fear that someone else will get that job. . . . The decline of the apprentice system, once the pride and joy of British industry, is a startling revelation of what seems to be an impairment of the British productive mind. . . . In any analysis of the British business position you encounter on all sides the uncompromising fact that the normal high cost of production is a disturbing factor. . . . Hence, one fundamental cause of unemployment is that the products of British industry are too expensive for an impoverished world to buy."

The following was an extract from the book entitled "From War to Work," which gave the American point of view, which was exactly contrary to unfortunate English methods:—"We are not going to have the trouble here that Britain had with restriction of production. . . . There has not been any restriction on output for over 30 years in America. We, in the United States have followed an entirely different policy. . . . We say to the employers: "Bring in all the improved machinery and new tools that you can find. We will help you improve them still further and we will get the utmost product out of them. But what we insist on is the limitation of the hours of labour for the individual to 8 per day. Work two shifts if you please or work your machinery all round the 24 hours if you like, with three shifts, and we will help you, but we insist on the normal working day with full physical effort. We will not agree to that over-work, producing the poison of over-fatigue which destroys the maximum of production, undermines the health of the individual worker, and destroys his capacity for daily industrial effort."—[Mr. Samuel Gompers, President of the American Federation of Labour, representing 2,000,000 workers, in an interview on Labour and Dilution. *The Observer*, July 8, 1917.]

It should be remembered that our own Prime Minister had recently expressed himself opposed to the limitation of output, which coincided with the views of Mr. Gompers. How was it that the leading men in County Councils and Corporations did not also openly protest against this ca'canny abomination, which was apparent to the most casual observer? If the erection of industrial buildings was slow and costly and Government and County Council and Corporation works were equally so, rents and especially rates, added to the overhead charges of both manufacturer and shopkeeper, and the building trade worker and the architect must pay more for rents, clothes, food, and even amusements, in consequence.

He was distinctly of the opinion that the architect might do much good in discussing and explaining to the workmen the difficulties they had to face. It must be remembered that the architect found the work before the builder, and he knows from experience that slow and costly building was the great factor which prevented prosperity in this important industry, and if the workmen only knew how much work was abandoned by clients owing to the cost and slowness they would join with us in speeding up work by all possible means.

If there were only one building in course of construction in this country there might be something to be said for slowing down work and employing as many men as possible on that one job. But if building were cheaper and quicker more industrial and commercial work would soon be forthcoming. There is, of course, a great demand for workmen for housing schemes, but that does not assist manufacturers or commercial men; in fact, it only added to their overhead charges and made it still more difficult for them to compete in the markets of the world. The housing of workmen, however, must be provided, and the only way in which they could assist was in speeding up work to the utmost. He thought he had said enough to suggest that the architect was the right man for approaching this difficult subject. The architect was the first to move in a building enterprise, he had no direct interest in the profits on labour, and above all he was free from the blighting influence of party politics.



Cross at St. Philip's Church, Rugby.
MR. H. B. CRESWELL, F.R.I.B.A., Architect.

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ILLUSTRATIONS.

Imperial College of Tropical Agriculture, Trinidad. A description of the Imperial College of Tropical Agriculture at Trinidad is given on p. 550. Major H. C. Corlette, O.B.E., F.S.A., F.R.I.B.A., is the architect.

Miners' Welfare Institute, Ilkeston. The plans of this building explain themselves, but the large hall and the rooms in connection with it on the first floor are being designed so that they can be used independently of the Institute, separate entrance and exits being provided. Slipper baths are provided in the basement for both men and women, together with dressing rooms in connection with the recreation grounds which are at present only partially completed.

The building was officially opened on the 13th ult. by Sir H. Dennis Readett Bayley.

The chief contractors were Messrs. D. Roberts & Son, of Ilkeston; whilst the heating and ventilation were carried out by Messrs. Young, Austin & Young, of Leicester; and the electric lighting by Messrs. J. W. Furse & Co., Ltd., of Nottingham. The recreation grounds are being carried out by Messrs. W. Barron & Son, Ltd.

Mr. H. Tatham Sudbury, M.S.A., is the architect.

St. Philip's Church, Rugby.

This church has been built on a restricted site and, as is usual in these days, with limited funds, which placed the proposal in the category of mission churches. The design attempts to continue the tradition of English plan with the substitution of authentic brickwork for the characterless brick Gothic which has served this purpose so long. Churches have recently been built in the true tradition of Lombardic brickwork, but the present design sought to avoid an altogether exotic architecture. The compromise seems to have been a success for the building has attracted rather than repelled worshippers.

The walls are faced with small hand-made red bricks laid with a wide unstruck joint, and the whole of the interior is of plaster set with a felt-faced float for distempering. The "Italian" hand-made tiling of the roof is c scissor-trussed rafters which form t work carrying the plaster barrel ce this device principals were eliminate walls kept low.

Heating is by low-pressure radia ventilation by baffled inlets behind the and by outlet gratings in ceiling ope cross-ventilated roof space. Artificia is by inverted reflectors on the indirect

The contract price, omitting furnis transept entrance and campanile, was the equivalent of £4 12s. 6d. a sitti contractors were Messrs. Linnel & Rugby; the contractors for the tilin Ames & Hunter; and the reredos, furnishings were made to the architect by Mr. Pyment, of Chipping Camp carving done by Mr. Miller, of Campden.

Mr. H. B. Creswell, F.R.I.B.A., architect.

New Premises, Glasshouse-stre

Messrs. Horace W. Cullum & Co. ar out the fire-proof floors at Messrs Walton's contract at these premises, i in our issue for September 26.

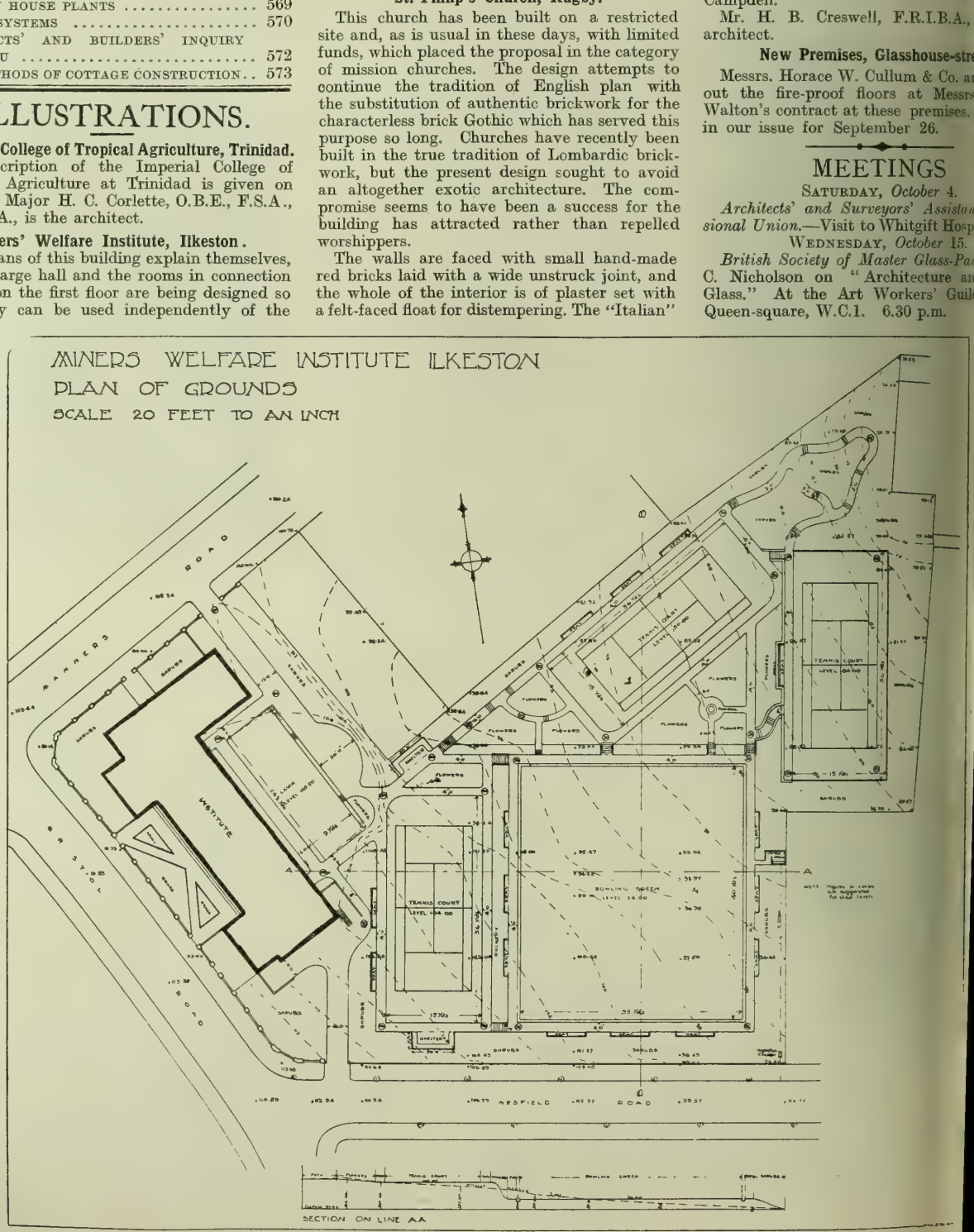
MEETINGS

SATURDAY, *October* 4.

Architects' and Surveyors' Assistan sional Union.—Visit to Whitgift Hospi

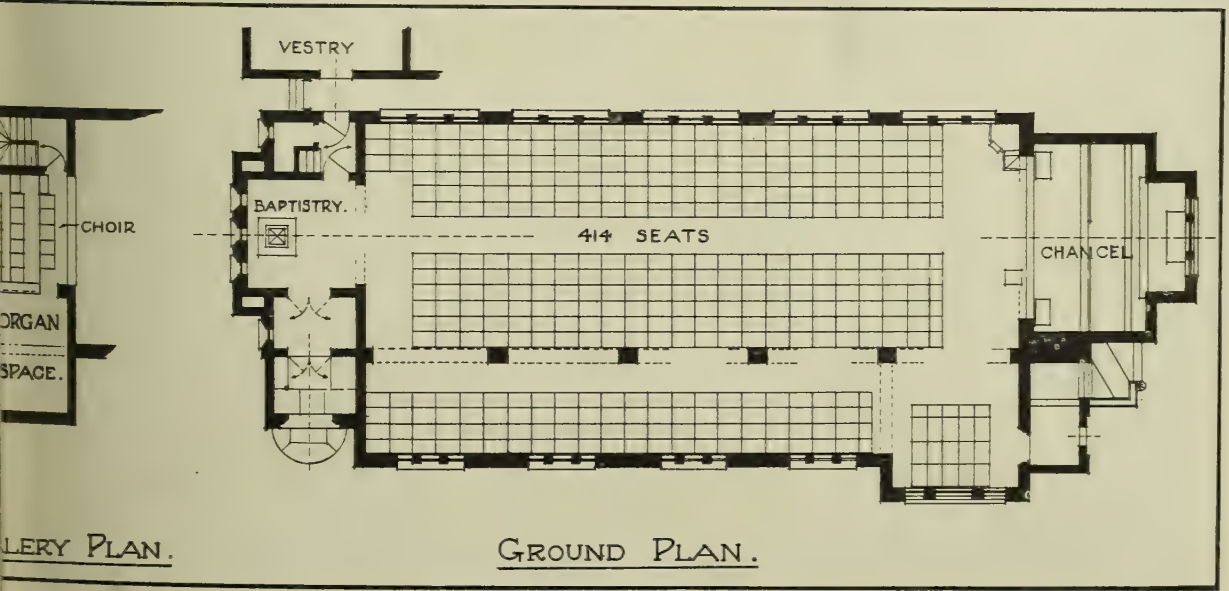
WEDNESDAY, *October* 15.

British Society of Master Glass-Pai C. Nicholson on "Architecture an Glass." At the Art Workers' Guild Queen-square, W.C.1. 6.30 p.m.



Miners' Welfare Institute, Ilkeston. MR. H. TATHAM SUDBURY, Architect.



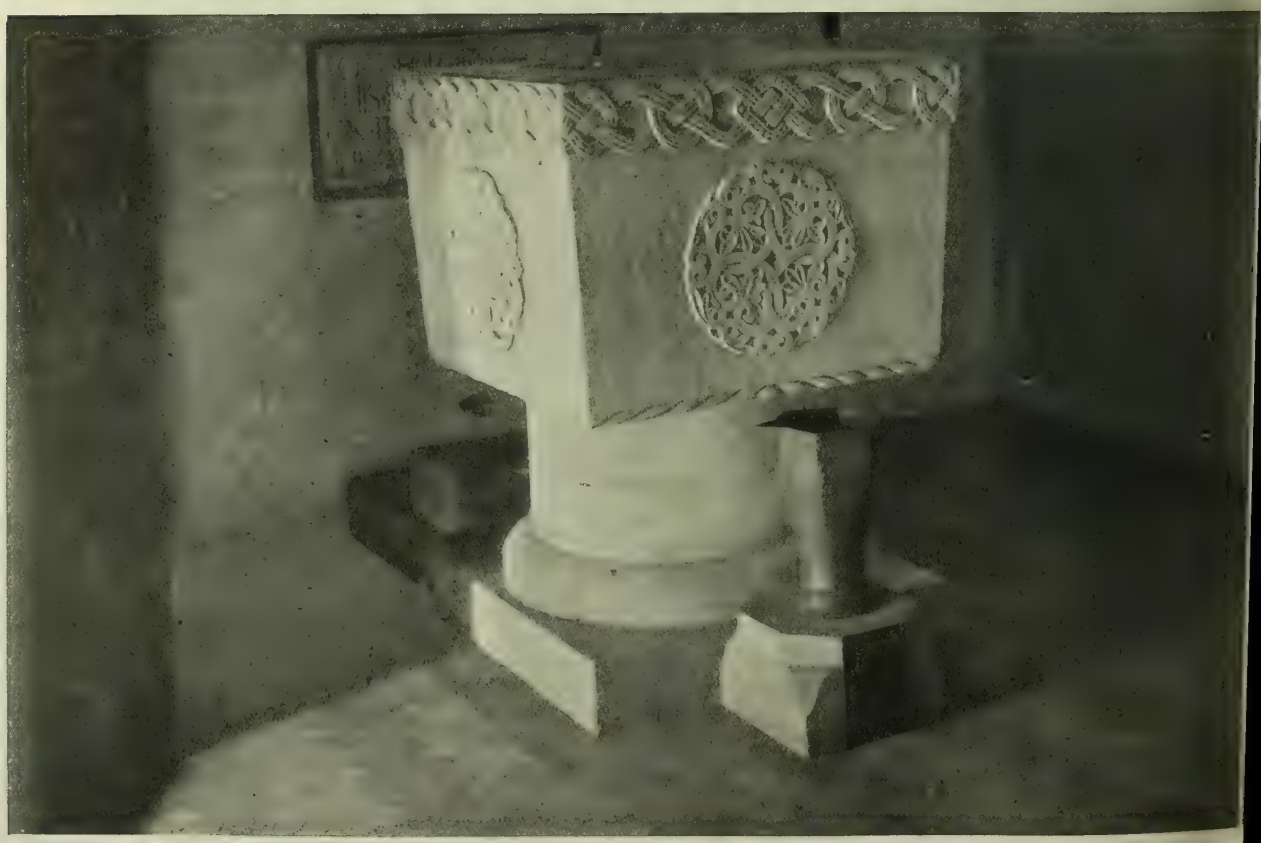


St. Philip's Church, Rugby.

MR. H. B. CRESWELL, F.R.I.B.A., Architect.



BAPTISTRY.



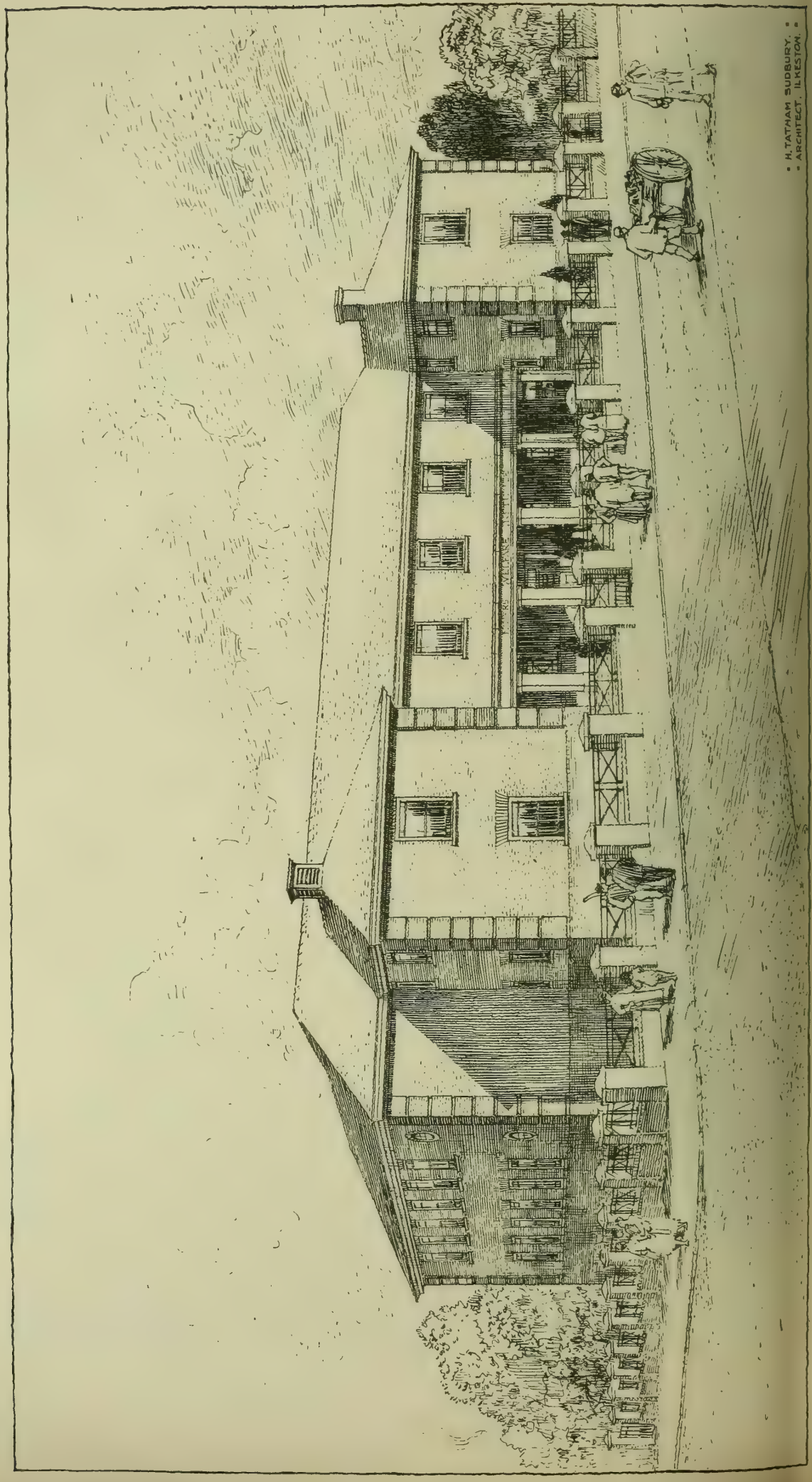
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St. Philip's Church, Rugby. MR. H. B. CRESWELL, F.R.I.B.A., Architect.

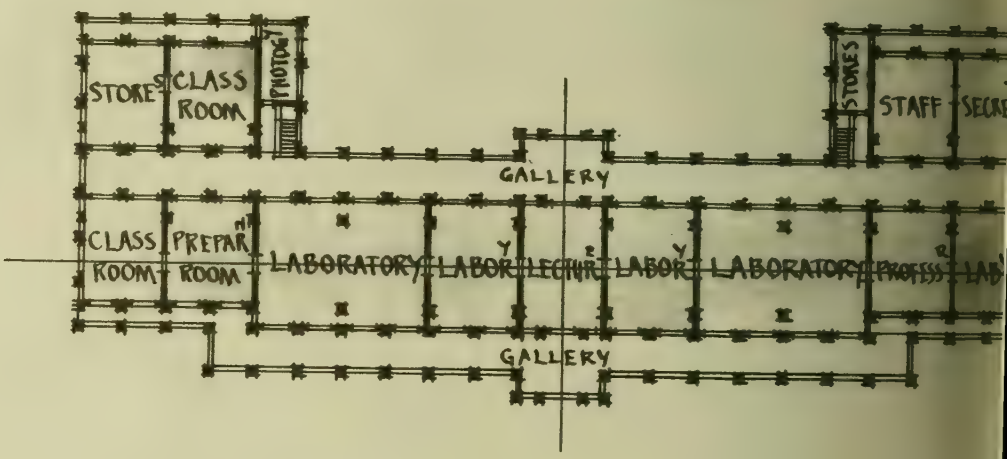


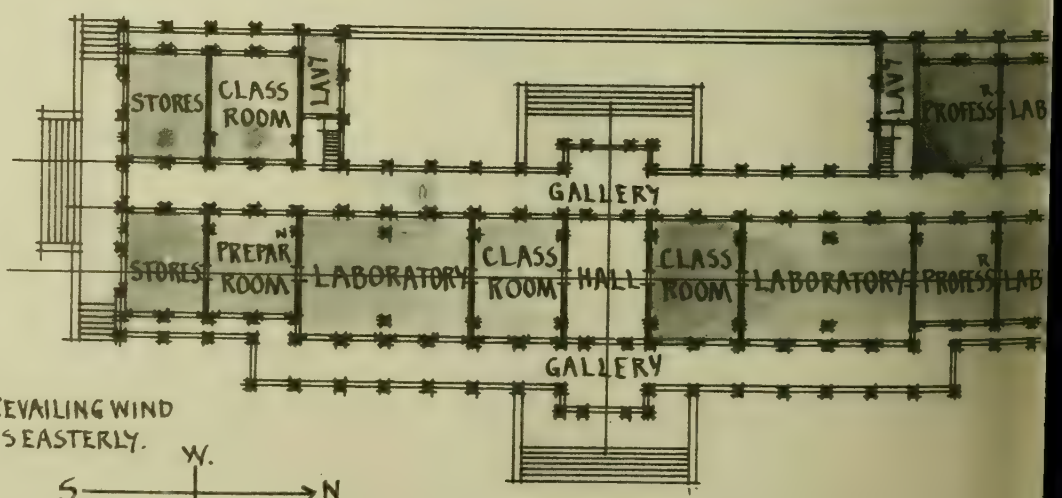


St. Philip's Church, Rugby. Mr. H. B. Creswell, F.R.I.B.A., Architect.


H. TATHAM SUDBURY.
ARCHITECT, ILKESTON.





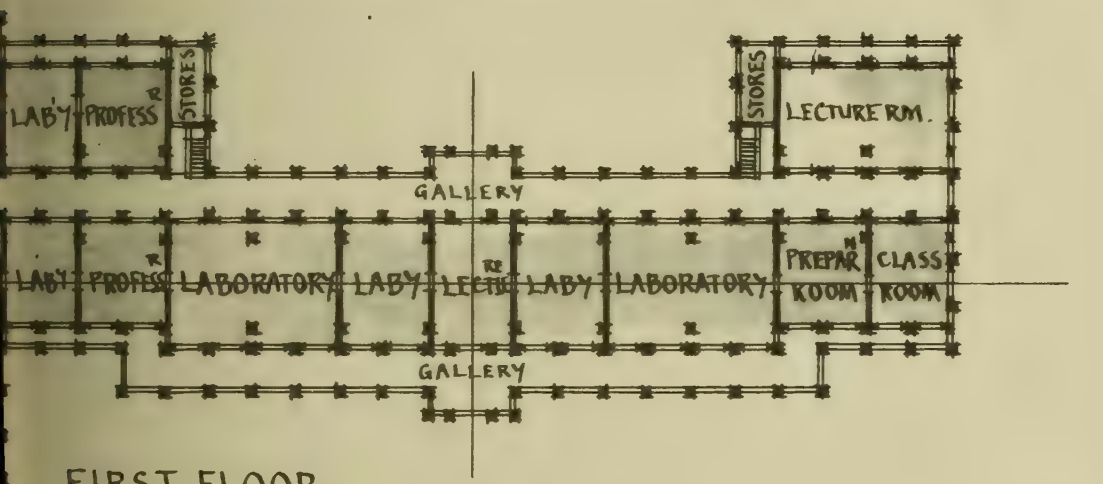


PREVAILING WIND IS EASTERLY.

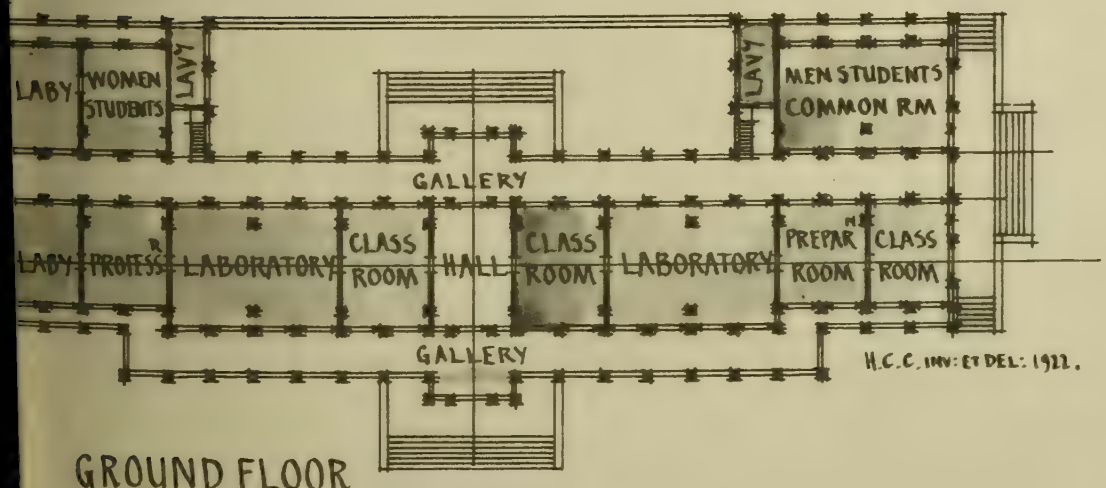
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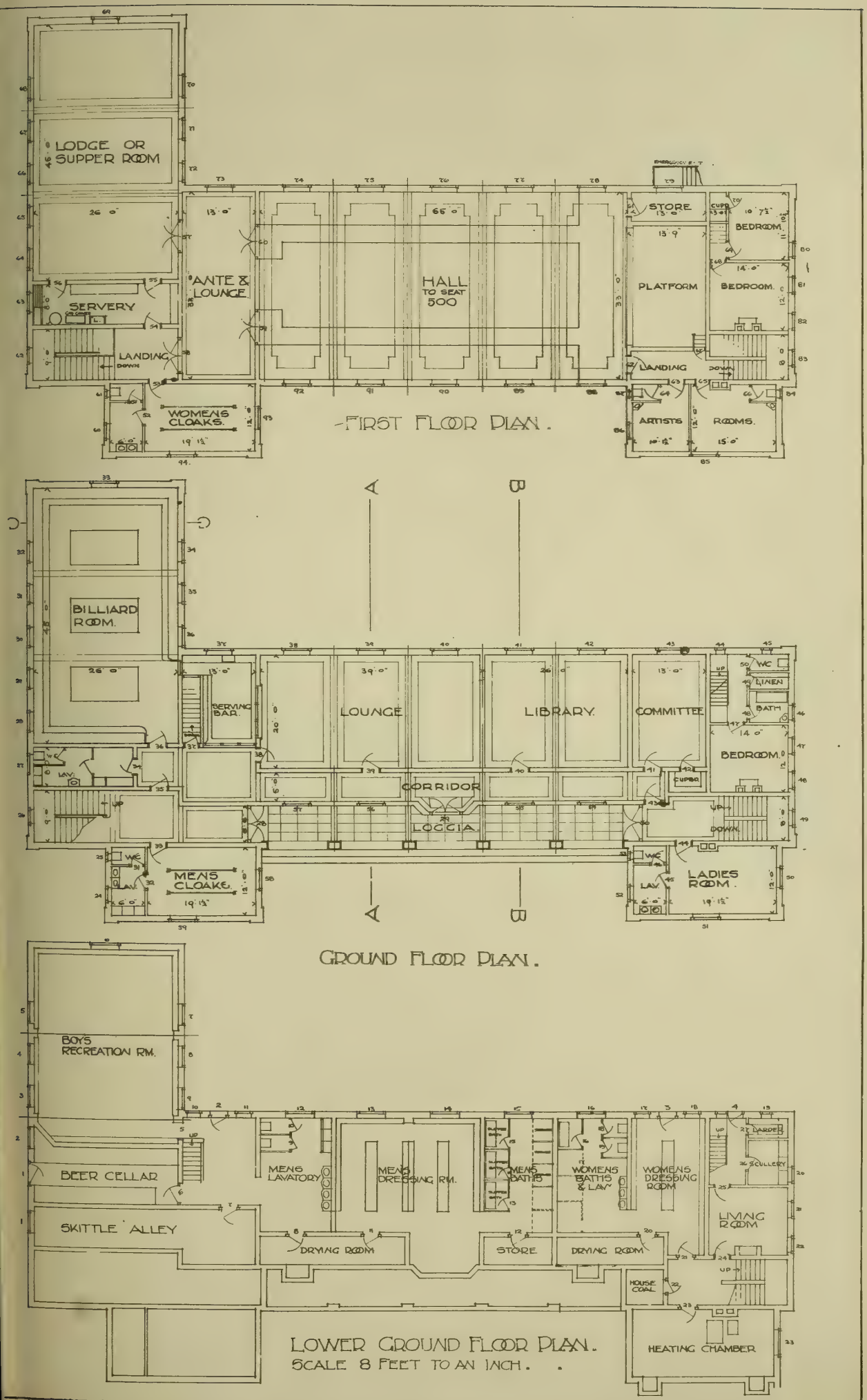


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AUGUSTINE, TRINIDAD.

RCHITECT.

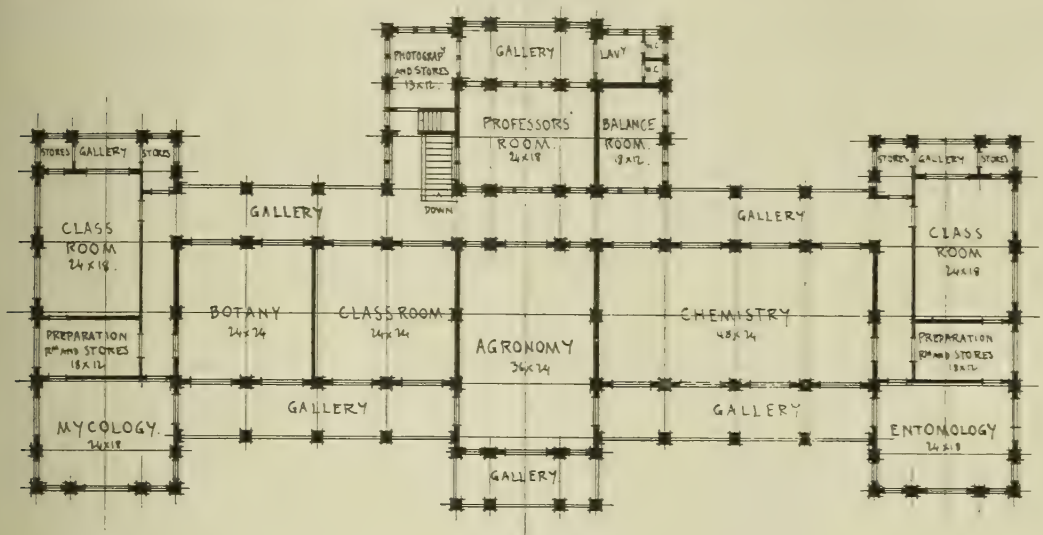


MINERS' WELFARE INSTITUTE, ILKESTON. MR. H. TATHAM SUDBURY, ARCHITECT.



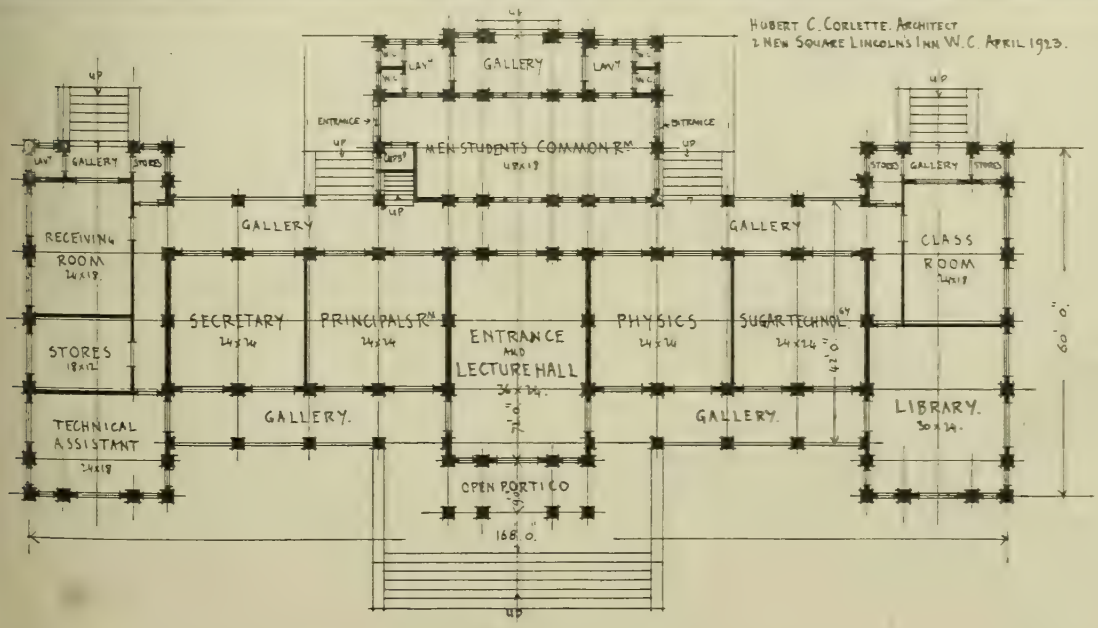


VIEWS FROM THE SOUTH-WEST AND SOUTH-EAST. FROM A MODEL SHOWN AT THE BRITISH EMPIRE EXHIBITION.



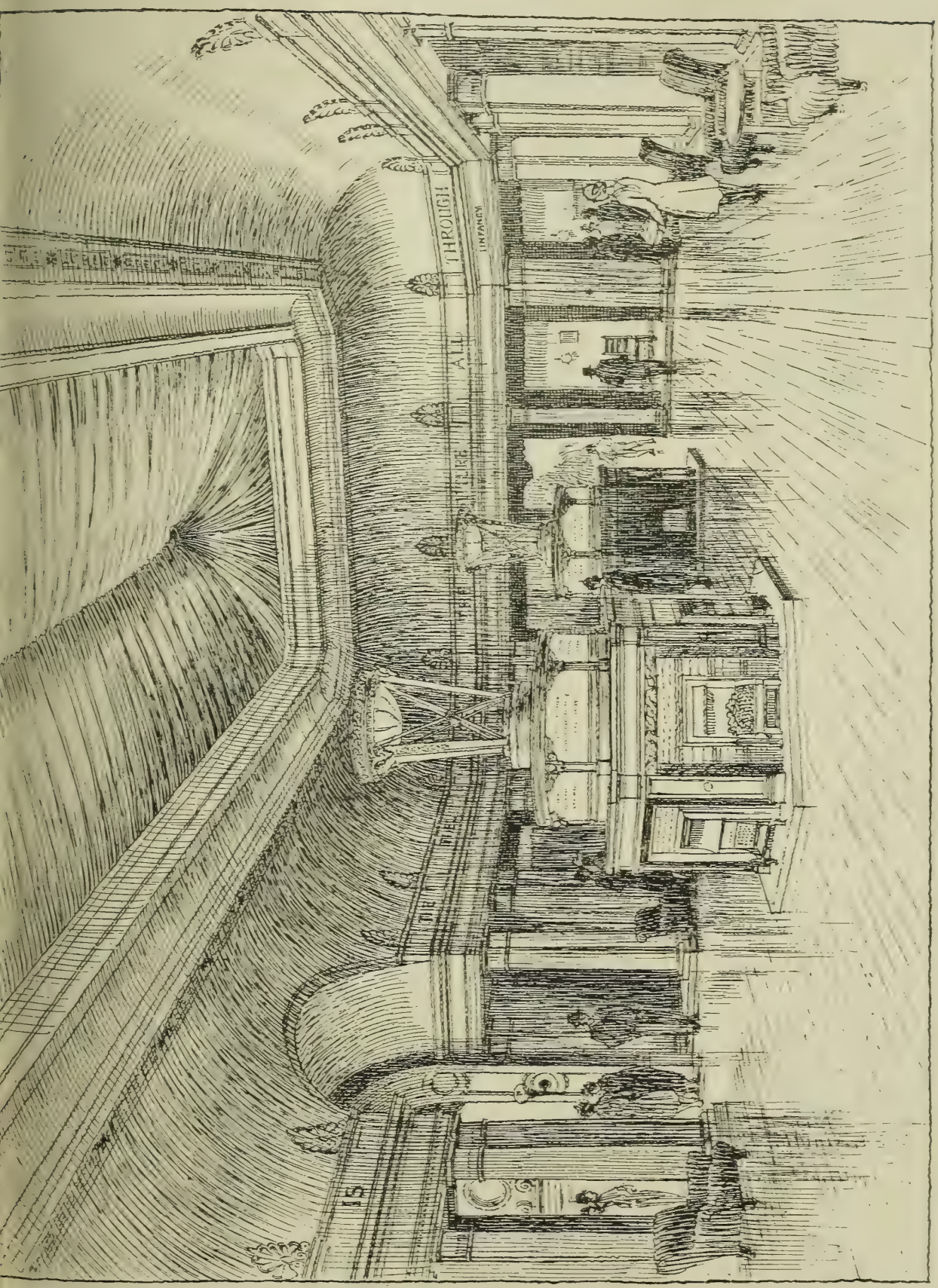
FIRST FLOOR





GROUND FLOOR

Imperial College of Tropical Agriculture, Trinidad. MAJOR H. C. CORLETTE, O.B.E., F.S.A., F.R.I.B.A., Architect.



British Empire Exhibition: Gas Exhibit. (*See p.* 564.)

FIG. 6.—PORTION OF MAIN HALL AND LOUNGE, SHOWING PYLONS AND SOME OF THE MODEL ROOMS. MR. H. AUSTEN HALL, F.R.I.B.A., Architect.

WESTMINSTER ABBEY RE-EXAMINED—VIII

[*Continued from page* 520)

BY W. R. LETHABY.

FIRST AND SECOND WORKS OF HENRY III.

FIRST WORK EXTERIOR.

The north front has been separately discussed, but in examining the Chapter House we have seen that the influence of Amiens Cathedral is plainly evident there also, especially in the

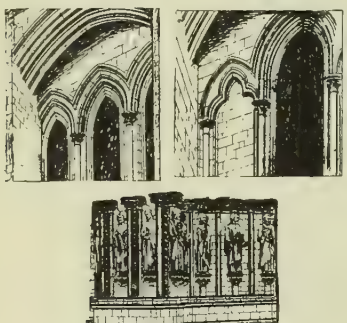


FIG. 7.—NORTH FRONT (S. Weatherley).

sculpture. If we could see the Westminster portals there is no doubt that we should find the Apostles on the jambs, directly imitated from those at Amiens, each with his significant emblem. Even in late reports of them they were recognised as Apostles. (Fig. 7 is from Mr. Weatherley's drawing of Sir G. Scott's proposed restoration.) We have a record of the mouldings of the great central doorway in a sketch by Carter, now at Westminster, Fig. 8 F. Scott followed the evidence in the main correctly from the decayed *original* work, but made some modifications. On comparing the "restoration" with Carter's sketch we can arrive at the original form. One of the arch orders had a great hollow for carved work, doubtless of little figures in interlacing foliage as at Lincoln, or of figures under canopies like the figures of Virtues and Vices of the Chapter House door at Salisbury —from the jointing Scott thought the latter. I gave an extract before from a letter of Mr. Baker King, who worked for Sir G. Scott, but print it here more fully as every morsel of evidence on these wonderful porches is valuable. "I have in my note book some sketches and dimensions giving the sizes of voussoirs of the arches which were carefully followed in the new work. Much of the old work, where it had partly perished, had been reworked in the eighteenth century. The orders of the arches which had had carving were reduced to this form (A, Fig. 8), the carving having been cut away. The Purbeck marble abaci of the caps, which had been something like this (B), were reduced to (C). The neckings of the capital also extended along the jamb splays thus (D) not dying against the splays. If you have been up to the stone roofs of the portals you will have seen that a considerable portion of the ancient stone slopes remains. The pitch of the gables was given by several of the stones which had the intersection of the two slopes. I do not think that any of the Purbeck marble shafts remain. The jointing of the corbels for sculptured figures inside the porches gave the dimension for these features, but all had been worked off flush [E, but part of one old corbel remains]. The sunk panels in the tympana of the inner arches had all been pared down" (September 2, 1907).

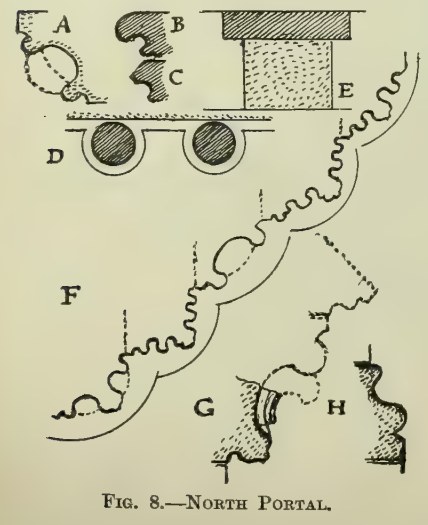


FIG. 8.—NORTH PORTAL.

The "sunk panels in the tympana," just mentioned, must mean the series of cinquefoils in circles which form a series of medallions. That these had been reworked is confirmed by a sketch of Carter's which shows them thin and poor. I have no doubt that these circles originally contained little sculptures as at Amiens and that there is an echo of them in the doorway at Higham Ferrars.

Even the small details and the continuous base mouldings and neckings (Fig. 8, D) were taken from the portals at Amiens, and they are found again at Lincoln, which was derived from Westminster. Further, the record that the abacuses of the capitals only were of marble shows that the capitals themselves were carved, for all moulded capitals were wholly in marble. The late Mr. William Brindley informed me that fragments of the Purbeck marble shafts had been found and these were of a scarce reddish tint, as if they had been specially selected. Fig. 7 shows what Sir G. Scott thought the details of the windows above the porches would have been; the suggestions I made in 1906 agree entirely except that Scott rightly put carved capitals instead of moulded. In the actual "restoration" as carried out the forms which had come down to our time were altered. The remarkable gable tracery (Fig. 1) was destroyed 1884-90.

What may be called modern repairs in the church began in 1600. (See B.M. Add. 34195, f. 14 and 16.) Dean Andrews established a fabric repair fund. Hackett says of the next Dean, Williams, "he found the church in such decay that all who passed by shook their heads at the stones which dropped down from the pinnacles. Therefore he took care to strengthen it. He began at the south-east part, which looked the most deformed with decay, because of Henry VII's Chapel, which was tight and fresh; the north-west part also, which looks to the great Sanctuary, was far gone in dilapidations. The great buttresses, which were almost crumbled to dust with the injuries of the weather, he re-edified with durable materials and beautified with elegant statues (among whom Abbot Islip had a place) so that 4,500 pounds were expended in a trice upon the workmanship."

Norden, writing about 1600, says of the pinnacles of the buttresses that "many through antiquity have lost their form." Hollar's print shows the buttresses of the chapels without pinnacles, and the whole east end looking very bald.

The exterior of the ring of eastern chapels has been terribly pared down and put into a modern casing that it looks like a convict's garb compared with what its ancient, graceful beauty must have been.* However, it is better than anything we could now substitute for it.

* In the books of accounts for work done in Wren's time, from 1698, the renewal of the external masonry can be followed in detail in items like this:—"Taking down 4 pyradmids" (pinnacles). "416 feet supl. of axing pointing and cleansing old Reigate ashlar at 4d. a foot." Wren last signed accounts 1721.

A photograph of the chevet of Reims Cath will help us to make an imaginary restor The chapels at Westminster still so disti echo those of Reims that we may be con that parts which have been superseded followed the great prototype (Fig. 6). At the great pinnacles of the buttresses co statues of a choir of angels in niches. eastern buttresses at Westminster are u dry, drab and dreary, but those to the w the transept have niches for statues look as if they must have been derived Reims, and in that case it would be th the buttresses of the first work.

Now in Hatton's *New View* (1708) remarked of the Nave: "It was on the o adorned with the statues of princes who tributed to this building. They were in niches in the said 18 buttresses betwee cross aisle and the west end of which not eight remain on both sides." The tra end is then described, and the author "There were also several figures on the tresses on the east side of the church, buttresses in the reparation thereof are r plain; but though that grand enemy of b Time has somewhat defaced her ex features, yet there remains not a few ma her outward gracefulness."

The windows of the apsidal chapel obviously like those of Reims, and the butt are similar in having their lowest slop continuation of the window sills. The bu slopes were in a smooth slanting plane at and this, as we shall see, seems to have followed at Westminster. At Reims the window arches are studded with foliage this, I doubt not, was so also at the A we find such arch decoration inside the transept doorways and elsewhere. The hollow mouldings of the chapel wi suggest such carving.

The exterior of one of the original wi of the apsidal chapels has been preserv a sheltered recess at the S.E., next to VII.'s Chapel, together with its six-foil It has been shorn of its mouldings outside within even the carved ends of the cusps re This window is a treasure; it assures us indeed is plain enough from the blank tr within the chapels that the lower sta windows in the first work really had thes foiled roses. Remembering the insisten rose decoration throughout the first wor may not doubt that this tracery form actually seen and understood as a rose. shall find that exactly the same form on a small scale was repeated in paint on the as a rose decoration. The jointing of th window, which must have been one of the first erected, looks a little uncertain an perimental. Some decayed pieces of c ends of cusps remain among the collecti loose fragments.

The inner part of at least one of the trian



FIG. 9.—FROM NORTH-EAST DOO

orium windows still remains, except for the ing; and the ancient ironwork of the foiled les also, I believe, exists in several cases. he clerestory windows of the first work have -foiled circles and these are guaranteed in eral cases by old ironwork. Some portions of t appears to have been the ancient cornice e been found (Fig. 8, G). Doubtless it was of typical French fashion, a deep course with ow moulding studded with carving, and a lower drip course above. Evidence for this been carried on in the series of renewals. the wall plinth, a French form.

ne flyer of one of the ancient buttresses is erved on the S.E. part of the clerestory, an



Fig. 10.—From South-East Door.

of two chamfered orders. The higher ends ne arches were supported by large capitals, I was told many years ago that the ends of e of these, of Purbeck marble, had been found e recasing the apse. Fragments of the beck shafts were also found in the walls. ne doorway entering Poets' corner, together the walling about it, is the largest piece of ent external work that remains. It is a panion to a similar door on the east side of north transept, which is also largely ancient, ough unhappily it went through the process arned restoration, so that it is difficult to what is really old. Some of the carved —one of the French foliage type (Fig. 9)— in, and enough of the carved arch to show such carving existed. The Poets' Corner way has nearly lost its capitals by decay. ketch (Fig. 10) from one of them is largely de up" but it gives the style. These two rnal doorways with their original carved tals are most precious. Together with the ence as to the great portals given above



Fig. 12.—Capital by Door to Cloister.

and the carved caps of the windows in the interior, they show that the door and window capitals of the first work were carved and not moulded

The south doorway into the east walk of the cloister decayed very rapidly until late years, when a coating of lime did some good. It has diapers of the Amiens fashion up the jambs with roses studding the moulding, rounds of foliage in the arch, and crowned heads as label terminations. The carved capitals were of the foliage crocket type. Some notes of these details are in Collings' sketches (1842) at South Kensington (E 4086), and earlier records by Carter carry us back to 1795. Fig. 11 was made in 1910. Fig. 12 is a capital near by, with one from the doorway also.

The vaults to the three northern bays of the east side of the cloister are the earliest built, and with their plastered cells and small bosses they are of an earlier type than others in the church.

The south transept as recased in Wren's time was restored into correct sham "Gothic" fashion in the upper part about 1870, and a new south rose was inserted about twenty years later. Some old photographs show the pleasant Elizabethan cappings to the turrets as still existing (Fig. 2). Repair of the lower part of the transept was undertaken about 1913. The casing —"flagging," as Wren called it—had become detached from the solid walls in big patches, but it was decided to repair the work as it was, making no vain attempts in sham Gothic. I have a note before me, dated July 5, 1916: "The repair of south transept has reached the buttress on the left of 'Wren's arch.' There were four weatherings to the buttress at the height of coping of cloister, the slope being continuous; the courses are 7 : 8 : 9 : 6 in.

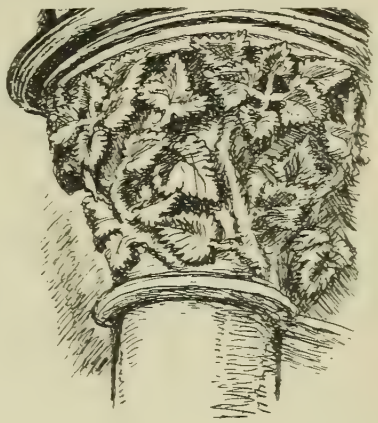


Fig. 13.—Naturalistic Foliage (Interior).

There was another slope of two courses at level of springing of Wren's arch and another near the level of triforium windows. Some 30 ft. in height of the buttress face, which was 5 ft. 8 in. wide, was exposed at one time. The work was very closely jointed in courses, varying from 6 to 11 in. The face of the slanting wall of stair turret also exposed; original face still remains in the recess under Wren's arch, which was built to carry the casing of the buttresses."

October 24, 1917: "Repair of south transept still going on notwithstanding everything! The splay angle of stair turret was exposed for a great height showing original, much decayed face. The courses are very narrow, some only five inches, and few more than eight inches. The joints white lime putty and very thin. The stair windows had probably been narrow slits originally. [A sketch of one in the turret by Poets' corner, by Carter, shows it six inches wide with a circular enlargement at bottom like a castle loop]. We have now seen a large amount of the original face of this transept." The facing

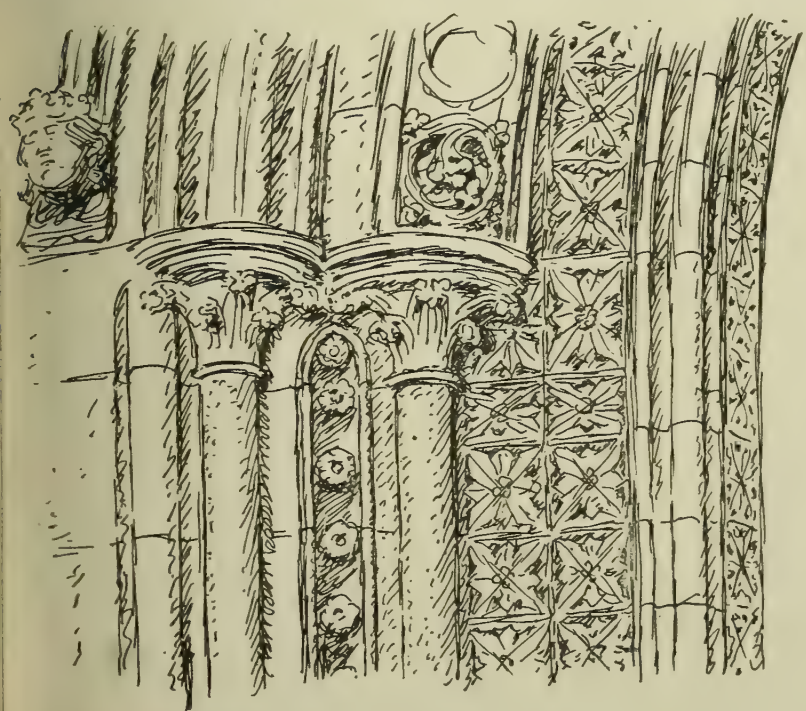


Fig. 11.—Jamb of Door to Cloister.



Fig. 14.—Falcon Capital (Interior).

courses of Chapter House and those which remain by Poets' Corner entrance are equally narrow. The stone was very white and the new building must have been bright and fair even before it received the usual protective coat of wash.

A lantern tower was designed as part of the first work and actually commenced. The squinch arches across the re-entering angles

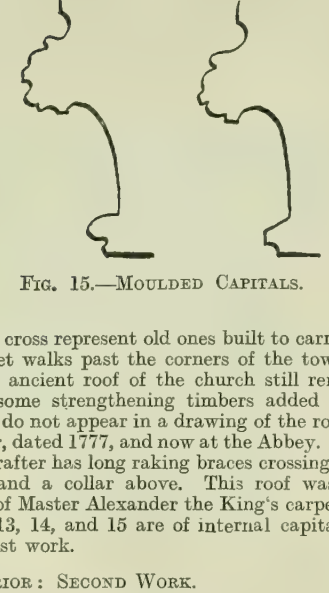


FIG. 15.—MOULDED CAPITALS.

of the cross represent old ones built to carry the parapet walks past the corners of the tower.

The ancient roof of the church still remains with some strengthening timbers added later. These do not appear in a drawing of the roof by Carter, dated 1777, and now at the Abbey. Each great rafter has long raking braces crossing in X form and a collar above. This roof was the work of Master Alexander the King's carpenter. Figs. 13, 14, and 15 are of internal capitals of the first work.

EXTERIOR: SECOND WORK.

About 1905 a considerable work of re-casing and re-editing "Wren's" restorations of the clerestory on the west of the north transept and of the choir adjoining was begun. On my first official visit I noted, December 12, 1906: "The clerestory of west side of transept is practically completed. First bay of north side of choir is stripped for recasing." (It was arranged that after the choir bays we should repair in detail continuing what existed without any attempt at making the details more sham correct.) "In this first bay traces of the blank arch to the right of the window has been found (the left was doubtless part of the first work, compare *Gleanings*), the face of the recess, weathered as it is, shows how very finely jointed the original masonry was. Mortar ⅛ in. at most. (This blank arch was 2 ft. wide and no less than 9 ft. high and formed of an order 9 in. wide.) Original thirteenth-century squinch work at angles by lantern exposed." These were remnants of squinch arches which allowed the parapet walk to pass the angles of the lantern tower. "Original cornice was in two courses like 'Wren's.'" That is, it had a deep main course and a narrow dripping course over: only the backs of the stones remained. Some fragments which exist show a course about 12 in. deep with a big hollow having projections (carved ?) at intervals (Fig. 8, G).

In the second work there were many variations from the first, the blank arches just described

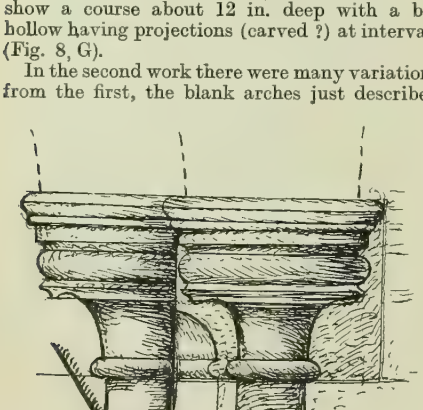


FIG. 16.—CAPS BETWEEN WINDOW AND BLIND ARCH.

were clearly not contemplated by the first master, for on the south side as on the north, the *eastern* jamb of the first window which belongs to the first work is plain. Such blank arches show a return to English fashions.

On the south side they exist with the aisle windows as well as in the clerestory; they do not occur on the north aisle because the buttresses are here of full width and there was no room for such flanking arches. These blank arches flanking the windows are very similar to examples at Fountains, Beverley and Lincoln. The last-named was doubtless copied with much else from Westminster itself, but the two others are earlier. As to the date of these, I consulted my friend, Mr. J. Bilson, who tells me: "There is no precise date known for the thirteenth-century choir and transept at Beverley—second quarter of century or *c.* 1225 to 1245. The new work had been dedicated before 1261. Beverley shows influence from Fountains." All this seems significant for the second work at Westminster was largely done under the mastership of Robert de Beverley, who fully succeeded John of Gloucester on his death in 1260–1. Robert was already working under the older master in 1259, and I have little doubt that he was already in charge at the Abbey when the aisle windows were reached.

In the work of repair a few months later one of the compound capitals, once under a window arch and on which a blank arch also fell, was found buried in the wall above the third clerestory window. This is of Purbeck marble *moulded*, and shows the type of detail of the second work (Fig. 16). The flying buttresses here had no marble shafts against the wall.

The triangular triforium windows of this part have three foiled circles instead of a single larger one. Essex, writing about 1780 (?), said: "The triangular windows at Westminster are of two sorts; all that are of this form (sketch with three circles) are the original, but the others having been renewed of late years are not of true form." (MS. Notes at B.M.) Essex was mistaken as to the entire alteration of the renewed windows to the eastern part, but the others when he wrote were still *original*. There is a drawing of one of them by Carter now at the Abbey, and they seem to have lasted on till 1835, when they and the aisle windows beneath were "restored" by Blore. The inner halves of some of these windows, except for the foiling, still remain.

The niches of the pinnacles of the buttresses appear in Wren's model of the church, and a sketch of them by Carter also exists; they must represent the original work with fair accuracy. The Cloister bays of this part are most elegant and share in the characteristics of the second work.

INTERIOR.—The setting out of the complicated plan is so exceptionally accurate that it is evident that the first work was begun as a whole on a cleared site. At the same time there are small variations of detail which show that the building was begun at the apsidal end. The bases of the apse pillars and those of the ambulatory are more delicate than elsewhere, some of them have hollows in their profiles and carved leafage filling the angles between the circular and octagonal forms. Apparently the work was pushed forward so rapidly that much had to give way before the King's haste. The arches first turned must have been those which have wood ties or rather props—the iron tie-bars were not ready in time. The diapering of spandrels of the main arches is smaller in greater part of the presbytery than at its north-west corner, and this earlier diaper is found on the east side of the south transept also.

In the second work the details of piers, wall-arcade, triforium, clerestory, and vault were modified, but so sympathetically that all is perfectly harmonious. The most marked variation is in the additional ribs of the high vault. A part of the changes had been intended from the first. Thus the first pillar west of the crossing although it is of the early work is different in plan from those to the east, but it has, like them, marble annulets, while those further west have them of bronze—an fashion (Fig. 5). The vaulting shaft o first pillar starts above a capital, while be runs up from the floor without an inte capital. The first bay of triforium also of the early pattern. In the secon all the windows and the cloister openin five foiled roses.

This second work does not show the s haste which are so apparent in the first The details, such as the cloister trace the wall-arcade of the aisle with its spandrels, are exquisite. Among the is that of Simon de Montfort, and as thwaite observed, this would hardly ha chosen after 1264.

PLANNING.

The plan was closely conditioned by t existing buildings and cloister. To the e the Lady Chapel, old or rebuilt: connecti this may have been formed by a vestibu or the chapel may have opened direct the ambulatory as at Amiens. A por the actual work against the ambulato exists (Fig. 6). This is a plan taken level of the wall-passage of the chap formerly thought that this wall passa minated with the existing polygonal cha the north-east and the south-east, October 5, 1909, I got into a continuatio ward of the passage from the south-east from A to B on the plan (Fig. 6). Beyo point B the passage is blocked by th of Henry VII's Chapel; what remains, ho is sufficient to show that there was a squa here rather than a polygonal chapel. triforium stage it is evident that this spa floored at the level of the triforium extends over the other chapels around th There must either have been a transver (Fig. 6, F) terminating this space to th or an upper story at triforium level ex over the whole chapel. Perhaps the fo more probable. The surface of the wall p still had its old whitening and rose deco and the marble shafts and bases still re some polish. An outer base of the eastwa tinuation is on the level of the window and it falls on a sill similar to the windo There was certainly here a blank like a w light similar to those in other chapels doubtless it had a companion light to th of it where not blocked by the buttress a "blank" and the light would have mad normal two-light composition. There w an inner and lower base on the passage ran east exactly similar to those under the of the rere-arches of the windows. F indications of moulded arches were foun under the leads which form the roof existing low vestibule between the churc Henry VII's Chapel. This part was similar to the polygonal chapels, except was square. The two radiating buttresse to this bay with their fliers above stil (renewed).

The doorway in the south transept e from the east was the immediate way of from the Palace, and it must have be King's private entry. It might be call Palace door. Close against this door transept is another which opens to a spir which ascends to a wall passage acro transept end, leading to a beautiful ch which forms a gallery story intermediate b the ground floor and the triforium and occ the space over three bays of the cloister. chamber now known as the Muniment R open towards the church on two side looking the altar and the choir, and I that it was originally the royal pew. position agrees with the tradition in pala castles of having gallery-pews in their c This fine chamber, moreover, has s beautiful sculptured bosses in the vault. are also several carved royal heads am elaborate decorations and also traces of p on the window jambs. One of the capit hawks perched on the foliage (Fig. 14).

There was a second way of access fr cloister, and the series of radiating

nd the apse might be reached from the
ıber or pew by the wall passage without
ending to the ground floor. All this, I think,
have been specially contrived for the King.
e chamber was altered in the time of Richard
hen an immense white hart, the King's
e, was painted here over a wooden partition
h was set up to divide the chamber into two
.

er the "crossing" of the church, as before
ioned, a lantern tower was to have been
ed, and evidence of this intention is to be
l within, as well as on the exterior. The
arches around the square space have label
dings above them, and from the points
e these intersect at the angles rose vaulting
s, the bases of which remain—sure indica-
that the work was to have been carried
r.

e choir terminated to the west with a
screen or pulpitum. There are in the

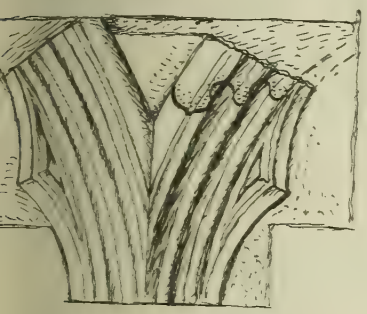


FIG. 17.—FROM PULPITUM ?

triforium two fragments of trefoil blank
, much like the wall-arcade but different
it. I have wondered whether these did
rm part of the western front of the pul-
, date *c.* 1270 (Fig. 17). Organs are
ned from an early time. Parts of the
l marble pavement, consisting of squares
agonally between longitudinal strips laid
, may still be found in the ambulatory,
pts and aisles. Several years ago, in

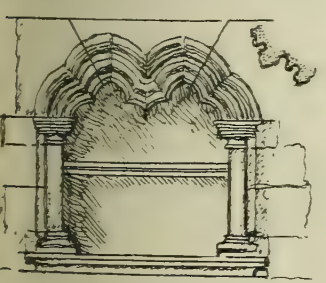


FIG. 18.—PISCINA.

ng a part of the wall on the east side of
th transept, the remains of a piscina were
behind a wall tablet. Of this Fig. 18 is
a restored sketch.

English Church at Ypres.

appeal was recently made by Field-
l Earl Ypres for an English church to be
t Ypres. This suggestion was followed
once and strongly commended by the
hop of Canterbury and other representa-
the Church of England and the Army,
er to the Press of August 7. The chair-
the Ypres League now informs us that
ea is to build first the chancel end of the
and then extend it, if necessary, to hold
wo hundred people. They have been
to make the appeal for funds to carry
work, and they ask that subscriptions
be sent to either Bishop Bury, c.o. the
Staunton Batty, Commissary, Christ
Vicarage, Down-street, London, W.1;
ld-Marshal Lord Plumer, through Lieut.-
Poole, 36, Eaton-place, London, S.W.1.

A GERMAN INNOVATOR

ONE feels that much of the work of the ultra-modern school must be judged not so much from actual performance as from the promise which it may hold out. Otherwise judgment on such work may be unduly harsh, and ideas stifled in their genesis, merely because their preliminary manifestations are tentative and crude.

The buildings and designs of Erich Mendelsohn* cannot be seriously regarded as fully developed expressions of the steel and concrete industrial architecture, the dynamic idea translated into form. They appear too crude for comparison with the finished product of any classic, romantic, or crafts school of design. They will command interest and respect only if they stand the acid test of fitness for the practical problems which they arise to serve, and of this fitness plans and photographs do not permit a considered judgment. As essays in pure form, as straightforward expressions of material and structural design, they appear to be a failure at the best: sincere but tentative effort; at the worst, tortured and bizarre attempts at architectural notoriety.

One may dismiss this latter hypothesis on the basis of our information regarding Mendelsohn: his dreams during the war of a better and finer foundation for a living architecture, his hopes, born in the trenches, of a genuine expression for the industrial post-war era. He was so sensitive as to visualise the post-war problem and evidently prepared to meet it by an architectural formula compounded of the artist and the engineer.

As an introduction to his book we find reflections and lectures obscure as are the most involved of German philosophic writings. Here, again, we cannot judge. Either Mendelsohn is often writing untranslatable nonsense, or else he has been cruelly ill served by his translator; for many of his sentences, words and arguments, are not only un-English, but incomprehensible.

The chief value of this publication of Mendelsohn's designs lies in the stimulus which they supply to others to attempt fresh and logical architectural expressions; in the sometimes successful massing of his buildings (*vide* the "New Hat Factory"), and in the plastic handling of form in concrete construction as exemplified in the Einstein Tower. In addition, there is interest in the actual technique of the sketches and working drawings. Judged from the standard of production, the book is in every way admirable; but should there be a further edition we hope that the obscurity of the present text will be remedied.

MYTHS OF CHINA AND JAPAN†

IT is a fairly safe thing to say that, apart from the mere trade stuff turned out for the European markets, the Chinese potter never made and decorated a pot that had not an inner meaning—perhaps twenty meanings. A prunus jar is something more than "just a piece of blue and white"—a rather unconvincing sketch of plum blossom reserved in white on a blue ground of cross hatchings. Whatever else in addition it may mean, it certainly is an epitome of spring and the ever-recurring miracle of the rebirth of Nature. It is told in two words—the first flower of the spring, and the breaking up of winter's ice. The plum tree, we are told, is closely connected with the dragon, inasmuch as a dragon was once punished by having its ears cut off and where the blood dropped to the ground the plum tree sprang to life. The dragon is a gentle beast in China, and never went in fear of our St. George. He is the water-giver—no dragon, and there would be no spring rain after the winter drought. He was not always a dragon, but a strange mixture of several animals. He himself, as the water-giver, is the prince of all the lucky things in the Chinese imagination, and associated with him is the priceless pearl—which is, perhaps, the moon—and so chasing or clasping the pearl is he depicted by the Chinese artist when he puts his hand to paper or porcelain.

We have merely hinted at one or two of the many things which the reader will find in the closely-packed four hundred pages of Mr. Mackenzie's book, and we can only commend in passing the thirty-four plates illustrating and illuminating the text. The aim of the writer is not merely to interest us in the myths of China and Japan as myths, but to help us to understand something of two great nations and ancient civilisations through a knowledge of their religious beliefs and ancient folk lore. Judging by the footnotes referring to authorities on almost every page, we can well believe that the author has left no stone unturned in tracing the origin of the myths. He shows us quite clearly how China received her civilisation from the Byzantine Empire—to state the case quite baldly and inadequately—and how the same influences that penetrated to the Far East drifted as far west as the Scottish Hebrides and, to quote from his preface, "When, however, it is found that China obtained certain myths and practices from the area called by its writers 'Fu-lin' (the Byzantine Empire), and that not only Byzantine but Ægean influences are traceable in the Celtic field, the charm-link between Gaelic Scotland and China may not, after all, be regarded as 'far-fetched.'"

The book should prove a useful and welcome adjunct to the many volumes on Oriental art now pouring from the press. The mere lover of legend and folk lore will be gripped from start to finish, and the art student or collector of pottery, prints and rugs will find it of inestimable value. He will learn something of the inner meaning of the innumerable "precious things," animate and inanimate, which go to make up the sum total of Oriental aspirations—long life and good luck.

* "Erich Mendelsohn. Structures and Sketches." (Ernest Benn, Ltd.) Price 21s.

† "Myths of China and Japan." By Donald A. Mackenzie. (The Gresham Publishing Co., Ltd.) Price 12s. 6d.

WAGES ON PUBLIC WORKS

THE Public Works Conciliation Board has made an award, dated September 30, 1924, for the London Area, namely, the City and County of London and the whole of the districts of all the local authorities the whole or any part of whose district lies within the Metropolitan Police district. The award fixes the rates of wages to be effective for the three months, October, November and December, 1924, as follows:—Blacksmith, X plus 4½d., 1s. 8d.; concrete leveller, X, 1s. 3½d.; duct or earthenware drain layer, X plus 1d., 1s. 4½d.; fitter, X plus 4½d., 1s. 8d.; granite mason kerb, &c., X plus 5½d., 1s. 9d.; granite sett dresser, X plus 4½d., 1s. 8d.; jointer, X plus 1d., 1s. 4½d.; kerb fixer, X plus 4½d., 1s. 8d.; pavior, X plus 4½d., 1s. 8d.; petrol locomotive, petrol roller, or petrol air compressor plant driver, X plus 2d., 1s. 5½d.; pipe jointer (iron up to 6 in.), earthenware or concrete pipes and conduits, X plus 1d., 1s. 4½d.; pipe-jointer (iron) above 6 in. diameter, X plus 2d., 1s. 5½d.; platelayer, X plus 1d. to 2d., 1s. 4½d. to 1s. 5½d.; platelayer labourer, X, 1s. 3½d.; pneumatic pick operator, X plus 1d., 1s. 4½d.; rammerman, X plus 1d., 1s. 4½d.; scaffolder, X plus 3d., 1s. 6½d.; screeder, X plus 1d., 1s. 4½d.; steam roller driver, X plus 4d., 1s. 7½d.; street mason and flag dresser, X plus 4½d., 1s. 8d.; tarpot man, X, 1s. 3½d.; timberman, X plus 1d., 1s. 4½d.; wood block layer, X plus 1d., 1s. 4½d.; men working in "Boots," 1d. per hour extra; watchman, 7s. 6d. per shift minimum day or night. The hours of labour and overtime rates to remain as agreed on March 11th, 1920. "X"=labourers rate, 1/3½d.

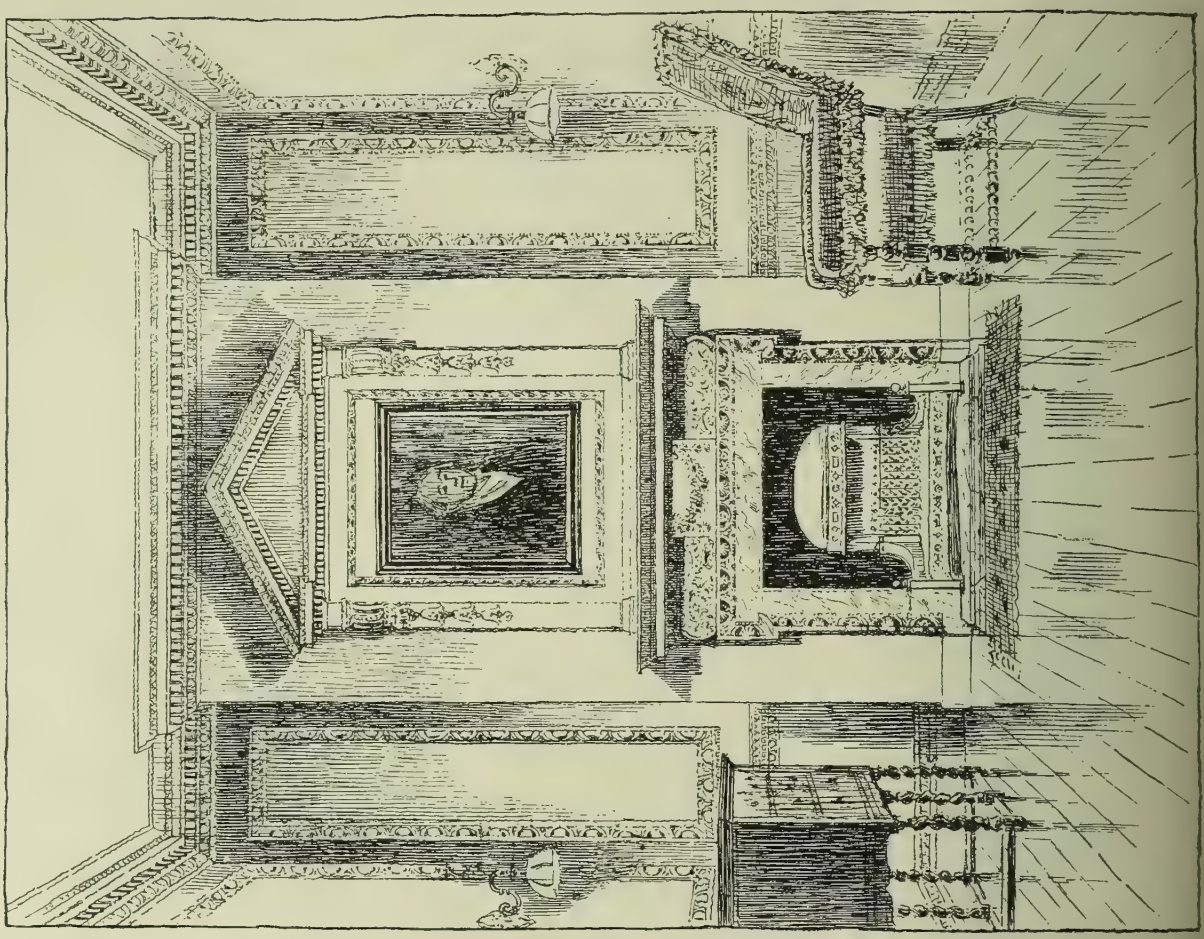


FIG. 3.—DOCTOR'S CONSULTING ROOM.

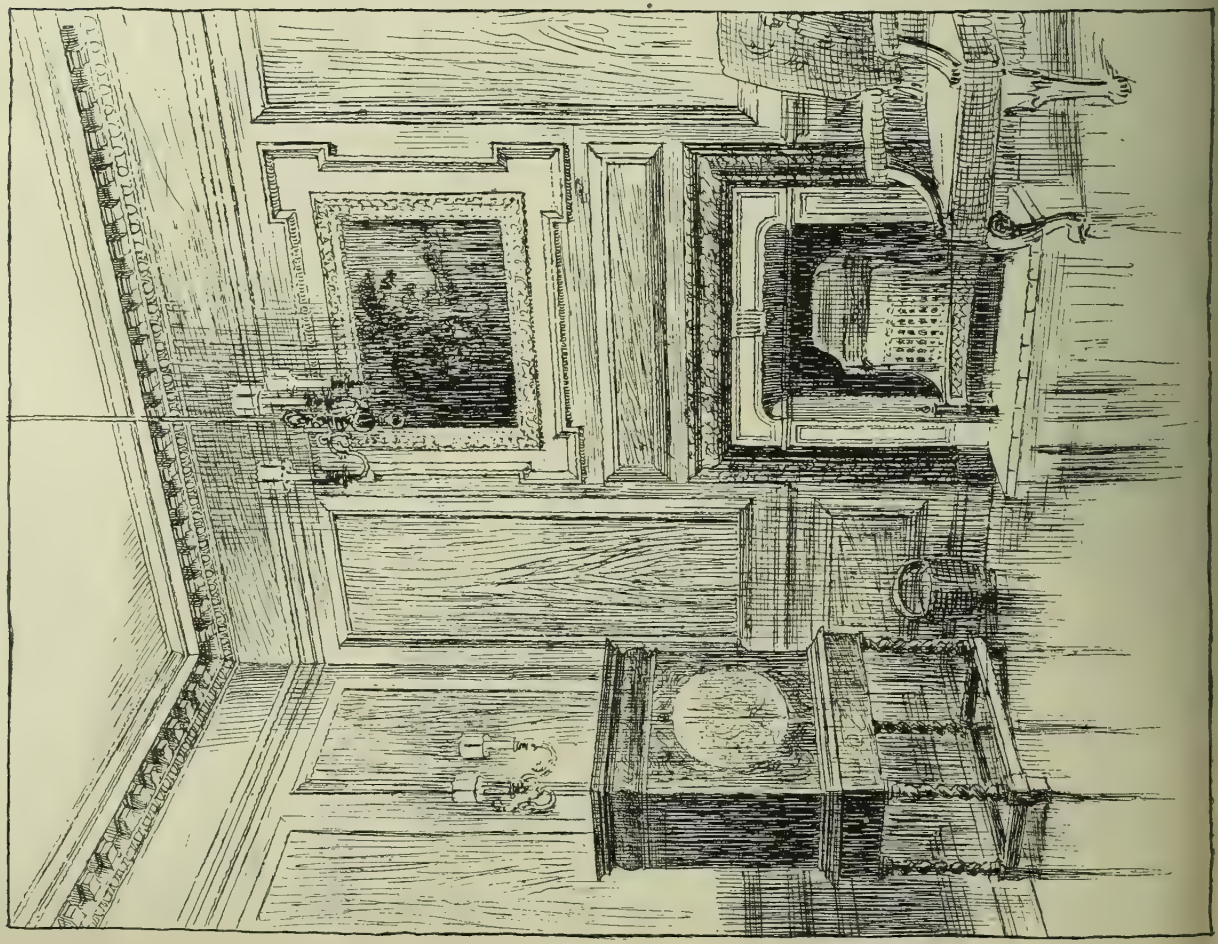


FIG. 4.—BUSINESS ROOM.

HEATING AND VENTILATION

FRESH AIR AND WARMTH

privileges that have followed upon ation have been truly bought at a price, n some respects we have undoubtedly e very inferior creatures in the process. same power that gave us the ingenuity to houses and design clothes, has certainly ed us of a great deal of that natural resist- o the elements which the remainder of the l kingdom possesses. Whether the heating er and the tailor came to the aid of the rown bald, or whether their premature precipitated the affliction, are conjectures le important as the vexed question of the y of the egg and the chicken. What con- us to-day is rather that there exist certain s in the human constitution that must be the best and most scientific ways if we are r an efficient part in the civilised world of .

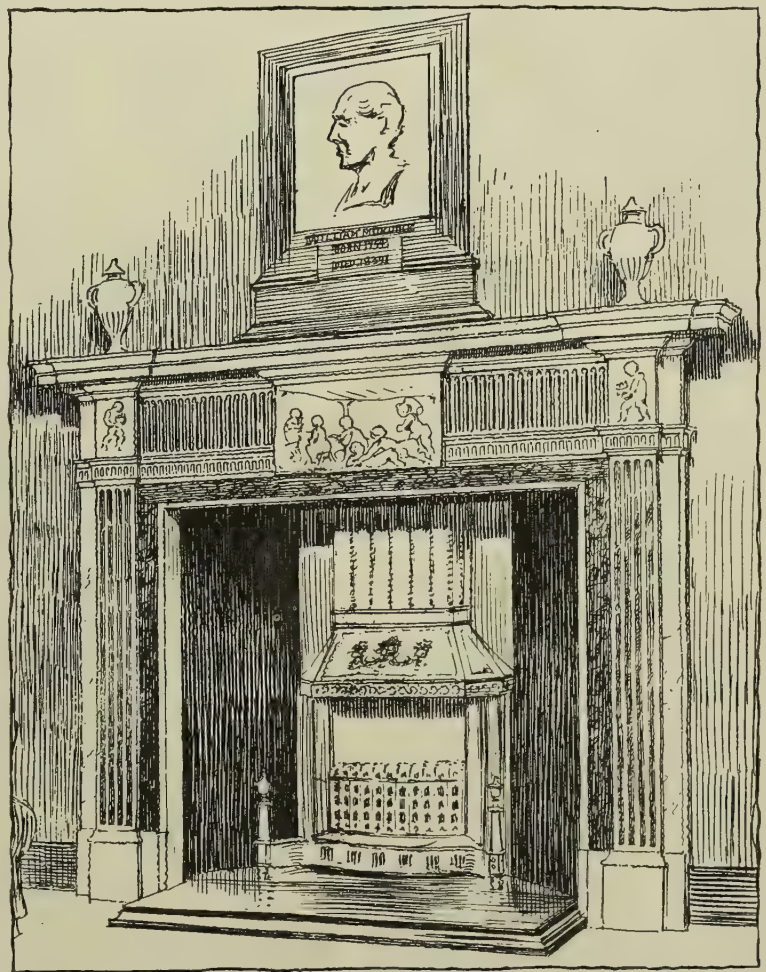
ificial heating is perhaps one of the most tant of these means of living and very allied to it is the question of ventilation— , the one is almost the natural corollary of her. The ancient fire on a hearth in the of the hall floor, and its stifling effect, uced the first germ of ventilation, though k but the form of a hole in the roof. It ut a small step to the introduction of the flue, and yet this advance has sufficed for rpose through many centuries, and even more than holds its own in the class of tic work that concerns the vast majority. smoke flue does indeed serve a more purpose than that for which it was ally designed, for the strong upward t promoted by the rarefied heated air and , makes a fairly efficient exhaust whereby nant atmosphere is avoided and frequent al ensured. The real objection to reliance the smoke flue for ventilation lies in the hat what efficiency it has is largely acci- l, and as such it naturally does not perform unction in its most direct and efficient r. It operates from a point where the at its purest, and rapidly extracts it before borne its fair share in the relief of the over- ned atmosphere of the room. The fire s also a most imperfect source of heat. Of ree methods of transmission of heat—con- n, conduction, and radiation—little more he latter is called into play, while a vast f heat is sucked rapaciously up the chimney te itself in the open. It does indeed seem rdinary that we should tolerate such a f affairs, and yet as we write and read the , we know full well that we love the coal ith all its faults. It does indeed stand as bol of comfort to which the heart at once ds, and we shall most probably have to with it for long to come. Such advances now make are more in the direction of menting the function of the fire and ting many of its faults.

need not dwell upon the more ambitious aborate systems by which our large halls heatres and underground stations are ained with a comfortable temperature and thy atmosphere, and there is much to be of in many of the achievements of the age direction. For most of us, the treatment domestic house is of greater and closer n.

tral heating implies a first cost which our lt times may sometimes distort into an ance of the impossible, but we should do resist the impulse to be appalled and re the incessant outpourings of waste in the household with their sum capital to get a true perspective of the real n between the two. Consider the dupli- res that have to be cleaned out, stoked, d with a full scuttle from some remote the range kept alight during all hours of a non-cooking day; perhaps the sick room fire upstairs. Think of the frenzied airing of bedding in the damp spare room on the arrival of the unexpected guest; the continual repolishing of furniture that would keep a surface in a reasonably dry atmosphere. And, do not let us forget the lost days in bed recovering from the cold caught on the chilly staircase after the stuffy room. Surely even these chance shots would seem to indicate that we are seriously reducing our income when we struggle to save this moderate sum, that fades into a fraction when spread over the number of years that would be served. Then there is the great opportunity that such a system affords towards an improved system of ventilation. Take the case of the ventilated radiator. The air drawn in and warmed on its way, passes naturally up into the vitiated upper strata. There is little or no loss of energy and the inlet of fresh air is not left to the inefficient joiner to supply by way of ill-fitting doors and windows.

How far the design of some of the radiators with which we are familiar has adversely influenced the wider use of central heating with all its advantages, is difficult to say. The test of beauty is, however, far more incisive than we are apt to imagine, and may often give the definite lead towards the solution of many a knotty problem by way of the sensibilities, after the unaided intellect has given up the task in despair. It is in such instances as this that the architect with his broader outlook may with advantage influence the specialist. With a perfectly legitimate function to perform, it must be as fit for a beautiful expression as is the fireplace. We must, therefore, welcome with enthusiasm the beautiful models which have been designed comparatively recently. Their graceful and slender lines can give an added beauty to the finest room, as a piece of well-designed furniture, and the expensive grilles and casings wherewith we were wont to cover the abomination, with disastrous results to the circulation, can now be dispensed with. This must be reflected in an impetus towards the more general use of central heating in this country.

Time will show if this is to be so, or whether the traditions of an old country are ever to stand in the path of progress. Let no prophet risk his reputation upon the fate of the open fire, which appears to be a part and parcel of our home life. It is no doubt very stubborn and stupid of us, but we shall be forgiven if the same trait appears in other directions in the form of that spirit of firm determination that has carried the country through so many dark places. It is well to exercise the quality in maintaining an interest in many of the duller sides of building study, which can always absorb the attention of the mind that recognises that the inspiring whole of building achievement is only to be built up of practical component parts none of which can be neglected if the whole is to be completed and realised.



British Empire Exhibition: Gas Exhibit. FIG. 5.—ANTE-ROOM. (*See p.* 564.)

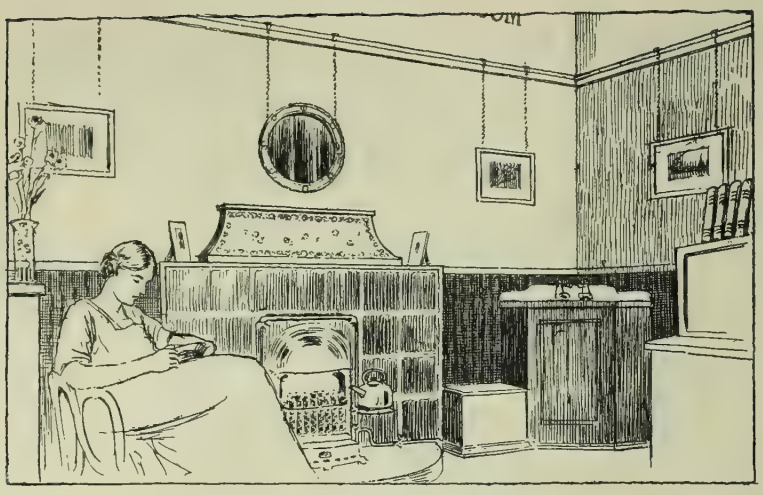


Fig. 1. STUDENT'S BED-SITTING ROOM. (*See p.* 564.)
British Empire Exhibition: Gas Exhibit.

CHEAP HEATING: WARMTH WITHOUT WASTE

BY MANNING ROBERTSON, A.R.I.B.A.

WE are often told that heating by hot air is unhealthy, that the radiant heat of the open fire is "Nature's way," and that the heat derived from radiators or hot stoves leads to stuffiness, sore throats, and ill health. But those who admire Nature's way overlook the methods adopted by Nature to prevent our winter climate from being as cold as that of central Canada or Siberia. We all know how much we (sometimes) owe to the radiant heat from the sun in summer, but why is not the winter, when the sun is virtually absent, not far colder than it is? Other countries on the same latitude suffer from a mean January temperature 70 degrees and more below ours. The answer is that Nature has blessed us with the Gulf Stream, with a storage for heat in the form of surrounding seas, and with a prevailing wind warmed by the water. In other words, Nature relies on the hot-air principle, known as convection, even more than on the direct radiant heat of the sun. There is nothing, therefore, in the stock argument about "Nature's way." It is necessary here to mention that radiators ought to be called "convectors," since their function is to warm the air by convection rather than to heat objects by direct radiation like the sun or the open fire.

How has the prejudice against warm air arisen? It is safe to say that it is due to the lack of ventilation usually associated with steam, hot water, or hot air heating, and, in addition to this fatal stagnation, the rooms are nearly always over-heated. Stagnation of the air reduces its cooling power and a feeling of oppression results which is relieved when the air is set in motion, hence the use of fans in the theatre. Within reasonable limits vitiated air in motion is preferable to motionless pure air. When sitting in front of an open fire one is ready to tolerate more draught than when sitting in a room heated by a radiator, and this is the main reason why the open fire is regarded at the healthiest form of heating.

The open fire is terribly inefficient, and a dweller in a cold country would never think of relying upon it. His objections are, (*a*) that it warms one side of him by radiation while the cold air freezes the rest of him; (*b*) that only about 25 per cent. of the available heat from the fuel is utilised. In other words, for every £1 spent on fuel for the open fire 5s. worth of heat is obtained and 15s. is wasted. This is not a good bargain.

Where, then, does this enormous quantity of heat go, and why do we not use it? Normally it goes up the flue and heats the solid brickwork of the chimney before it escapes, still hot, into the open air to warm the countryside. This applies in varying degrees to the heat from stoves, ranges, open fires, and even to gas fires. Experience shows that if a stove is placed 20 ft. away from an ordinary fireplace and connected to the flue with 5-in. sheet-iron piping, laid nearly horizontally, the heat obtained from the 20-ft. length of piping is greater than that obtained from the stove itself, and, more astonishing still, the heat of the pipe where it enters the wall is not noticeably less than where it leaves the stove. A further 20 ft. of vertical piping would, therefore, provide almost as much heat as the original length. The heating surface of an ordinary coke stove may be taken as about 7 sq. ft., while the 20 ft. leng 5-in. piping presents 26 sq. ft., up whi the hot gases have to pass. It is not, fore, astonishing that the heating pow this pipe exceeds that of the stove a equal to a very large series of hot radiators without entailing any of the The heating value of such a pipe is g when it is dull black than when it pr a bright surface.

But, it will be argued, admitting th ciency of the flue, there are obvious diffi when it comes to using it. It is unsi and the heat is concentrated and can carried to convenient points as can hot It is in heating the basement passag large houses that such horizontal flue be of the greatest service, for if a bas can be kept warm and dry the house will be free from the chill that has its in cold and damp basements; draught be warm instead of cold, and the floors rooms above will be warm—an imp point as the Romans well knew when went to so much trouble to heat their by means of flues. The basement may times be used as a further source of he placing the stove there in a small hot ber with a grating over it in the c leading to the main centre—generall staircase hall—of the house. The co supply must be admitted into the hot ch through large openings near the floor, a should be noted that even this air, befo stove has warmed it, is not unduly co cause it has been heated by the flue-pi which reference has already been made which lies mostly outside the hot cha The writer has experimented with this m and has found that the uprush of hot ai the body of the house is remarkable a the greatest value in keeping the house Where the basement is a small one ar in use the grating may not be desirab cause sound, and often the smell of co would be communicated to the floor abo

In small houses that have no baseme periments should be made in the utilisat flue heat, whether from the kitchen when the hot gases could be allowed al tive routes for summer and winter, or, still, from a stove in the main hall,



Fig. 2. MATRON'S BEDROOM. (*See p* 564).
British Empire Exhibition: Gas Exhibit.

e lighted when the house required
The main difficulties are:—
distribute the heat to different

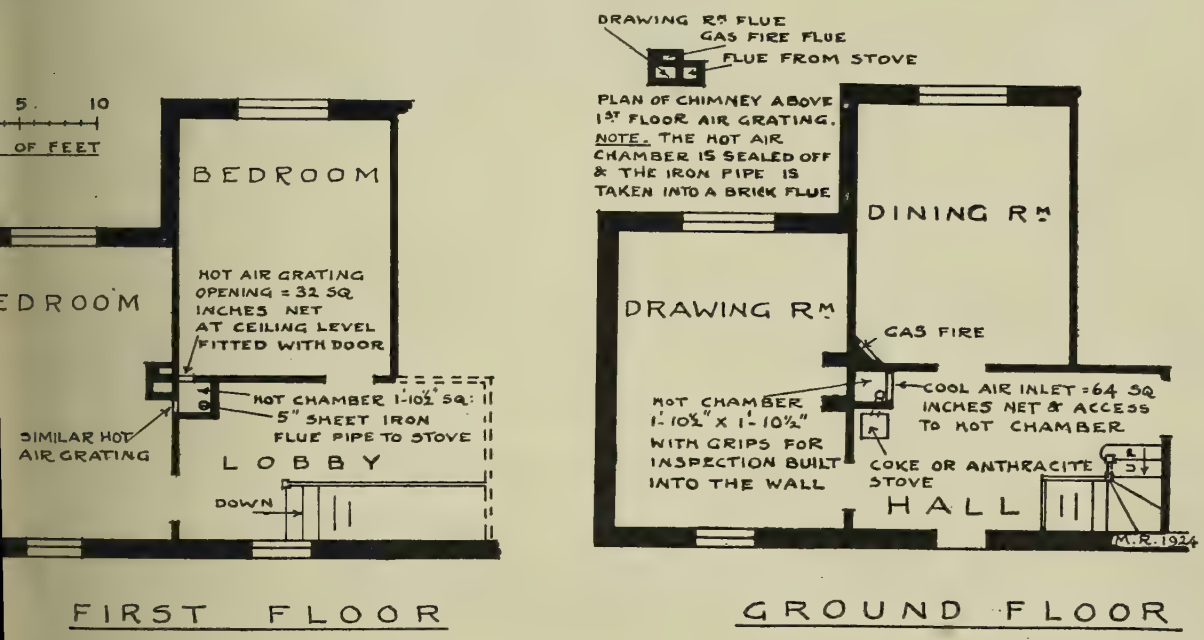
nsure against the danger of iron
ng, and to provide for renewal.
uard against the danger of fire
piping.

am illustrates a possible method
the flue heat from a stove in the
m two bedrooms over, and the
ned difficulties are met as fol-
is distributed from a hot cham-
ntains the iron flue-pipe; the cool
e hall enters through a grating
or; in the chamber it is heated
nd rises to the upper part of the
ich is sealed off; just below the
hamber hot-air gratings are fitted
ls to deliver into the bedrooms.
gs are placed near the ceilings
floor rooms, and are fitted with
rs that can be closed at will.
mber should be large enough to
to climb up in comfort for in-
renewal of pipes; an access door
laced at the bottom and hand-
grips built into the wall to facilitate examination. The hot chamber, being built of 4½-in. brick or 4-in. concrete blocks, would be safe from fire, being itself constructed like a flue, and the pipe would be clamped at intervals in the corner, delivering into an ordinary brick flue where the hot chamber ends. The hot-air inlets to the bedrooms are placed high up to tap as much flue heat as possible, and to avoid excessive communication of sound. Experience shows that a radiator or other source of heat near the ceiling is not appreciably less efficient than the same supply of heat placed low down, for the hot air in the latter case tends at once to rise to the ceiling.

The diagram, for convenience, only shows two bedrooms on the first floor, but the hot chamber could be carried up to warm rooms on the second and third floors provided that the cool air inlet was proportional to the size of the outlets. The hot chamber is here shown connected up with an ordinary chimney stack containing a common flue and a gas flue, but the chamber could contain more than one flue.

In a house fitted with the system shown in the diagram the entrance hall would require a full allowance of fresh air from outside, or the hot chamber could receive its air supply direct from the open. Warm air circulating through the rooms would permit of open windows, and air stagnation could be avoided. The attraction and associations of the open fire are deeply rooted, and such a fire contributes definitely to the appearance of comfort and warmth; if we could obtain a cheap and efficient smokeless fuel and utilise the flue heat, the objections to the open fire would be removed. The principle of the hot-air chamber would be equally applicable to the open fire, and by its aid we could save a large proportion of the 75 per cent. heat value which we normally send to waste. Even the most up-to-date and approved methods of central heating as a rule make no provision concerning the flue.

Heating is in its infancy, especially in England. Sooner or later we shall be forced to break away from the 25 per cent. efficient open fire and brick flue. These tentative notes are written in the hope that those interested will carry out experiments and publish any satisfactory results they may obtain.



FIRST FLOOR GROUND FLOOR

THE ALL-ELECTRIC HOUSE

BY AN ELECTRICAL EXPERT.

few years much progress has been commercial application of electri- purposes than lighting. Elec- ting, cooking, and for the opera- r-saving appliances in the home idly ceasing to be a novelty. The development is to be found in the s of electricity supply under- from all parts of the country un- id increase in the domestic load t is of importance that the nature pment should not be misunder- not a transitory phase, but the e definite policy now generally of encouraging domestic electri- reasons and circumstances dic- licy need not concern us here. it exists and is being steadily s simple fact is of very consider- ce to the architect and builder. gh the flexible nature of elec- fact that it can be applied with eating, ventilating, cooking, and may have been appreciated, it lly been considered feasible to these services in a single build- ing owing to the practical objection of excessive cost. Even in the comparatively few areas where cheap rates for electricity have obtained for many years the large outlay involved in respect of initial cost of the equipment has been a deterrent to complete electrification. To-day these barriers have been largely removed.

The two most important manifestations of the desire of the electricity supply industry to encourage the domestic load have been (*a*) the adoption of special tariffs, or scales of charges, whereby electricity has been made available for heating and cooking on a competitive cost basis with alternative agents, and (*b*) the introduction of hire and hire-purchase facilities for equipment of every type. The results have been so far successful that it may be justly claimed that the novelty stage is passed, and though we are still in the early days of the domestic electrification era the All-Electric house is a fully practical proposition in many electricity supply areas to-day. So far we have confined ourselves to generalities. They are necessary in order that a broad idea of the situation may be presented. We may now, however, turn to a concrete example to demonstrate that the All-Electric house can be operated not only economically but actually more cleaply than a similar dwelling on more conventional lines.

In connection with its housing scheme at Riddrie the Glasgow Corporation decided to test out practically the All-Electric house idea. Two of the standard type houses being erected were equipped throughout for electrical service. The only difference between them was that in one house a single coal fire was retained for heating the main living room, and in conjunction with this a boiler was fitted to furnish a bulk hot-water supply; the other house was completely "All-Electric." These houses, which were put into service in February, 1922, consist of a living-room, drawing-room, three bedrooms, bath and kitchenette. The cost of erection was slightly more than £1,130, and the complete electrical installation amounted to a further £80 16s. 6d., making a total of approximately £1,211. The figure of £1,130 was really the builder's estimate, the actual cost being increased slightly owing to unforeseen fluctuations in the cost of labour and materials

during construction. It is the better figure to employ, however, when arriving at the percentage cost of the electrical equipment compared with the total cost; this works out roughly at 6½ per cent.

As the result of forty-eight weeks' occupation under normal conditions of use, etc., the running expenses of the above two houses worked out as follows:—

In the All-Electric house the electrical energy consumption was 5,350 units for the total period, or 103 units per week. At the tariff in force, viz., a fixed charge of 2s. per week plus ½d. per unit used—the cost works out at £5 4s. 0d. fixed charge, £11 2s. 11d. energy charge, making a total of £16 6s. 11d. The average outlay then for lighting, heating, cooking, water heating, clothes washing, ironing, and use of all other electrical appliances was 6s. 4d. per week.

In the electric house with one coal fire the corresponding figures were: £5 4s. fixed charge, 4,166 units at ½d., £8 13s. 7d. energy charge, or a total of £13 17s. 7d. To this must be added the sum of £4 11s. for the coal used during twenty-six weeks, from the end of October to the beginning of May, which brings the total cost up to £18 8s. 7d., the average all-in figure being 7s. 1d. per week.

The above figures supply concrete testimony to the fact that electrical service is not the fabulously expensive myth of popular fancy. The actual tariff charge is, of course, an important matter. In the case quoted it is the standard rate for public supply in the Glasgow area, and this is in some respects typical of the special competitive tariffs now being introduced to encourage a greater use of electricity for all domestic purposes. It is quite a simple matter to ascertain with the aid of the consumption figures given what the cost would be for any rate.

It is of interest that the Riddrie estate also furnishes comparative figures for the running expenses of the type of house in question when gas and not electrical service was employed. Without going into details it will not be out of place to present the respective figures in summary form, together with other data germane to the matter. They are as follows:—

1. Riddrie "All-Electric"	£16	6	11
2. Riddrie "Part-Electric"	18	8	7
3. Riddrie "All-Gas": 26 weeks (winter) at 10/6 recorded, plus 26 weeks (summer) at 5/3, estimated	20	9	6
4. Riddrie "Part-Gas," say ditto	14	0	0
5. Kirkhill "All-Gas"	29	8	3
6. Maryhill, electricity for lighting, gas for cooking, and coal for heating	18	1	10½

From the above figures, which are the records of practical experience, it is plain that electricity for domestic service is quite competitive with alternative methods even on the basis of running cost.

The All-Electric houses dealt with, it may be noted, were simply standard dwellings equipped for electrical service, the cost of the installation and apparatus being in the nature of an extra to the actual outlay on the building. Had they been designed primarily with a view to electrical operation the design could have been materially modified and an appreciable saving effected in the building cost by the elimination of grates, chimney breasts, and flues which, with electric heating, are superfluous. In connection with a number of All-Electric houses that have been erected in various parts of the country where this has been done, it has been found that the saving in constructional outlay more than compensates for the cost of the whole of the electrical equipment. Due to this the All-Electric house is actually no more expensive to build and equip than its counterpart on more conventional lines; it may be appreciably cheaper. In addition to saving money the elimination of chimney breasts increases the available space in a room and allows much greater scope in respect of the interior arrangements.

Though actually the fully All-Elec proved slightly the more economic case of the Riddrie houses, this i form generally advocated. Conser domestic matters is extraordinarily s the last thing the British housewif sacrifice to the demands of scientific ment is the coal fire. Without it th thing to poke, while the strong psy effect of an open grate fire cannot As a concession to these two fac usually considered desirable that on should be retained even in an othe Electric house. Where this is don a good case also for retention of pressure saddle-back boiler for bulk hot-water supply, and the combi these two is, as a rule, to be reco The single coal fire with high-press is best installed in the main living provision should be made for electric supply during the summer months auxiliary supply in the winter.

Hitherto most of the activity in the erection of All-Electric houses municipal. The private builder and tect, except in one or two isolated ca not tackled the problem on a comp scale. But the time is at hand whe be anticipated that they will find it to do so. Electric lighting has long cognised as a commercial asset to Electric cooking and heating are re much greater ones. The former a preparation of food to be carried on minimum of trouble and with abs tainty of uniformly good results, latter enjoys all the advantages of co associated with electric light applied It is not, however, the intention an eulogy of electricity or to dec methods which are of proved value. cause electricity widens the scope for tect in the application of his art t that electrical service is the best and mical one at least deserves investiga

THE GAS HEATING EXHIBIT AT WEMBLEY

ARCHITECTS and builders are constantly confronted with problems regarding lighting, cooking, heating, water heating and other domestic services for cottages, residences and other buildings with which they are dealing. At the Gas Exhibit at Wembley modern methods of treatment of all these matters are very clearly and practically demonstrated, regarding which details of a general character have already appeared in *The Builder*. In our special Heating and Ventilating Number, however, we feel that it will be of interest if we set out some further particulars regarding that portion of the exhibit which specially demonstrates what gas can do—and is doing—in the direction of heating, and also particulars of an interesting system of ventilation.

For a number of years past architects, heating engineers and builders have been informed by those connected with the gas industry that great improvements have been effected in gas fires, and in the general science of gas heating. They have also seen many illustrations of gas fires of modern type, and have naturally had actual experience of a number fitted in residences and other buildings with which they have been dealing, or have come in contact. At the Wembley Gas Exhibit, however, it has for the first time become possible fully to realise the advance which has been made in the direction of the provisions of a comprehensive range of gas fires of plain and "period" designs, in a number of attractive finishes.

The Gas Fires in the Main Hall and Lounge.

Apart from some heating exhibits of a special character which are referred to later, all the gas fires are shown in the main hall and lounge and the ante-room. In this part of the exhibit there are no less than 23 "named" designs of gas fires of various sizes, in which are included examples of the following periods or schools:—Georgian, Adam, Early Victorian, Italian, Tudor, Jacobean and Modern. These designs are carried out in one or other of the following finishes:—Plain black, oxy-silver, satin-brass, oxy-copper, antique gold, copper - bronze, stippled grey, armour bright, copper, and dull silver. An important feature of the exhibit is the very carefully chosen setting of rooms and fireplaces, in and against which the fires are fitted, and by an inspection of which it can be realised that one can now obtain a gas fire to harmonise with any surroundings likely to be met with in residences or buildings, either ancient or modern in character.

The Model Rooms.

The series of model rooms—some of which are descriptive of the "Seven Ages of Woman," to which reference has been made from time to time in the public Press—contains some fine examples of gas fires, those installed in the children's playroom and the student's bed-sitting room each being equipped with a very useful gas ring of neat design and appearance. A selection from some pen-and-ink drawings by Mr. T. R. Davison will convey a far better impression of these model rooms, and the gas fires fitted therein, than could possibly be conveyed by any descriptive matter. Figs. 1 and 2 are drawings of two of the rooms in the "Seven Ages of Woman" series, Fig. 1 being the student's bed-sitting room, in which may be noted the "Winchester" gas fire in oxy-copper finish, with a boiling burner attachment, and a small cupboard at the side of the fireplace in which the small "coin in the slot" meter is fixed. Fig. 2 is the "matron's" bedroom, with an "Adam" gas fire of satin-brass finish. Figs. 3 and 4 are illustrations of a pair of really fine rooms wi priate gas fires, which undoubtedly enh general effect of the decorative scheme rooms are not included in the "Seven Woman" Tableaux, Fig. 3 being repre of a doctor's consulting room with a "C gas fire of oxy-silver finish, and Fig. 4 a man's room with a "Westminster" g copper-bronze finish. The Ante-room, the Main Hall and Lounge and The Science and Industrial Hall, contains of the old dog grate type, known, resp as the "Lansdowne" and the "R These fires are fitted to a fine pair o fireplaces and mantelpieces of Adan Fig. 5 illustrates the "Raphael" fire, a dull silver finish. The remainin heating features to be seen in the Main the three pylons which are erected centre, placed at such distances apart a satisfactory balanced effect.

The Three Pylons.

These pylons are hexagonal in shape six gas fires which are fitted to eac against backings of marble and tilings designs and colourings, in order that t mind can decide the type of fire which best in any situation which is to be d With a view to catering for the kind of fireplace which is usually found in ho pied by those whose means are limited call for fires of absolutely plain design finish, one of the pylons contains a s this type of gas fire. They are quite in to purchase, and many are hired at l from a number of gas undertaking gives an impression of a general view o of the Main Hall and Lounge, some of rooms and two of the pylons. It is

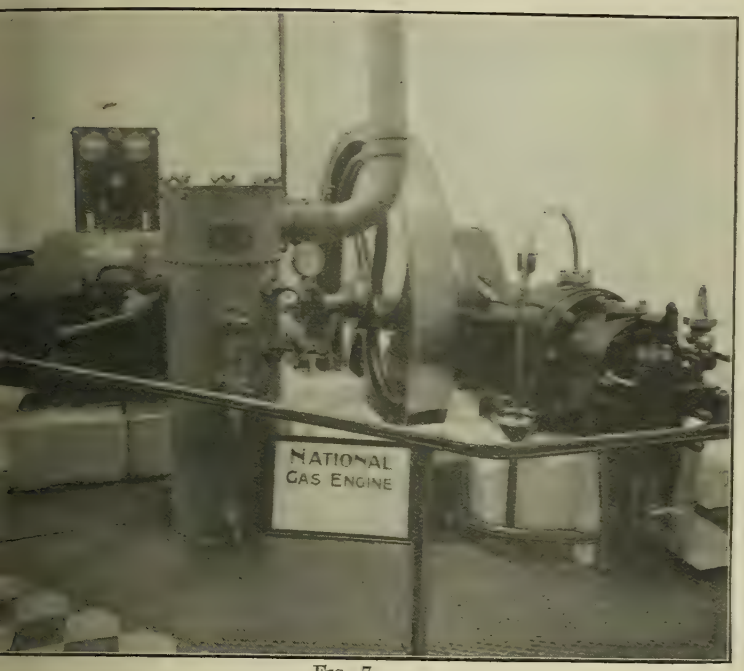


FIG. 7

rt of the general lighting of the Main
ined from the artistic semi-indirect
ich are superimposed above the
add tone to their design. Clusters
inverted burners—of the pattern
the London County Council for
gas more than 100 of their schools—

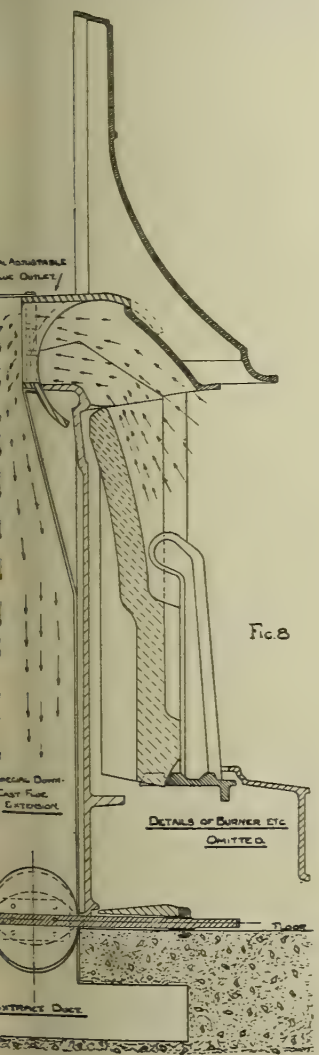


FIG. 8

are fitted within the bowls. The lighting fittings and shades in the model rooms are also worth more than a passing glance; a feature of special interest to visitors being the ease with which the gas burners may be switched on and off.

Methods of Fixing Gas Fires to Old-fashioned Grates.

An interesting exhibit to the architect or builder may be seen in what is known as the Domestic Science and Industrial Hall, where a number of examples of old-fashioned hob and register coal grates are shown, with suggested methods of treating them with asbestone or sheet iron backings, against which gas fires are fitted. Such grates have always presented difficulties to those who have wished to instal gas fires, but it is here clearly demonstrated that with proper treatment very pleasing results are obtainable. Two instructive methods of installing the rapidly increasing "built-in" gas fire complete with mantle, are also shown here, one of which has the "Economy Flue" constructed in concrete blocks, and the other in brickwork, in the thickness of the wall.

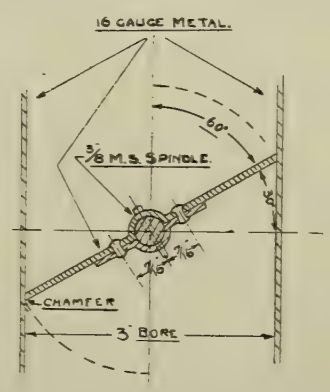
The foregoing is a short account of the principal features of the exhibit as far as gas fires are concerned, and though much more might be written on the subject, it is necessary to pass to a matter which is of particular interest to ventilating engineers, and to those who desire to generate electricity on their own premises.

The Ventilating System.

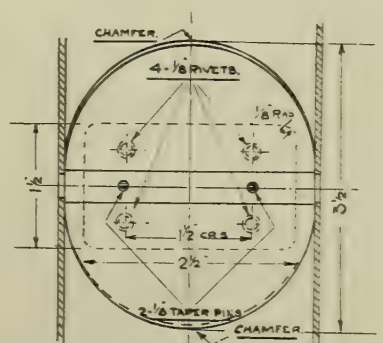
When passing through any portion of the Gas Exhibit the casual visitor does not realise that the building is only a shell of walls erected within another building—the Palace of Industry—and that windows, ventilators, flues and chimneys of the kind which are ordinarily met with could not readily be introduced into the structure. Yet, if the exhibit was to be a real example of what the gas industry can accomplish, it is obvious that gas apparatus of all kinds, including those for lighting, cooking, water heating, heating and—last, but by no means least—those for industrial processes, must be shown burning, many of them at one and the same time, in a fairly confined space. It was also necessary to make suitable arrangements for dealing with the vitiated air arising from the breaths and bodies of crowds of visitors. It was evident, therefore, that a system of ventilation must be carefully thought out. That this was successfully accomplished must be admitted by anyone who has seen the gas lights, fires, water-heaters and cookers burning, and the industrial processes, such as sweet making, aluminium melting, pottery firing, and metal cutting simultaneously carried on.

The Gas-Engine Generating Set.

The necessary power for the system is provided by a gas engine which has run without a break during the "open" hours ever since the Exhibition started. The power unit consists of one of the National Gas Engine Company's "P.E." type gas engines fitted with a specially heavy wheel for electric driving, and giving a maximum load of 20 B.H.P. on town gas. This engine is coupled direct by means of a flexible coupling to a current generator, having an output of 12 k.w. at 220 volts. This is a compound wound machine, of the standard type manufactured by the Lancashire Dynamo and Motor Company, Ltd. The speed of the set is 275 revolutions per minute. The switch-board is a two-panelled board of enamelled slate, having floor and wall supports. The generator panel is fitted with a 6 in. dial, moving coil ammeter, and a 6 in. dial, moving coil voltmeter. It has a back-of-board shunt field regulator, double pole switch, and two single pole fuses. The second panel is a feeder panel, arranged for four feeders, each being controlled by a double pole switch and two single pole fuses. The complete installation makes a compact and efficient generating unit, specially suitable for cinemas, and various industries where a fairly large supply of electricity is required at a cheap rate. The hourly gas consumption of the engine is 10,000 B.Th.U. per B.H.P. at full load (say, 20 cubic ft.), and the consumption necessary to produce each k.w. hour at the full output of the generator is approximately 16,000 B.Th.U. (say, 32 cubic ft.), by which, with gas for power purposes at 6½d. per therm (some gas undertakings sell it at less than this) electricity may be generated at about 1d. per unit. The engine starts up easily, and runs satisfactorily under all conditions of load, and the set needs practically no attention. Fig. 7 is a photograph of the complete set, including a waste heat boiler, in which steam is raised by the exhaust gases from the engine.



FRONT SECTIONAL ELEVATION REGULATING VALVE. SHOWN CLOSED.



SIDE ELEVATION OF REGULATING VALVE. SHOWN OPEN. SPINDLE OMITTED.

FIG 9.

The Intake and Extract Fans and Ducts.

The ventilation is carried out by two separate systems, one of which supplies fresh air, whilst the other exhausts the vitiated air, in addition to the products of combustion from the gas apparatus and the vapours, &c., from the various manufacturing processes. The whole of the fresh air is supplied by one centrally-situated motor driven fan of specially light construction, the air being distributed by means of a system of sheet steel ducts run for the full length of the building under the two platforms between the main hall and the Industrial and Domestic Science Hall. This fresh air fan is driven by a 2' h.p. motor and is capable of providing 500,000 cu. ft. of air per hour.

The exhaust system consists of four direct coupled motor-driven extract fans, which are installed in four fan chambers, situated in suitable positions in the exhibit. These fan chambers are made air-tight and the various exhaust ducts are connected to them. In each case the extract fan creates a suction in the chamber, thus pulling products of combustion, vapours and vitiated air into the chamber; they are then picked up by the fan and discharged upwards through a vertical discharge duct which passes up through the main roof of the Palace of Industry. The general extract ventilation ducts are erected over the plaster ceiling of the exhibit, exhaust gratings being provided in the ceilings of the various rooms.

The removal ducts for the products of combustion from the gas fires are run underneath the various rooms and the pylons, the usual flue outlet at the back of each stove having a short downward flue carried into these ducts. A small butterfly damper or valve is provided to each fire, for adjusting the strength of the pull to the degree which is necessary for the satisfactory removal of the products of combustion from the burning gas, and to create an additional ventilating effect through the canopy of the fire. Fig. 8 illustrates the method by which the products of combustion from each gas fire, and the moving air, are conveyed downwards into the extract duct, and Fig. 9 contains details of the butterfly valve. The four exhaust fans are together capable of dealing with 80,000 cu. ft. of air per minute—nearly five million ft. per hour.

The products and vapours given off from the various manufacturing exhibits are co means of galvanised sheet steel hood which is situated over each piece of ap and these hoods are connected by branch pipes to an underground duct, in turn, connected to a separate powerful exhaust fan situated in one chambers. This fan is capable of 300,000 cubic ft. of air per hour.

The ventilating installation was ca by Messrs. J. Jeffreys & Co., Ltd., He Ventilating Engineers, Barrons-place, road, S.E., and is of considerable valu dication of a method of heating by ga other use of other gas apparatus, inclu tory appliances, in premises where n upwards flues, are possible or permis where some kind of pressure system w cast flues is considered necessary.

In conclusion, it is not too much t the Gas Exhibit as a whole is a strikin of the fact that utility and beauty ca bined without detriment to either, practical and utilitarian matters nee unaccompanied by artistic effects an of appearance.

GAS IN THE HOME

The following notes descriptive of the Gas Exhibit at the British Empire Exhibition are by Mr. H. Austen Hall, F.R.I.B.A., architect to the Exhibit.

The purpose of this exhibit is to present the different uses of gas for all purposes of light, heat and power, in all phases of modern life. With this object in view, the exhibit takes the form of two large halls containing model rooms in which gas lighting and heating are shown in conjunction with suitable decorations and furniture, such as would be met with in rooms for different purposes. Thus on one side there is the "Seven Ages of Woman," from nursery times to old age, in a series of rooms, by Messrs. Heal & Son. These rooms are remarkable for the freshness and variety of their treatment and the versatility that is displayed in the expression of life under different conditions. The colour schemes are studied to give variety to the general scheme, and show some entirely new settings for gas fires.

It is desirable to think in terms of gas rather than coal if a successful treatment of gas fires is to be evolved, and there are shown some excellent suggestions for the modern gas fire and its setting. The fires have been selected in the first instance, and the surrounds have been designed to harmonise with them, thus avoiding the haphazard look that sometimes occurs in a new building. A series of period rooms are provided opposite those of modern design, to which they form a contrast. These are the work of Messrs. Osborne & Co., of Grafton-street, who show the styles of decoration from Queen Anne to Early Victorian. The fireplaces are well chosen and illustrate the wide range of designs that the makers of gas fires have placed upon the market.

The inner hall is devoted to the application of gas to water heating, cooking, and many forms of industrial undertakings. The general design of the interior is on simple classical lines, with coved ceilings, the whole being painted in simple grey and gold tones, which set off th colours of the rooms around them. light is by means of three inverted bo upon pylons in the centre of the room, of flood lighting new to gas, and highly in this case. There would appear to be able possibilities in the use of standar of pendants in large rooms such as thes idea could be developed in banks and of a similar nature. The pylons als good places for the display of gas illuminated panels for advertising g purposes.

Externally, the feature is the entran which projects to correspond with work in the Palace of Industry. The de classical lines, and relies upon the la the scale rather than ornament to necessary dignity to the entrance. provided for the smoke abatement and the historical section, and also exhibits of the Sulphate of Ammonia F

MODERN INDUSTRIAL LIGHTING

The deplorably bad state of factory and workshop lighting at the present time becomes very apparent when one compares the existing general standard with that recommended by specialists in illumination. Depending on the nature of the industry and the particular department of the works, good illumination in engineering factories is indicated by a standard of 5 to 10 ft. candles on the working plane. Considering that Home Office Factory Regulations recommend a minimum illumination of from .25 to .4 candle-power (this is on the floor level, however), the average value must be appreciably less, and the vast discrepancy between good lighting and present-day practice is only too plain. There are a number of reasons for this, and much might be written concerning them. That, however, is not our intention. Rather it is desired briefly to indicate what constitutes correct illumination and its very concrete advantages to the factory or works owner. Merely by doing this, many of the more obvious faults common in existing installations will be exposed.

First we have to consider the source of light —the lamp filament. It is intensely brilliant —particularly so in the case of the modern high candle-power gas-filled lamp. Like the sun it is dazzling to look upon and must be shielded from the direct line of vision of the workers. Light is emitted in every direction, and only a relatively small proportion is delivered downwards on to the working plane in the case of a lamp freely suspended. A reflector is therefore necessary to deflect downwards the light which would otherwise be wasted in illuminating the ceiling and factory walls. If the maximum amount of light is to be concentrated on the working plane, the reflector must be designed to that end, and so must be scientifically proportioned to suit the particular type and size of lamp in conjunction with which it is to be used. We arrive, then, at the fundamental requirement of a good lighting unit—a lamp housed in a suitably designed reflector. To obviate glare the bottom half of the lamp bulb should be frosted or otherwise obscured from direct vision. Though this conception of a good lighting unit has been led up to in a somewhat elementary character, no apology is deemed necessary, since it is the keystone on which correct lighting is built up. It is also the one essential most frequently neglected. Almost any factory one cares to enter would furnish an example. Just as one cannot put new wine into old bottles without risk of disaster, so it is impossible to put modern lamps, more especially the gas-filled type, into obsolete reflectors and get correct tion. The lamp and its reflector m garded as one indivisible whole.

Comparatively recently standard lighting units have emerged, and type is now made by a number of turers. The illuminating and lig buting characteristics of these unit relied upon within the usual toleran mercial production, and it has thu possible for the illumination expert correct lighting installation to give determined quality of illumination w considerable degree of accuracy.

The installation of good lighting not of itself ensure correct illuminati unit will, for the sake of simp assumed to deliver downwards a con Actually the form of the light beam be conical nor well-defined, but th tion that it is so will help our explan the basic principle is the same in Now the intensity of the illuminati horizontal plane through the light vary with the actual distance from source. It will also vary at differ on any one horizontal plane, the tensity being in the area immedia the lighting source and diminishi goes outwards away from the cen

niform lighting is to be secured on g plane, and it is desirable in fac- workshops, apart from any addi- l lighting that may be necessary in es, that all the workpeople shall be e same quality of illumination—the vhich the lighting unit is suspended work is a matter for consideration. e case of two or more such units, they spaced apart that, with their cones erlapping, uniform illumination is the working plane, both directly lighting units and at any point te between them. Precisely the es as between two rows of lamps, ssential that a workman operating liately under but in the space be- rows of lighting units should not low on his work. This question of ghting over the working area is ntal requirement in the majority of is not necessary that the illumina- equal intensity throughout a work- nay differ in various bays to suit ments of individual classes of work. general lighting to make moving need not be of the same high s over a working area; special local ay also be required for some pur- t in any one area devoted to one work, uniform illumination is a n.

more than one way of securing uniform illumination. A small high candle-power units can be o give the same quality of light as mber of smaller units. But there ortant difference in the two cases. the number of light sources, the number of cones of light inter- th one another and producing a tensity over the area illuminated. nd machines, even the work itself, ich cases throw harsh, or black, shadows. This is usually a disadvantage. On the other hand, with a large number of light sources of lower candle-power, intense shadows will not be obtained, as the total illumination at any point is derived from many directions. Shadows will then be what are known as soft or "luminous." Even if it were possible to secure entirely shadowless illumination, it would not be advantageous to do so. Some difference in the intensity on the various surfaces of any object, such as, for example, the work itself, is necessary for its "form" to become apparent. We are now able to appraise the essential characteristics of correct illumination in factories and workshops—uniform lighting of high intensity throughout a working area by glareless light sources so arranged as to throw not harsh but luminous shadows. Reference is not here made to the lighting units, their height of suspension and spacing. They are only incidental, a means to an end—the delivery of the correct quali and quantity of light at the place where it is required. Necessarily much has been omitted that could be written on this subject, but we may add that the actual details of lighting installations may vary widely in different cases. Such details are hardly worth theorising over; they primarily concern the illuminating engineer in the application of his knowledge.

Good lighting costs money. So also does bad lighting; and the difference is small, out of all proportion to the benefits derived from the former. It has been proved by practical test that high-intensity correctly arranged lighting has a direct beneficial effect on the output of a factory. Here are some suggestive figures that can be vouched for on reliable authority. They relate to the average results obtained in the case of ten different industries. By increasing the average original lighting intensity from 2.3 to 11.2 ft. candles an increase in production of 15.5 per cent. resulted at an additional cost for lighting corresponding to a 1.9 per cent. increase in the pay-roll. Any new or improved productive machine that could offer but half as good a proposition would immediately have a vogue. The fact that correct lighting increases output is attributable to the greater ease with which it enables work to be carried on, the saving in actual time normally wasted in taking work under a lamp for inspection or measurement, and the direct stimulating effect high-intensity illumination has on the operatives, who are naturally getting fatigued towards the end of the day. There is another important factor that makes correct illumination worth while. Accidents during hours of artificial lighting occur at a far heavier rate than during the daylight periods of working. Thirty per cent. is about the measure of the increase, and this does not take into account the fact that hours of artificial lighting are far less than those of natural daylight. If the "Safety First" campaign one hears so much about means anything, it means that good factory lighting is not only justified but is a necessity in the interests of humanity.

In conclusion, the following figures, which give the minimum intensities recommended by lighting specialists for various classes of workshops will be interesting:—

Foundries—	Min. Ft. Candles.
All processes other than fine moulding and core making	5
Fine moulding and core making	10
Machine shops—	
For rough operations	6
For medium operations	9
For fine operations	12
Fitting shops—	
For rough operations	5
For medium operations	8
For fine operations	10
Drawing office	10

The above intensities are recommended as being justifiable on a strictly commercial basis.

SOME ASPECTS OF THE VENTILATION PROBLEM

ALD GRIERSON, A.M.I.E.E., lectured thern Polytechnic Institute, on this me time back.

ourse of his lecture he said the art cessful ventilation of offices, hotels, ns, theatres, workshops, and similar paces wherein human beings were, speaking, crowded together, was ne of the most difficult branches of .

building, dynamo and ship construc- ailway work, the material with which r worked was inanimate and consis- the finished products were more or ndent units. In ventilation work the ; equipment must be applied as an o a structure designed for a specific nd compromise was not infrequently Further, it had only been possible judge the result by the human senses, veryone knew, individuals varied or a very long time, indeed, certain d had the reputation of being bracing localities had had the reputation of a relaxing atmosphere, but so far logists had not been able definitely to indicate to the ventilating engineer d the fundamental difference between heric conditions in the two localities. other branches of engineering the ide was leading the applied side, ntilation it would probably be ad- engineers were leading physiologists. e ventilating engineers were prepared to supply, and to maintain in any pace, given the necessary facilities, any type of weather, from the coldest er, to a warm, humid day in summer, ere only waiting for the physiologists dise the air conditions that it was really desirable to maintain in given circumstances, in order to ensure the physical comfort and the health of the occupants. Since the majority of ventilating equipment was installed for the comfort and well-being of the human being, they might, with profit, devote a few minutes to considering it in detail from the points of view which chiefly affected the ventilating engineer.

It was a well-known fact, of course, that a steady or constant temperature could only be maintained in a mass of matter, living or dead, when the heat gained was equal to, or balanced, the heat loss, or output.

The whole problem was a particularly fascinating one, but in the short time available they must be content to accept the conclusion which a close study of the subject indicated. This was that excessive working of these heat regulating mechanisms of the body, caused by certain atmospheric conditions, produced feelings of discomfort in us in one direction or another, such as lassitude, headaches and ailments of a similar nature. Experiments showed that the rate of heat emission varied with the state of physical rest or work, and with the age of the person under test. For an adult male resting in bed it was as low as 275 B.Th.U.hr., and for the same adult walking at the rate of five miles per hour it was 3,030 B.Th.U.hr., or over ten times greater. The normal ventilation problem dealt, as a rule, with spaces in which people were at rest, or employed on light work, and the figure taken for heat emission was from 350 to 420 B.Th.Uhr., depending on the authority consulted.

The other products of combustion emitted by the human engine in the course of its run, of interest to the ventilating engineer or physiologist, were carbon-dioxide and water vapour. The volume of carbon-dioxide emitted also varied with the physical state, but in the above-mentioned conditions averaged 0.60 cu. ft. per hour. Water vapour emitted from the lungs appeared to average about 0.05 lbs. per hour, but they might rise to a value as high as 0.3 lbs. under certain circumstances.

So far they had only considered the total heat emission from the human body, but in order to be in a position to provide suitable weather by artificial means in occupied spaces, they must investigate the subject a little further in this direction, in order to ascertain, if possible, why they normally felt cheerful and fit on a bright day in spring, and depressed and feeble on a hot moist day in summer. Investigation and experience showed that the body lost or emitted heat in five ways, *i.e.*:—

Method.	B.Th.U.	% of total.
1. Rejection by waste products	7.9	1.9
2. Expired air	15.0	3.6
3. Evaporation from the lungs	31.3	7.5
4. Evaporation from the skin	60.5	14.5
5. Conduction and radiation	305.3	72.5
Total	420.0	100.0

Obviously the fourth and fifth methods, i.e., evaporation, conduction and radiation, which amounted to 87 per cent. of the total, were the most important factors, and those which were of primary importance to ventilating engineers.

The question of water vapour and relative humidity must be very briefly dealt with before they considered the question of the loss of heat by the evaporation of moisture from the skin. This was a slightly more complicated subject and was not so universally understood as the

CO_2 and heat factors of ventilation. It was, of course, a well-known fact that air was a mechanical mixture of various gases, ordinarily considered as consisting of oxygen and nitrogen, but also containing a small percentage of CO_2 and moisture or water vapour, termed humidity.

The weight of water vapour that a given space would contain depended entirely on the temperature and was entirely independent of the presence of air, except as regarded the effect of the temperature of the air. Relative humidity was the ratio of the weight of water vapour contained in a given space, to the weight of water vapour that the same space was capable of containing, when fully saturated at the same temperature.

Dew point was the temperature at which saturation was obtained for a given weight of water vapour, or the point when any reduction in temperature would cause condensation of some of the water vapour. Common examples were steamy windows and mirrors, tumblers containing cold drinks, slate shelves or walls, bathroom tiles, &c.

Any given amount of moisture had some temperature at which saturation will occur, just as any given quantity of water had a definite limited capacity to absorb alum. Any further lowering of the temperature will cause condensation. This—then—will be its dew point.

It was an established physical fact that heat must be absorbed when water or any liquid was evaporated, i.e., was converted or transformed from the liquid to the gaseous state; the commonest examples probably being those of a kettle, or saucepan, boiling dry, and the ammonia refrigerating machine. Contrary to the opinion commonly held, however, evaporation took place at all normal temperatures down to freezing-point. Those who served in the East during the war would recall the unglazed earthenware pots which, if filled with water and placed in a draughty place, rapidly cooled the contents, due to the evaporation of the moisture which soaked through the earthenware. In order, therefore, to ascertain the wet bulb temperature of the air they covered the bulb of an ordinary mercury thermometer with a clean, soft cloth, and arranged to maintain it in a moistened condition. A thermometer used in this manner would give a depressed or lower bulb reading than that of the dry bulb thermometer, in proportion to rate of evaporation from the wet surface of the cloth. The depression was a measure of the amount of moisture in the air. This depressed reading corresponded to the temperature at which the air would normally saturate, without any change in its heat content.

Dr. E. Vernon Hill, of the Chicago Department of Health, had carried out a very large amount of research work on the inter-related subjects of hygiene, ventilation and physiology, in an endeavour to answer the question raised in an earlier part of the paper, *i.e.*, What was the combination of Physical, Chemical and Physiological conditions of the air that produced a bracing or a relaxing climate or atmosphere?

One of Dr. Hill's earliest experiments was to obtain figures for the heat emitted by the human body, by evaporation, and also by conduction and radiation under varying conditions of relative humidity, but with a fixed wet bulb temperature.

Experiments on students and staff by Dr. Hill showed that a constant wet bulb of 56 deg. Fahr. gave general satisfaction for an average person in a state of physical rest and with the air practically motionless. Provision was made for increased heat emission caused by varying conditions of work by a slight alteration in the wet bulb temperature.

Conversely, as the air motion increased, it was found necessary slightly to increase the temperature of the wet bulb if conditions of comfort were to be maintained. These results were collected and were shown in the form of curves in the graph. Obviously, if it were found by experiment that these curves represented comfortable and healthy conditions, it was possible to evolve a method whereby the air conditions existing in any room could be compared with the standard conditions, and the variation, therefore, could be figured as a percentage error of the ideal.

Such a scheme had been worked out by Dr. Hill, and was termed the Synthetic Air Chart. This chart was divided into seven main columns, the figures for the first five being obtained by direct test, and for the remainder by calculation from observed results. The last column was the summary of the test, and showed the comparison of the results obtained, expressed as percentages of the ideal. The base lines of each of the columns represented 100 per cent. ideal conditions for the six main factors of the air, as they were known to-day, *i.e.*, it presupposed the most desirable relation of wet bulb to air motion; air entirely free from dust particles visible under a moderate power microscope, from bacteria and objectionable odours, unlimited in quantity and evenly distributed. The other extreme was at the top of the chart, and represented conditions that were so unsatisfactory that life would be maintained with difficulty, or would cease to exist. Perfect conditions were 100 per cent., and extreme conditions were zero. The eighth column was the summary of the others, and was completed by adding together the percentage penalisation obtained from the other columns and deducting the total from 100.

A comfortable, healthy room should show 95 to 100 per cent.; 90 per cent. was fairly good, 85 per cent. was only fair, and if the air condition showed only 80 per cent. immediate action was called for. If a 95 per cent. standard could be obtained without mechanical equipment, then there was no object in laying out capital on the installation of plant.

On the other hand, if an upward or downward fan system will produce the same result in a given building, when tested on the basis indicated by the Synthetic Air Chart, the system to be adopted would be decided on a financial and a convenience basis. Dust determination, with scientific accuracy was a matter of some difficulty and research. One method in common use now was to draw a volume of air on to a sticky plate. Counting was done under a cross-ruled screen in a microscope designed for a magnification of fifty diameters.

The determination of common aerabic bacteria, found in the air of rooms, was made by exposing standard 4 in. agar Petric plates in accordance with standard conditions. The plates were then incubated for 24 hours at room temperature, and the colony count was then made at the end of this period.

The investigation of odours was rather a difficult matter, since the only known method involved the human factor. Dr. Hill had analysed odours into nine different types, viz.:—

Aetherial, such as given off by fruits. Aromatic, such as camphor, citron and resinous substances. Fragrant, as of flowers and perfumes. Ambrosial, typified by amber, musk and bodily odours. Garlic, as found in onions, garlic, sulphur. Burning, roasted coffee, tobacco, smoke benzol, plenol. Goat, typical of this animal, by caproic or caprylic acid found in the sweat. Repulsive, given off by many narcotic plants or acanthus. Nauseous, or fetid odours from certain plants and from the products of putrefaction.

It might be of interest to note that the sense of smell was located in the upper part of the nasal cavity and covered a small area in either nostril. Odorous substances, to be perceived, must be in gaseous form; the gas entered into solution on the moist surface of the olfactory membrane and acted chemically on the sensitive hairs of the sense cells.

Many odours were certainly objectionable but whether they were harmful it was impossible to say with our present knowledge. Experiments appeared to indicate that odours caused a constriction of the blood vessels in the skin and that in all probability they did affect the blood-supply to the brain.

For the purpose of the Synthetic Air Chart, diluted solutions of varying strength of butyric acid were used to compare the strength of the odour. Six tubes were commonly use containing fine drops and termed 75 solution. The last contained distil and was termed 100 per cent. solutio

Regarding the very controversial Natural versus Mechanical ventil lecturer said he could not do better t from Dr. Hill Robertson's Report to t Department of Health, dated 19 making tests of air conditions in any g it was essential, above all things, tha standard of measurement or comp employed in order that the result value."

If they wished to determine the p sample of water, the accuracy of a wa speed of a locomotive, they must have with which to measure it, some standar lence for comparison, in order that might grasp the true significance of th was due to the absence of such a st ventilation work in the past that much of opinion had prevailed.

It was not unusual to hear well individuals condemn mechanical venti *se*, and to insist upon natural v methods, when the latter were totally in to maintain the air conditions required other hand, not infrequently mechani ments were specified, and installed wi were unnecessary and undesirable, a perfectly satisfactory conditions could tained by the use of windows or othe methods at a much lower cost a economical maintenance.

Natural methods of ventilation n successful if applied to some classes of when the period of occupancy was s ratio of window area to floor area l proportion of occupants to cubic spa and a clean, fresh air supply, free fr odours, and other objectionable featu be taken in through the external walls difficulty. The first step after the open was probably the roof extractor, and th be of the fixed or rotary type, fitted w vanes. In a report by the U.S.A. B Standards on some fifty 16 in. ventila conclusion was reached that no genera ment could be made as to the relative r rotary and stationary or mushroo stationary ventilators. The perf entirely depended on the particular n

The next step was probably the ve radiator, in which provision was made circulation of outside air through a radiator (which was really a convecto flue type, placed directly in the occupi and connected to the outside air by a air duct.

Very few grids had an effective area e 50 per cent. of the gross area obtained l plying gross length and gross width. through the cold air duct seldom excee per second or 240 ft. per minute. advantages of a system of this ty obvious, *i.e.*, dust and dirt collected be radiators, risk of forcing and crac radiator, air supply might not be sati variation in operation due to the effect and the difficulty of providing adequa for moistening the air.

The lecturer, after dealing with seve points, was accorded a vote of thanks, by Mr. T. P. Bennett, F.R.I.B.A.

Department of Overseas Trade

The Commercial Counsellor to th Legation, who will be returning to Ch in November, will be in attendanc Department of Overseas Trade from O to October 31 inclusive, for the purpos viewing British manufacturers and r interested in export trade to China. S views will only be given by appointme applications, quoting the reference 5 should be addressed to the Comptrolle Department of Overseas Trade, 35, O street, Westminster, S.W.1.

ELECTRIC HEATING

WITH SPECIAL REFERENCE TO CHURCH HEATING

tric heating of large buildings is a
t usually receives but scant con-
more often than not, none at all.
that electricity for this purpose is
to be quite out of the question is
and, apparently, even on the most
mination, so well founded that it
little temerity to challenge it. But
ng to extremes, it may be safely
electric heating, due to certain
ics, can and naturally does in many
ete commercially with heating by
aseous fuels. Electricity is to-day
ng used for heating theatres, cinemas,
hools and dwelling houses.

factor that makes it possible for
ting to be commercially applied to
es as these is that the heat can be
actly at the spot where it is required
exact amount necessary. If in any
om or building a certain quantity of
ired for warming purposes, all that
to install an electric heater of the
apacity. When heat is needed a
he switch produces it; when no
ted another touch on the switch
at supply is cut off. By suitable
rol any required regulation of the
y can be secured. There is no
waste, and when the bill for
comes to be settled one pays only
fully employed; incidental expenses
to maintenance and repairs, which
quite moderate.

od of applying electric heat varies
the purpose for which it is required.
applied by radiation, convection or
In dwelling houses, occasional, or
, heating is the sphere in which
ting shows to greatest advantage.
are only used now and then at most
or two at a time can be heated
tage by portable electric radiators,
be carried from room to room and
n and off just as required. In
here artificial heating is normally
d for about half an hour in the
d evening it is particularly con-
d economical. A well designed
iator gives out at least 80 per
heat as radiation and the com-
t of this form of heat is experi-
ost immediately the radiator is
. and there is no need to wait until
of the room is warmed before the
comfort of artificial heating is obtained. In large mansions an excellent combination can be effected by utilising a solid or gaseous fired central heating installation to maintain a general temperature throughout the building of 55 deg. F.—60 deg. F., electric radiators being used to top-up the temperature to any degree required to meet the varying conditions from day to day. It is, however, self-evident that every heating proposition will have its own special conditions, and it is essential to consider these when planning the application of electric heat. Let us illustrate this by reference to a special problem—church heating.

Church heating is a difficult proposition at any time, and at first sight electric heating for this purpose might appear quite impossible. Probably, in the ordinary way, it would be dismissed without serious consideration. But so far from being an impossible proposition there are definite factors favouring the use of electricity for this purpose. First the character of the demand from the electricity supply point of view is good. The maximum load occurs on Sundays when most of the generating plant is usually idle; the amount of energy required is large; the demand is not of a highly fluctuating nature, and is continuous over long periods; and most important of all, possibly, it does not overlap the peak, or time of maximum demand on the generating station, to any considerable extent. Consequently, it is possible for the supply undertaking to sell electricity at a profit, for such a purpose as church heating, at a very low rate. A half-penny or three-farthings a unit would quite probably be adequate and, in fact, rates as low as this are actually obtainable in a number of supply areas to-day. Naturally this factor has an important bearing on the cost of heating by electricity.

The greatest advantage of electricity, however, is the method of its application. It delivers just the right amount of heat exactly where it is required without unnecessary waste. The object of church heating is to provide comfortable conditions for the congregation during the service, and to fulfil this purpose artificial heat must be distributed uniformly throughout every part. A system that has received the hall-mark of success in practical application is the provision of electric foot warmers to every seat in the building. Every individual in the congregation then has his or her own supply of artificial heat. Conditions of comfort are at a maximum, warm feet being essential in this connection. By suitably proportioning the loading of the foot warmers over or under heating is avoided. Separate foot warmers are not actually provided for each individual, but run continuously the full length of the pew. Aisles, vestibules, vestry, the choir, and other parts of the church, each have their own heating installation. (There is economy here in respect of choir practice, vestry meetings, &c., when only partial heating of the church is required.) Fully to meet the heating requirements the provision of electric heaters under every pew is not sufficient. Down draught from the windows has to be avoided, and this is done by installing electric heaters of suitable loading close up under the windows. Other special features are similarly met by direct application of heat at the point where it is required.

Consider an electric heating installation on the above lines in practical use. The heating ability of the equipment would be sufficient to meet the severest conditions experienced during the year. The installation having been designed with this in view when the conditions are less severe the actual heating requirements at any time are met by suitably operating the switch controls. Much heat is necessary to warm a stone church after it has been standing empty all the week. It is necessary therefore to switch on many hours before the service is due to start, maybe some time during the preceding night. An electric time switch previously adjusted can be utilised for this purpose. Regulation of the heating can be effected at any time by suitably manipulating the switch control, and there is very little time lag in respect of the reduction or increase of heat after the controls have been operated. This permits advantage being taken of the natural heating effect of the assembled congregation for the purpose of economising electrical energy consumption.

It is not suggested that the subject of church heating electrically has in any way been exhausted by these remarks. Enough has been said, it is hoped, to indicate some of the reasons why electricity can be utilised commercially for church heating. It has been done, and has proved very satisfactory and economical in many cases. Owing to the exact nature of electricity it is possible to determine in advance what the approximate cost of heating in a year will be with a reasonable degree of accuracy. In at least one case the maximum annual cost involved by electrically heating a church has been the subject of a guarantee.

COUNTRY HOUSE PLANT

house lighting and power plants
e from the smallest units of ½ to
acity, suitable for lighting bunga-
mall houses, to plants of 25 h.p.
ecessary to meet the lighting and
irements of large mansions. The
invariably petrol-engine driven
e for the latter heavy oil or gas
the general rule. Between these
nes there exists great variety in
size, type, and choice of prime

y few exceptions a storage battery
an essential part of the equipment,
etermines the nature of the supply
rrent. The voltage, or pressure at
trical energy is generated is an
consideration. In the case of plants
supply only the lighting require-
mall houses a pressure as low as
nay be adopted with advantage.
advantage associated with high
s that they allow of thinner wires
being used for the purpose of supplying a given load, which results in economy on the initial outlay. In the case of bungalows and small isolated houses the lighting load of itself would be quite small and thin wires would, therefore, be used in the ordinary way. Generally in these circumstances 25 volts will represent the most economical pressure. There are, however, disadvantages, the chief of which, perhaps, is that as the battery voltage varies during discharge the intensity of the lighting will also fluctuate. Though this effect is negligible at the higher pressures usually employed, it may become appreciable and annoying at a pressure of only 25 volts. Further, 25-volt lamps are in the nature of special types, while if at any time it is desired to use an electric iron or other domestic device, such appliance must be specially designed for this pressure; normal stock sizes could not be used. Generally then such low pressures are not to be recommended except for the smallest installations.

Many country house plants have been installed for a 50-volt supply, but though this offers some economy in initial cost there is a good deal to be said in favour of 100 volts. The latter is a standard public supply pressure, and lamps, irons, kettles and similar small appliances for this voltage are stock articles. Also the possibility of a public supply becoming available in the district should not be overlooked as it would generally in such an event be economical to take advantage of it. If the original installation is designed for 100 volts pressure little or no alteration would probably be needed to adapt it to connect to the public mains. Depending upon the actual supply voltage and nature of the supply, d.c. or a.c., lamps and other current consuming appliances might or might not have to be changed. These factors need to be taken into consideration when determining the voltage of a country house installation. In some cases, such as large installations where there are long runs of cable or

where the generating plant is situated a considerable distance from the house, a pressure of 200 volts is quite likely to be the most economical. This again is a standard public supply pressure and, the installation being large and the cable-runs long, the use of thin wires would be a factor of economic importance. It is not possible to give any definite ruling as to the best voltage for any size of installation, as local conditions enter into the matter to a considerable extent. Where, however, 25 volts is too low the factors favouring 100 volts or 200 volts should be carefully weighed.

The battery is a most important part of the equipment, but, adequately to deal with, it would occupy too much space. It is advisable, however, always to instal a battery of ample size, and it is safest to confine one's choice to the products of manufacturers of repute. Cheeseparing in respect of the outlay on the battery is generally unwise economy. A large battery worked well within its capacity will obviate much trouble, and will save expense in maintenance and renewals. A safe standard would be to instal a battery of such size that the work imposed on it will not wear out the plates under a period of ten years.

Small and medium-size generating sets up to several kilowatts employing petrol, or paraffin engines for the prime movers are available in three types, viz., automatic, semi-automatic, and non-automatic or manual operated. The completely automatic plant is arranged to start up when the load exceeds a predetermined value, and to shut down when the load falls off again without human intervention. Such units will give very satisfactory service so long as everything is all right, but there is the drawback that in the event of a fault developing skilled attention is usually required and will probably not be immediately available. The semi-automatic set which is started up by hand to charge the battery and shuts down of its own accord when the battery is fully charged is more widely used. In either case it is desirable that the automatic switchgear be as simple and reliable as it is possible to make it. Hand-operated plants are controlled throughout by the plant attendant. Skilled attention is not involved, however, as the simplicity of these sets is such that they can be left to the care of the gardener, or odd-job man, after a little instruction in their manipulation.

There is a large variety of plants of each of the above three types available, and they differ widely in respect of price. It has already been indicated that voltage and the size of battery used are two important factors affecting cost. A third is the speed at which the sets operate. Generally speaking, very high speeds allow of cheaper manufacture and, it may be added, involve greater wear and tear. But it must not be overlooked that both petrol engines and electric generators are established as reliable high-speed machines. The general tendency in American practice is to favour high speeds up to several thousand revolutions per minute, and in British practice relatively low speeds.

For medium-size plants up to, say, 10 h.p. very satisfactory service can be obtained from gas or oil-engine driven sets. The former almost presupposes the existence of an available town gas supply, as otherwise suction gas plant would be necessary, when the oil engine may be taken as the better proposition. Where a large plant is in question and skilled attention is available, however, it must be admitted that a suction gas plant gives satisfactory and economical service. Oil engines may be either of the horizontal or vertical types, and either of slow (a few hundred revolutions per minute) or comparatively high speed. The former naturally occupies greater space, but a horizontal type oil-engine direct coupled to a slow-speed generator undoubtedly represents a very sound combination likely to involve little trouble in repairs and maintenance. Belt drive to a relatively high-speed generator enables economy in initial outlay to be high-speed generators being cheaper facture—and this generally does no cate matters to any appreciable exten are a number of relatively slow spee oil engines, including types run paraffin, of reliable make available, would naturally be favoured where limited. With vertical-type engines a or belt drive may be employed.

As the capacity of the plant inc becomes more and more important provision for putting the plant in by other means than hand-startin usual method is to run the genera motor, taking power from the batt it is up to speed, when the engine co action. This, of course, is what is d automatic sets and is, in fact, quite mon feature with all types of unit as one kilowatt capacity or less owi great convenience. It involves only simple switching problem.

For large installations up to and e 25 h.p. the choice of prime movers is to include heavy crude oil engine Diesels, and suction gas plants. Us such cases skilled attention would be a and satisfactory and economical o would be influenced to a greater exten human factor.

Finally, a word as to water power. are undoubtedly quite a large number streams in this country now running which could be usefully and economica nessed to develop electrical energy lighting and power requirements of mansions, villages, and even small tow It is surprising and regrettable that advantage has not hitherto been take opportunities for cheap generation whic streams offer. The subject of water development is a very wide one and now be discussed, but it is urged t possibilities of utilising this source of should never be overlooked or neglect

WIRING SYSTEMS

In recent years the number of wiring systems has multiplied to an almost phenomenal extent. So much so, in fact, that to-day there is an undoubted embarrassment of choice. Correctly to differentiate between the special technical features of the various systems and to select one that will best meet the requirements in any particular case is specialists' work pure and simple. It is not to be undertaken without sound knowledge and wide experience; it is a function fulfilled by the electrical consulting engineer. We do not wish to be misunderstood to say that there is one best system for every job. Actually there may be half-a-dozen or more different systems, with any of which it might be possible to carry out a first-class installation in a given case. In dwelling-houses, for instance, almost any system, in the hand of a conscientious contractor and skilled workman, would give satisfactory results. On the other hand, there may be one system particularly well adapted to the special conditions of a certain installation, and therefor the best for that case. It is not always technical features that decide the choice of system. Inconspicuousness, ease of installation without damage to existing decorative or structural details, cost, and so forth, may be the determining factors. All of which remarks only go to emphasise what has been stated, that electrical installation involves specialist work, and that co-operation between the architect and the electrical engineer is essential if the best results are to be secured. Having made this point clear, we may proceed with the main purpose of this article—to present a general review of the various classes of wiring now in vogue.

Wood casing was one of the earliest systems developed, and was extensively used. It consists essentially of vulcanised rubber-insulated wires laid in grooved wood casing to which plain or ornamental wood capping was screwed, to enclose and protect the wires. Generally, the casing was run on the surface and, compared to modern surface wiring systems, was bulky and unsightly. For dry situations it constitutes a very satisfactory and quite cheap system, and it represented standard wiring practice for many years. It is to be avoided in damp situations or buildings where vermin are likely to be present. In certain respects wood casing has points of superiority over all other systems, but its two great drawbacks are its inflammable nature and inability to resist damp. The need for greater protection against mechanical damage, the chance nail, and fire, however, led to the advent of the conduit system.

Conduit Installations replaced wood casing as the standard form of wiring, more particularly for new building work, where the position of lights, switches, etc., can be determined prior to construction. In one form or another it is the most widely used system to-day. Enamelled tube conduit, the various sections of which are connected together with coupling pieces, entirely surrounds the vulcanised rubber wires, which are usually drawn into the conduit after the latter has been fixed in position. In effect, the whole of the wiring is metallically encased in every part of the installation. It is very important that the whole of the conduit be electrically continuous throughout, and that at one point it should be effectively connected to earth, as this provides a large measure of safety in the event of electrical bre Failure of the insulation will allow el to pass from the conductor to the which then becomes electrically alive. conduit is electrically continuous thr the resistance to the flow of current will be low, which will allow a su large current to pass to blow the fus particular circuit on which the fault to be. The faulty circuit will then dered dead, and the risk of electrica fire, etc., eliminated. If the resistanc path of the current flowing to earth i due to the conduit not being prope tinuous—much damage may be done currents before the fault is finally There is also the risk of shock to touching a live section of conduit. I couplings and screwed couplings are connecting the sections of conduit the latter being obviously preferable point of view of securing good co When slip couplings are used some continuity grip device is necessary joint, and this, naturally, does not le to such high-class work as screwed s duit. There are several types of con may be solid drawn, brazed, welded, split tube. Solid drawn steel cond screwed couplings represents the standard of quality. Owing to its and ease of erection, split tube con slip-on couplings has enjoyed a wide p Excellent mechanical and electrical and practical elimination of fire characteristic of conduit wiring pro ried out; where the wires are drawn the conduit is fixed the system lends

eplacement of faulty or perished

nd for cheapness, simplicity and
l electrical installation work has
ntroduction of a number of patent
tems. The post-war conditions
nded to accelerate this phase of
, with the result that to-day there
oice. Broadly, these systems may
as surface wiring systems
ided into two groups, depending
e of cables used, viz., metal-
nd cab-tyre or tough-rubber
Though classed as surface wiring
y can, of course, be run concealed
sary or desirable; an installation
r partly concealed and partly run
ace. Practically all these systems
re the same advantages, and their
racteristics are, up to a point,
re or less. It is proposed to give
f the nature and purpose of surface
ems, without going into details of
ar system.

athed surface wiring systems
f special cables and fittings. The
uctors are insulated with vulcanised
r which proofed tape is wound.
or three such cores are then
ther with a lead alloy of special
, which is put on under heavy
ressure, or other metal covering.
cation purposes, and to facilitate
up, the tapes wound round the
cores are distinctively coloured.
cables are circular, and twin and
f flat cross section. In this type
e overall diameter is kept to a
o that even when run on the wall
rface it does not constitute a dis-
such as would be likely to result
§-in. conduit were utilised in the

By suitably selecting the cable
or mouldings, round picture rails,
ables can be installed in such a
e largely invisible to casual obser-
r fixing the cables in position, neat thin metal holding clips are used at short intervals throughout the run. When erecting, these clips are first fixed in position to the walls or other convenient support by means of pins, screws or dowels. The cables are then placed in position and the clips only have to be bent over in the right way to hold the cable firmly in position. It will be readily appreciated that cables of this type, fitted in the manner described, involve the minimum of damage to existing decorations, very little or no cutting away and making good is necessary, and since the work of erection is very simple, time and expense in installation are saved. Further, the semi-flexible character of the cables allows of their being bent round corners, adjusted to cornice curves, etc., with ease. Where the cables are run in positions exposed to mechanical damage, additional protection may be afforded by steel channel sections or such-like methods. Steel channel sections are also used in some cases to support the cables carried across the ceiling, with the object of avoiding unsightly sagging between points where the cable is supported. The same characteristics of neat appearance and simplicity are aimed at in the design of the accessories, such as junction boxes, earthing devices, etc., which are necessary to complete an installation. A common form of junction box consists of a thin metal backplate fixed in the required position by a single screw, and a similar cover either fixed to the backplate by a screw or arranged simply to clip on. Jointing of wires within the box is commonly effected by means of simple porcelain-sheathed connectors. Provision is usually made to allow cables to be brought into the box at any position, thus securing complete flexibility in this respect. While the lead, or other, sheathing of the cable ensures excellent electrical continuity throughout any one run, long or small, special provision must be made for bonding at all junction points. This bonding is a point that needs special attention in any metal-sheathed surface wiring system. In some cases the junction box itself is utilised as a bonding link, in others special bonding clamps of simple designs, easily fixed, are employed. The earthing bond is also an important feature.

From this brief description some idea may be obtained of the general characteristic of metal-sheathed wiring systems, and also the advantages they possess in respect of cheap, simple and inconspicuous installation. The actual design of the accessories is the chief feature of difference between individual makes. Such systems are widely used to-day and are increasing in popularity as their intrinsic merits become better known.

Cab-tyre-sheathed and tough-rubber covered wiring systems are similar in general principle to the metal-sheathed variety, but a covering of tough rubber compound similar to that used for tyres of cabs replaces the metal sheathing. This covering possesses extraordinary resisting properties to rough treatment, and is unaffected by being exposed to paint, moisture, wet plaster, acid and chemical fumes, and such-like corrosive atmospheres. The cab-tyre cables are secured to walls by clips in a manner similar to that described when run on the surface. In common with metal-sheathed cables, they may be buried in plaster or brickwork, or run concealed. They possess the maximum of flexibility, and in addition to being widely used for all ordinary installation work, are particularly well suited, in conjunction with corrosion-proof accessories, to such situations as chemical factories, breweries and the like. As indicating the wearing properties of cab-tyre-sheathed cables, it may be mentioned that they are used with much success for hand-lamps, portable drills, and similar tools in factories.

Some patent wiring systems make special provision, by means of coloured exterior braiding over the lead-sheathing or by neat wood beading which may be stained and polished, so that the installation may be made to harmonise with any existing scheme of decoration. Very neat and inconspicuous work is thereby made possible.

GAS CONFERENCE.

Wade Deacon, presiding at the
ion of the British Commercial Gas
Conference, at Liverpool, said that
s should take the lead in attempting
ployers and employed together, with
ting up machinery for the prevention
nd lock-outs.

p of Liverpool welcomed the sugges-
expressed the hope that "Copec"
e means of giving it practical effect.
ne said, take a generation or two
d the mistake of the old economists
the labour of men on a level with
rial things. Completely human
industry would be attained when
tributed labour of brain and hand,
or led, understood not only their
ontribution as part of a great whole,
ood each other. He expressed his
oval of co-partnership, which was
e operation in the gas industry.
commended the enterprise of the
in the education of adult workers,
d the hope that part-time continua-
would become universal, and that
levelop on the lines of public schools
es.

Deacon, in thanking the Bishop,
ls had been made that there should
the industrial world. If there were
e, there must be some organisation
d settle matters of wages and
without strikes and lock-outs.
l that the Church might take some
s matter. It would be a blessing to
if the leaders of the Churches—
d Roman Catholic and Free—
about a conference between the
the employers. Unless something were done to stop the strife in industry, the country would be in a very dangerous position in a few years. Although some people deliberately fermented trouble, the great majority of employers and employed were reasonable, sensible, and honest men.

Sir Lawrence Weaver, speaking on "Art in Industry," contended that industry, as the great source of wealth, had a very substantial duty to support the fine arts as well as the applied arts. Such great buildings as Liverpool Cathedral had to be financed ultimately by industry. When they considered the devastating blight of ugliness which the industrial developments of the nineteenth century laid upon this land, the public had the right to demand something in return from the industrialists who had now learnt better things. A community got the measure of ugliness in common life that it deserved, just as it got the government it deserved. Industrial people had got to support the artist, otherwise beauty would die out of the world. The Commercial Gas Association had a clean record in that matter because they had encouraged art in their publicity campaigns. The only really entirely satisfactory piece of commercial publicity at Wembley was the gas exhibit, because it was the only piece of publicity which had entirely suppressed the individual and had simply set out to make a fair, beautiful, and persuasive picture of an industry.

Sir Lawrence went on to plead for seemliness in common things and for the kind of art that everybody could understand. Real art was no more costly than ugliness. Art was not a coating applied to things normally base and ugly; it was a character in things and not something stuck on the outside. There was no reason why all the things they employed in industry should not be seemly, decent, and pleasing.

Mr. Lawrence D. Holt, in proposing a vote of thanks to Sir Lawrence Weaver, said they must unite to fight the smoke fiend, even if they had to put themselves under a penalty. As a shipowner, he regretted that the shipowners had asked Parliament to exclude ships from the ambit of the new Smoke Abatement Bill. The reason given was that they could not impose these domestic laws on foreign ships without causing irritation. Mr. Holt contended that all the new houses which were being built by municipalities should be smokeless houses.

The Chadwick Lectures.

The Chadwick Lecture Programme for this autumn includes lectures in London on "Defective Hygiene and Child-Life," with special reference to the effect produced on growth and development of children by town dwelling and slum areas, by Dr. Lawson Dick, M.D.; "Rats," by Dr. Mark Hovell, F.R.C.S.; "Smoke," with a review of its causes, its effects on vegetation, fabrics, masonry, and metal work, and its influence on health and the death-rate, by Professor J. D. Cohen, Ph.D.; and "Ante-Natal and Post-Natal Child Physiology and Hygiene," by Dr. W. M. Feldman, M.D. Each lecture will be illustrated and among the chairmen will be Sir William Collins, Chairman of the Chadwick Trustees, Sir J. Crichton Browne and Sir Frank Baines. Further information about these lectures, which will be free to the public, may be obtained of the Secretary, Mrs. Aubrey Richardson, at the offices of the Trust, 13, Great George-street, Westminster.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

*** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Abandoned Work.

SIR,—Can you inform me whether an architect and quantity surveyor can claim the full fees for quantities upon abandoned work, in a district where it is the general practice to prepare them, if he has not actually obtained the client's instructions to prepare them, but merely to obtain tenders. If one could forsee differences of opinion, one would naturally enter into the matter in detail at the outset, but so many jobs go through without question that it becomes a habit to assume that the general public is familiar with the methods of local practice. "BITTEN."

Size of Bricks.

SIR,—I have noticed of late that many of the bricks in this part of the Midlands are slightly thicker than those obtaining before the war. The difference is very slight, amounting to little more than ¼ in. in seven courses. The opinion has been expressed in my hearing that it is due to the urgent pressure on the brick-making industry leading to rather less burning than of old. Is there anything in this suggestion, and, if so, is the quality of the brick likely seriously to suffer in consequence?

"GAUGE."

Incinerators.

SIR,—As a reader of your paper, I am taking the liberty of writing to you to see if you can help me in the matter of building an incinerator suitable for the burning of refuse from a sanatorium. They would like me to build one in an open field where there is no chance of obtaining any forced draught, and they will not go to the expense of a chimney-stack. The amount of refuse to be burnt is about three dust-bins a day, and is of a green wet nature. I thought perhaps one of your readers might know the type that proved best in the Army. JOHN GABBERTAS.

Raising of Party Wall.

SIR,—For some years before the war I was an architect and qualified as A.R.I.B.A. in 1912, and was a constant reader of *The Builder*. I am now in a difficulty regarding a question of the raising of a party wall and would be grateful if you would help me with your opinion. I am the owner of shop premises and I wish to carry out extensions at the rear of same. My neighbours have a tenement at the rear of their premises with a rain-water gutter overhanging my yard, but emptying into their yard, as per sketch (No. 1). This gutter has been in existence many years and is possibly a "right." Their tenement roof is in a very bad condition, having been grouted frequently with cement and tar, but is apparently water-tight.

Query (1) My neighbours demand that if we raise the dividing wall (which they agree is a party wall), necessitating disturbing the eaves of the tenement roof, we must re-slate the whole of both slopes of the roof and, if necessary, provide new rafters, battens, &c.; in fact, provide a new roof in place of the old one. Is this a legal demand? Is it not legally the case that we must only replace in a workmanlike manner and make water-tight the actual part of the roof which we disturb—in this case the slating at the eaves, and provide, of course, a lead gutter against the raised portion of the wall?

Query (2) If it is considered the overhanging gutter is now a "right" have my neighbours the "right" also to demand access to the gutter from my yard? or can I build a wall past the gutter (as per sketch No. 2), which would entail any attention to the gutter being given from their roof?

Query (3) My neighbours also demand that the party wall shall be raised full thickness and shall still be a party wall when completed. Have I not the right to build up for only half the thickness on my side—the raised portion being my property and not a party wall?

Query (4) Can I carry out my intention of removing the gutter and raising the party wall for half its thickness without agreeing to the unreasonable conditions imposed by my neighbours?

J. B.

Estimating Quantities.

SIR,—In estimating the quantities of bricks, breeze slabs, roof tiles, flooring, and other building materials in bulk for ordering purposes, can you inform me what allowance in each case is usually made for breakages, waste in fixing, &c., over nett superficial measurements as given in Bill of Quantities?

"QUANTITY SURVEYOR."

Brands of Timber.

[Messrs. *The Timber Trades Journal* inform us that for a number of years they have been publishing a book entitled "Shipping Marks on Timber," which should be of help to "Cautious." The latest edition is out of print, but a new edition is in course of compilation.]

Grano-paving.

[REPLY TO STUDENT.]

SIR,—The operations of beating up cement after it has once set, and of scouring the surface of granolithic cement under like circumstances, are not quite parallel. In the first case the re-used cement mortar is handled as though freshly made, and having passed through a chemical action, its efficiency is destroyed.

The purpose of scouring the surface of granolithic cement, on the other hand, is twofold—(1) to acquire thorough homogeneity through pressure, which would be impossible by hand trowelling over a fluid surface, and (2) to produce an extremely fine surface, which can be produced the better upon a mass as it approaches solidity, just as it is the harder stone that takes the better polish.

It is not a question of beating up the whole bulk of the paving, but merely a surf ment.

"INTERE

Rough Cast.

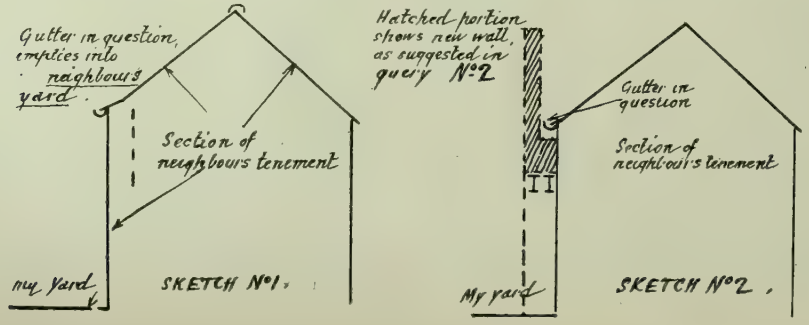
SIR,—Can any of your readers giv recipe for cement and granite rough is desired to avoid the drab grey cement tone, and the result aimed at grey colour in which the sparkle particles is a little in evidence.

"S

Building Paper.

SIR,—Can any of your readers in through your columns as to the makers o Paper Pioneer No. 1, or equal? If we shall be glad to forward samples o require.

"CONT



THE WEEK IN PARLIAMENT

WESTMINSTER, *Wed*

PARLIAMENT reassembled on Tuesd tember 30, to pass the Irish Bounda mission Bill.

Rent Restriction.

Mr. N. McLean asked whether it intention of the Government to legislation to bring the rents of pre-wa to pre-war level?

Mr. Clynes said that the whole qu Rent Restriction was receiving the cons of the Government as an urgent matte

Mr. D. G. Somerville: Will the r gentleman try to introduce legislation the cost of repairs back to what they 1914?

Mr. Clynes: That is a subject whi not be considered without the matte by the first question being fully dealt w

Local Authorities and the New

Mr. Wheatley informed Mr. Strau since the Housing (Financial Provisi was passed on August 7 last, m authorities had been in recess, and t not been sufficient time for local autl formulate completely their proposals new Act. Local authorities had been to frame their policy so as to provide tinuous house building, and, in ad submitting proposals for immediate to adopt programmes for work wh would be able to carry out effective the next two years. He would be gla the House from time to time as information as possible.

Number of Apprentices.

Mr. E. Simon asked the Minister whether he had taken the necessary have a return made at regular interv number of apprentices in the buildi and whether he would arrange for su to be published at intervals of not m month?

Mr. Wheatley said that steps were b to set up the Industrial Committees had foreshadowed in connection housing scheme and, as part of th ments, he hoped to provide for the supply of statistics as to the numbers tices.

Rebuilding in France.

A book, entitled "Five Years has recently been issued by the once areas of France. Among other thin that of the 22,900 industrial bui troyed, no fewer than 20,872 have b structed. Of 200 pits destroyed, 1 working. Of the 742,000 houses and buildings destroyed, 605,000 have b

THE BUILDING TRADE

NEW METHODS OF COTTAGE CONSTRUCTION

r to get a large number of small ilt in a short period of time a great tention is now being given to new and new methods of building. The ow is much the same as it was first post-war Government housing as launched: the need for houses has ished; the number of skilled men has not increased; there are still gh bricks being manufactured at meet the requirements of such a ramme. Since the "Addison" as abandoned owing to the height the cost of building had soared uses, perhaps the chief of which is ce of demand, have led to the price rking-class dwelling being reduced top figure of over £1,000 to some- ut £500, and it is probably the fear s will again increase when the new put in operation, and the demand exceeds the capacity of the industry materials and skilled labour is con- hich is responsible for the anxiety Government to discover alternative providing cottages.

new materials advocated steel is at receiving the most attention. We yet had an opportunity of seeing ese houses, and without further par- han the meagre information which published it is impossible to give an n them, but a proposition put for- Lord Weir deserves close attention. we can gather the houses are built frame covered on the outside with es and with wallboarding and bitu- aper inside; chimneys are of rein- ncrete, and the roof of asbestos-cement rafters. No doubt such houses could d very rapidly, providing they are not such large numbers that the steel- nnot keep pace with the demand, in se the steel house would be as diffi- btain as is the brick house, but it is that the manufacture of the units ave to be on such mass-production t the resulting standardisation would cceptable to most people.

ly other material being advocated to nt is concrete. Many thousands of ave already been built with this with the walling either monolithic form of piers-and-panels or hollow locks. The chief advantages of this are that suitable sand and coarse may be found in practically every and often on the housing site itself, iding delay in obtaining materials sport charges, and that local labour nt receiving unemployment pay or ms of relief can be quickly trained n concrete, but as to cost the saving alling does not often exceed 10 per the total cost of the house.

years ago there were some two hun- erent systems of concrete construc- advocated, and most of these were by the Ministry of Health; not more ozen or so, however, were used for cottages to any extent, and now, as f experience, many of these systems n abandoned. The systems which rived may be divided into three dis- sses, namely, walls poured *in situ*, ted at intervals around the building in with slabs, and either plain rect- locks forming a wall in two leaves vity between them or hollow blocks thickness of the wall. In the first scheme blocks in one form or an- e used almost exclusively; later, the pier-and-panel system was extensively used; monolithic walls were used in but very few districts. It seems now, however, that the order in which these methods find favour has been altered, and in schemes now in course of erection the pier-and-panel system is probably being more extensively used than blocks; concrete cottages with monolithic walls are still not being built to any great extent.

One of the chief causes of the diminution in the use of concrete blocks for large schemes is no doubt the extra cost entailed by the trade union rule which requires that the laying of concrete blocks comes under the heading of bricklaying, and that bricklayers must be employed for the work, while there is also a considerable amount of unskilled labour required for the manufacture of the blocks, carrying them away from the machines in which they are made, keeping them watered while they are curing, and carrying them back to where they are wanted for erection. This can be eliminated by purchasing the blocks already made and cured in a factory, but as factories for the manufacture of concrete blocks on a large scale are not in many parts of the country conveniently situated the cost of transporting the blocks would, in many cases, make this a more expensive procedure than making them on the site. However, thousands of cottages have been built of concrete blocks, and in nearly all cases have worked out cheaper than brick.

The pier-and-panel system was designed to eliminate the necessity of employing bricklayers and to simplify manufacture of the units. Concrete piers, usually reinforced, are erected at intervals of about 4 ft. around the building, and the spaces between them filled in with slabs measuring 4 ft. by 2 ft. high by about 3 in. thick. The piers are made with parallel grooves throughout their height on both sides, and in these are slotted tongues cast on the ends of the slabs. A cavity wall is thus formed without mortar joints, the outside being roughcast or rendered to hide the joints and to make them weatherproof. This system may be cheaper because no skilled labour is employed on the walling, and because the plain slabs required are simpler to make than the sometimes complicated forms of hollow blocks, and also because owing to their larger size fewer are wanted, but to get the cheapest building a certain amount of standardisation is necessary; the most economical use of the system is to build all the houses exactly alike, every deviation from the standardised pattern adding to the cost.

Monolithic concrete walling for cottages has not been used to any great extent in this country, although in America it is perhaps the most usual method. The Edison method of pouring whole streets of houses at a time no doubt has considerable possibilities for cheapness; but here, again, the same moulds have to be used over and over again, with the result of monotony and sameness, if it is to be put to its most economical use. This method also involves the use of hoisting and placing plant, as the whole of the houses even to the picture rails are poured from the top, which would not be economical except on very large schemes. Besides the Edison method, however, there are several other systems of monolithic wall construction which could be applied to small house erection by which one house or any number of houses could be erected with a minimum of plant. One of these methods uses sheets of galvanised iron which revolve outwards and upwards from the ground level to the top of the wall, the wall being built in courses about 2 ft. 6 in. deep. Another makes use of a mould about 3 ft. long by 2 ft. deep, so built that it travels along the wall. Another method, and one which seems to have considerable possibilities, uses moving shuttering of the type used for silos; the cost of shuttering is reduced to a minimum, as a piece of timber 15 in. high is all that is necessary to carry a wall to any height, and of a length corresponding with the length of timber. These and other similar methods permit of rapid construction with a minimum of plant, and if a mesh or similar reinforcement is used vertically throughout the wall it is possible for one man to pour a dense impervious concrete for the outside of the wall and another simultaneously to place a breeze concrete to form a porous inside wall. It is claimed that by the use of sliding shuttering the walling of any number of houses can be built in three days at a cost 25 per cent. less than brickwork.

It may be useful to sum up the methods of construction with these three methods of concrete construction:—

Concrete Blocks.—Made in a machine or wooden mould, carried away and kept moist for two weeks or so while curing, then built into the wall (usually bricklayers have to be employed). Size generally 18 in. by 9 in. by 4½ in. when solid blocks are used to form a cavity wall; smaller sizes made to follow the architect's design when necessary. Hollow blocks are usually 18 in. by 9 in. by 9 in., and smaller sizes made when necessary as with solid blocks; the hollows are usually formed so that there is a continuous flow of air throughout the wall. Cavity walls are formed with dense blocks for the outer leaf and breeze blocks for the inner leaf. Hollow blocks are generally made of an impervious concrete throughout, and the air flow through the cavity is often relied on for the prevention of condensation on the inside. Surface either roughcast or left with the blocks and joints exposed; the surface is often relieved by forming the blocks with an imitation rock face or by a ribbed surface; sometimes colour is imparted to the blocks by incorporating a colouring material with the concrete when it is mixed or by the use of coloured cement purchased from the cement manufacturers.

Pier-and-Panel System.—The piers are built *in situ* or pre-cast and erected in position after curing; in either case they are generally reinforced with three or four vertical steel rods. Panels are made on the site, usually in wooden moulds made by the contractor. No skill is required to place the panels in position, as they are simply slotted between the piers and held in position with a tongue and groove joint. In some of the systems no mortar is used. Cavity walls are used, sometimes with impervious concrete on the outside and porous slabs inside. It is necessary to render the outside surface and push the cement well into the joints between the slabs and between the slabs and the piers, in order to make the walls weatherproof. The greatest economy is obtained by a certain amount of standardisation, otherwise it may be necessary to erect piers closer together than is necessary and make the slabs in different sizes.

Monolithic Walls.—Apart from methods where whole streets are cast together, houses may be built with monolithic walls, reinforced or not as desired, without standardisation of design and without a great deal of shuttering. Climbing shuttering, travelling moulds, or moving forms may be in small units, and as no piers intervene window and door openings may be placed in any position without extra cost or cutting formwork to waste. Cavity walls are formed by placing boards or sheets of metal in position within the shuttering, and held apart by distance pieces, before the concrete is poured; as the wall gains in height

this inside shuttering and the distance pieces are raised ready for concreting the upper part of the wall. A vertical dampcourse may be inserted throughout the height of the wall, or a mesh or other reinforcement placed in position and concreted in; when such a dampcourse or mesh reinforcement is used pouring can take place simultaneously from each side of the wall, and a dense concrete used on the outside and a porous mixture on the inside to prevent condensation. Walls built on this system may be roughcast or left as they come from the shuttering. If wooden shuttering is used the surface may be broken by fixing strips of wood or blocking-pieces to the inside of the shuttering. A perfectly flat surface showing no marks of shuttering can be obtained by the use of steel shuttering. There are also many methods of treating concrete surfaces with pleasant effects. The method usually adopted, because it is the cheapest and simplest, is to wash off the film of cement which works up to the surface while the concrete is setting and exposing the aggregate of which it is made. With climbing shuttering, travelling moulds, or moving forms this is a simple matter, as the shuttering is removed from the face before the cement has finally set, and the film can be brushed from the surface with water; if the concrete has set the cement is removed from the surface by acid or by chipping with a hammer. This method of surface treatment opens up wide possibilities, as the colour may vary from white, if a white aggregate such as marble chippings and a white cement are used, to black if black marble chippings are used with a cement coloured black. Marble chippings are, of course, out of the question for cottage building, and are only mentioned to show the range of colours and shades which can be obtained by using different aggregates or combinations of aggregates; when it is remembered that only the aggregate of which the concrete is composed is seen on the surface it will be realised that cottages built of granite aggregate in a granite country will look like granite, and cottages built of concrete with a flint aggregate in a flint country will look like flint.

A number of houses have also been erected with a steel frame filled in with concrete, either poured or in the form of slabs; this system comes within the heading "Pier-and-Panel Systems" above, the only difference being that a certain amount of site work in marking concrete piers and carpenter's work in making roof trusses and floor joists are avoided. Cottages are also being erected with concrete plastered on both sides of mesh reinforcement, no shuttering being used.

From this brief survey it will be seen that the Committee now sitting has much material to work upon in the thousands of cottages which have been built of materials other than brick during the past few years, and as these various methods of building have all been produced within such a short time it is probable that in the course of its investigations other methods will be discovered with even greater possibilities. Obviously 2,500,000 houses cannot be built within the next fifteen years with brick, but in the search for new materials brick will, of course, not be overlooked. Until the outbreak of the war brick was used almost entirely for small house construction, obviously because it was the cheapest and best material then known. Present difficulties are due in large measure to the shortage of bricks and bricklayers, not to anything wrong with the method. We have been told that because they have been in use since the time of the Pharaohs it is time bricks were scrapped in favour of something new, but because a thing has been in use for a long time it does not follow that it is of no use any longer. In fact, the experience with newer forms of cottage building prove that under normal conditions there is no cheaper or better material than brick, for even when no skilled labour whatever is used in the erection of the walling of a cottage and the materials are found locally there is hardly ever more than a saving of 20 per cent. in walling. It is only the present higher wages of the bricklayer and the increased cost of bricks which enable savings to be effected by the use of other materials; it is more than probable that if similar houses were built of brick and one of the new methods under pre-war conditions of wages and prices of materials there would be no saving at all. However, under present conditions there are certainly cheaper methods of building sound, weatherproof, durable, and comfortable houses than by brick, and undoubtedly the new methods will play a large part in the housing programme when it is put in operation. It may be that an effort to increase the output of bricks while the apprentice-bricklayers are being trained under the agreement between the Government and the building industry would make it easier to build many of the new houses in brick, especially in districts near brickmaking centres where transport charges would be low.

Since the above was written, we learn that Mr. Wheatley and the members of the Committee which is considering new methods of cottage building have visited Glasgow and inspected three new systems, namely, Lord Weir's timber and steel cottage, which was erected, under factory conditions, in "three or four hours," and the price of which is given at £300 per house if over 1,000 are built on one site; a house built by Messrs. Beardmore for the Duke of Atholl, which is constructed of outer walls of steel three-eighths of an inch thick and inner walls of asbestos-cement; and a cast-stone cottage, built by Mr. John MacDonald. We learn that the members of the Committee were "greatly impressed" with these experimental houses, but no further technical details of the methods of construction have yet been published.

INDUSTRIAL PEACE ARBITRATION

In the Prime Minister's speech at Derby in connection with the proceedings at Geneva and the League of Nations there was contained this significant passage: "The thing we have to do is to outlaw war. Until the nations of the world discover some particular act which can be taken by universal consent as the test of aggression you will always have war. The Labour Party made its contribution to what that act of aggression by common consent ought to be and it is this—a refusal to submit to arbitration."

That, according to the Prime Minister, is the attitude of the Labour Party to peace in the international sense. Peace at home in industrial matters is hardly less important and this pronouncement of the Prime Minister appears equally applicable to industrial disputes. What by common consent should be deemed an act of aggression? The refusal to submit to arbitration. The Minister of Labour, in a pamphlet entitled "Labour and Industrial Peace," touches on the question of arbitration and says it is becoming more and more a practical method of settling disputes, but he says, "It seems absolutely impossible at the moment even to dream of any compulsion." That was the attitude of the Trade Union Congress towards arbitration.

The Minister of Labour, however, in the above pamphlet speaks of the value of Courts of Inquiry, as on inquiry the facts are laid before the public and "public opinion still is a tremendous force with both employers' organisations and trade unions." We do not know why the word "still" occurs in this passage, as we presume it is not intended to nationalise public opinion, but we desire to make the point that if the views expressed by the Prime Minister as being the opinion of the Labour Party on international questions are applied to industrial matters a long step will have been made towards compulsory arbitration before a dispute is followed by a lock-out or a strike.

In every dispute nowadays public opinion is invoked and there is propaganda to secure public favour. Let the public accept the easy dictum of the Prime Minister that a r submit to arbitration indicates the agg the dispute, and it will make arbitrat pulsory in fact, for the aggressor in dispute who has neglected to try me conciliation will know that it is vain f play to the gallery and obtain public su sympathy.

The public desire peace and there is ment at the moment to secure it. In p the trade unions have found that a aggression rather tends to increase their ship and they have discouraged co-pa schemes and arbitration because, as often asserted, it saps the loyalty members; but public opinion has ripene the past few years, and if public opinio force attributed to it by the Minister o it seems not too much to hope that in t the trade union which strives to adopt methods will find its membership more than can ever be the case by militant m

At any rate, the public has a simple before it in every dispute as applied Prime Minister to the nations: Wh aggressor?

NEW BUILDINGS LONDON

Vauxhall.—Work has just started erection of an extension to the Brabazon Ladies' Hostel at Vauxhall Bridge-road, The new building will be of five floors an ment, providing an additional 26 bedroom bathrooms, lavatories, a lounge and re office. Costing £12,000, including equi the work will be executed in brick on framework. Concrete floors will be la forced with B.R.C. fabric. The roof wi Mansard type facing Vauxhall Bridg covered with Westmorland slates, whilst will be a flat surface of concrete, with an a covering. The architect is Mr. Art Parsons, Abbey House, Victoria-street, whilst the contractors are Messrs. H. L. H & Sons, 16, Lewisham High-road, S.E. 1 steelwork will be supplied by Messrs. D Long & Co., Ltd., of Central Buildings,

Strand.—Quantities are ready for issue conversion of the old Villiers Cinema in street, Strand, W.C.2, into a Palais de winter gardens, &c. The plans show th tation of the existing building into a dan and winter garden, and the erection of a story building in the forecourt, facing street, to accommodate a restaurant, tion room, &c. Steel frame constructi brick filling and concrete floors will be a whilst a frontage of artificial stone will b duced. The dance hall will be cap holding 1,000 couples. The archite Messrs. Hatfield & Rowe, of 6, Marlb road, Richmond, Surrey. The quant veyor is Mr. A J. H. Sprague, 10 Holborn, W.C.2. The promoters of the are the London and Provincial Danc Ltd., Capel House, New Broad-street,

Greenwich.—Work will commence at date upon the extensions proposed to th General Hospital for South-East Lon Greenwich, S.E.10. A new block of thre providing 78 additional beds (three wa beds and six single-bed wards), ne kitchen, dining-room and classroom fo stores, &c., are to be built, together with section of a proposed nurses' home, stories, giving 78 bedrooms, to cost The buildings will be of brick with sto ings, and Mansard roof covered with A new lift will be installed in the wa and also new cooking plant. The tects are Messrs. Pite, Son & Fairwea Carteret-street, S.W.1, the quantity being Mr. A. J. Falkner, 12, Carter S.W.1.

Edgware.—Work is to proceed ne upon the erection of a row of the corner of Hale-lane and Edgwareb to the plans of F. Howkins, F.S.I., 1, parade, Golder's Green-road, N.W.1

t 16 shops, with frontages of Crow-ick, relieved by best red pressed rtland stone will also be used in the f the shop fronts. Each shop will h of 43 ft. and the frontages will vary 6 in. to 28 ft. The accommodation a sale space of 750 super feet, two two reception rooms, kitchen and l other domestic offices (on the first three bedrooms and w.c. on second floors will be of fireproof materials f will be of hand-made sand-faced centre shop facing down towards the " station will be occupied by the r Bank, Ltd., when the equipment up, designed by Messrs. Hall-Jones of Parliament Mansions, S.W.1, is

reet.—The site of 252–260, Regent- is now cleared of old buildings, and hortly begin on the large shopping h is to cover the area. With the cade as a central feature, the new have frontages on Regent-street, t, and Little Argyll-street. Sixteen e provided on these frontages, each ment below and a mezzanine floor upper floors will rise above the ned for letting purposes. On each arcade entrance—which will extend t-street to Argyll-street—will be a with a 30 ft. frontage, that on the g through to Argyll-street. Further ne the frontages to Argyll-street and ll-street. Three entrances—one in t, one in Argyll-street, and one in l-street—will serve the upper floors, an entrance hall and lift. A fourth installed inside the building. The e site will be left clear for lighting large glass dome being provided over on the ground floor. The total Regent-street is 100 ft., to Argyll- 150 ft., and to Little Argyll-street the total depth being about 150 ft. ons will be carried out in Portland construction will be on a steel frame- reproof materials. The roof will be type covered with Westmorland ns have been prepared by Mr. S. eves, 4, George-street, Hanover- . The quantities are by Mr. W. H. Furnival-street, E.C.4.

ND FOR ROAD WIDENING

r Simmons, K.B.E., Official Arbi- r the Acquisition of Land (Assess- mpensation) Act, 1919, has issued his laim by Mr. Edmond Warner against Aldermen and Councillors of Wool- rning the latter's acquisition of land side of and adjoining Footscray-road, mprising an area of about one- n acre, for the purpose of widening oad.

d is as follows: (1) The Acquiring to pay to the owner the sum of mpensation; (2) the claimant to s on this award; (3) all other costs by the respective parties.

earing of the claim, which recently at Woolwich Town Hall, Sir Arthur Town Clerk of Woolwich) appeared f the Acquiring Authority; while tanton (of Messrs. Murray, Hutchins itors, of Birchin-lane, E.C.), repre- claimant.

. Farrer, F.S.I., of Coleman-street, evidence on behalf of the claimant, d had a frontage of 170 ft. to Foots- nd a depth of 70 ft. His valuation o £552.

Sedgwick, F.S.I., district valuer for ch district, giving evidence for the uthority, valued the land at £170, at when the widening of the road ffected, Mr. Warner would be left y more than half the land. There- (Mr. Sedgwick's) opinion, the value taken would be £85.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/8	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

(For rates of wages in the Building Trade in Scotland, see page 576.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

OCTOBER 11.—**Bangor.**—ADDITIONS.—For the erection of laundry premises and disinfector house at the St. David's Hospital, Carnarvon-road, for the Bangor and Beaumaris Union. Mr. B. Evans, Clerk to the Guardians, Union Offices, St. David's Hospital.

OCTOBER 11.—**Chapel-en-le-Frith.**—PAINTING.—For outside painting at the Poor Law Institution, for the B.G. Mr. L. Jagger, Clerk to the Guardians, Union Offices.

OCTOBER 11.—**Crowland.**—RETAINING WALLS.—For the erection of a new bridge, retaining walls, &c., for the Holland C.C. Mr. Wm. A. Rogerson, County Surveyor, Sessions House, Boston.

OCTOBER 13.—**Croydon.**—COTTAGES.—Erection of 12 cottages at Beddington Sewage Farm. Beddington-lane, near Croydon, for the County Borough Council. Borough Engineer, Town Hall, Croydon. Deposit £2 2s.

OCTOBER 13.—**Croydon.**—HOUSES.—Erection of 48 houses (comprising 62 tenements) at Thornton-road, Thornton Heath, in two sections of 24 houses each, or as one tender for the whole, for the County Borough Council of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £2 for each section, or £4 for both sections.

OCTOBER 13.—**Durham.**—PAINTING.—For painting and renovation of the Cold Hesledon Council School, near Murton, and the Wheatley Hill Council School, for the E.C. Mr. A. Moir, District Clerk, District Education Office, Council School, Haswell.

OCTOBER 13.—**Hebburn.**—HOUSES.—For the erection of 37 houses on the Hedgeley-road site. Mr. T. Stuart, Clerk to the Council, 2, Coquet-street.

OCTOBER 13.—**Hull.**—VARIOUS.—For excavating, piling, concreting, and other works on the Alexandra Dock Estate of the L.N.E. Rly., for a Hull firm. Messrs. Todd & Thorp, Land of Green Ginger, Hull. Deposit £2 2s.

OCTOBER 13.—**London.**—STAIRWAYS.—For the construction of two stairways to the existing subway under the Victoria-embankment, near Westminster Bridge. Mr. J. Bird, Clerk of the L.C.C. Deposit £3.

OCTOBER 13.—**Merthyr Tydfil.**—EXTENSION.—For the extension of No. 6 Female Ward at the Infirmary. Mr. F. T. James, Clerk, Union Offices, High-street.

OCTOBER 13.—**Shrewsbury.**—ENGINEERING WORK, ALTERATIONS, PAINTING, &C.—(1) Engineering work, including heating, hot and cold water supply work, re-setting two Cornish boilers, with all new pipework, and the provision of an electric lighting plant, and X-ray apparatus and laundry appliances, at the Berrington Hospital at Cross Houses, near Shrewsbury. (2) Alterations to the buildings at the Hospital. (3) Painting and decorating at the Hospital, for the Guardians of the Atcham Union. Messrs. Henry Lea & Son, consulting engineers, 1, Newhall-street, Birmingham, for quantities of engineering; and Mr. G. W. Deakin, architect, 22, Castle-street, Shrewsbury, for quantities for alterations, and for painting and decorating. Deposit £3 3s. for each set.

OCTOBER 13.—**Urmston.**—PAINTING.—For painting the exterior of 52 houses on the Golden Hill Estate. Mr. J. Heath, Surveyor, Council Offices.

OCTOBER 13.—**Worsborough.**—HOUSING.—For various trades in connection with the erection and completion of 16 houses at Furnace-yard, Worsborough Bridge, for the U.D.C. Mr. Alfd. Clegg, Clerk to the Council, 31, Regent-street, Barnsley. Deposit £3 3s.

OCTOBER 14.—**Cardiff.**—SCHOOL.—For erection of an elementary school on the Tank Field, Mynachdy. Mr. J. J. Jackson, Director of Education, City Hall. Deposit £2 2s.

OCTOBER 14.—**Glasgow.**—VARIOUS WORKS.—For various works required in connection with the proposed erection of a gate lodge in Dumbreck-road, at Bellahouston Park, viz., excavator, brick and mason, carpenter, joiner, glazier, and ironmongery, slater, plumber, plaster, painter. Mr. J. Lindsay, Town Clerk, City Chambers.

OCTOBER 14.—**Guernsey.**—HOUSES.—Erection of 40 houses in Collings-road, and 10 or 12 houses at Sausmarez Mill, St. Martin's, for the States Committee for Homes for Workers, States of Guernsey. States Office, Guernsey, or at the office of Mr. Sydney Newcombe, architect, Greve d'Azette, Jersey.

OCTOBER 14.—**London, E.2.**—FLOORING.—Laying of composite floors at the Children's Homes, High-road, Leytonstone, for the Bethnal Green Board of Guardians. Mr. C. Faulkner Jones, Clerk to the Guardians, Administrative Offices, Bishop's-road, Bethnal Green, E.2. any week day between the hours of 10 a.m. and 12 (noon), and 2 to 4 p.m., Saturdays excepted. Deposit £2.

OCTOBER 15.—**Aldershot.**—WORKS CONTRACT FOR REPAIRS AND MATERIALS.—Works contract from October 24, 1924, at the Blackdown and Deepcut Station. Commanding Royal Engineer, Royal Engineer Office, Marlborough Lines, North Aldershot, Hants.

OCTOBER 15.—**Chorley.**—HOUSES.—For the erection of 60 houses on the Highfield Estate, for the Borough. Mr. Jno. Mills, Town Clerk. Deposit £2 2s.

OCTOBER 15.—**Glamorgan Agricultural Committee.**—VARIOUS.—For erection of (*a*) outbuildings at Tirbach, Aberaman, and (*b*) alterations, repairs and painting at St-y-Nyll. Mr. T. Mansel Franklen, Clerk, County Hall, Cardiff.

OCTOBER 15.—**Ilkley.**—HOUSES.—For erection of 24 houses on a site abutting upon Leeds-road, for the U.D.C. Mr. F. S. Eckersley, Clerk of the Council, Town Hall.

OCTOBER 15.—**Wath-upon-Dearne.**—BUNGALOW.—For erection of a bungalow, for the District Light Railways Joint Committee. Mr. J. Ledger Hawksworth, clerk, Station-road, Bolton-upon-Dearne.

✱OCTOBER 15.—**Wrexham.**—HOUSES.—Erection of an additional 56 houses in groups of 10, 20, and 26 houses on the Acton Park Housing Estate, for the Town Council of Wrexham. Messrs. Lockwood, Abercrombie & Saxon, Cathedral Chambers, St. Werburgh-street, Chester. Deposit £2.

OCTOBER 15.—**Ynysybwl.**—ALTERATIONS.—For alterations at the Lady Windsor Workmen's Hall and Institute, and for redecoration of the premises. Messrs. Thomas and Morgan & Partners, architects and surveyors, 23, Gelliwastad-road, Pontypridd.

OCTOBER 16.—**Brighton.**—HOUSES.—Erection of 11 houses in Hereford-street, Brighton, for the County Borough Council of Brighton. Borough Surveyor, Town Hall, Brighton. Deposit £1.

OCTOBER 16.—**Cardiff.**—HOUSES.—For erection of 94 houses at Ely, for City Council. Mr. C. G. Brown, Town Clerk, City Hall. Deposit £2 2s.

OCTOBER 16.—**Ely.**—HOUSES.—For the erection of 94 houses, for the Cardiff City Council. Mr. C. G. Brown, Town Clerk, City Hall, Cardiff. Deposit £2 2s.

✱OCTOBER 16.—**London, S.W.2.**—Painting and decoration of four underground conveniences, for the Lambeth Borough Council. Mr. Osmond Cattlin, Assoc.M.Inst.C.E., Borough Engineer, Lambeth Town Hall, Brixton Hill, S.W.2, on receipt of a stamped addressed envelope. Mr. Bruce Penny, Town Clerk, Lambeth Town Hall, Brixton Hill, S.W.2.

✱OCTOBER 16.—**London, N.1.**—FLATS.—Erection of 102 flats on the site adjoining the Municipal Buildings, Tyndale-place, Upper-street, Islington, N.1, for the Metropolitan Borough Council of Islington Mr. E. C. P. Monson, F.R.I.B.A., Council's Architect, 192, Finsbury-pavement House, 120, Moorgate, London, E.C. Deposit £5.

OCTOBER 16.—**London.**—DECORATIONS.—For repair and redecoration of the Mortuary and Coroner's Court, High-street, Lambeth, and the Mortuary, Wanless-road, Loughborough Junction, S.E.24, for the Lambeth B.C. Mr. B. Penny, Town Clerk, Town Hall, Brixton Hill, S.W.2.

OCTOBER 16.—**Pontargothi.**—HALL.—For erection of a memorial hall. Mr. T. Lewis, Brynglas, Nantgaredig.

✱OCTOBER 16.—**Rochford (Essex).**—HOUSES.—Erection of workmen's dwelling houses, as follows:

Contract No. 1, Great Stambridge, 18 ho
tract No. 2, Canewdon, 14 houses: Cont
Rochford, 6 houses, for the Rochford R
veyor of the Council, Mr. A. E. Madge, at
Rayleigh. Deposit £1 1s.

OCTOBER 16.—**Warrington.**—HOUSES.
and completion of 54 houses on the Reynold
for the Housing Committee of the County
Warrington. Borough Engineer and Surv
Hall, Warrington. Deposit £2 2s.

✱OCTOBER 17.—**Hereford.**—ALTERATIO
Works required in connection with the
&c., to be carried out at the old City Gaol,
Hereford, for the T.C. Mr. W. McNei
A.M.Inst.C.E., City Engineer, Town Hall
Deposit £1 1s.

OCTOBER 17.—**Trowbridge.**—HOUSES.—
20 houses in 10 pairs on the Rock Housing
the Trowbridge U.D.C. Mr. Walter W
Church-street, Trowbridge.

OCTOBER 18.—**Clacton-on-Sea.**—HOUSES
erection of 44 houses on the Croft Estate, fo
Mr. Geo. T. Lewis, Clerk to the Council, Co

✱OCTOBER 18.—**Grays, Essex.**—HOUSES
of 106 houses, together with roads, sewers, f
attendant works at West Thurrock, Grays
the Lafarge Aluminous Cement Co., Ltd.,
House, High Holborn, W.C.1. Mr. Edwar
A.R.I.B.A., P.A.S.I., Architect and S
Orsett-road, Grays, Essex. Deposit £2 2s.

OCTOBER 18.—**Haslemere.**—HOUSE.—Fo
tion of an engine house at Sturt-road, for
Mr. C. A. Best, Surveyor to the Council, Cou
Deposit £1 1s.

OCTOBER 18.—**Tilbury.**—FENCING.—For
and fixing approximately 1¼ miles of reinforc
fencing consisting of posts 10 ft. apart, in
Ward of Tilbury, for the U.D.C. Mr. A. W
Clerk of the Council, Council Offices.

OCTOBER 20.—**Harrogate.**—ALTERATI
alterations at Harrogate Station, for the L
way. Messrs. James McLaren & G. F
joint secretaries, Secretary's Office,
Station.

OCTOBER 20.—**Port Talbot.**—LODGES.—F
of two lodges at the main entrance to
Memorial Park. Mr. Moses Thomas, Town

✱OCTOBER 20.—**Romford (Essex).**—
ROADS, DRAINS, AND PAINTING.—Erectio
sheds, workshop and cart sheds, includ
fences, drains, &c., and for repairing and pai
ing depot buildings and caretaker's cott
Depot Buildings, in Rainham-road, H
Essex, for the Romford R.D.C. Mr. W
Surveyor to the Council, 16A, South-street.

OCTOBER 20.—**Southend-on-Sea.**—HUTS.
(*a*) the construction of concrete, steel and wo
nuts and platforms on the foreshore, and
bathing huts, and incidental works, for the
H. J. Worwood, Town Clerk, Municipal
Clarence-road. Deposit £2 each.

✱OCTOBER 20.—**Southport.**—HOUSES.—E
50 houses at Halsall-road and 50 houses a
road, for the Corporation of the County B
Southport. The tenders invited are for th
not less than ten houses. Mr. A. E. Jackson
Engineer, Town Hall, Southport. Deposit

OCTOBER 20.—**Tredegar.**—CENTRE.—For
a centre for instruction in handicrafts and

BUILDING TRADE WAGES IN SCOTLA

THE following are the present rates of wages in the building trade in the principal t
Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible f
that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Bric Masons' lay Labou
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ t
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 t
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d.
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 t
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/
Galashiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ t
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. t
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Stirlingshire (Eastern Districts)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/

* The information given in this table is copyright. The rates of wages in the various towns in En
Wales are given on page 575

Georgetown Council School. Mr. C. etary, County Hall, Newport, Mon.
.—**Caerphilly.**—SHOP.—For erection of V.R. Mr. A. E. Bolter, Paddington

21.—**London, S.W.**—TELEPHONE Erection of a telephone exchange in ndon, for the Commissioners of H.M. ks. Contracts Branch, H.M. Office of harles-street, London, S.W. 1. Deposit es payable to the Secretary.)
22.—**Brentwood, Essex.**—ADAPTATIONS. (to form a telephone exchange) at ssex, for the Commissioners of His ice of Works. Contracts Branch, ing Charles-street, London, S.W.1. (cheques payable to the Secretary).
—**Ecclesfield.**—ROOM. –For the erection room at Warren Council School, for the C. The Education Department, County d.
—**Great Ouseburn.**— ADDITIONS.—For l additions to Great Ouseburn council xcavator, Mason, and Bricklayer; (*b*) Joiner; (*c*) Slater; (*d*) Plumber; (*e*) Painter, for the West Riding E.C. The partment, County Hall, Wakefield.
—**Thurnscoe.**—SCHOOL.— For erection of Education Department, West Riding Hall, Wakefield.
22.—**Whittingham.**—VARIOUS.—Various ed for the erection of sixteen cottages the Whittingham Mental Hospital, as oads and sewers; (2) brick and stone- ting; (4) plastering; (5) woodwork; Mr. L. Cotman, Clerk to the Committee eposit 10s. 6d. each.
23.—**London, E.1.**—BALCONIES.—Pro- ng new balconies to certain wards at the ine-street, Old Gravel-lane, E.1, for the St. George in the East. Mr. R. M. , Guardians' Offices, Raine-street, Old 1, on receipt of postage (3d).
. — **Rochford, Essex.**—ALTERATIONS.— ., to the Post Office, Rochford, Essex, sioners of His Majesty's Office of Works. nch, H.M.O.W., King Charles-street, . Deposit £1 1s. (cheques payable to

24.—**Cheltenham.**—CONCRETE CON- onstruction of pre-filter tanks of ferro- the building of an engine house of con- rovided by the Corporation), and works reto at the Water Works, Dowdeswell, ration of the Borough of Cheltenham. kering, Municipal Offices, Cheltenham.

5.—**Usk.**—BUILDINGS, &C.—For the ildings for the Agricultural Institute, dential block, scholastic block, additions ower house. Mr. C. Dauncey, Secretary, Newport, Mon. Deposit £2 2s.
.—**Edinburgh.**—VARIOUS.—Various work R.C. School, Portobello—mason, joiner, r, plumber, steel work. Mr. J. Stewart, ive Officer, Education Offices.
.—**London, S.E. 18.**—LAVATORY ACCOM- rection of additional lavatory accom- he Guardians' Offices, 394, High-street, E.18, for the Guardians of the Poor of Union. Guardians' Offices, 394, High- am, S.E. Deposit £1 1s.
27.—**London, E.**—DWELLINGS.—Erection wellings on the Whitemore Estate (Ware- horeditch, for the L.C.C. Architect to The County Hall (Room No. 3), West- e, S.E.1. Deposit £2, payable to the

27.—**Newmarket.**—HOUSES.—Erection of lated houses in five pairs, at Stamford- rket, in the County of Suffolk, for the t Council of Newmarket. Mr. W. H. , Godolphin House, Newmarket.
7.—**Salcombe.**—ALTERATIONS.—For al- , at the Salcombe Hotel, Salcombe. Barron, architect, 11, The Crescent,

28.—**Basford, near Nottingham.**—TELE- NGE.—Erection of a Telephone Exchange ar Nottingham, for the Commissioners of Office of Works. Contracts Branch, ing Charles-street, London, S.W.1. (cheques payable to the Secretary).
28.—**Windsor.**—CONCRETE HOUSES.— ix houses in concrete, contractors to own designs and estimates, for the Mr. E. A. Stickland, Borough Surveyor, ndsor.
29.—**Gravesend.**—ALTERATIONS, &C.— the Post Office and erection of a new ange at Gravesend, for the Commis- Majesty's Office of Works. Contracts .W., King Charles-street, London, S.W.1. cheques payable to the Secretary).
Kilmarnock.—WORKS.—Various works of 24 houses—digger and brick, car- er, glazier, slater, plumber, plaster and r work. Mr. N. J. Campbell, Town Chambers.
Pontardulais.—BUNGALOW.—Erection of idence near Bolgoed Farm. Messrs. & Son, architects, Falcon Chambers, sit £2 2s.
Rawmarsh.—HOUSES.—For the erection n the Haugh-road site, for the U.D.C. ge, Architect to the Council, Council e, Yorks, W.R. Deposit £1.
Watford, Herts.—STRUCTURAL ALTERA- DDITIONS.—Structural alterations and emises Nos. 211–213, St. Albans-road, for Messrs. Timothy White & Co., Ltd. Department), 30, Chandos-street, om whom all particulars may be

✱NO DATE.—**Whetstone.**—BUNGALOWS.—Erection of pair medium-sized bungalows. Mr. E. E. Briggs, architect & surveyor, 99, High-street, Southend-on-Sea.

FURNITURE, MATERIALS, etc.

OCTOBER 11.—**Bootle.**—GRANITE.—For supplying (*a*) 105 lineal yds. of straight granite kerbs and 25 lineal yds. of circular granite kerbs, (*b*) 500 lineal yds. of straight granite channels and 50 lineal yds. of circular granite channels, (*c*) 250 lineal yds. of granite crossing stones, for the Corporation. Mr. J. Spencer Tumilty, Town Clerk.

OCTOBER 13.—**Edinburgh.**—CEMENT.—For the supply of Portland cement to the Tramways Depot, Shrubhill. Mr. A. Grierson, Town Clerk, City Chambers.

OCTOBER 16.—**Aberdeen.**—PIPES.—For supply and laying of ½ mile of 9 in. diameter cement-lined cast-iron pipes and specials, for the T.C. Mr. G. Mitchell, Water Engineer, 41½, Union-street. Deposit £2.

ENGINEERING, IRON AND STEEL.

OCTOBER 13.— **Aldershot, Hants.** — ARTIFICER'S WORK.—Maintenance Contracts, from October 15, 1924, at the Station hereafter mentioned in the South Aldershot Royal Engineer District of the Aldershot Command I :—South Aldershot, including Ewshot and Crookham. Commanding Royal Engineer, R.E. Office, Headquarters, Stanhope Lines, Aldershot, Hants.

OCTOBER 14.—**Eastbourne.**—TIDAL FLAPS.—For the removal of existing tidal flaps, &c., in the valve chamber, Langney Point, and the supply and fixing of new tidal and sluice valves. Mr. Leslie Roseveare, Borough Engineer, The Town Hall. Deposit £1 1s.

OCTOBER 15.—**Bedlington.**—CULVERT.—Construction of a concrete culvert and the diversion of the Sleekburn under Sleekburn Viaduct, near Bedlington Station, for the London & North Eastern Railway Co. Chief Engineer, North Eastern Area, York.

OCTOBER 15.—**North Seaton.**—VIADUCT.—For the reconstruction of North Seaton Viaduct, for the London & North Eastern Railway Co. Office of the Chief Engineer North Eastern Area. York.

OCTOBER 22.—**Dundee.**—STEEL BRIDGE.—For the construction, supply, delivery and erection in its place at the entrance to Camperdown Dock of a steel bridge caisson, for the Harbour Trust. Mr. J. Hannay Thompson, General Manager and Engineer, Dundee Harbour Trust.

OCTOBER 24.—**Cheltenham.**—TANKS. –For the construction of pre-filter tanks of ferro-concrete and the building of an engine house of concrete blocks. Mr. J. S. Pickering, Borough Engineer, Municipal Offices. Deposit £3.

OCTOBER 24.—**London, E.C.4.**—LIFT.—Erection of a new lift at the G.P.O. (South), Queen Victoria-street, E.C.4, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 27.—**Berwick.**—BRIDGE.—For construction of a ferro-concrete bridge over the Tweed, consisting of approaches, and arches up to 360 ft. in span. Messrs. L. G. Mouchel & Partners, Ltd., Civil Engineers, Trinity Buildings, 25, New Bridge-street, Newcastle-on-Tyne. Deposit £100.

OCTOBER 27.—**Bristol.**—BRIDGE.—For the reconstruction of the swing bridge over the Junction Lock, Cumberland Basin, for the Port of Bristol. Mr. T. A. Peace, Chief Engineer, Chief Engineer's Office, Avonmouth Dock. Deposit £5.

OCTOBER 27.—**Findochty.**—EXTENSION.—For the extension of the harbour, comprising the excavation of the harbour bed and the construction of a mass concrete jetty, mass and reinforced concrete quay walls, and relative works, for the Burgh. Mr. W. Smith, solicitor, 12, East Church-street, Buckie.

OCTOBER 28.—**Wellington, N.Z.**—BRIDGE SPANS.—For plate girder spans for Wairoa, Rangitaiki and Awakeri bridges, for N.Z. Public Works Board. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 31.—**Beaufort West (Cape Province).**—POWER STATION.—Electric power station plant, for the T.C. Department of Overseas Trade (Room 52).

NOVEMBER 3.—**Sydney, N.S.W.**—BRIDGE SPANS.—For metal work for superstructure of bridge at Tom Ugly's Point, for Department of Public Works, Sydney. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—**For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.**

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

OCTOBER 11.—**Birmingham.**—SEWER.—For the construction of about 32 yds. egg-shaped brick and concrete sewer, and 919 yds. stoneware pipe sewers. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2.

OCTOBER 11.—**Hemsworth.**—CONVERSION.—For conversion of six existing privies and ashpits, and erection of six new w.c.'s at Bond-street, Kinsley, near Pontefract. Mr. A. Wright, Clerk to the Council, Council Offices, Barnsley-road, Hemsworth, near Pontefract.

OCTOBER 13.—**Abertysswg.**—SEWERS.—For laying 1,090 yds. of 6 in. and 688 yds. of 9 in. storm water sewer, &c., at Abertysswg, for the Rhymney U.D.C. Mr. W. H. Trump, Clerk, 57, High-street, Rhymney.

OCTOBER 13.—**Barnes.**—ADDITIONS.—For constructing an addition to the public sanitary convenience, Barnes Common, for the U.D.C. Mr. G. Bruce Tomes, A.M.Inst.C.E., Surveyor to the Council, The Council House, High-street, Mortlake. Deposit £1 1s.

OCTOBER 13.—**Barnes.**—ROAD AND SEWER.—For the construction and drainage of an extension to Hertford-avenue, East Sheen, for the U.D.C. Mr. G. Bruce Tomes, Surveyor to the Council, The Council House, High-street, Mortlake.

OCTOBER 13.— **Coseley.**— SEWERAGE.— Stoneware and cast-iron sewers, manholes, pumping station, and other works at Princes End, for the U.D.C. Messrs. Berrington, Son, & Watney, engineers, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £5 5s.

OCTOBER 13.—**Eastbourne.**—SEWERS.—For laying water sewers in Victoria-drive. Mr. L. Roseveare, Borough Engineer, Town Hall.

OCTOBER 13.—**Hornsey.**—SEWERS.—For the construction of about 2,000 ft. run of sewers and surface water sewers, at their housing site, Coppett's-road, Muswell Hill, N.10. Mr. F. D. Askey, Town Clerk, Town Hall, Highgate, N.6.

OCTOBER 13.—**Loughborough.** — ROADS. — (*a*) For making-up of approximately 676 lin. yds. of Beacon-road, including storm water sewers, kerbing, channelling, &c. Deposit £3 3s. (*b*) For providing, laying and jointing of about 112 yds. of 9 in. stoneware pipe sewers and the construction of about 130 lin. yds. of granite rubble foundation in connection with the Burleigh-road extension. Mr. H. Perkins, Town Clerk. Deposit £1 1s.

OCTOBER 13.—**Lytham St. Anne's.**—STREETS.—For making-up nine private streets within the Borough, for the Corporation. Mr. T. Bradley, Town Clerk, Town Hall, St. Anne's.

OCTOBER 13.—**Rhymney.**—SEWER.—For laying of about 1,090 yards 6 in. and 688 yards 9 in. storm water sewer, &c. Mr. W. H. Trump, clerk, Clerk's Office, 57, High-street.

OCTOBER 13.—**Ripon.**—SEWERS.—For laying of sewers and reinforced concrete back road. Mr. J. H. Gough, Town Clerk, Town Hall. Deposit £3.

OCTOBER 14.—**London.**—PAVING.—For the making-up and paving of a section of Imperial-road, for the Fulham B.C. Mr. J. P. Shuter, Town Clerk.

OCTOBER 14.—**Southall-Norwood.**—CARRIAGEWAYS. —For resurfacing carriageways in various streets. Mr. J. B. Thomson, Assoc.M.Inst.C.E., Engineer and Surveyor to the Council, Town Hall, Southall.

OCTOBER 15.— **Hove.** — WOOD PAVING.—Providing and laying wood paving in Goldstone-street, between Clarendon Villas and the south side of the railway bridge (about 4,370 yds. super.) for the Borough Council of Hove. Borough Surveyor, Town Hall, Hove.

✱OCTOBER 16.—**Hove.**—SEWERS AND ROAD WORK.—Constructing sewers, forming roadways, laying kerbing, channelling, and other works in connection with the housing estate in Old Shoreham-road, within the Borough of Hove, for the Borough Council. Borough Surveyor's Office, Town Hall, Hove.

OCTOBER 16.—**Wallasey.**—CONVENIENCE.—For erection of a public convenience at Leasowe-road, for the B.C. Mr. G. Livsey, Town Clerk, Town Hall. Deposit £2 2s.

OCTOBER 17.—**Southampton.**—MAINS.—For laying 2,000 yds. of 36 in. and 6,250 yds of 33 in. cast-iron water mains. Mr. R. R. Linthorne, Town Clerk. Deposit £3 3s.

OCTOBER 20.—**Burntisland.**—RESERVOIR.—For the construction of a storage reservoir, &c., on a site near Stenhouse Farm. Messrs. Brown & Gilmour, Joint Town Clerks, Town Clerks' Office.

OCTOBER 20.—**Fermanagh.**—ROADS.—For construction of roads, for the C.C. Mr. J. P. Burkett, County Surveyor, Enniskillen. Deposit £5.

OCTOBER 20.—**Greenford.**—DRAINAGE.—For the extension of the main drainage system, comprising about six miles of 7 in., 9 in., and 12 in. sewers, manholes, &c. Mr. A. Lloyd Jones, Clerk to the Council, New Broadway Chambers, New Broadway, Ealing. Deposit £3 3s.

OCTOBER 20.—**Heckmondwike.**—RECONSTRUCTION.— For reconstruction of about three-quarters of a mile of Birstall and Huddersfield main road, within the U.D.C. Mr. A. H. Redfearn, Clerk, Council Offices.

OCTOBER 20.—**Rochester.**—SEWERAGE.—For construction of stoneware pipe sewers as follows :— 5,935 lin. yds. 7 in. sewers ; 1,286 lin. yds. 9 in. sewers ; 525 lin. yds. 12 in. sewers ; 322 lin. yds. 15 in. sewers, for the T.C. Mr. Apsley Kennette, Town Clerk, Guildhall. Deposit £5 5s.

OCTOBER 20.—**Wantage.**—SEWERS.—For laying of 1,250 yds. of 9 in., and 225 yds. 7 in. stoneware and cast-iron outfall and auxiliary sewers, &c., for the R.D.C. Mr. E. B. Ormond, Clerk to the Council, Wantage. Deposit £2 2s.

OCTOBER 21.—**Dover.**—WIDENING.—(1) For road widening and tarmacadam works, Limekiln-street and Bulwark-street; and (2) building alterations to the drainage works, and incidental constructional works. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House. Deposit £1 1s. each.

OCTOBER 25.—**Plygyrhiw.**—ROAD.—For the construction of two sections of new road at Plygyrhiw and Penlan, near Llandyssul, for the Carmarthenshire C.C. Mr. R. W. Jones, County Surveyor, County Offices, Carmarthen. Deposit £3 3s.

OCTOBER 31.—**Blackpool.**—MAINS.—For laying cast-iron mains between Stocks Reservoir, in the West Riding, and Westby Reservoir, near Blackpool, in the County of Lancaster : (1) 12,919 yds. of 27 in. main ; (2) 12,518 yds. of 27 in. main ; (3) 12,346 yds. of 25 in. main ; (4) 12,240 yds. of 25 in. main. Mr. G. F. Atkinson, Engineer, The Fylde Water Board, Sefton-street. Deposit £5.

NO DATE.—**Doncaster.**—SEWERAGE.—For furnishing and laying of about 1,900 yds. of 12 in. cast-iron and earthenware pipe sewers, with manholes, &c., at the Bainby-Dun-with-Kirk-Sandall, for the R.D.C. Mr. H. M. Marshall, Clerk, Union Offices. Deposit £5.

NO DATE.—**Maidstone.**—ROAD.—For the works required in the widening, improvement and diversion

on the Maidstone–Folkestone road, for the Kent C.C. Mr. H. T. Chapman, M.Inst.C.E., County Surveyor, St. Peter-street.

Competitions.

(*See Competition News, page* 546.)

Auction Sales, Tenders, etc.

★OCTOBER 15.—**Lingfield, Surrey.**—Mr. C. E. Clark will sell, without reserve, at Borer's Auction Ground, Lingfield, Surrey (adjoining Lingfield Racecourse), sale of prime timbers, &c. Auctioneers, Beddington House, near Croydon.

★OCTOBER 16.—**Herefordshire.**—Messrs. Apperley & Brown will sell, on the premises, Staunton Park, Staunton-on-Arrow, Herefordshire, the whole of the costly interior and exterior fixtures and fittings from the demolition of an early Georgian mansion. Auctioneers, Bank Chambers, Hereford.

OCTOBER 16.—**London, E.C.**—Messrs. C. C. & T. Moore will sell, at the London Auction Mart, a freehold and copyhold estate at Enfield. Auctioneers, 7, Leadenhall-street, E.C.3.

★OCTOBER 20.—**Barnes, S.W.**—Mr. Richard J. Steel has been instructed by Mr. P. Vine to sell, upon the premises, The Field, Lonsdale-road, Barnes, S.W., a quantity of new and second-hand building material of a large variety, three bow huts, sectional huts, vans, coal trolleys, tip-carts and numerous other items. Auctioneers, 2, Plough-terrace, South Ealing, W.5.

OCTOBER 21 AND 22.—**Swindon, Wilts.**—Mr. F. H. Clark will sell, without reserve, at the Central Stores Depot No. 18, Swindon, Wilts. (near Swindon Station, G.W. Railway) final clearance sale of timber buildings and building materials. Auctioneer, Railway Wharf, York-road, Wandsworth, S.W.18.

★OCTOBER 23.—**London, E.14.**—Messrs. Henry Butcher & Co. will sell, by order of H. T. Bloor, Esq., A.C.A., receiver for the Debenture Holders *re* F. W. Bunt & Co., Ltd., on the premises, London-street, Commercial-road, Stepney, E.14, packing-case manufacturers' plant and woodworking machinery, &c. Auctioneers, 63–64, Chancery-lane, London, W.C.1.

★NOVEMBER 18.—**London, E.C.2.**—Messrs. Ventom, Cooper & Co. will sell, by order of the owners, who no longer require this section of their extensive works (unless previously disposed of privately), in one or more lots, the valuable freehold property erected by Brifco, Ltd., at Ashtead, on an enclosure of about 17 acres of land, mainly walled in, and comprising five extensive modern blocks of buildings, plant and machinery. Auctioneers, 35, Old Jewry, London, E.C.2.

Public Appointments.

★OCTOBER 11.—**East Ham, London, E.C.**—BUILDING INSPECTOR.—Building inspector (temporary appointment), for a period of six months from date of commencement of duties, required by the County Borough of East Ham. Applicants must hold Royal Sanitary Institute Certificate in sanitary science as applied to buildings and public work. Mr. C. Eustace Wilson, Town Clerk, Town Hall, East Ham, E. 6.

OCTOBER 13.—**Greenwich, S.E.10.**—Office Clerk required in the Borough Engineer's Department by the Metropolitan Borough Council of Greenwich. Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich-road, S.E.10.

OCTOBER 14.—**Auckland, New Zealand.**—Professor of Architecture required by Registrar, Auckland University College, Auckland. London Agent of the University of New Zealand, Mr. J. W. Joynt, M.A., 88, Gower-street, W.C.1.

★OCTOBER 20.—**Leeds.**—Full-time Lecturer in the Department of Building, to teach building construction and allied subjects required at the Leeds Technical School by the Leeds Education Committee. Mr. James Graham, Director of Education, Education Offices, Leeds.

★NO DATE.—**Hong Kong.**—ARCHITECTURAL ASSISTANTS.—Assistants (three) required by the Government of Hong Kong, for service in the Architectural Office of the Public Works Department, for a period of three years, with possible permanency. Apply at once, by letter, to the Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1 (quoting M-12919).

★NO DATE.—**London, E.9.**—Clerk of the Works wanted in connection with erection of new buildings (contract £20,000). Clerk to the Guardians, Hackney Union, 2, Sidney-road, Homerton, E.9.

★NO DATE.—**London, N.7.**—Lecturer required in structural steel and reinforced concrete at the Northern Polytechnic Institute, Holloway, London, N.7. Apply to the Secretary.

Building Materials Bill Deputation.

The Minister of Health recently received a deputation from representatives of the manufacturers and suppliers of building materials. The deputation, while accepting the principle of legislation directed against persons seeking to exploit the necessities of the country, represented that some of the provisions of the Building Materials (Charges and Supply) Bill went beyond the pledges that had been publicly given by the Minister in the course of the negotiations prior to the Housing Bill. In particular they could not accept the clauses of the Bill providing for temporary taking over of works in certain circumstances. The Minister undertook that if they could put forward amendments which, without prejudice to the underlying principles, would meet their requirements, he would give them full and fair consideration.

PROPOSED NEW BUILDINGS & OTHER WO

IN these lists care is taken to ensure the accuracy of the information given, but i sionally happen that, owing to building owners taking the responsibility of comm before plans are finally approved by the local authorities, "proposed" works at publication have been actually commenced. Abbreviations: T.C. for Town Cou for Urban District Council; R.D.C. for Rural District Council; E.C. for Education B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERDEEN.—Plans passed by the T.C.: For three bungalows and a mission hall. The three bungalows, it is estimated will cost £3,300, and the mission hall £1,500. Altogether plans to the estimated value of £8,430 were passed.—The Scottish Hierarchy have issued an appeal for funds for the extension and maintenance of Blair Cottage. The estimate is £20,000.

AMBLE.—Messrs. D. Balfour & Son, engineers, Newcastle, have plans ready for an additional reservoir for the U.D.C. Two sites on the Albert Housing Estate were granted Mr. J. Sample, builder, Amble, for building purposes.

AMERSHAM.—The R.D.C. have plans under consideration for new building work at The Vale, near Chesham, Great Missenden, Amersham, Ley Hill, Chalfont St. Peter, Amersham Common, Chalfont Station Village, Chalfont St. Giles, Rignall, Knotty Green, and Ballinger.

ANCOATS.—A new nursery school is to be erected. The proposed site, which has been offered by the Ancoats Settlement, is in Every-street.

AUCKLAND.—The R.D.C. has obtained sanction from the M.H. for the borrowing of £12,857 for the erection of working-class houses.

AUDENSHAW.—Discussions are proceeding regarding the provision of a secondary school for Audenshaw, Denton and Droylesden.

BARROWFORD.—Messrs. J. & J. H. Boothman, Brierfield, have purchased the Whittycroft Estate. It consists of six acres and will be opened out for building purposes.

BILLINGHAM.—Mr. H. Scotson is prepared to build about 20 houses adjoining Station-road, Billingham, provided the Council constructed the necessary sewer.

BINGLEY.—Plans passed: Pair of semi-detached houses in Beech-street, for Messrs. Dyer & Bailey.

BIRMINGHAM.—The Catholic congregation of Yardley are to secure a site for the erection of a new chapel.

BLACKBURN.—Plans approved by the T.C.: House, Billinge-avenue, by Mr. Harper Southworth; two houses, Assheton road, by Mr. Harper Southworth; two houses, Assheton-road, by Mr. Harper Southworth; four houses, Brindle-street, by Messrs. D. E. Critchley & Co.; three bungalows, Parsonage-road, by Mr. J. Ashworth.

BLACKPOOL.—Plans passed by the T.C.: Two houses, Briercliffe-avenue, —. Priestley; two bungalows, Alexandra-road, Bispham, Pilling, France & Co.; two houses, Cleator-avenue, G. Hodgson; six houses, Abbey-road, Kay & Fisher; house, Leamington-road, P. Round; bungalow, Burgate, H. Walton; stables and house, Boothley-road, Blackpool Co-operative Society, Ltd.; two houses, Harris-avenue, Nuttall & Taylor; three houses, Layton-lane, Threlfall, Midgley & Whiteside; seven houses, Warbreck Hill-road and Calder-road, W. Yates; six houses, Wembley-avenue, R. Lancaster & Sons (Cleveleys), Ltd.; three houses, Bispham-road, R. E. Fogg; two houses, Cameron-avenue, Mrs. W. Fletcher; bungalow, Layton-lane, W. Carew; two houses, Vicarage-lane, A. Rothwell; bungalow, off Whitegate-drive, J. E. Cardwell; two bungalows, Little Bispham-road, Dawson & Fielden; four houses, Crosland-road, Hogarth & Pollard; three houses, Phyllis-avenue, Seddon & Eckersley; house, Boothroyden, W. Winstanley; two houses, Sidney-avenue, T. Brierley; house, Preston New-road, Potts & Pickford; four houses, Durley-road, L. Hodgkinson; two bungalows, Romney-avenue, J. Todd; four houses, Kenilworth-gardens, J. A. Shepherd and others; four houses, Halifax-road, E. R. Grimshaw; two houses, Briercliffe-avenue, —. Metcalfe; four houses, Hawes Side-lane, —. Rider; six bungalows, Roseacre, A. Fletcher; bungalow, Roseacre, —. Ainscough; six bungalows, Roseacre, —. Harrison; 16 houses, Mayfield-avenue, J. W. Clarkson; four houses, Stopford-avenue, J. Walton.

BOSTON.—The R.D.C. has agreed to contribute £400 towards a new bridge at Chapel Hill. The bridge is estimated to cost £3,700.

BOURNEMOUTH.—Plans passed by T.C.: Joinery works, Heytesbury-road, Messrs. The Hampshire Shopfitting Co.; "Richmond Hotel," Charminster-road, Messrs. Strong & Co.; house, Namu-road, Mr. E. T. Green; house, Irving-road, Mr. E. Wood; house, Stokewood-road, Mr. J. W. Davis; house, King Edward-avenue, Mr. F. J. Whittle; house, Endfield-road, Messrs. F. Hoare & Sons; house, Ophir-road, Mr. A. D. Lambert; house and shop, Wimborne-road, Miss L. Swan; house, St. Ledger's-road, Mr. H. B. Long; house, corner Southill and Wynyard-roads, Mr. F. A. Cole; house, Crichel-road, Mr. F. Bowden; house, Cowper-road, Mr. C. K. Habgood; house, De Lisle-road, Mr. W. Greenwell; house, De Lisle-road, Mr. W. Greenwell; two houses, Kimberley-road, Messrs. Griffiths & Eady; house, Horsa-road, Mr. L. C. Day; two houses, Ensbury Park-road, Mr. A. E. Bolton; house, Rowena-road, Mr. F. G. Troke; house, Egerton-road, Mr. C. V. Miller; house, Tuckton-road, Mr. H. J. Cutler; house, Westfield-road, Mr. S. A. Wood; house, De Lisle-road, Mr. A. R. Watts; house, Namu-road, Mr. E. W. Hayter; house, Browning-avenue, Mr. H. Solomon; house, St. Ledger's-road, Mrs. A. Beardsley; two houses, Carbery-avenue, Mr. J. Scott; house, Queen's Park-avenue, Mr. J. Moody; house, corner Charminster and Strouden roads, Mr. W. Carpenter; pair of houses and shops, corner Markham and Bemister roads, Mr. F. Richards; two houses, Branksome Wood-road, Mr. A. L. Cox; house, Cranleigh-road, Mr. M. G. Kellaway; two hou road, Mr. F. Moorman; two houses, Messrs. E. & H. Joy; bungalow, Court Newton; bungalow, Court-road, Mr. C. N and garage, St. Ledger's-road, Mr. J. F.

BRENTWOOD.—The U.D.C. recommend diture of £32,900 on the erection of a school for girls.

BRIDGEND.—The Cottage Hospital C considered alternative proposals for a ne schemes submitted varying in estimat £12,500 to £22,000.

BRIGHOUSE.—The T.C. has approved Percy Morris, bungalow, Lightcliffe-roa Jagger, two houses, Crowtrees-lane, T.C. has received sanction for the spe on the purchase of a site in Blackbur open-air school from the B.E.

BROXBOURNE.—The bridge across the High-street is to be widened at a cost of

BURNLEY.—The M.T. has intimated pared to make a grant of £2,442 in resp posed widening of Hand Bridge by the T

BURSLEM.—Plans passed: 10 house road, for Mr. E. M. Sambrook; two hous for Messrs. J. Moss & Son; two houses, for Mr. J. Wood.

CHELMSFORD.—The T.C. decided to Engineer to submit a scheme for makin the bridge in London-road to Springfield the Queen's Head Hotel, and also for th Springfield-road from the entrance to the second bridge.

CHESTER.—The T.C. has approved plan Mr. R. R. Smith, Park-road, Curzon-p Dr. Welch, Park-road, Curzon-park; h lane, for Mr. J. Beckett; bungalow, Butler; bungalow, Mr. W. A. Austin Pottle; house, Mr. J. R. Jones.

COLCHESTER.—The Borough Surveyo submitted an estimate of the cost of th direct labour of a further pair of park £1,100, and a block of six non-parlour hou to complete a 50 authorised by the M application for sanction of the requisite made.

COULSDON.—The U.D.C. is considering of 3½ acres at a cost of about £500, t memorial ground.

DARLINGTON.—Plans passed by the houses, Neasham-road, and house, Pierre for J. E. Chilton; four houses, Longfield B. Richardson; house, Dene-grove, Catterick.

DORCHESTER.—The R.D.C. has recei approval of a grant of £1,116 towards cost of surfacing certain roads in the rura

DROXFORD.—Plans passed by R.D.C. of building to cottage, Swanmore, for Son.

DUNDEE.—Plans and sections of propo ings, &c., lodged at the office of the Bank-avenue, house, for Robert R. W street, cottage, for Mrs. Rettie; Hy house, for W. M. Dick; Jedburgh-road John Cree; Loons-road, Johnston Clepington-road, semi-detached cotta Dundee T.C.; Montague-street, Barn James A. Roberts.

DURHAM.—Plans passed by T.C. house, The Avenue; J. Dobson, pictu road.

EDMONTON.—The U.D.C. has rec from the M.T. for the Church-street cost will be as follows: C.C. £1,010; U.D.C. £1,017. The M.T. approved improvement works: Silver-street fro Silver-street station, estimated cost £423, C.C. £423. Ridge-avenue, Pa Village-road, estimated cost, £7,050; C.C. £3,525. Silver-street from Swee Weir Hall, estimated cost, £3,472; C.C. £868, U.D.C. £868. The Middle to £250 towards improving the dang Ridge-road and Church-street, esti £1,010. The C.C. have agreed to towards widening part of Church-street to apply to the M.T. for their contr and to the M.H. for sanction to a loa M.T. agreed to pay £292 for improvir corner at Bush Hill and Park-avenue contribute £146. A scheme for layi off Bury-street and Galliard-road as a p by the U.D.C. The purchase money of the sub-schemes are: Men's lavato convenience, £750; shelter, £500; two open-air swimming bath, £7,000; surf age scheme, £1,550. It has been dec the M.H. for sanction to borrow a l the purchase of the land; £18,700 to

ELLESMERE PORT AND WHITBY.— decided to erect a secondary school obtained between Whitby and Littl passed: Transformer house for Me Ltd.; shop for Wolverhampton Cor —Negotiations are in progress for t additional land for recreation groun

ESHER AND DITTON.—The Coun now in course of erection under the which provides for 48 houses. In

* See also our List of Contracts, Competitions, etc.

ses there are 70 houses and bungalows in ection by private enterprise.
.—The U.D.C. approved a scheme to build s at Marboll State. The M.H. are being ermission to borrow money.
.—The Catholics are making a determined ure funds for the erection of a church. already been purchased from the U.D.C.
.—A new police station is to be erected Riding Joint Standing Committee of the stimated cost of £2,989.
.—The T.C. is seeking the approval of the erection of a new school at King Edward- estimated cost of £21,678.
.—The Ystrad Mynach and District mittee has in hand a scheme for recreation out. The secretary of the committee is an.—The Penybont R.D.C. is to erect 44 le and construct sewers at Pencoed.—The Garw U.D.C. is considering erecting a foot- ryrhyl, at an estimated cost of £1,200. A e may also be erected at an estimated cost The Council has been informed by the l Coal Co. of their intention to erect 23 aengarw.
.—Plans passed by T.C.: Three houses, enkins, Enridge & Fooks; house, Single- r Mr. H. A. Burton; house, Portland- Mr. A. Hudson; houses, King's-drive, for lin: two houses, Portland-avenue, for . Wallis & Co.; house, King's-drive, for send: 15 houses, Cross-lane, for Mr. T. houses. King's-drive, for Messrs. Hopkins e houses, Portland-avenue, for Messrs. ein.
.—Plans passed by T.C.: House, South Norris & Shattock, for Mr. G. H. Jacobs; more-avenue, Messrs. Hodgson, Lunn & Pettit: house, St. Omer Ridge, Mr. Capp, r Mr. D. Grazebrook, 17, High-street; on-road, for Mr. C. G. Jackson; house, , for Mr. H. Harlock; bungalow, ad, for Messrs. F. & F. H. Higgs, Ltd.; r-road, for Messrs. Rutter & Co.; bunga- rough-Estate, for Mr. D. Grazebrook; tside, for Messrs. Rutter & Co.; house, , for Mr. J. M. Holt; house, Avonmore- Messrs. H. Frampton & Co.—The Council ase from the E.C. part of the Stoughton ng field in Grange-road as a site for

—A site has been acquired for the erection rch, plans now being prepared.
-Plans passed: Bungalow, Heath-lane, Salt: warehouse, Market-street, for Mr. house, Heath-lane, for Mr. H. Bell; two tham-road, for Mr. W. Shone; eight n-road, for Messrs. Shenton Bros.
.—Plans passed by Stoke T.C.: Bunga- Estate, for Mr. J. Tinsley: two houses, , for Mr. T. Horwill; two houses, Long- r Mr. T. Horwill.
—Plans passed by T.C.: House, Filsham- . S. Lee, per Wakeford & Sons, architects.
—The West Riding C.C. E.C. propose to elementary school for about 63 children.
he U.D.C. has made application to the tion of a loan of £3,000 for subsidies.
D ISLEWORTH.—The U.D.C. are to spend iverside garden.
e Corporation has received sanction to the building of the art gallery and new

N.—A sea wall is to be erected at a cost

The Sunderland R.D.C. reports that en approved by the Government for the of a bridge.
The T.C. propose erecting a mortuary on street: the cost is estimated at £1,600.
.—A new central receiving home for B.G. is to be provided in Twickenham- estimated cost of £12,000 to £13,000. een submitted by Messrs. Dodge & Reid proved. Tenders are to be invited for the work subject to the approval of the

Efforts are being made to purchase land d for a children's playground.
—The T.C. has been informed that the ared to make a grant of £1,392 towards the ning London-road opposite Cambridge- as agreed to.—The T.C. are applying for ,000 for the new cattle market.
.—The M.T. has put in hand the arterial the Viaduct. Tenders are being invited. he Corporation has arranged with the Extension Society to take over part f St. Paulinus Church, Dewsbury-road, pproximately 656 sq. yds., and required ing of the road.
—The E.C. is considering a new site for n Girls' School.—The culverting of the t Wordsworth-road is recommended at .

CHELSEA).—The British Federation of omen have inaugurated an endowment le Crosby Hall to be used as a residence o are studying at the London University. is estimated at £30,000.
'ULHAM).—A new park pavilion is to be e B.C. The Council is borrowing £1,000.
REENWICH).—The B.C. has purchased an as "The Twenty Acre Field." Black- 330, on which they will build 400 houses.
UNNERSBURY).—The railway bridge is to

KENSINGTON).—The L.C.C. has agreed he borrowing by the B.C. of £24,200 with the erection of houses comprising the of the St. Quintinh ousing scheme.— opose providing a new public elementary out 768 children and capable of enlarge-

ment by 128 places, in North Kensington; the site of the proposed school is in Bevington-road.

LONDON (LEWISHAM).—The B.G. has decided to purchase, subject to the sanction of the M.H., property in Lewisham High-street, known as The Priory. The cost of the purchase will be £4,100, and it it proposed to erect there a new board room and offices.

LONDON (POPLAR).—The B.C. is applying for sanction to borrow £16,000 for the purchase of a site in Weston-street, required for the Electricity Department.

LONDON (SOUTHWARK).—Messrs. J. Lyons & Co., Ltd., propose to rebuild Nos. 345 and 348, Walworth-road. Negotiations are proceeding with the L.C.C. regarding the proposal to create an open space in the Grotto-place area.

LUTON.—Plans approved by the T.C.: H. F. J. Bottoms, two houses, Alexandra-avenue; Luton B.G., extensions, Tramp Ward, Union House, Dallow-road; W. M. Router, two houses, Carlton-crescent; J. Squires, house, Old Bedford-road; A. W. Oakley, ten houses, Dunstable-road; A. Mardle, four houses, Alexandra-avenue; E. J. Taylor, four houses, Biscot road; F. White, two houses, Colin-road; A. Tate, two houses, Stratford-road; J. Frost, nine houses, Holland-road; Luton Suburban Estates, Ltd., two new streets, New Bedford-road Estate, Argyle-avenue and Blenheim-crescent; W. Reeve, two houses, Holland-road; Electricity Dept., electricity sub-station, Turner's Knoll; J. T. Garrett, four houses, Farley-hill.

MAIDSTONE.—The Council has applied to the M.H. for sanction to sell to H.M. Postmaster-General, for £4,200, the site for the new Post Office in King-street; and to sell to Mrs. Howlett & Whitehead, for £1,050, the site for their new offices adjoining that to be sold to the Postmaster-General.

MANCHESTER.—The T.C. approved plans: Refacing transformer house, Lower Vickers-street and Sycamore-street, Miles Platting; D.I.C. house, Cross-street, Bank-street, and Half Moon-street; dedication plan and section of back street, Barrow Hill-road, Waterloo-road, Cheetham.

MEXBOROUGH.—The U.D.C. has received conditional approval for the erection of 40 houses from the M.H.

MIDDLESBROUGH.—A quarter-of-a-million pounds is the estimated cost of a new bridge over the Tees at Newport.

MONMOUTHSHIRE.—The County E.C. has obtained a site for erection of a school at Maesycymmer.—The Bedwellty U.D.C. is to lay out a new site for a cemetery. —The Pontllanfraith Welfare Committee proposes to acquire Ynyswen House and lands for conversion to a public institute.—The C.C. is to spend £150,000 on widening the main Newport-Cardiff road.

NEWCASTLE.—The City Council has received permission from the M.H. for an additional loan of £1,100 in respect to the erection of 142 houses at the Walker site.—It is proposed to erect a library at Scotswood, at a cost of £13,000.—A scheme has been prepared for the adaptation of the plunge bath hall at Byker Baths into a recreation hall, at a cost of £1,000.

NEWTON ABBOT.—Plans approved by the R.D.C.: Bungalow, Bishopsteignton, for Mr. H. Compton Arnold; house, Kingsteignton, for Mr. E. Best; flats, the Manor House, Widecombe, for Mr. E. G. Wetherall; six cottages, Kingsteignton, for Mr. S. Howe; bungalow, Trusham.

NORTH WICKFORD.—The U.D.C. passed plans: House, for Mr. W. C. Smith, at Stonea; bungalow, for Messrs. H. & A. Redhead, at Wimblington.

NOTTINGHAM.—A bacon factory for the area at an estimated cost, to build, equip, and run, of about £25,000, is being proposed by the South Notts Farmers' Union.

PONTEFRACT.—Plans passed by R.D.C.: House at Beal, for Mrs. H. Sherrard; 18 houses at Westfield, Glasshoughton, for Messrs. Powell Bros.; house at Brotherton, for Mr. Wales.

PONTYPRIDD.—The U.D.C. is to erect a new school at Treforest.

PRESTON.—The T.C. have purchased a plot of land adjoining Ribbleton-avenue for £2,750.—It has been decided to recommend the acceptance of a tender for a sum of £1,050 in regard to a contract for stone pillars for the entrance gates at the cemetery.

PURLEY.—The U.D.C. has purchased land at Higher-drive for £5,700 for a recreation ground.

RADSTOCK.—The M.H. has approved the proposal of the R.D.C. to erect a further 14 houses. Sanctions are to be obtained for £4,942 for the erection of the houses and £142 for sewer works.

ROTHERHAM.—The T.C. recommend the rebuilding of the old Gaol Bridge. The expenditure involved is estimated at between £80,000 and £90,000, and towards this sum it is anticipated that the M.H. will make a grant of about £40,000. The Borough Engineer has been instructed to obtain tenders for carrying out the work.

ROTHWELL.—The U.D.C. has been informed that the M.T. has agreed to a start being made with the proposed Longthorpe-lane improvement, and to pay half of the approved estimate of £2,865.—Plans are being prepared for the erection of four new houses on the site of Miss Schofield's condemned houses at Carlton. —Sanction has been received to the borrowing of £13,684 for the erection of twelve houses each on the Thorpe, Lofthouse, and Carlton sites.

RUGBY.—The B.G. has accepted, subject to the consent of the M.H., a tender for the extension to the Poor Law Infirmary amounting to £9,632.

ST. ASAPH.—The R.D.C. approached several P.C.'s regarding housing. The results obtained were Dyserth, twelve; Meliden, twelve; Bodfari, six; and Waen, four.

ST. THOMAS.—The R.D.C. have a scheme of Mr. C. Warren (Exeter), to establish a garden city of 150 houses on the Birchy Barton estate, near Heavitree.

SANDERSTEAD.—Plans passed by U.D.C.: Six houses, Britton Hill-road, for Mr. Thomas; two houses, Mayfield-road, for Mr. J. Webster.

SCARBOROUGH.—The M.H. has sanctioned the borrowing of £3,000 by the Corporation for the purpose of providing new public conveniences at Sandside.

SHEFFIELD.—Plans passed by the T.C.: Two houses, Ford-road, for Messrs. W. J. Richardson & E. Hill; house, Cobnar-road, for Mrs. R. T. Dyson; two houses, Louth-road, for Messrs. Simpson Bros.; bungalow, Seagrave-road, for Mr. A. Tate; two houses, Firth Park-crescent, for Mr. T. Pye; house, School Green-lane, for Mr. E. F. Cliff; two houses, Main-road, Handsworth, for Mr. G. Payling; ten houses, Sandygate-road and Watt-lane, for Mr. J. Samuel; four houses and shops, Ringinglow and Bents Green-roads, for Messrs. W. Malthouse, Ltd.; house, Don-avenue, for Mr. G. Hardwick; bungalow, Watt-lane, for Mr. P. Parry; two houses, Stubbin-lane, Richmond, for Mr. J. Kennedy; bungalow, Abbey-lane, for Mr. E. Rosten; four bungalows, Rundle-road, for Mr. W. Ramsay; two bungalows, Folds-crescent, for Mr. A. J. Mackenzie; two houses, Archibald-road, for Mr. Atkinson; house, Pearl-street, for Messrs. Wostinholm & Stevenson.

SOUTH SHIELDS.—Plans passed: Mr. F. W. Newby, for Mr. R. H. Brown, block of business premises, four garages, and five shops with two dwelling houses above at corner of Prince Edward-road and West-avenue, Harton.

THAMES DITTON.—Plans have been submitted for the re-building of the "Lamb and Star." As the site of these premises forms part of a proposed road which is being considered in connection with the re-building of Hampton Court bridge, the Council have decided to explain the circumstances to the M.H. and to the County Surveyor, in order that their observations might be obtained.

TWICKENHAM.—The U.D.C. are proposing to purchase the Green for a sanitary convenience.—The erection of houses is being proposed.—There is every likelihood of a clinic being erected.—Messrs. Ralph Knott and E. S. Collins have submitted a sketch plan for the alterations of Radnor House in connection with a scheme for the formation of a pleasure ground. The M.T. has made a grant of 50 per cent., but not exceeding £6,250, towards the cost of widening Cross Deep to 50 ft. between King-street and Pope's-grove.—The M.H. has given formal sanction to the borrowing of £1,360 for the widening and improvement of Nelson-road, from Hounslow-road to near Hospital Bridge-road. The M.H. has made a grant of £237 for the improvement of the corners at the junction of Stains Hospital Bridge and Sixth Cross-roads.

UXBRIDGE.—The U.D.C. proposes the construction of a reservoir on land adjoining the common. The Infant Welfare Centre is to be enlarged and tenders are to be invited forthwith for the work.

WAKEFIELD.—The R.D.C. approved plans of the lay-out of the proposed sixteen Council houses at Upper-lane, Netherton.—Plans passed: Two houses Denby Dale-road, Crigglestone, for Mr. J. Dilks.

WALTHAMSTOW.—Plans approved by the U.D.C. Classroom and heating chamber, Forest School. Rev R. C. Guy; shop and dwelling, Winchester-road, W. E. Penny.

WANDSWORTH.—Plans: Mr. R. Mansell, six houses, Sutherland-grove, Southfield; Messrs. Holloway Bros. (London), Ltd., two houses, Ellerton-road, Springfield; Mr. H. G. Parker, house, Glenburnie-road, Balham; Messrs. North, Robin & Wilsdon, eight lock-up shops on land at junction of Mitcham-road and Bickersteth-road, Tooting; Messrs. H. S. Goutland & F. Metcalf, five houses, Albert-road, Southfield; Mr. C. A. Sharp, house and garage, Kingsmead-road, Streatham; Mr. J. J. Taylor, 14 houses, Atkins-road, Clapham South; Mr. W. J. F. Gillett, seven houses, Voss-court, Streatham; Messrs. C. Midner & Son, four houses, Tankerville-road, Streatham; Messrs. William Willett, Ltd., house, in new road on Dover House Estate, westward of Dover House-road, Putney; Messrs. F. W. & A. E. Kerven, five houses, Hill House-road, Streatham; Mr. F. H. Clarke, house, Hopton-road, Streatham; Messrs. J. Harrison & Co., hall, Ravenna-road, Putney; Messrs. Belfrage, Saville & Hooper, six houses, Sutherland-grove, Southfield; Mr. C. S. Banks, house, King's-avenue, Clapham South, and house, Clarence-road, Clapham South; Messrs. Blyth, Ltd., six houses, Viewfield-road, Southfield; Mr. T. Collingwood, two houses, Glenburnie-road, Balham; Messrs. Rowling Bros., Ltd., five lock-up garages at the Rawcester Athletic Association Ground, Wimbledon Park-road, Southfield; Messrs. G. Glover & Sons, house, Leigham Court-road, Streatham.

WANTAGE.—The R.D.C. are to erect six houses at West Hendred.—Mr. J. W. Harris was instructed to advertise for tenders for carrying out the Harwell drainage scheme.

WEST RIDING OF YORK.—The E.C. decided to purchase land for the new middle school at South Kirkby, Moorthorpe.—The authority are to provide a new Council school for 450 children at Shitlington, to replace the existing Church of England school.—Subject to the approval of the B.E., a scheme of permanent extensions to the Ossett Grammar School was adopted, the estimated cost to be £22,000 for buildings and £3,000 for equipment.

WREXHAM.—Application is to be made by the R.D.C. for sanction to a loan of £49,720, for the erection of 90 houses, purchase of land, &c. The cost of repairing 8¼ miles of roads, prior to transfer to the C.C., is estimated at £22,865, towards which the M.T. has granted £17,149.

WYKE (BRADFORD).—A Corporation tramway shelter is to be erected adjacent to the recreation ground, at an estimated cost of £140.

YORK.—The M.T. having considered preliminary plans of the proposed road and bridge over the River Ouse at Clifton, desires to know whether it is the intention of the Council to proceed with the construction of the whole of the work, including the bridge. The Committee recommend that the work be proceeded with at an estimated cost of £73,500, exclusive of land. —It is proposed to enlarge St. Helen's-square and Davygate.

FIRE.

BANGOR.—Messrs. Baird Bros.' garage was burnt out. The damage is estimated at £30,000.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry

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Best Stocks	4 3 6
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Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fjettons, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
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Do. Bullnose ..	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick :—			
2½ in.	8 11 0	3 in.	10 3 0

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Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
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Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

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2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

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Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
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¾ in. Shingle for Ferro-Concrete	14 0	" "
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" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
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	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
	6 1½
6 in. rubbed two sides ditto "	2 10
4 in. sawn two sides slabs (random sizes) "	2 1½
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags.. Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube :—Plain, 6s. 6d. ; Moulded, 7s. 9d. ; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	.... £32 0	3 × 6	.... £23 0
4 × 9	.... 28 0	3 × 11	.... 28 0
4 × 8	.... 26 0	2 × 11	.... 28 0
4 × 7	.... 26 0	3 × 9	.... 26 0
3 × 8	.... 24 0	2½ × 9	.... 26 0
3 × 7	.... 23 0	3 × 4½	.... 24 0
2½ × 7	.... 23 0	3 × 4	.... 24 0

PLANED BOARDS.

1 × 11	.... £34 10	1 × 9	.... £32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/3
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
¾	16/6
⅞	20/-
1	25/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle		0	2
Dry Wainscot Oak, per ft. super, as inch	0 2 0 to	0	2 6
¾ in. do.	do. 0 1 6 to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9 to	0	2 6
Cuba Mahogany	0 3 0 to	0	3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0 to		—
American Whitewood planks, per ft. cube	0 12 0 to	0	14 0
Best Scotch Glue, per cwt.	4 10 0 to		—
Liquid Glue, per cwt.	4 7 0 to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Hip and valley tiles (per dozen) { Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in.	13 10 0
⅜ in.	14 10 0	⅝ in. to 2¾ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¼"&up.	Fittings. ⅜"to½" inclusive.	Flanges ¼"&up.	Flanges ⅜"to½" inclusive.
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28½ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

	£ s. d.		£ s. d.
IRON—			
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..
Hoop iron, basis price	16 10 0	..
" Galvanised	31 0 0	..
Soft Steel Sheets, Black—		
Ordinary sizes to 20 g.	14 10 0	..
" " " 24 g.	15 10 0	..
" " " 26 g.	17 10 0	..
Sheets Flat Best Soft Steel, C.R. & C.A. qu		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 0 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..
Best Soft Steel Sheets, 26 g.	26 0 0	..
Cut Nails, 3in. to 6 in.	20 10 0	..
(under 3in. usual trade extras.)		

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pai coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	

NOTE—Country delivery, 30s. per ton extra ; 3 cwt.. 2s. per cwt. extra and over 3cwt. an cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. Old lead, ex London area, at Mills ..... per ton } 31 0 0 ..
Do., ex country, carriage forward ..... per ton } 32 0 0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB C IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 i
29/-	45/-	76/-	153/-	246/-	510/

NEW RIVER PATTERN SCREW DOWN STOP C UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per do

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/-

NEW RIVER PATTERN CROYDON BALL VALV

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228/

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

1¼ in.	1½ in.	2 in.	3
33/-	41/-	56/-	101
35/-	45/-	66/-	126

COPPER—	£ s. d.	
Strong Sheet	per lb.	0 2 3 ..
Thin	"	0 2 4 ..
Copper nails	"	0 2 3 ..
Copper wire	"	0 2 4 ..
TIN—English Ingots	"	0 2 6 ..
SOLDER—Plumbers'	"	0 1 2 ..
Tinmen's	"	0 1 4 ..
Blowpipe	"	0 1 5 ..

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon
" " " in barrels	"
" " " in drums	"
Boiled " " in barrels	"
" " " in drums	"
Turpentine in barrels	"
" in drums (10 gall.)	"
Genuine Ground English White Lead, per to (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT—	
"Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's, "Spedol" and other best brands (i 14 lb. tins) not less than 5 cwt. lots	
	per ton delivere
Red Lead, Dry (packages extra)	per to
Best Linseed Oil Putty	per cw
Filocol	per cw
Size. XD Quality	fk

[*Continued on next page.*

* The information given on this page has compiled for THE BUILDER and is copyright. this list is to give, as far as possible, the of materials, not necessarily the highest or l and quantity obviously affect prices—a fact be remembered by those who make use of thi

URRENT OF MATERIALS (contd.)

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
hs ..	3½d.	32 oz. fourths	8½d.
s	4½d.	32 „ thirds	10½d.
hs ..	5d.	Obscured Sheet, 15 oz.	4d.
s	6½d.	„ „ 21 „	5½d.
hs ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
s	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

ccording to size and substance for squares stock.

OLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
late	4½d.
olled	5½d
olled	5½d
Rolled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large	
h white	6½d.
o. tinted	9d.
heet	6d.
olled Cathedral	5½d.
do.	7½d

Plate is same price as rough rolled.

VARNISHES, &c.

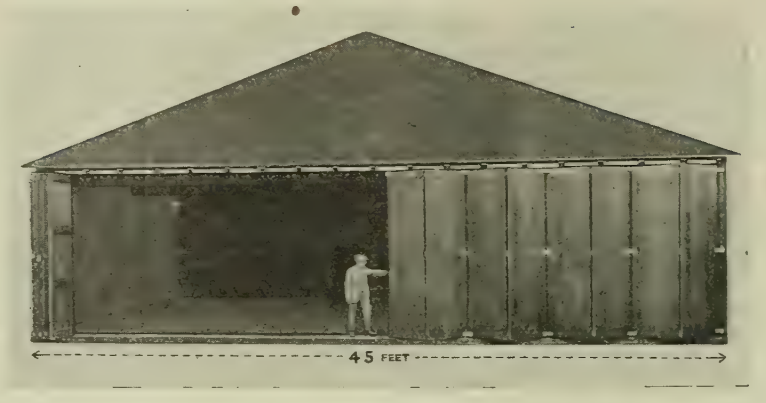
		Per gallon £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
Carriage	ditto	1 4 0
.....	ditto	1 12 0
h	Inside	0 18 0
aper	ditto	0 18 0
Cabinet	ditto	1 2 0
Flatting	ditto	1 0 0
Oak.....	ditto	0 18 0
Drying Oak	ditto	0 19 0
Varnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
Gold Size		0 10 0
Japan		0 10 0
ogany Stain (water).....		0 12 0
Black.....		0 7 0
.....		0 14 0
atent)		1 5 0
Brush Polish		0 17 0
rs in Terebine.....		0 9 0
s Enamel.....		0 7 0

w Hotel, Weston-super-Mare.

rand Central Hotel is to be erected Messrs. T. Macfarlane & Sons, Ltd. cheme will contain 150 rooms. The re Sir Henry Tanner & Sons.

hester College of Technology.

ing trades teachers from Lancashire re are at present considering at the College of Technology, recent ts in the building industry that eater efficiency of management and l craftsmanship. A report is to be e work done during the year by a ittee composed of members of the branch of the Institute of Builders lding trades teachers, and formed rence held in Manchester in October Mr. J. W. Riley, of Rochdale, will discussion on building examinations essity for national certificates. Mr. , of Manchester, will open with the n of training for higher positions ng industry, and Mr. F. W. Anderson, will deal with the introduction of s.



Tangent Door.

NEW INVENTIONS

Folding Doors.

A new system of folding doors has been put on the market by Messrs. P. C. Henderson, Ltd., of Tangent Works, Barking, E., and is known as the "Tangent Folding Door Gear." As will be seen by the illustration on this page, the gear only is supported, while the screen is made by a joiner. This design and many others are fully illustrated and described in Messrs. Henderson's publication, No. 24.

A New Curtain Runner.

A system of wheeled runners moving on a flexible metal rail for carrying curtains has been put on the market by Messrs. Wilson & Kingsley, Ltd., of 271, Goswell-road, E.C.1. It is claimed that with this device the life of curtains is considerably prolonged, as "dragging" when moving the curtains to and fro is eliminated. A rail is secured to the window frame, and to this rail the curtains are suspended from hooks attached to a wheel which runs along the rail. We are informed that each wheel attachment can support a weight of 112 lbs., and thus the heaviest curtains may be carried. The rail may be easily bent to follow the shape of any wall or window, and when fixed to windows one side may be made to overlap the other so that curtains are overlapped at the centre. We are informed that this curtain rail, called the "Rolo," has been installed in many public buildings and leading hotels throughout the country.

New Wolverhampton Factory.

Messrs. Courtaulds, Ltd., have decided to proceed with the erection of a factory at Wolverhampton in Hordern-road, adjoining the Dunstall Park Racecourse. The plans show that the complete factory will cover something like forty acres of land, and it is understood that operations are to be put in hand very shortly.

TRADE NEWS

A Canadian company who manufacture veneered doors, and also a large variety of stock white pine doors with solid sticking, are in a position to undertake regular export trade, and invite inquiries from British importers. Full information may be obtained from the Canadian Government Trade Commissioner's Office, Portland House, 73, Basinghall-street, London, E.C.2.

We have received from Messrs. D. & J. Tullis, Ltd., Clydebank, a copy of their latest pamphlet, illustrating and describing their "London Imperial" ironing machine. It is claimed this machine has completely revolutionised the laundry industry, and that not only is the output equal to, if not greater than, any other design of multiple machine on the market, but what is equally important, the finish on the linen has not been sacrificed. The makers state in designing their 1924 model they have aimed at keeping it as simple as possible. There is, it is stated, no return apron necessitating constant expert supervision; and that the mechanism has been so constructed that it cannot get out of order.

Messrs. Nicholls & Clarke, Ltd., of High-street, Shoreditch, E.1, having recently remodelled and decorated their showrooms, have now issued two catalogues of their goods. No. 20 gives a comprehensive list of general ironmongery and sanitary fittings, &c., fully priced, and illustrated, from which a selection of fitments may be made for any class of building whether commercial or domestic. It is a useful volume, and should be in every builder's office. Catalogue No. 21 gives coloured illustrations of leaded lights, some simple in character, others more elaborate in design. Sections of leads, casement handles, wrought steel casements, &c., are also illustrated fully and drawn to scale. The leaded light list is in colour, and gives an excellent idea of the high-class goods for which Messrs. Nicholls & Clarke are well known. It is not often nowadays that we get such complete catalogues of builders' materials, and the firm are to be congratulated on getting out such a comprehensive list.

RCHITECTURAL
WOODWORK
CIAL FURNITURE
MANTELS ,
CARVING ,
DECORATING
OUS PLASTER WORK
TAINED GLASS
Elo

THE ALLIED ARTS
&
CRAFTS GUILD
NORTHERN REPRESENTATIVE
Mr. H. W. BRANT
11, Manor Street
NEWCASTLE-ON-TYNE

REGISTERED OFFICE
No 4
BROOK STREET
SAINT PAUL'S
BIRMINGHAM
TELEPHONE:
CENTRAL 3706
TELEGRAMS:
BEAUTIFY. B'HAM.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	" "	7	6
Add if in floors 6 in. thick	" "	3	6
Add if in beams	" "	4	0
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	9	0
¾ inch on flats in two thicknesses	" "	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
York stone templates fixed	per foot cube	12	6
York stone sills fixed	" "	21	6
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	19	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	"		54/-	65/-	72/-
Do. matchings	"	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"
Deal wrot moulded and rebated	per foot cube	
Plain deal jamb linings framed	per ft. sup.	1/8
Deal shelves and bearers	"	1/5
Add if cross tongued	"	2d.

STAIRCASES.

	1"	1¼"	1½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers	
Deal balusters, 1 in. × 1¼ in.	per ft. run
Mahogany handrail; average 3 in. × 3 in.	"
Add if ramped	"
Add if wreathed	"

FIXING ONLY IRONMONGERY (INCLUDING SCREW

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinge letting in to floor	
Casement stays	1/2		
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	per
Plain compound girders	
Do. stanchions	
In roof work	

RAIN-WATER GOODS.

		3"	4"
Half-round plain rebated joints	ft. run	1/11	2/4½
Ogee Do. Do.	"	2/4½	3/1
Rain-water pipes with ears	"	2/9	3/7
Extra for shoes and bends	each	4/4	5/11
Do. stopped ends	"	1/11	2/4½
Do. nozzles for inlets	"	2/2	2/7

PLUMBER.

		½"	¾"	1"	1½"	4
Milled lead and laying in flashings and gutters	per c					
Do. Do. in flats	"					
Extra labour and solder in coated cesspools	each					
Welt joint	per ft.					
Soldered seam	"					
Copper nailing	"					
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					
Bends in lead pipe	each					3
Soldered stop ends	"	1/2	1/8	2/1	2/10	3
Red lead joints	"	11d.	1/-	1/3	1/11	2
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6
Lead traps and cleaning screws	"				14/7	19
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard
Do. Do. Sirapite	"
Do. Do. Keen's	"
Add sawn lathing	"
Add metal lathing	"
Portland cement screed	"
Do. plain face	"
Mouldings in plaster	per 1 gu
One-and-a-half granolithic pavings	per yard

GLAZIER.

21 oz. sheet plain	per foot
26 oz. Do.	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
¼ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per yard
Knotting and priming	"
Plain painting 1 coat	"
Do. 2 coats	"
Do. 3 coats	"
Do. 4 coats	"
Graining	"
Varnishing twice	"
Sizing	"
Flatting	"
Enamel	"
Wax polishing	per foot
French polishing	"
Preparing for and hanging paper	per piec

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The

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. P. Lievre : Automatic securing- ged doors, windows and panels.
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ackson & Ogden, Ltd., and F. T. g mechanism for lifts, hoists, &c.
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Dorr Co. : Process for the manu- iting.
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TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

AMERSHAM.—For tiling eight cottage roofs at Little Amersham, for the R.D.C. :—
*Parsons £245

BEDFORD.—Alteration to Newnham House, for T.C. :—
*S. Freshwater & Sons £376

BEXHILL.—For making-up Brockley-road, Coodendrive, Egerton-road, Knebworth-road, Sutherland-avenue, Terminus-avenue, and Warwick-road, for the T.C. :—

W. J. Simms	£25,285	0	0
J. Bodle, Ltd.	22,629	0	0
Black Rock Quarries, Ltd.	21,484	9	0
A. Saunders	19,930	0	0
Smith Wright & Co.	17,134	18	9
*S. Carey, Bexhill	16,209	8	0

BILLINGHAM.—For 150 conversions, for the U.D.C. :—
*J. McNeil £753 17

BRADFORD.—For transformer chamber in Otley-road, for the Electricity Committee :—
Mason—*J. & P. Obank, Bradford.
Asphalter—*Tunstall's Seyssel & Limmer Rock Asphalte Co., Ltd., Leeds.

BRADFORD.—For extensions at Bradford Technical College, for the City Architect's Department :—
†Chas. Booth & Son, Bradford.

BRISTOL.—For Shelter in Evans Park, for T.C. :—
*Bray & Slaughter £363

BRISTOL.—Erection of the following houses for T.C. : Shirehampton site, 94 houses, concrete construction ; Horfield site, 176 houses, concrete construction, 26 houses, brick construction—Total 296 :—
*John Knox..... £126,920

BRISTOL.—Sanitary conveniences at Canford Park, for T.C. :—
*Bray & Slaughter..... £298

BURNLEY.—For work in connection with the erection of a sub-station near Rose-grove :—
Mason's, &c., work—
B. Smith & Son £686

BURTON-ON-TRENT.—For erection of a fish market, for the T.C. :—
*A. Holmes & Sons, Dallow Bridge.. £2,675

CARLISLE.—For construction of new masonry and concrete retaining wall, and the necessary filling to form the new approach at the south end of St. Nicholas Bridge, for the T.C. Mr. H. C. Marks, City Engineer, 18, Fisher-street :—
*John Laing & Son, Ltd., Carlisle.... £2,254

CHELMSFORD.—For the erection of a boundary wall, for the T.C. :—
*W. A. Claydon, Ulting £972

CHESTERFIELD.—For erection of an underground convenience in New-square, for the T.C. Mr. V. Smith, Borough Engineer, Town Hall :—

Blythe & Sons, Mansfield	£6,696	0	0
Lehane & Co., Darley Dale	6,084	7	3
C. E. Gaunt, Chesterfield	5,524	0	0
W. G. Robson, Sheffield	5,197	0	0
*J. Wright, Chesterfield	4,698	16	0

CROWMARSH.—For erection of 10 houses at South Stoke, for the R.D.C. Messrs. J. G. T. West & Son, architects, Abingdon. Quantities by architects :—

A. Cox, Henley-on-Thames	£5,996	2	
Francis Bros., Tilehurst	5,270	0	
Hinkins & Frewin, Oxford	5,130	0	
Brasher & Sons, Wallingford	5,095	0	
Kirby & Sons, Wallingford	4,998	0	
Boshers, Ltd., Wallingford	4,950	0	
Randall's Executors, Abingdon	4,900	0	
J. W. Beeson, Pangbourne	4,899	0	
†P. R. Gutteridge, Pangbourne	4,340	0	

DONCASTER.—For 400 concrete houses, for the Corporation :—
For 180 "A.N." and 120 "A.S." Type, in concrete—
*F. Bate, Doncaster £127,546
For 100 "B." Type—
*Swift Bros. & Haslam, Doncaster.. £48,372

DUNDALK.—For erection of premises at 99, Clanbrassil-street, for Messrs. P. McGorisk & Co., Ltd. Messrs. Morris & Kavanagh, quantity surveyors, Harcourt-street, Dublin :—
*T. McDonald & Sons, Ltd., Dundalk £4,779 5 8

FITZWILLIAM (YORKS).—For picture house at Fitzwilliam, near Pontefract. Messrs. Garside & Pennington, architects, Ropergate, Pontefract :—
*G. Waller, South Elmsall.

GUILDFORD.—For making-up footpaths at Guildford Park, for the T.C. :—

Swinford, Powell & Morrison	£180
Streeter & Co.	175
*Franks, Harris Bros.	150

GUILDFORD.—For repairs to Woking-road, for the T.C. :—
*W. Manders & Co. £3,942 10 6

HALIFAX.—For alterations to Brearley's warehouse, Bull Green, for the T.C. :—
Mason—
*Jagger Bros., Ringby £2,303 0 0
Joiner—
*J. Lees & Sons, Halifax 278 15 6
A. Higginbotham & Sons, Holmfield..... —

HASTINGS.—For widening of Red Lake-road and construction of new roadway, for the T.C. :—
*L. J. Speight, Ltd., London.... £19,980 1

HASTINGS.—Construction of public conveniences, &c., at the Pilot Fields, for T.C.
‡Simms, Sons & Cooke, Ltd., Nottingham £1,250

HEREFORD.—For conversion of the present Isolation Block into an operating theatre, for the General Hospital, Messrs. Nicholson & Clark, architects, Cathedral Chambers, King-street :—

Wilks, Son & Peake, West End Works	£6,148
Beavan & Hodges, Ltd., Victoria-street	5,325
W. Bowers & Co., Bath-street	5,246
W. Powell & Sons, Whitehorse-street	5,168
*Charles Cooke & Co., St. Owen-street, Hereford	5,014

HIGHFIELDS.—For erection of 18 houses at Hamel Rise, for the Hemsworth U.D.C. :—

De Burgh & Sprakes, Doncaster	£9,119	5
G. B. Hillier, Hemsworth	9,000	0
W. Hanley & Sons, Hemsworth	9,000	0
*W. Jennings & Sons, Barnsley	7,915	0

ILFORD.—Extension of Goodmayes electricity substation, for U.D.C. :—
*Hammond & Mills, Ltd. £3,350

IPSWICH.—For rebuilding bridge over Belstead Brook, for the T.C. and East Suffolk C.C. :—
*A. E. Farr, London £910 10

KEIGHLEY.—For alterations at the Town Hall, for the T.C. :—
Mason—
*A. Sharpe, Oakworth £136
Joiner—
*Pearson & Wharton, Keighley..... 340

LEEDS.—For erection of offices, for Messrs. Timothy, Newby & Sons, Ltd., Boar-lane, Leeds :—
*Wm. Gott & Son, Leeds.

LEEDS.—For reconstruction of "Leeds Arms" hotel, West-street, for Messrs. Wm. Whittaker's Brewery Co., Ltd., Bradford. Messrs. Wm. Illingworth & Son, architects, Sunbridge-road, Bradford :—
*John Leach, Bradford..... £3,400

LIVERPOOL.—For erection of baths and washhouses in Minshull-street, Low-hill, for the T.C. :—
‡Hughes & Stirling £15,591

LLANDUDNO.—Parade and promenade extension at Craig-y-don, for U.D.C. :—
‡Alex Williams and W. Thomas, Llandudno £2,899

LONDON.—For the erection of four cottages and 36 flats on the St. Quintin Estate Housing Scheme, for the Kensington B.C. :—

Henry Knight & Son	£25,029	0
Harry Neal, Ltd.	25,000	0
Ross & Son	24,126	0
William Moss & Sons, Ltd.	23,656	11
A. Roberts & Co., Ltd.	23,400	0
Patman & Fotheringham, Ltd.	22,810	0
F. G. Coxhead	22,363	0
Perry Bros.	22,026	0
*F. D. Hidden & Co., Ltd.	21,280	0

LUTON.—For converting Plait Hall into a covered market, for the T.C. :—
*Luton Building Co. £5,147

LUTON.—For erection of an administrative and cubicle blocks at Spittlesea Hospital, for the T.C. Mr. J. W. Tomlinson, Borough Engineer, 1, Cheapside, Luton :—

	Administrative Block.		Cubicle Block.	
A. W. Butt	£6,474	0	£1,990	0
A. Carter	6,578	0	1,763	0
J. T. Garrett	5,827	0	1,705	0
H. Lacey & Sons	6,595	0	1,850	0
Luton Building Co.	7,158	0	2,500	0
C. Miskin & Sons	5,800	0	1,835	0
A. W. Oakley	5,762	0	1,659	0
E. Pryer	5,734	0	1,795	0
J. Tomkins & Sons	5,881	0	1,762	0
C. Wood & Sons	7,055	7	2,456	14
*C. H. White	5,720	0	1,645	10

MAIDENHEAD.—For erection of a new scarlet fever block at the Isolation Hospital in St. Mark's-road, for the T.C. Mr. H. E. Davies, Town Clerk, Guildhall. Quantities by Mr. Frank Woods, 3, High-street, Maidenhead :—

Cox & Sons	£4,130	9	11
Wm. Creed & Co.	3,993	0	0
W. A. James & Sons	3,987	0	0
J. K. Cooper & Sons	3,972	0	0
Halfacre & Young,	3,958	0	0
*Cripps & Green	3,922	0	0

(All of Maidenhead.)

MANCHESTER.—1,000 3 in. cast iron pipes, for the T.C. :
*Staveley Coal and Iron Co.—£11 17s. 6d. per ton.

MOUNTAIN ASH.—For erection of 26 houses at Penrhiwceiber. Mr. W. H. Williams, Architect, Town Hall :—

*Hawkins & James, Merthyr Tydfil.. £13,280

NEWMARKET.—For erection of 12 houses at the Rows, for the U.D.C. Mr. W. H. Eley, Godolphin House :—

†Linzell & Edmondson, Newmarket £6,085 10

OLDHAM.—For erection of a boundary wall at Watersheddings Recreation Ground :—

†J. Spencer & Bros., Ltd.

OLDHAM.—For laying-out playing fields at Heron-street School, for the T.C. :—

†J. & J. Spencer.

PONTEFRACT.—For rebuilding "Turk's Head" hotel, Gillygate, for Messrs. Carters, Knottingley Breweries, Ltd. Messrs. Garside & Pennington, architects, Pontefract :—

*G. Ward, Pontefract.

PORTISHEAD.—For erection of 10 cottages in South-road, for the U.D.C. Mr. F. H. Smith, Surveyor, Council Offices :—

E. Walters & Son, Bristol	£5,950
W. J. Kew, Bristol	5,785
W. Hinton, Portishead	5,363
*Burston & Hawkins, Clevedon	4,873

PORTSMOUTH.—For alterations at "Tower House," for W. L. Wylie, R.A. Mr. A. E. Tutte, architect, 30, Commercial-road, Portsmouth :—

F. J. Privett	£837	0	0
Jno. Croad	748	0	0
Tanner Bros.	741	0	0
Jno. Crockerell	733	0	0
John Lay & Co.	537	3	5
A. E. Porter	525	13	2
*E. A. Sprigings	520	8	6

PORTSMOUTH.—For alterations at No. 6, Auckland-road, West Southsea, for Lieut.-Col. E. A. Bourke. Mr. W. J. Wakely, architect, Portsmouth :—

H. Reynolds	£846	0	
John Lay & Co.	660	10	
Light Bros. & Flowers	646	12	
*A. H. Jordan, Ltd.	620	0	

ROCHDALE.—For external painting work on (*a*) 118 houses on Ivor-street, and (*b*) Kilworth-street Estates, for the T.C. The Borough Surveyor, Town Hall :—

(*a*) *W. Webster, Rochdale.
(*b*) *W. H. Duckworth, Rochdale.
*Hill Bros., Rochdale.

RUGBY.—For additions to the Union Infirmary, for B.G. Mr. J. W. Pendred, Clerk, Union Offices :—

*Parnell & Son, Rugby £9,632

SHEFFIELD.—For erection of a new telephone exchange at Sheffield Beauchief, for H.M. Office of Works :—

W. & A. Forsdike, Ltd., Sheffield.

SHEFFIELD.—For supply of 500 4 in. cast-iron pipes, for the T.C. :—

*Staveley Coal & Iron Co., Chesterfield £544 14

SHEFFIELD.—For repairs to premises in Limbrick-road, for the T.C. :—

*T. Owen £463 10

SOUTHEND-ON-SEA.—For erection of 55 houses, for the Corporation. Mr. R. H. Dyer, Borough Engineer, Town Hall :—

*Johns Bros., Woolwich £26,332 10 8

SOUTH SHIELDS.—Erection of steel fire escape balcony and staircase at sanatorium, for T.C. :—

*M. Aynsley & Sons, Newcastle-on-Tyne £832

TWICKENHAM.—For wood paving in the district, for the U.D.C. :—

†G. Wimpey & Co., Ltd. £22,300

WAKEFIELD.—For laying the 4 in. water main at Black-lane, for the R.D.C. :—

*Wilson Bros. £158

WANDSWORTH.—For additional baths for women at Tooting, for the B.C. :—

*J. Potterton & Sons £2,155 12

WEST HARTLEPOOL.—For the erection sub-stations for the T.C. :—

*C. Turnbull, West Hartlepool—

Chatham-road	£1
Milton-road	2

WOLSTANTON.—For the completion Wolstanton to Chesterton new road, for the

Coxhead & Co.	£12,254
S. W. Carryer & Co.	12,254
J. Riley & Son	10,600
Saunders & Torrence	9,974
Inchley & Co.	9,195
A. Monk & Co.	8,180
D. Carson	8,120
R. Douglas	8,067
‡J. Taylor	7,500

YORK.—For erection of Nurses' Home in ton-road, York :—

*Wm. Birch & Son, Ltd., York.

YORK.—Provision of assembly hall at Secondary School, for E.C. :—

*Henry Colman & Sons £1,388

YORK.—Lavatory accommodation at Secondary School, for E.C. :—

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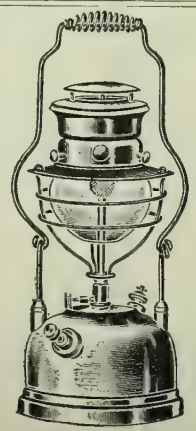
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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT

—No. 4263. OCTOBER 17, 1924.

THE VILLAGE

MANY of us have been enjoying a brief spell of leisure from work in the pleasures of the country-side, resting amid its quiet surroundings and the associations of the past. Whether in the Eastern Counties or the Cotswolds, we may still see life not so very different from what it was centuries ago. mp of the horses' feet, as they pass along the street in the morning twilight, and return at evenmind us of labour and habits stretching over a l years. Among the inhabitants are those who have een beyond the nearest town, and a few among the ve never travelled in a railway or been to London. ne of us who know little of the country-side would hem as uncouth and ignorant folk by the side of the in towns. The agricultural labourer of this kind is an n of the city, the reality far different. There is some- be learned from his life, often so much freer from of pleasure, not only on account of the distance from ut arising out of the varied interests and occupations is garden and his work include. Abounding in mother a first-hand capacity to do things, we find him less of a , and more intuitive and practical than his town brother, fe is compelled by a more narrow experience. At a hen so much is said about the restoration of village ought not to forget its many advantages. If the wage rably low and the problem of living at all a hard one, kind of labour, so near to nature, has exhilara- it, and it is not for this we need pity him. The nity sense prevails more in the village, and we too large to know about each other, if not always in ways. A corporate sense prevails in the country parish. ne such village out of many, wherein but one enamel ement disfigures the street, otherwise displaying only nt, homely time-worn characteristics, we speak, though f neglect lends some sadness to it now. The property assume belongs to a collegiate institution, and suffers ownership. For what interest in the preservation of its charm, its Tudor-built farms and cottages, does such ip bestow? The bursar—for there is no steward to er the property—will make a flying visit and hurry ain, and repairs are few and grudging, as the buildings We notice a hole in the roof of one of them, which has ere for weeks, and the cottage, one of the late Tudor nd inhabited, suffers no less harm than the unfortunate who dwell in it. It does not seem to the owners, who ld expect to be so conservative, a matter of any concern rve what is in their charge. We exaggerate, in our g ardour, the unsuitableness of these old cottages rn requirements. They have, nevertheless, bred stalwart thy types of countrymen in the past, and such further nces as are needed might well be added without new schemes becoming necessary, althou h they have been to fall into decay. Is not the traditional character of one-built cottages and farm buildings a contribution ell-being of life which we can all share? Yet we see adually but surely decaying, or with such repairs made as are almost as great an injury as decay itself. For pairs are made, the machine-made brick often replaces e of the old chimney. Care is not alway: taken to local characteristics or to depend on local material, t is the duty of the owners of such property to preserve is often not so much a question of the cost as the neglect about it at all. And the question of local material ery much the congruity of what is done. Who, having from the top of a certain lovely little town can egret the character of some new houses, which are word thrust into the beauty of the locality; or, e, where a new housing scheme has been carried lly incongruous to the surroundings, and defacing rance to the town. Tradition no longer aiding have to endure these things, so we see the hop "improving" itself with a plate glass window, ould disfigure a factory, quite unconscious of the vandalism in the act. These matters are conducted in a wholly haphazard way, without either direction or safeguards against the injury done. Greater efforts are now being made towards the conservation of ancient features, which will, in the end, do more to help village life than the imitation of town defacements which destroy its rural beauty.

It is a matter of wonder with some of us how the great churches came to be built which we may see in towns now hardly more than villages, so dwindled is the population. Their size and impressiveness a e accounted for in that the districts at the time when they were built were the centres of industry, such as those we may see in the Eastern counties. But this is only half the matter. The people liked to give the most glorious witness of their belief and the great buildings rose as the expression of it, not as an economic computation of seating capacity only, but from love of the beautiful, that which transcends any ephemeral profit and loss account. For when we have done all that our so-called genius for the practical can achieve, there still remains a vast unknown, and it is to this that we offer service when the artist in us directs our life. The evil is that we should have surrendered so much of this for economic and political considerations which hardly touch the heart at all. Life lived on such a plane may give us housing schemes and multiplied organisation, but will not restore beauty. For we live by faith, not sight, and all the best things come out of it.

Those great stone barns we pass on the roadside were not only to house corn, but to be the witness of the beliefs of men when life was more enclosed by religion. We labour this the more because it is this ideal which has gone out of life. An American Church Committee decided, as we read recently, to build a church over a grocery store which will be rented out for profit.

It is the very humbleness of village life which is a source of strength to it. We may find less facilities for listening-in, but more for the songs of the stars; and the owl's call from the dark elm trees may also contribute something. It is because of this nearness to nature that the village and contented villagers are so important; for within them the essential meanings of life are often better understood. We are not here setting up the village against the town—far from it—only the city has suffered more loss in traditional characteristics than the village. We rejoice, therefore, at the many agencies now directed to the revival of village life.

Now that the craftsman is carrying his work into the country-side and the small workshop is able to maintain itself, this influence should be very valuable, not only as the source of a limited amount of further employment, but in the impulse toward a better appreciation of country needs which lie in less dependence on the town. The artist also brings with him an outlook and appreciation which should react on the villager as he dwells among them and shares their life freer from class prejudices than others. Thus closer human relationships and a real aristocracy of wisdom and service may take the place of the foolish snobberies which too often divide the country-side, the inability to know each other being replaced by the desire for closer union. But the village is in danger, threatened in more ways than one. Work is becoming more uncertain in them, and the people will not stay. Though much better off on the same money in the country, when the weekly wage becomes uncertain they are safer in the town, where there are more chances of work. It is not true to-day that the countryman leaves his village because i is dull. He is compelled to do so in order to find work which the country no longer provides. We know of one village from which 40 to 50 of the inhabitants bicycle a long distance every day to their work in the towns in order to remain in their villages which they love. This desire is increasing and should secure all the aid possible. Pride of its own life is returning and to these efforts we should contribute all the help we can. To preserve village traditions and life is no dilettantism, but a necessity, for the village stands for a life the example of which is needed in the lure and dissipation of town life to-day.

NOTES.

A Great Building Scheme.

BUILDING activity of an important and conspicuous kind is about to commence from the designs of Sir Edwin Cooper for the Lloyd's Insurance and the Royal Mail Steamship Co., on the great areas which they have acquired bounded by Leadenhall-street and Lime-street. The designs for Lloyd's has been on view at the Royal Exchange last week and some admirable drawings convey an excellent idea of the finely planned scheme and its effective elevations. The principal entrance, in Leadenhall-street, is marked by a dignified and impressive composition. The long frontage to Lime-street will only be seen in quick perspective, and is treated with much simplicity. The lay-out of the plan has been dealt with by a master hand which suggests ease and convenience in the working of the various departments whilst giving many opportunities for free architectural rendering. Our readers will shortly have the opportunity of seeing in our pages how admirably Sir Edwin Cooper has dealt with this important problem of commercial building enterprise and we withhold any detailed explanations until the illustrations appear.

The National Federation of House Builders.

THE half-yearly conference of the National Federation of House Builders recently held at Leamington was of interest as showing what the more prominent members of the industry think of the possibilities of new methods of construction. The public—always interested in new things—is apt to place too much reliance on novel proposals which, however valuable they may be, are certainly not magicians' wands. The drab key to increased house building at a reasonable cost can only ultimately be found in increased output, both of materials and labour, and in sound organisation. The former can only be attained through a more exalted ideal and co-operation animating everybody concerned; while the knowledge of organisation, in so far as it affects actual building operations, is practically the exclusive property of the house builders. To look for success, without these essentials, in new methods or in increased density, or in simplified lay-out, is like lightening the load engine by cutting the driver's The difficulty is, of course, to d how to get the individual to wo utmost for the common good.

Adelaide House.

THE scale of Adelaide and the resultant d of Fishmongers' Ha other buildings may b pared to the effect of Bush House little church in the Strand. The critics who oppose the building i huge proportions because of the caused to earlier buildings of tectural and historical interest. Adelaide House is erected for n requirements of use that differ those of an earlier time and th requires a scale proportionate, a a logical reason for its enhanced p tions, and it appears to us that obj taken to it on account of the inj smaller buildings are difficult to s Is it also so certain that the s building suffers in the way sugge If, for the purpose of argument, Ad House were bad architecturally, it seem more likely to enhance the b of the smaller building. This seem us truer than to assume that a bea building is made less beautiful b erection of a much larger one nea The objection to the big modern bu should be on account of its ugline failure architecturally, for the m look of a building near an ancien is not the objection to it, but that a bad building. Stone facing which not really support the structure attempt to ornament a metho steel construction which does not out of any constructional necessit may criticise or approve of acc to our view of the function of tecture.



Photo: F. R. Yerbury.

Seville Church and the Convent of St. Paula.

Apprenticeship and Slow and Costly Building.

WE print on p. 6 article on apprentices the building industry will give some indica the efforts which are made to deal with a question of urgency. A correspondent in writ us this week says:—"The c between the employers and the wo in regard to apprentices must be st ened out if we are to carry on the in in the future. . . . If we could onl workmen understand that the s down of any one job kills future wo produces unemployment we shoul bring about a better state of thin the workmen themselves would get wages."

Back-to-Back Houses.

IN his interesting add the Town-Planning ence of the Town Pl Institute at Leeds. t Engineer, Mr. W. T. Lancashire, C.E., the President, made special re to the large number of back-t houses in Leeds. Of the 77,800 ho



Dutch House, Topsham, Devon.

rpe, 34,500 "abutted directly on eet and generally contained larder als in the basement, kitchen with and sink on ground floor, and one m on first floor, there being one w.c. houses with entrance from the " There can be little doubt, he ed, that sooner or later—the sooner tter, we must all agree—this class gely disappear and the population over a wider area by rapid transit wider and better roads.

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don ffic.

Another interesting address was that of Sir Lynden Macassey to the Institute of Transport dealith the urgency of centralised lanning for London. He suggested ust as there exists a Common Poor und, there should exist a Common Improvement Fund for the London area. Goods should be conveyed tunnels instead of on the surface, oviating one of the worst causes of congestion. Further points with we are in hearty agreement are the ility of giving a practical trial to duct method of eliminating blocks s-roads, the necessity for a road at Charing Cross, and the great that would accrue from an efficient of passenger boats on the Thames. England invariably display a lly timidity in approaching domesoblems of the first order, and n's traffic is hardly less important ne nation's fuel.

Coal.

Mr. Frank Hodges, M.P., in a recent address, emphasised afresh our criminal folly in burning raw coal. said, was the fuel of the future. In normal times we burnt 155,000,000 tons of raw coal yearly, thus wasting the by-products, obtaining only a miserable percentage of heat, and fouling the atmosphere. The speaker pointed out that one ton of coal could provide three gallons of motor spirit, 18 gallons of crude oils, of which at least 50 per cent. would be available for Diesel oil, and some two gallons for lubricating oil, 30 lbs. of ammonium sulphate (used for fertilisation), while 14 cwt. would remain over as a smokeless, free-burning fuel. The first Government that seriously tackles our national fuel resources will deserve our gratitude. Public opinion is ready for such legislation.

Road Facilities.

In different localities the country-side is suffering much defacement in order to provide greater security for the motor traffic, but it does not always appear that the remedies effect the results aimed at. We think of an example where some magnificent trees which sheltered the entrance to a very beautiful village were cut down in order to enlarge the view of the motorist. In this case, the benefit resulting proved very much smaller than the injury to the spot, and we think that more caution is necessary before such steps are taken. We were told by residents of the locality that it had not been of the benefit expected to motorists. These instances suggest that more care should be taken in such cases, for the injury to rural surroundings arising out of motor traffic is very serious and would appear to require the watchfulness of an organisation to protect the country districts in the same way as the S.P.A.B. seeks to protect our ancient buildings.

The Late T. E. Collcutt.

A long and honourable career has come to an end with the death of Mr. T. E. Collcutt, whose life has been of unquestionable benefit to the profession and many outside of it. We regret the loss of his genial personality. His direct influence on architectural design had already become a thing of the past, but his later years were marked by very earnest desires for the better housing of the poorer classes, and had another ten years of active work been vouchsafed to him we feel sure his efforts would have borne good fruit. He came into public notice largely through his Imperial Institute design and such works as the Wakefield Town Hall, but a great part of his time must have been devoted to hotel and other designs, in which he scored some notable successes. He collected clocks to an extent and in quality such as few can reach, and he understood furniture design to an exceptional degree. He had a strongly marked personality which won him many friends. Though his life was shadowed by such inevitable clouds as fall over all alike, we are glad to think that fortune smiled on an architect of such outstanding ability, and that much real enjoyment came to him in his declining years. The shortness of human life appears sadly emphasised when one considers the possible benefit to the world of an active force like Collcutt's if its powers at the age of seventy could last another twenty years. Every time a link with the past is broken, like the passing of a long known and highly esteemed architect, we cannot but feel how much our lives may hold of value to our fellows if we carry them forward under the influence of good tradition and honest endeavour.



Photo: F. R. Yerbury.

Seville Church.

GENERAL NEWS

Professional Announcements.

Mr. Robert C. Mathew, F.S.I., has removed to Bedford-row House, 58, Theobalds-road, W.C. 1. Tel.: Museum 7459.

Mr. Wilfrid L. Evershed, F.S.I., has opened a branch office at 3, High-street, Woking.

Annfield Plain.

The design of Messrs. A. & F. Manuelle, Ltd., London, has been accepted for the Annfield Plain War Memorial.

Royal Institute of British Architects.

R.I.B.A. Intermediate Examination, November: The centres for this Examination will be London and Leeds. At both centres the examination will be held on November 21, 24 and 25.

At the London centre the oral examination will be held on November 27, and at the Leeds centre on November 26.

South Wales Architects.

Major Harry Barnes, F.R.I.B.A. (Vice-President of the Royal Institute of British Architects), delivered a lecture to the South Wales Institute of Architects and the Institute of Builders, at the Engineers' Institute, Cardiff, recently, on "The Architect, the Builder, and the Client."

Mr. Percy Thomas (President of the South Wales Institute of Architects) occupied the chair, and supporting him were Mr. J. Turner, J.P.; Mr. Charles Thomas (Swansea); and Mr. H. Teather and Mr. Alwyn Lloyd, of the Welsh Town-Planning Association.

Major Barnes, in the course of his remarks, expressed the hope that the client would learn to perceive more clearly the distinction between the engineer and the architect, and the fact that, except in rare cases, the one could not be employed to do the work of the othe were distinct professions.

He appealed to the builder as the of the doors" through which the crafts and materials which were essential ele the building art must pass, to co-op the revival of craftsmanship and the pr of materials, which should possess not qualities required to resist the eleme stresses they had to meet, but also the of texture and colour. He expressed th conviction that much of the divisio unfortunately existed at the present day builder and operative would disapp the revival of a common interest in a craft.



London Street Architecture!
[How we decorate our buildings.]

COMPETITION NE

Barton-upon-Irwell Union.

The assessor, Mr. W. A. Pite, F.R.I.B made the following awards in this comp (1) Messrs. Elcock & Sutcliffe, 21, North land-avenue, London; (2) Messrs. Adam den, Hyde Park Corner, London, (3) Messrs. H. V. Ashley & W. Newm Gray's Inn-square, London, W.C.; E. B. Bailey, 9, Cook-street, Liverpool

Harrogate Infirmary.

The assessor, Mr. S. D. Kitson, has m following awards in this competitio Messrs. Elcock & Sutcliffe, 21, Northumb avenue, W.C.2; (2) Messrs. Lanchester, & Lodge, 19, Great Russell-street, (3) Professor Beresford Pite and Mr. J Hodges, 101, Great Russell-street, W.C.2

Dundee School Competition.

Mr. John Arthur, the assessor, has m following awards in the competition for for the new advanced school in Blackne for the Dundee Education Autho (1) Messrs. Maclaren, Soutar & Salmond, J. O. Allan, Aberdeen, (3) Messrs. A Friskin, Dundee.

Monument to Sir Wilfred Laurier.

The full result of this competition follows: (1) Mr. J. Emile Brunet, Par Mr. Antonio Sciortino, Italy.

Valletta Lay-out Competition.

Designs are invited for the lay-out open spaces and fortifications between and Floriana and those encircling F Applications for particulars, with a de £5, to be made to the Minister of Public Public Works Office, Valletta, Malta, n than December 1. Premiums of £1,000 a are offered to the first and second com respectively. An indemnity of £100 awarded to three other designs showi spicuous merit. The assessors are Mr Warren, F.S.A., and Professor Patrick crombie, A.R.I.B.A. Sending-in day, J 1925. Conditions can be seen at this

Holbrook School.

Sir Aston Webb, P.R.A., has been ap by the Royal Hospital Schools, Gr assessor of the designs for the new buil be erected at Holbrook, Suffolk. Six ar have been selected to prepare plans, a will be placed before the assessor on ber 1.

Other Competitions.

Other competitions still open incl following (the dates given are, first the se date, and second the issue of *The Bu* which full particulars were given):— Hall (May 1). Manchester Art Gallery (Aug. 22). Concrete Cottages (Oct. 31; S Christian Science Church, Southport (no in date announced; Sept. 26). Bar Memorial Club (no sending-in date ann Sept. 26).

ORRESPONDENCE

Peace in the Industry.

—Your editorial, "Peace in the Indus- has evidently aroused very considerable t, from which it is clear that the matter ch in the mind of the public, waiting or some such lead as yours to give it ventilation. In doing this you are to the good work which you have so isly undertaken on behalf of the best ts of the industry.

nust be clear to everyone that the pre- ituation is not a satisfactory one. No on which has as its object a peaceful ettled condition, but which is liable at nes to disruption, can be described as ctory. However, that there has been s will not be denied. To any student history of the building trade it will be hat from the year 1799 to the present here has been very considerable change. ne 17, 1799, the first Act forbidding all ations was rushed through the Com- and Lords in three weeks. This law d for the sentencing to three months l or two months' hard labour of any g men who combined to gain an in- of wages or decrease in hours. The item of dispute at present is merely -hour. Consequently it is clear that nough conditions may not be described led, something has been achieved; and nething is the recognition of the claims operative.

s Major Harry Barnes says in your or October 10, peace in the industry is vaited for until the Royal Institute of Architects receives intimation from arties that they would favourably con- he establishment of a permanent tri- for the settlement of disputes in the g industry, then peace will be long de- For whilst it is unlikely that such an ill come from the operatives, it is as as anything can be that it will never hcoming from the employers. With respect for your correspondent and all ties concerned, it is desirable that it be realised that if anything but wait- something to happen is ever to be n offer should be made by a party of rchitects to a party of operatives, as a ep. The history of the industry, as by Mr. R. W. Postgate, gives proof e operatives have always led; and such ination would go far to force the third o come in or to stay out. Recourse to again proves that the latter event be unlikely.

J. E. Yerbury states that there is very oubt that both sides are badly led, in- as the leaders of both sides are in o be Napoleons rather than Solomons. be said without disparagement of any parties that their viewpoint becomes on rising to power, but at the same is not to be doubted that the rank of all parties are amicably disposed, a high regard for each other, and de- ve all things the peaceful conduct of dustry. Can it be that whilst this s so universally shared amongst the d file the peaceful condition desired waited for until the Royal Institute sh Architects receive a clear invita- n both parties that they would favour- nsider the establishment of a perman- unal for the settlement of disputes in ding industry? Once again reference Postgate's "Builders' History" will at progress has not waited on such an The amelioration of conditions in the industry has progressed without any having been made to the Royal In- f British Architects, and has resulted ne recognition of the efforts of the s towards that end by the more fair- masters, and the architects who have o be approached by these two parties waiting, and will wait for ever.

Any person or body of persons that continually stands aloof becomes in time to be regarded as one which does not matter; and it will be no overstatement of the case to say that, if the operatives and employers were asked, this would be their feeling as to the value of the opinion of the architects on the conditions of the industry. This being so, is it likely that an offer will come from either of these two parties that the architects should intervene? The only hope of any progress, as has been stated above, and cannot be too often repeated, is for the offer to come from the party which has so far stood aloof, but which is so eminently suited to act in arbitration within the industry.

If, by your further efforts, you can gain the acceptance of this idea, you will be acclaimed by every fair-thinking man within the industry.

A CORRESPONDENT.

London.

Housing and Rent Acts.

SIR,—Owing to pressure of work I was unable to read your issue of September 26 last until recently, and therefore have not been able to reply to the comments in your leader on housing.

With regard to the statement made by me on June 6 last, that working class dwellings never had been supplied by private enterprise, I only wish to point out that I did not state that *no* working-class dwellings had been provided, but that the working-classes as a whole have not been supplied with new houses by private enterprise. The vast majority of the working-classes live in houses which were built for the richer classes, and have been discarded by them, and comparatively few have had new houses provided by speculating builders.

Regarding your reference that you do not follow my argument against the immediate repeal of the Rent Acts; having referred to my letter, I see that it is not as clear in statement as it might have been, but what was in my mind when writing was directed more against your reason for advocating the repeal, viz., "that the cost would then be borne, not by the community as a whole, but by those who were supplied with what they wanted," with which I do not agree. In so far as the want of individuals is caused by the act of the community I think it is the duty of the community to supply that want.

I still think that the immediate repeal of the Act would greatly prejudice the professional middle classes, and in effect penalise the ex-Service men (who have not been able to obtain houses), while leaving his stay-at-home neighbours untouched (because they have entered into definite agreements limiting their rent for a period of years). I do not think repeal will greatly affect the provision of working-class dwellings, which, at the lowest rentals, are at the present time beyond the means of the poorer paid worker.

I do agree that subsidies are wrong, and have shown a better way of providing houses in your issue of July 18 last. I would not repeal the Rent Acts immediately, and am afraid of your suggestion to assist the necessitous tenants, because I fear it might develop into another system of doles, which would be open to abuse by the unworthy and certainly would not be taken advantage of by the very people who are of the greatest value to the State.

JOHN E. YERBURY.

Old English Villages and Modern Town Planning.

SIR,—It has often occurred to the writer that there is room for a book describing in detail selected examples of typical old English villages, the work being designed principally for the use of architects, town planners, landscape gardeners and artists.

Although nearly all these old villages grew in very haphazard fashion and with but little relation to definite plan, they furnish, nevertheless, suggestions of direct and practical utility for all who are engaged on schemes for new garden suburbs, villages, and town plans, and are at the same time endeavouring to recapture for modern purposes some of the charm that dwells in the old places.

It seems that what is needed is a compilation in book form containing the ground plan, ground contours, roads, buildings, gardens, streams, and general lay-out, of between a dozen and a score of the finest extant examples of unspoilt old villages.

The exteriors of churches, houses, and other buildings, &c., could be illustrated by photographs, and the same method can be employed to show other important features such as unique gardens, plantations, bridges, and picturesque spots.

It is true, of course, that the ground plan of any village is to be found in some detail on the large-scale maps of the Ordnance Survey, and hence the primary data needed is already available for anyone proposing to write a book of this kind. But a compilation on the lines sketched out above will involve a great deal of additional labour, for most of the information required has not, it would seem, been published, or, if published, is not in an easily accessible form.

This book would make an appeal not only to those mentioned above, but also to a large and various body of general readers.

T. W. MACALPINE.

Gravestone Art.

SIR,—I see from a recent issue of one of the London dailies that a committee has been formed to inquire into the possibility of raising the standard of gravestone memorial art. The decadence in this as in other branches of the applied arts is due to the commercialism of the age. As students, the majority of qualified architects have studied this branch of design as part of their training. To-day an architect is rarely called upon to design private memorials of such importance as the Bridport tomb at Salisbury, the Burleigh tomb at Stamford, the de Grey tomb at York, or the Percy Shrine at Beverley, but now the village mason has for the most part ceased to design in the local traditional manner it is well to point out to the general public that by going to a qualified architect they will get more value for their money than by going to those firms who do not keep designers who can put the individual and personal touch into such work, but turn out endless copies of stock types with various embellishments to suit the varying costs. The mediæval village mason usually knew the life story of the person to whom the memorial was to be erected and the heraldic history of his family; his design was, therefore, a thing of meaning and sense.

Few designers would be retained by their firms if they took time to inquire into the personal history of the deceased, but by no other means can that finality of design be obtained which places any new work into its place in the traditional line of its class. A walk round any old churchyard would convince any but the most prejudiced that no matter how simple such work may be the unity and beauty are largely, if not entirely, due to its personal application of the individual's life story to the design, together with a conscious or unconscious appreciation in the designer for beauty of form, scale, and detail.

Whether any architect sits on this committee or not I do not know, but it is difficult to see what good such a committee of investigation can do. The public do not yet seem to have grasped the fact that there are many qualified architects who are mainly architects because the creating of beautiful things is to them the one means of self-expression, and that they are wholly devoted to the interests of the smallest client. The proper collaboration between the architect and sculptor would lead to a revival in this most interesting and fascinating branch of art. War memorials have failed, as a whole, for the want of this collaboration.

Edinburgh. WILLIAM DAVIDSON.

THE ARCHITECTURAL ASSOCIATION EXCURSION TO SPAIN—II

By A MEMBER OF THE PARTY.

September 18.—Segovia proved to be very rich in doorways and small façades, a favourite motif being a rather squat arch of enormous voussoirs surmounted by balconied window. The interior of the Cathedral is noble in its scale and comparatively simple, and here, as in all Spanish churches, the wrought iron work is so plentiful and magnificent as to defy description. We discovered that a worker in majolica had established himself in a Romanesque church on the edge of the town of which he had converted the clerestory into a flat, using the remainder of the building as work and show rooms. The Alcazar, like Melrose Abbey, should be seen by moonlight when the iron hand of the restorer is less in evidence. Of the many things we saw at Segovia none were more interesting than the suppressed monastery known as El Parral, whose church, now bare of all contents except a magnificent retable, has a serenity and beauty of proportion that are extraordinarily fine. Like most Spanish churches, El Parral has no east windows and the lighting of the altar by means of windows high up in the transepts is very effective. Perhaps it was because of the absence of over-ornamentation that disfigures so many Spanish churches, that we enjoyed so much the beautiful lines of this one. No place in Spain, I think, has left us with more pleasant memories than Segovia.

September 19.—This, our last day in Madrid, was devoted to the Escorial by all except some half dozen members of the party who were summoned to meet King Alfonso. Situated among the mountains about seventeen miles from Madrid, this immense building contains a palace, a monastery, a convent, and a church, the burial-place of the Spanish Kings since Philip II. This monarch imposed his austere personality on his architects, Juan Bautista de Toledo and Juan de Herrera, and the whole structure wears an air of gloomy magnificence that well expresses its founder. Its scale is immense, and its simplicity unusual in Spain. Some of the courtyards are attractive, and the views from the windows are magnificent, but one thinks of it chiefly in its strength rising from and almost forming part of the rocks on which it stands. A little pavilion built in the gardens in 1772 two centuries later makes an attempt at gaiety which is curiously pathetic, so completely is it dominated by the sternness of El Escorial. Our night journey to Cordoba was animated by accounts of the King's amiability to his visitors and his horror and surprise at learning of the rise of a race of lady architects in England.

September 20.—A somewhat depressed party descended at Cordoba at dawn, but great solace was at hand in the club of which we were made members for the day. In its sunny patio we became our better selves, and soon set off to see the famous mosque, the largest in Europe, and the centre of Mohammedanism in the West during the Moorish conquest. A Christian church has been built in the centre of the mosque, and its unexpected appearance amidst the long lines of columns and horseshoe arches is more strange than satisfactory. Some sham vaulting is now being taken down here, revealing the much more interesting and characteristic Moorish wooden ceilings. The most charming place in Cordoba was a private house which we were privileged to enter—that of Don Gomez, now the property of the Marquis of Viana. Its patios, and its walled garden overlooking the street, all richly clad in plumbago and jasmine, bright with cannas and shady with orange trees, were a relief from the prevailing ecclesiasticism. Charming rooms, with some exceedingly good furniture and decoration, overlooked these courts, and some of us felt that we could have happily spent the day there. The stronghold of the sombrero-making industry is Cordoba, and some of our party supplied themselves with authentic hats. The city itself with its narrow winding streets wears something of the aspect of Toledo, but there are signs of considerable building activity. That evening we reached Seville, our final objective, and settled down in a hotel in a square cynically called "Del Pacifico" on account of the nerve-shattering noises which emanated from it.

September 21.—Seville was enjoying a heat wave, and the most hardened sun-worshippers were glad to keep to the shady sides of the streets. Our first visit was to the famous Giralda Tower, from whose summit the city could be seen spread out. The tower itself is Moorish with the exception of the superstructure, which was built in 1568, but so admirably is it composed that the whole structure appears to be the inspiration of a single mind. The cathedral itself is immense, approaching St. Peter's in Rome in size, although the simplicity and unity of the design prevent an immediate realisation of its vastness. As usual, the coro and high altar are enclosed and face each other across the transept screened by the most magnificent gilded iron grilles. Much of the stained glass, although not of what is generally considered the best period, is superb in colour, and the whole structure is impressive in the highest degree. The Alcazar, the remains of the Moorish citadel, was our next objective. Its exterior still preserves the appearance of a mediæval castle, but within the delicate and intricate ornamentation of a later date clearly indicates a palace built for pleasure. A good deal of restoration has taken place which, although it has recaptured something of the original gaiety of colour, has also lessened the attractiveness of much of the work. The patio of the Maidens, nevertheless, has a delicate beauty of its own, and some of the tile work is admirable, while the gardens laid out by Charles V in the sixteenth century form the most delightful retreat. Their palms and orange trees, overhanging the richly adorned fountains and pools, gave to those of us who had never visited the East some idea of its exotic beauty.

Seville as a city is bounded on the east by the Alcazar with its gardens, and beyond these lie pleasure grounds. Permanent exhibition buildings have been constructed, and are in course of construction here for a Pan-Spanish exhibition which is to take place in 1927. The lay-out is an attractive and interesting one, and the buildings themselves are designed in a manner reminiscent of Seville's native architecture.

September 22-24.—The official programme of the excursion finished at Seville, and since several days were passed there I need no longer adhere to diary form, but shall content myself with a general description of some of the places visited. The city is unusually rich in Renaissance buildings, both civil and ecclesiastical, and among the latter one finds in its fullest development the richly ornamented Spanish Baroque. Close to our hotel there stands one of the most interesting of these, the church of San Pablo, formerly the convent of Sta Magdalena. This church had been restored by Sig. Gutiérrez—restored only in the sense that he had exposed some very interesting work of Moorish character, particularly a vault in Micah form. The unfinished west front is magnificent in scale and decoration, and, in spite of its over-ornamentation, the interior is full of suggestion. For the work of an earlier period the convent of Sta Paula may stand. Its gothic entrance porch in fine red brick with majolica decoration is one of the most delightful things we saw. On the south bank of the river are two interesting churches, Sta. Ana San Jacinto, both in richly decorated R sance. The archbishop's palace adjoinin cathedral has a pleasant seventeenth ce baroque façade and a fine patio, whil most imposing example of the plater style is to be found in the Ayuntan (city hall) which overlooks the cha palm-shaded central square. Scarce square foot of its surface but has been c yet the general effect is not lacking in br

The city museum is lodged in an old vent and contains a large collection of ings as well as archæological speci Here Murillo leads, and there are som mirable pictures by Zurbaran, but for g interest the museum cannot compare wit of the Prado. I have left to the last th fine private houses which we visited Casa Pilatos and the Casa of the Du Alba. The first-mentioned is in some re more attractive in its detail, but the la a very fine example of the private res of a Spanish nobleman. Its patio and g resemble those described in the house o Gomez at Cordoba, but they are on a gr scale, and some of the apartments are and finely proportioned, and peculiarly esting by reason of their coloured and rated wooden ceilings and their pain The last-mentioned are of considerable torical interest to Englishmen since the D of Alba hold also the title of Duke of Ber

In Seville, as in Madrid, the entire en of the party were not consumed in s seeing, and many of us found opportuniti hear and see something of the tradi Andalusian singing and dancing. A good of this takes place in the open air, an one occason we found ourselves on the of a small pavilion, the music being sup by a "hurdy gurdy" specially dedicat our use. Our last evening provided a su opportunity for drinking the health of Gutiérrez, and for thanking him for the ordinary kindness which he had shown t party since its arrival in Spain. He completely thrown aside his work, had with us throughout our tour, and had played endless patience and high s Without him and the other Spanish arch who so kindly accompanied us, Sigs. P rutza, Arcas and Arnal, we could not seen or learned what we did, and w them all a great debt of gratitude. T Yerbury also acknowledgment was ma his most successful efforts in arrangin 1924 excursion. It was to his gift for o sation that we owed our most successfu to Spain, and every member felt they had part in the most interesting excursio A.A. has held.

Students' Work at the R.I.B.A.

The large collection of students' dr now on view at the Institute afford a favo view of the scholastic activities in archit education. The many schools repre may claim to be doing valuable work preparation for an architect's career. Th of the drawings represent the five years' of students at various schools, which has for them exemption from the final exami of the Institute; whilst some three t hundred count as the work of a three course, which earns exemption from the mediate examination. This exhibition a thousand drawings is well worth seein contains a good deal of encouragement f future, but it is difficult to see what may h if the present rate of progress is main for the pressure on space at the Instit already nearly at breaking point. Perha cause for satisfaction that little or noth the way of eccentricity marks the d As this is, we believe, the first time th London University has put in an appe at these exhibitions, it is of interest to c their work with that of other schools have been earlier in the field, such a A.A. and Liverpool University.



Photo: F. R. Yerbury.

Seville: Courtyard in the Alcazar. (*See p.* 590.)

COMPETITION FOR PROPOSED HOSPITAL AT DAVYHULME, NEAR MANCHESTER

AN excellent site of some thirty acres has been secured at Davyhulme, for the Burton-upon-Irwell Union, and the conditions of the competition for the new Hospital were drawn up by Mr. William A. Pite, F.R.I.B.A. From an examination of these, this appears to us to be the first instance of a distinct effort being made on a large scale to develop the Poor Law Hospital on more efficient and modern lines, in conformity with present general hospital requirements. The consistent demands which have been generally made by guardians throughout the country for improved conditions, seem at last to be bearing fruit, and have secured acknowledgment from the responsible Government authorities who have now under consideration a draft memorandum setting forth the requirements for such buildings, based upon higher standards than hitherto accepted for such buildings.

Eleven sets of designs have been submitted, all of an unusually high standard, and from our examination of these, it is evident that some striking results are to be obtained in the direction we have before indicated of the much-needed improvement and general development of such institutions.

The intention is to provide accommodation in the first section for 308 beds, and to make provision for an ultimate extension to 500 beds. The assessor has now made his award, as follows :—

First place—No. 9 (Messrs. Elcock & Sutcliffe).
Second (£150 premium)—No. 3 (Messrs. Adams & Holden).
Third (£100 premium)—No. 8 (Messrs. Ashley & Newman).
Fourth (£50 premium)—No. 4 (Mr. E. B. Bailey).

The winning design shows a symmetrically-arranged plan with all the wards, including the future extensions, on the southern side of the main corridor. The conditions require that the wards shall be placed axially north and south, an axiom of hospital planning; but we note that several competitors penalise their future wards by planning them on the northern side, where conditions cannot possibly be so good. With site unrestricted and an abundance of space available, there is no excuse for any arrangement but the best, where the maximum of value of site, sunshine and outlook can be secured for the patients. These advantages are embodied in the winning scheme, which is a most compact and economical plan, well illustrated by a delightful set of drawings illustrating an architectural treatment of considerable merit and thoroughly well considered in details of plan. The principal entrance is from Moorside-road, and the wards are arranged on each side of the central administration buildings, set back approximately 500 ft. from the road. On the extreme left, the nurses' home is situated with pleasant outlook over the golf links on that side of the site; on the extreme right the isolation unit is placed as a detached unit.

The ward pavilions provide for a large ward of twenty-four beds with side wards for three beds, two two-bed wards, and a single bed ward, or day room, all excellently arranged, except that we consider some effective means should be provided to secure direct lighting and ventilation to the ward corridors. This, no doubt, will be considered in the developments of planning. The entire omission of detached sanitary towers will be noted, a bold experiment, but one requiring careful examination. The ungainly and obstructive sanitary towers which have so long been a feature of hospital ward planning, seem to have had their day. No matter where placed in relation to the ward, they do obstruct a considerable amount of sunshine, and also prevent the free movement of air, which is so essential in the courts between long ward units.

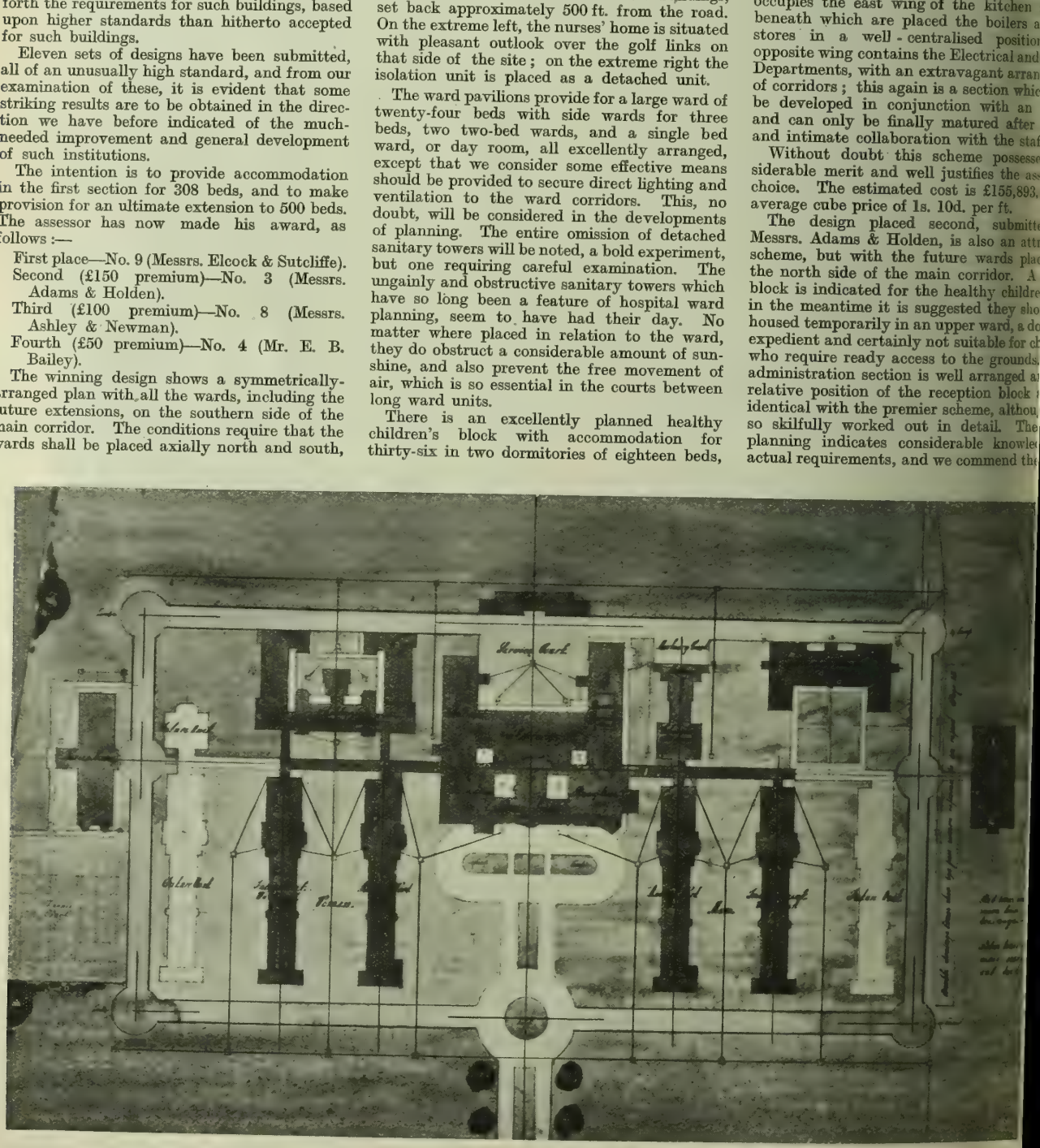
There is an excellently planned healthy children's block with accommodation for thirty-six in two dormitories of eighteen beds, each with well disposed bathrooms a tories, a central duty-room and adequ rooms and verandas. Dressing roon necessary adjunct to the bath-rooms, that the children may avoid the steamy phere of a bathroom when changing ni morning.

The maternity and sick children's a well-planned section, but the central co wing would have been better placed opposite end of the sixteen-bed wa opening out for sunshine from the soutl a position further removed from any obstruction caused by the main corrid

To the right of the administration s well-detailed reception department is with convenient access to the hospi egress to the isolation unit when require kitchen department, with stores, &c., factorily arranged with a good service c the north side, on the opposite side o are placed the various workshops. The occupies the east wing of the kitchen beneath which are placed the boilers a stores in a well-centralised positio opposite wing contains the Electrical and Departments, with an extravagant arran of corridors; this again is a section whic be developed in conjunction with an and can only be finally matured after and intimate collaboration with the staf

Without doubt this scheme possesse siderable merit and well justifies the ass choice. The estimated cost is £155,893, average cube price of 1s. 10d. per ft.

The design placed second, submitte Messrs. Adams & Holden, is also an attr scheme, but with the future wards pla the north side of the main corridor. A block is indicated for the healthy childre in the meantime it is suggested they sho housed temporarily in an upper ward, a do expedient and certainly not suitable for ch who require ready access to the grounds. administration section is well arranged a relative position of the reception block identical with the premier scheme, althou so skilfully worked out in detail. The planning indicates considerable knowle actual requirements, and we commend th



Davyhulme Hospital Competition. Design placed First: BY MESSRS. ELCOCK & SUTCLIFFE, F. & A.R.I.B.A.

d adopted for bringing in direct air and
o the ward corridor, a necessary provision
uently lacking in some of the best plans.
liately above the administration is
d the isolation unit, reached by means
open staircase and lift, but we do not
r this altogether a satisfactory plan to

elevations are charming and well shown
mple, straightforward drawings, quite
nt to illustrate the qualities of the design
e attractive grouping which is particularly
anaged. This scheme is estimated to
59,760, the cube being taken at 1s. 6d.

third premium is given to design No. 8,
ted by Messrs. Ashley & Newman, which
dicates a symmetrical plan with central
stration kitchen and stores and principal
e from Moorside-road. The future
have the same defect previously referred
eing situated on the north side of the
orridor. The nurses' home, situated in
eground, is connected up to the hospital
ong covered way, a similar expedient
dopted on the opposite side to provide
rom the isolated receiving wards. The
enerally are thoughtfully considered with
eption of the accommodation provided
dren. It can hardly be considered a wise
tion to place thirty-six healthy children
ing ages in one large dormitory. The
's sick wards are planned as inter-
nicating rooms without separate access
h we see many objections, both medical
ninistrative. The wards are interesting
howing a complete absence of the cut-off
towers, but we doubt whether the
illustrated is so effective as the more
x method shown as an alternative. The
home is an attractive block well con-
in detail.
rawings are prepared on rather hurried
matic lines but which well illustrate the
purposes and effect. The report is an
t one, and shows the total cube to be
2 ft. priced at varying rates from
o 1s. 10d. per ft. The total cost being
s £178,639.
he No. 4, submitted by Mr. E. B. Bailey,
rpool, is awarded the fourth place and
for a simple lay-out plan with the wards
in a regular array on the south side of
n corridor—an excellent arrangement,
ecures for the patients the absolute
m of benefit from sunshine and aspect
e site can afford. The administration
nd all other services are placed to the
h access from Davyhulme-road.
ite chosen for the nurses' home can
be considered satisfactory, facing as it
laundry and central station on the one
the reception block and administrative
on the other. The boilers are not well
being in such a position as to suit the
uildings rather than the present scheme.
ning of the reception wards in close
sition to the isolation cubicles is a
lefect. The children's garden, with the
s ward on the one side and the maternity
n the other, provides an attractive
although here again the 36 children's
herded together in one large dormitory.
the principal corridors are inadequately
ot ventilated—a matter too frequently
ntly considered in these institutions.
ds are generally well considered, but
me defects, such as the end beds being
nto unlit and unventilated corners;
cal rooms should not be entered
he duty rooms, as shown; the two-bed
e totally inadequate in cubic and floor
The nurses' home is shown as a long,
uilding about 200 ft. in length, packed
nultitude of small rooms, and most
sanitary provisions, which seem more
quate. Here again the corridors are
lit.
tal cube of this scheme is given as
ft., and is priced at varying rates
our opinion, are far too low. The
ated to be £134,845, but we consider
somewhat under-estimated.

Of the other designs submitted in the competition we should like to mention the excellent and attractive project of Mr. Arthur Kenyon, an architectural composition which stands a long way ahead of the remaining sets. The drawings are delightful and illustrate a simple but very effective grouping of buildings. We are afraid, however, that Mr. Kenyon has risked much in order to produce a distinctive plan. The wards, which are set diagonally on the site, are, strictly speaking, a contravention of the conditions. The wards are in detail very satisfactory, and throughout the standard is the usual high one associated with Mr. Kenyon's work. The Report states that the fan-shaped plan was adopted in order to avoid undue crowding of the wards, but the other schemes rather go to disprove such a suggestion. The high roofs shown are very delightful but expensive, and the total cube given is a high one—2,145,583 ft. The total cost is estimated at £215,378, cubed at 1s. 10d. per foot. The provision for children's sick wards and healthy children's accommodation is not altogether satisfactory.

Messrs. Rees & Holt (No. 7) submit a satisfactory plan, well balanced around central administration and stores, &c. An excellent ward plan is a feature of this scheme and to be commended.

The scheme submitted by Messrs. Gibson & Gordon (No. 5) is on orthodox lines, with wards which in the administration end are of an unusual type. The stores appear to be curtailed in area and also the office accommodation. An excellent theatre plan is submitted.

Messrs. Paine & Hobday (No. 1) also show a scheme of the usual type, the whole very clearly illustrated. A few scattered buildings are dotted about in the foreground, comprising the healthy children's block, the mortuary, isolation block and the nurses' home near Moorside-road. The sick children are somewhat isolated for efficient control and administration. The elevations are of an austere and forbidding type, of an institutional character of the wrong type.

Scheme No. 11, by Messrs. Saxon Snell & Phillips, shows a central administration, but otherwise a scattered group of buildings, priced at 1s. 4¾d. a cubic foot!

Mr. Milburn's plan (No. 6) is a most orderly one of correct and orthodox type. The plan submitted by Mr. T. A. Pole (No. 10) is decentralised and scattered, with the reception block and the administration section disposed on the west side of the site. The boiler-house is detached, with long subway connection of approximately 480 in length. The T-shaped ward units are certainly interesting and show many points of value. The cost is high—£210,000—and priced at figures of 1s. 9d. per cubic foot and less.

The guardians have, we understand, unanimously accepted Mr. Pite's award.

Messrs. Elcock & Sutcliffe, in the course of their report accompanying the winning designs, state they paid careful attention to the grouping of the various departments for easy and rapid administration and to enable visitors to gain quick access to the wards with a minimum of traffic through other departments.

Economy in capital cost and annual upkeep was also a main consideration.

The accommodation for the Healthy Children's Unit is provided to the north of the main corridor and two dormitories have been shown, one for the very young children and the other for those who are older, chiefly to avoid disturbance during sleeping hours. A large day room faces due south with folding screens to divide the veranda from same, so that in suitable weather the whole may be thrown open to the air. The kitchen and other necessary appointments are provided centrally, while the office for the sister-in-charge is right in the centre, on the veranda side, thus permitting of complete supervision.

The Maternity Units have been carefully designed to incorporate the latest ideas in this special department. The pre-natal ward, on the south side, is entered immediately from the main corridor; the two maternity wards are at the east and west sides and designed to admit sunlight and air on all sides. The labour wards are placed in the most private and isolated position, while the large duty kitchens and the other necessary surrounding offices are centrally situated, with the ward sister in immediate control of the whole unit.

The Nurses' Home is situated on the western portion of the site with a pleasant outlook, and is entirely self-contained with kitchen and stores, supplied by the central stores in the main kitchen department of the hospital. It is suggested that a considerable portion of the cooking for the nurses' home might be carried through in the main kitchen, leaving a minimum of cooking to be done in the home. The home sister's office is placed on the ground floor overlooking the main entrance, and a suite is provided for the matron. The equipment also includes a nurses' recreation room, sitting room for the sisters, lecture room, reading and writing room with a study, which is placed at the northern end and away from the general traffic of the home. The dining room, with suitable service room, is shown to seat 40 people comfortably. The bedrooms, for sisters and nurses, are placed on the first and second floors, with ample bath rooms, linen rooms, and box accommodation, and a box lift connects the various floors.

The walls generally would be built of brickwork faced with a plum-coloured brick with wide white joints, the dressings of artificial or "reconstructed" stone. All floors would be of fire-resisting materials with the beams crossing the wards formed in the thickness of the floors so as to give a flush ceiling. The finish to inside of walls throughout would be of hard plaster well worked, and in the wards bands of coloured tiles inset.

In the children's wards and the Healthy Children's home, pictorial tile panels would be inserted, flush with the plasterwork to brighten the units with homely and interesting subject pictures. All flat roofs would be of concrete with a non-conducting layer of fine broken brick on top, then cement screeding and asphalte cover.

THE GENIUS OF THE ENGLISH CATHEDRAL

Sir Banister Fletcher recently delivered a lecture on the origin and design of the cathedral, which, he said, was gradually evolved from earlier building types through successive periods and was enlarged and enriched as the ritual needs and devotional spirit grew.

The plan might hail from several sources in remote pagan days. Sometimes an ancient temple was adapted, the chancel being fitted up at one end, the side columns being destroyed or walled up as occasion served. Many believed that the Roman basilica, or law court and exchange, served as a model for its plan, with colonnaded aisles and semicircular "apse" at the end, it closely resembling the earliest basilican churches. Some, again, believed that the small "scholae" for discussions among the learned, as at Pompeii, or the atria of Roman villas with their transeptal wings, were adapted to the purposes of worship when these earlier types were discarded as places of meeting and the Christians could build edifices for themselves. At all events, such early Christian "basilican churches" were the first stage of a continually changing process of plan development which could be traced in the Romanesque plans of St. Gall and the early churches of Western Europe, and culminated in the great structures erected in the mediæval period and now regarded as triumphs of English architecture—their cathedrals.

Sir Banister gave a synoptical description of the chief features of the cathedrals of Western Europe, more especially of France—where the transepts were short and the east ends encircled with chapels to form a "chevet"—and of England, where double transepts, as at Salisbury, were peculiar features, aisles were usually single on each side of the nave, and green "closes" formed the rustic setting.

The next lecture will deal with Gothic constructive principles.

THE LATE THOS. EDWARD COLLCUTT

BY PROFESSOR BERESFORD PITE

THE death of Thomas Edward Collcutt occurred on the 6th inst. He was born at Oxford, March 16, 1840, educated at Cowley and at Mill Hill, articled to R. W. Armstrong, of London, and became assistant to G. E. Street, R.A.

Architects now mourn a vigorous and gifted leader whose powers endured to the end of his long life. His cheerful company and frank expressions of opinion are lost to a large circle of friends—a circle which extended both beyond the Institute and that select group of kindred spirits who solemnly entitle themselves The Foreign Architectural Book Society.

Collcutt's advent came in the later era of the great men of the Gothic Revival. Norman Shaw, who had been in Street's office before him, the two Seddings, also there, Waterhouse, William Burges, Ernest George, and Edward W. Godwin were all at their best, filling the architectural world, fed by the weekly journals, with interest and enthusiasm.

There would scarcely seem to have been room for a new leader, but the atmosphere was electric. Our dull outlook at the present day, with its gloomy academicalism, can hardly realise the delight of Collcutt's powerfully original Gothic design for the Wakefield Town Hall, selected by Street, drawn in perspective by F. G. Knight, another product of that office; a delight clouded over by a threatened alteraton to Renaissance, but rekindled with perhaps the freshest interpretation that can be imagined in freedom of treatment. The building justified the architect and made his reputation. In Bloomsbury-square at the same time the conventions of the district were rudely disturbed by the erection of No. 36 in red brick with a steeply-pointed gable and tiled roof; everyone could well believe that it must have been built by the architect for himself.

The Queen Anne movement of the School of Norman Shaw and the popular Low Country picturesqueness of Ernest George's work in London can with advantage to the student be compared with Collcutt's buildings. The antiquarian spirit which in the eyes of a Continental architect infects our work with a dead vaccine is absent in Collcutt's designs. He cannot be claimed as an archæological architect by any school. His outlook resembled Waterhouse's in grasping the qualities common to successful composition and grouping; in the contrasting lines of subdivision by which all the elevations are ruled; and by the studied distribution of ornament on easily recognised principles. But he seldom suffered from stiffness; his work reflects his disposition. A love of beautiful detail, delight in delicacy of ornament, and a realisation of the superficial value of the artistic crafts soften the effect of all the rules by which he designed. There is no artificial random or falsification of texture; in short, no hypocrisy about his buildings. Their stimulus is architectural in a real sense, and the conviction remains that when the fashions of his day are estimated as merely ephemeral the value of his witness to the lasting qualities of architecture will be felt.

The Imperial Institute building—temporarily, if not for good, the home of the University of London—in spite of some doubt, and in face of the extraordinary architectural mélange by which it is surrounded, carries itself without failure. The shop on the south side of Oxford-street, originally Waring's, impudently adjoining the Pantheon, the insurance building on the south of Ludgate Hill, and the refined front that was Bechstein's in Wigmore-street, are all vital things that we hope may survive. Collcutt did much besides these in street building. The Palace Theatre, the Savoy blocks in the Strand, the King's Hall, Holborn, have vigour, amounting in the theatre to power. He could make picturesqueness dignified, and was never vulgar. He would fail rather than succeed if he felt compelled to be commonplace. Perhaps this is a hard judgment of the big shop block in Oxford-street on the north side west of the Circus. Early successes were obtained in half-timber mixtures; and a stuccoed front in Fleet-street for Collinson & Lock—now forgotten and gone—should be mentioned as an early instance of the boyish spirit that played throughout all the life and work of this delightfully English architect.

To find Collcutt a year or two ago taking the field against our present educational fashions was no surprise to those who knew how honestly self-reliant he was an artist. It will be a sufficient criticism of modern methods of architectural draughtsmanship that one cannot imagine that they would commend a design by Collcutt in a competition. His works will live as genuine architecture—genuine in its expression of the character and aims of its author, as well as in their practical expression of purpose in design—and nothing in them will belie the honest, cheerful outlook on life with which his fellow-architects will always associate his memory.

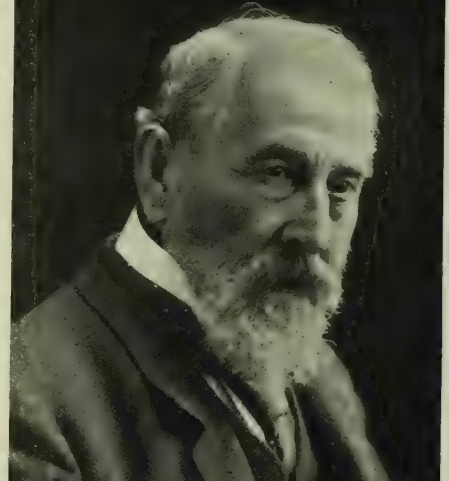


Photo: Elliott & Fry.

The late Thomas Edward Collcutt, P.P.R.I.B.A.

Among other buildings designed by Mr. Collcutt mention must be made of Lloyd's Registry of Shipping, and the offices in Leadenhall-street, for the Peninsula and Oriental Steam Navigation Company, and the decorations for many of their ships.

Mention has already been made of the Savoy Hotel and the Imperial Institute; the latter was built as the result of a limited competition in which five other architects took part.

Mr. Collcutt was President of the Royal Institute of British Architects for the period 1906–08, and in 1902 received the Gold Medal for Architecture. He was an Honorary Member of the Société Centrale d'Architecture de Belgique, Corresponding Member of the Société des Artistes Française, and at the Paris Exhibition of 1889 received a Grand Prix for Architecture. In December, 1921, he read before the Royal Institute of British Architects a paper entitled "A Plea for a Broader Conception of Architectural Education."

The funeral took place at Totteridge Church on October 11, and among those present were Messrs. Arthur Keen, Hon. Secretary R.I.B.A., H. P. Burke Downing, Frank Lishman, Gerald Unsworth, A. N. Prentice, Norman Evill, Stanley Hall, Llewelyn Roberts, H. Norton, Rudolf Dircks, Ian MacAlister, Secretary R.I.B.A. (representing the President R.I.B.A.), and Major H. C. Corlette (representative of the Australian Institutes of Architects).

THE LATE AUGUST SPENCER.

THE death of Mr. Augustus Spen twenty years Principal of the R.C.A., a man who had a great gift for organisat wide artistic insight and sympathy.

He was appointed by the Duke of Dev then President, in 1900, and cons supported both by him and by Sir John then Parliamentary Secretary, and S Abney, in reconstituting the staff an of the Royal College of art. Spenc already attracted the attention of Mr. Acland by his organisation of art teac Leicester, where in a few years he had fine art school and connected its wor many departments of municipal life. the author of the notable "Syllabus of Dr which is a landmark in the elementary t of art.

At South Kensington his organisin reconstituted the staff and work, a twenty years the College was devoted to the practical difficulties of associating th ing of teachers, its normal duty, w efficient system of education in the depa of industrial art. Spencer himself posses qualities of a good draughtsman, but little time for the exercise of his own water-colour drawing. He had a p instinct for sound craftsmanship and a pr understanding of materials and workm that made his judgments of real value.

Many must now be recalling his unostent generosity and sympathy to students in early struggles. A strong character wh a provincial town found no obstacle mountable to the attainment of his ide met the chronic problems of South Kens with a courageous determination to co-or all teaching with the requirements of pr industry. This he thoroughly unde from his earliest days, and with a simp direct artistic temperament. The partial ment of his ideal, through the inherent di of the problem, disappointed his zeal, a struggle tried his nature and health. To of the very large number of students and of friends he will always appear as the kind man, and to his colleagues as the man wrestling with the problem of teachi ernments artistic wisdom. The effects work upon the application of art to in in elementary, secondary and specialis education, though not manifest to the w large, are deep and will be lasting. Hi has consisted of the formation of a new tion of art teachers who are now, at ho in the dependencies, carrying out his ide who greatly mourn his death.

Students' Designs

The designs by students exempted fr R.I.B.A. Final Examination (with the ex of the subject of professional practice) on exhibition from October 20 to Octo inclusive, in the Galleries of the Royal I of British Architects, 9, Conduit-stree The exhibition will be open daily betw hours of 10 a.m. and 5 p.m.

The R.I.B.A. Board of Architectural tion Silver Medal for recognised sch awarded for the best set of designs subm this exhibition.

This year the following schools, whic courses of five or more years' duration rec by the Royal Institute for the pur exemption from the Final Examinatio sent exhibits:—

The Architectural Association (Londo

School of Architecture, the Univer Liverpool.

School of Architecture, the Univer London.

School of Architecture, the Univer Manchester.

Glasgow School of Architecture.

Robert Gordon's College, Aberdeen.

School of Architecture, McGill Un Montreal.

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LLUSTRATIONS.

Competition Results.

llustrate this week the designs placed three competitions—Dundee School tion, by Messrs. Maclaren, Soutar & (see this page); Harrogate Hospital tion, by Messrs. Elcock & Sutcliffe (see and Davyhulme Infirmary Competition, Messrs. Elcock & Sutcliffe (see p. 592).

MEETINGS

Friday, October 17.

w Architectural Craftsmen's Society.—r C. Gourlay on "How to Study Glasgow al." College Buildings. 7.45 p.m.

Saturday, October 18.

ects' and Surveyors' Assistants' Pro- Union.—Visit to the Gas Exhibit, y Exhibition. 2.30 p.m.

NEW SCHOOLS, DUNDEE

The assessor, Mr. John Arthur, in the course of his report on this competition, states that, having selected a short list of five designs, he called in an experienced measurer, Mr. Hugh Alexander Low, F.F.S. (Glasgow), to advise him regarding the probable cost of each. The following is from his report, the designs being placed in numerical order, *viz.*:—

No. of Design.	*Materials for Outer Walls.*	*Author's Estimate.*	*Measurer's Estimate.*
5.	Front wall, stone; rest brick and roughcast	£64,193	£71,032
6.	Old stone or brick and rough-cast, with new stone dressings to all openings	67,934	81,577
10.	Stone with artificial dressings	47,975	97,350
14.	(*a*) Stone	92,860	111,722
	(*b*) Terra-cotta brick with stone dressings	84,860	107,722
	(*c*) Rough-cast walls and stone dressings	76,860	102,722
15.	Reinforced concrete and rough-cast old stone for underground walls	69,328	77,679

"It will be seen that the measurer's estimate, confirmed by the assessor, exceeded in each case the author's estimate by over 10 per cent., thereby bringing each of these competitors under the disqualification clause (No. 9) of conditions of competition. Comparing the measurer's rates, as applied to these five designs, to the remaining ten schemes with their respective reports, it is apparent they also are out of it with regard to probable cost."

The assessor states he had no option but to place the first three designs in the following order: (1) Design No. 6, (2) Design No. 15, (3) Design No. 5.

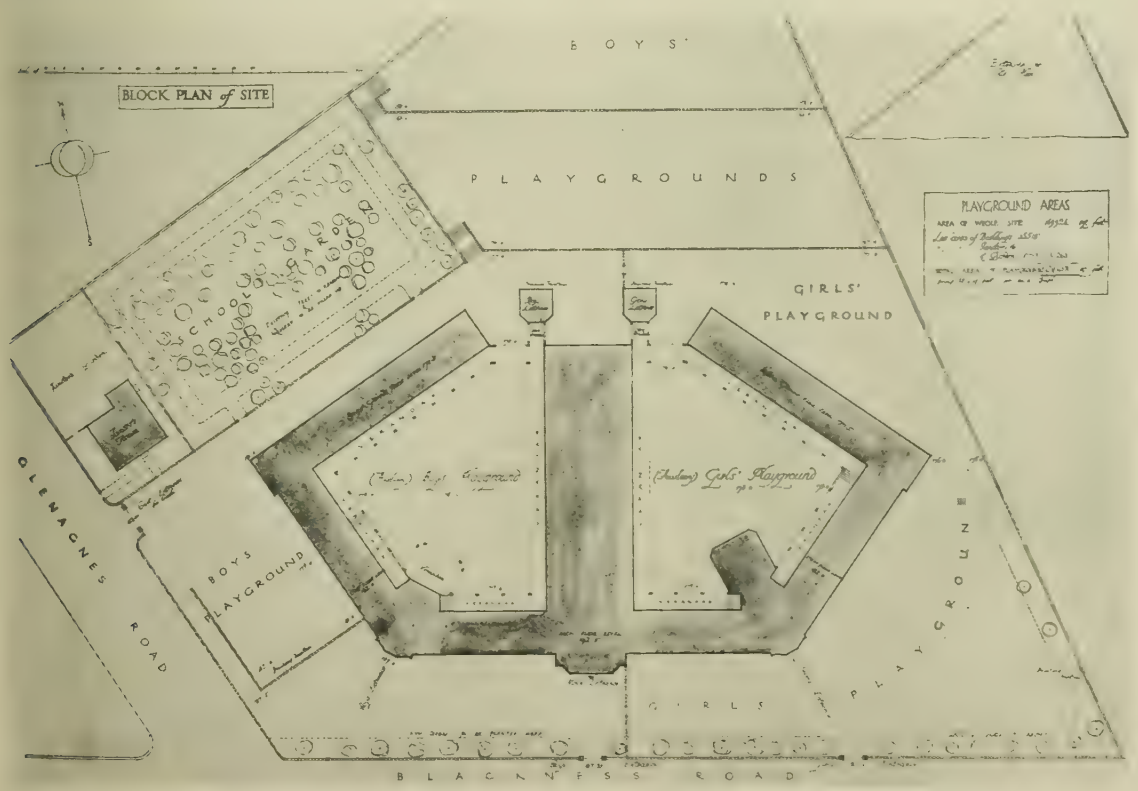
In placing these designs, the assessor states he has not taken into consideration the question as to whether the corridors should be open or closed. His views are that the arrangement in No. 15, with three opening doors to each class-room on the side next open corridor, is not to be recommended in Dundee's rigorous climate, apart from the fact that the doors opening out, as shown, partially block the corridor. Neither did he care for the intermediate ceiling in upper ground floor corridors for ventilation purposes as indicated in design No. 6.

"It will be noted that the design placed first, by Messrs. Maclaren, Soutar & Salmond [illustrated this week], is the most costly of the three, but this is due to the fact that the author is more generous in his floor areas. The first and third designs provide for 1,060 scholars, at the required floor area per scholar, as against 1,018 by the second design.

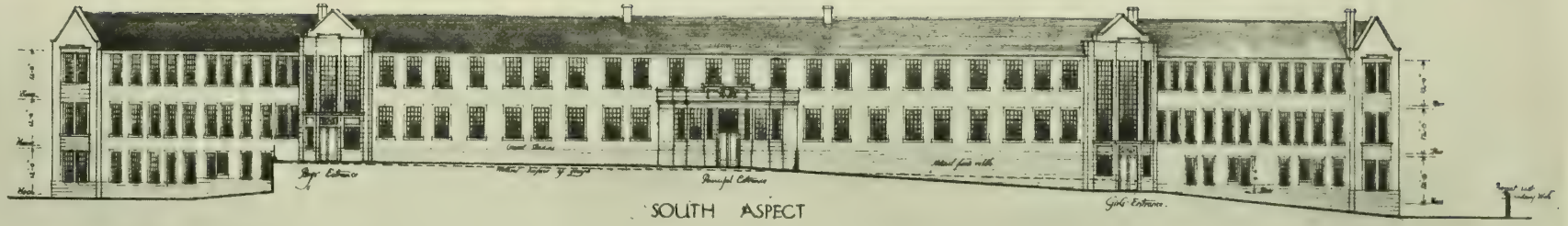
"Design placed first (No. 6) is origina' and excellent, well suited to the unlevel nature of the site, while the elevations designed on broad and simple lines are dignified and pleasing. The few criticisms which should be made are of minor importance, *viz.*: The library is badly placed and should be removed elsewhere; no fireplaces are shown in the cookery rooms; no gallery is provided in hall, but could, he thinks, be obtained if desired; the laboratories seem narrow for the proposed arrangement of tables as indicated; the two sewing rooms are on separate floors; and the playgrounds are somewhat cut up. The formation of playgrounds on the steep north-east corner of the site might be dispensed with and prove a saving.

"Design placed second (No. 15) is an admirable one in many ways, designed to be constructed with reinforced concrete and large windows, which somewhat sacrifices the scholastic feeling of his elevations. The arrangement of double quadrangles at or near the level of the principal floor is a very pleasing and useful feature, but the making up of the levels of these quadrangles, playgrounds, net-ball court, and quarry, would entail, he fears, the bringing in of a very large quantity of material from elsewhere. The entrances for junior and senior pupils might be better placed *vice-versa*; the steps at access to the lower ground floor cloakrooms are not good; the dining room is badly placed on upper floor, with only one stair to it common to boys and girls; the music room is too near teachers' rooms; main entrance hall would be rather dark; assistant masters' rooms are small.

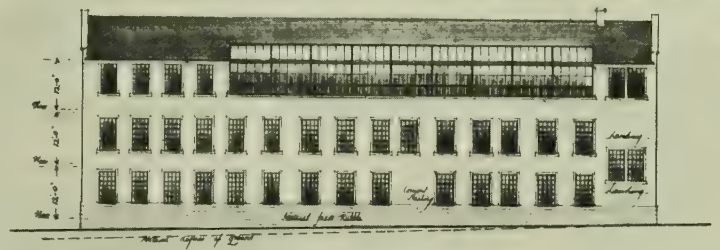
"Design placed third (No. 5) is a scholarly scheme with a very good lay-out and many good features, but marred by some faults, the principal ones perhaps being the lowering of the central halls and north block of buildings by half a story below principal floor, thereby creating unnecessary excavation of site and losing the simple effect of planning which otherwise might have been obtained; the great height of stage in hall (8 ft. above floor), as likewise the front railing to Blackness-road (10 ft. high), dwarfing a good front elevation; the utilising of the south front for administration and laboratory purposes, and planning six class-rooms with a northern aspect."



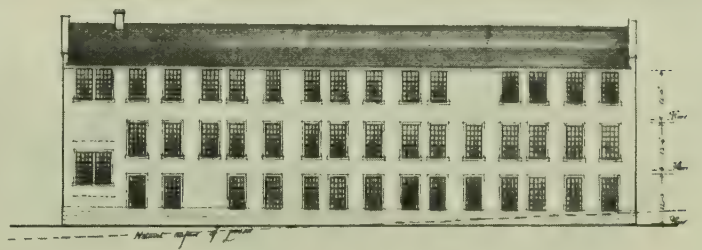
Dundee School Competition. Design placed First: By Messrs. Maclaren, Soutar & Salmond.



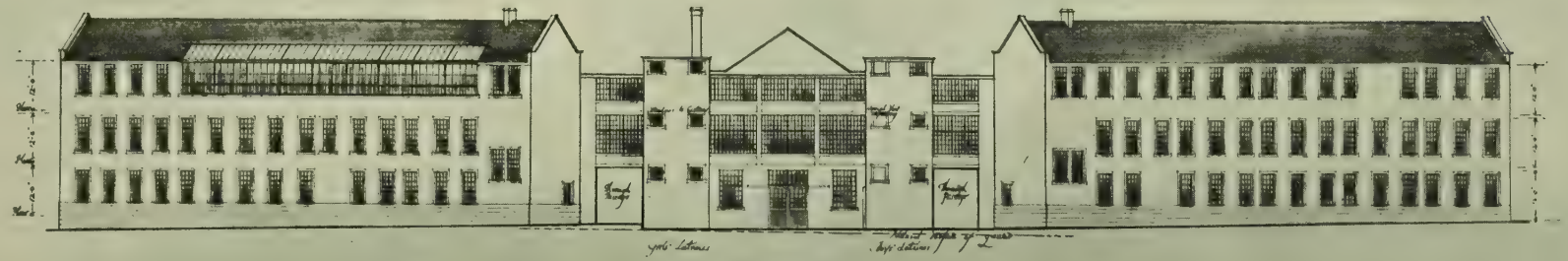
SOUTH ASPECT



NORTH EAST ASPECT.



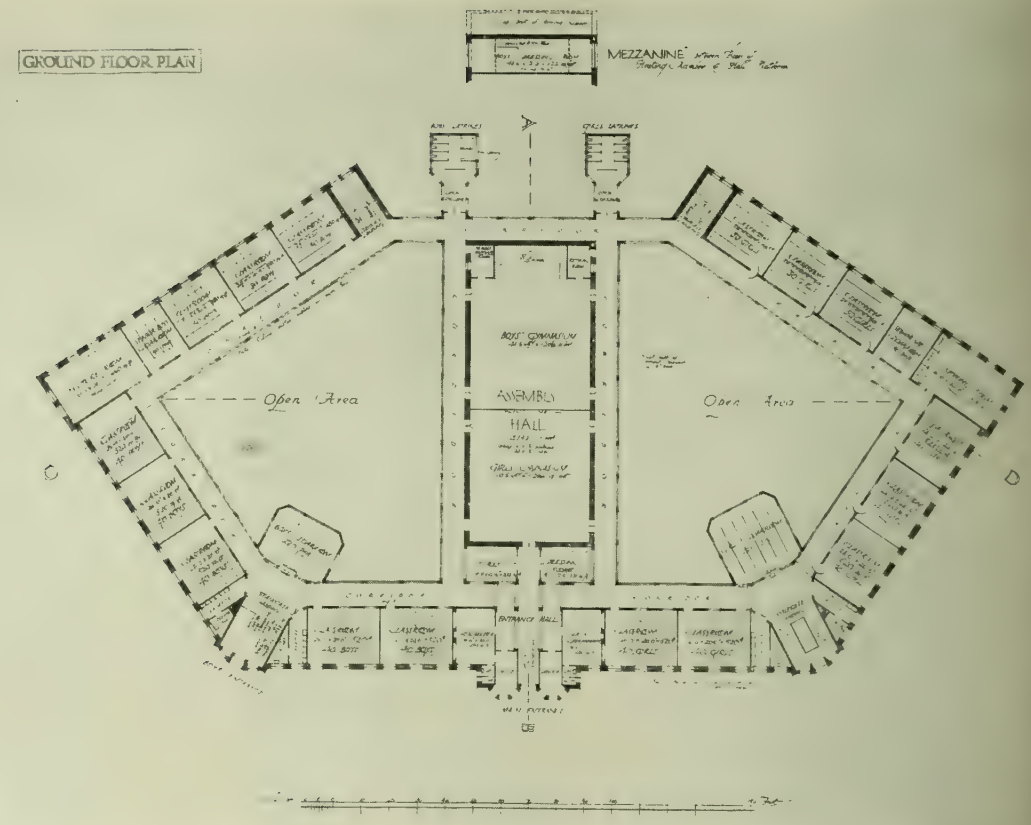
NORTH WEST ASPECT

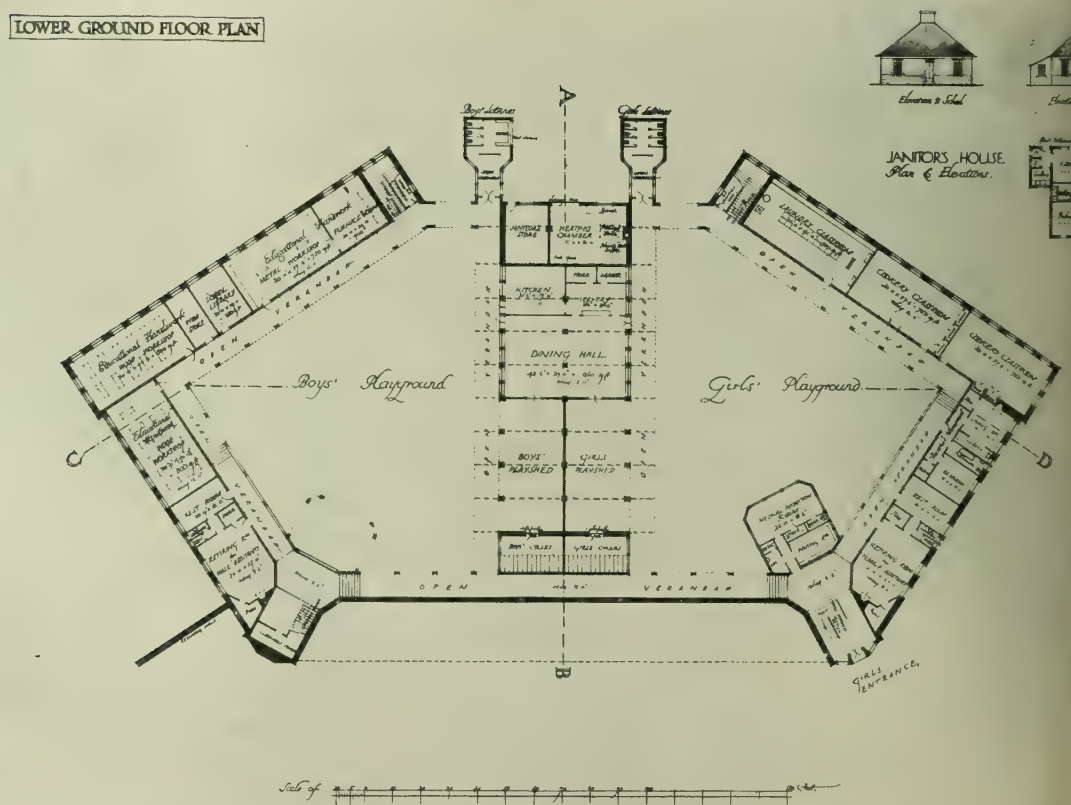


NORTH ASPECT



Dundee School Competition.

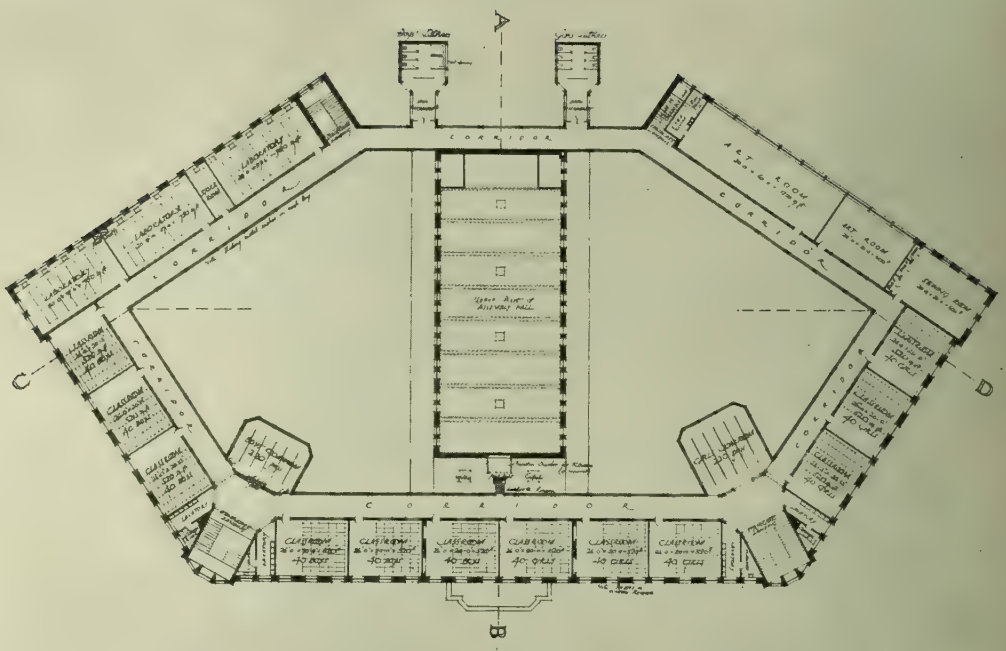




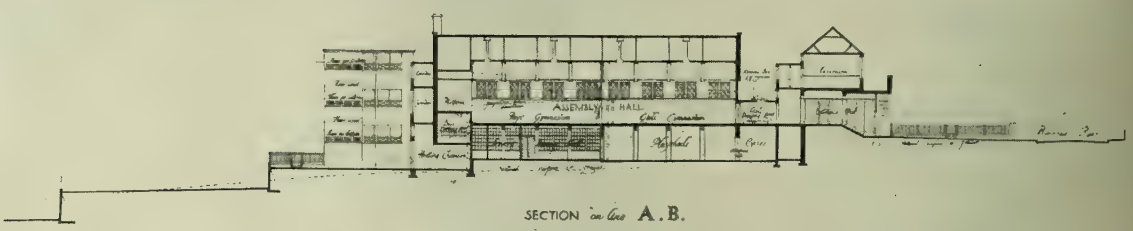
Dundee School Competition.

Design placed First: By Messrs. Maclaren, Soutar & Salmond.

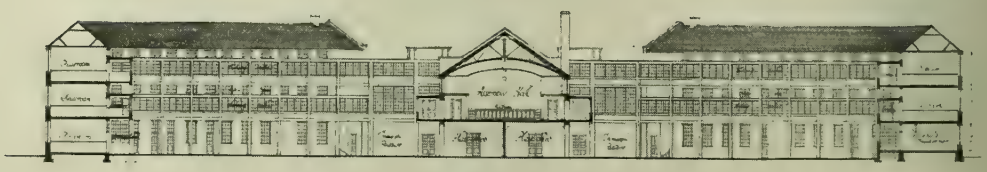
FIRST FLOOR PLAN



SECTIONS



SECTION on Line A.B.



SECTION on Line C.D.

Dundee School Competition.

Design placed First: By Messrs. Maclaren, Soutar & Salmond.



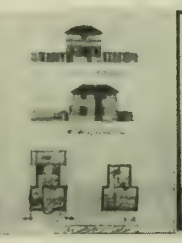
NURSES' HOME. | FUTURE UNIT. | WOMEN'S WARD. | WOMEN'S WARD. | ADMINISTRATION. | MEN'S WARD. | MEN'S WARD. | FUTURE UNIT. | ISOLATION BLOCK.

SOUTH ELEVATION.



SOUTH ELEVATION. | CROSS SECTION LOOKING EAST. | CROSS SECTION LOOKING NORTH.

MATERNITY AND WARD CHILDREN'S UNIT.



PORTER'S LODGE.



SIDE ELEVATION OF WARD UNIT.



SECTION THROUGH KITCHEN LOOKING WEST. | SOUTH ELEVATION. | EAST ELEVATION.

HEALTHY CHILDREN'S UNIT.



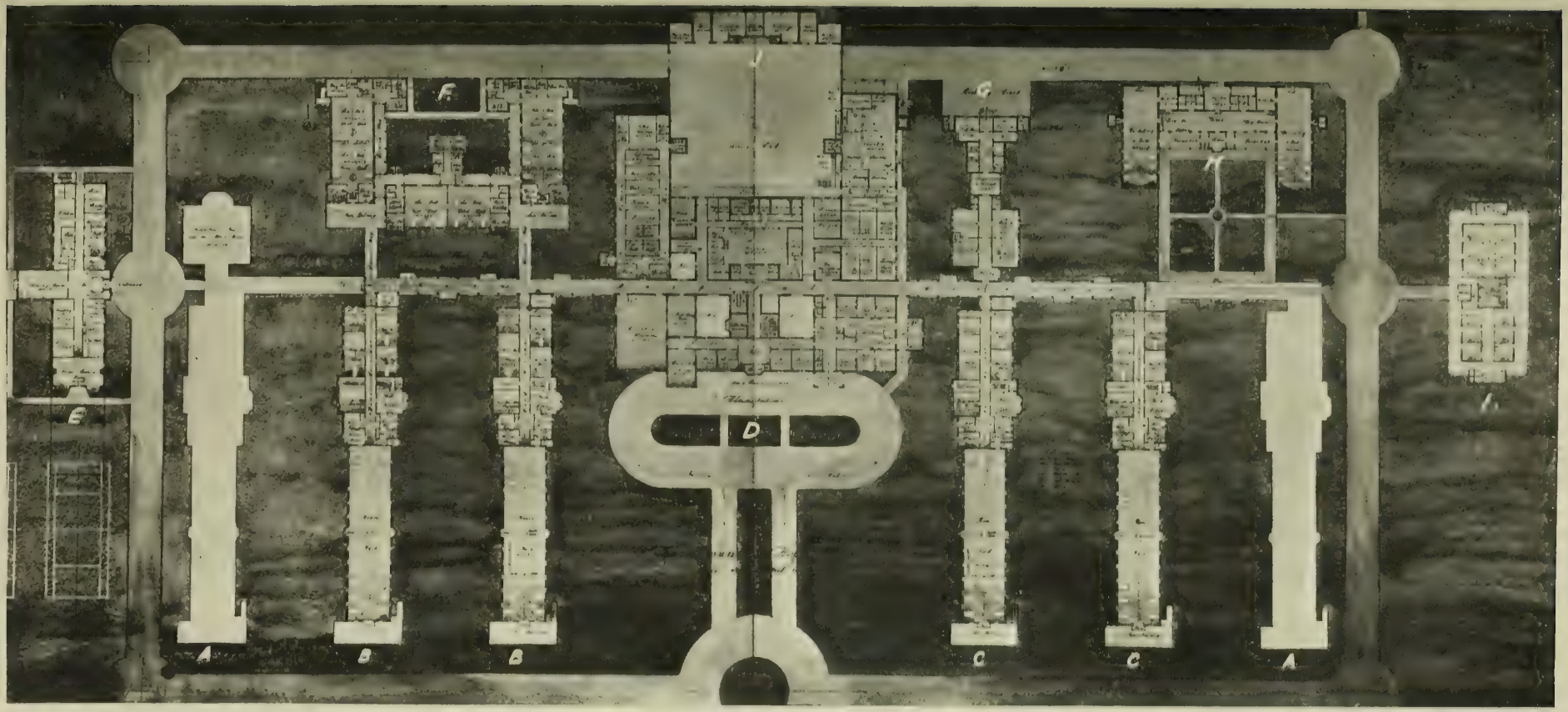
ELEVATION. | SECTION LOOKING SOUTH.

NURSES' HOME.



EAST ELEVATION. | SECTION.

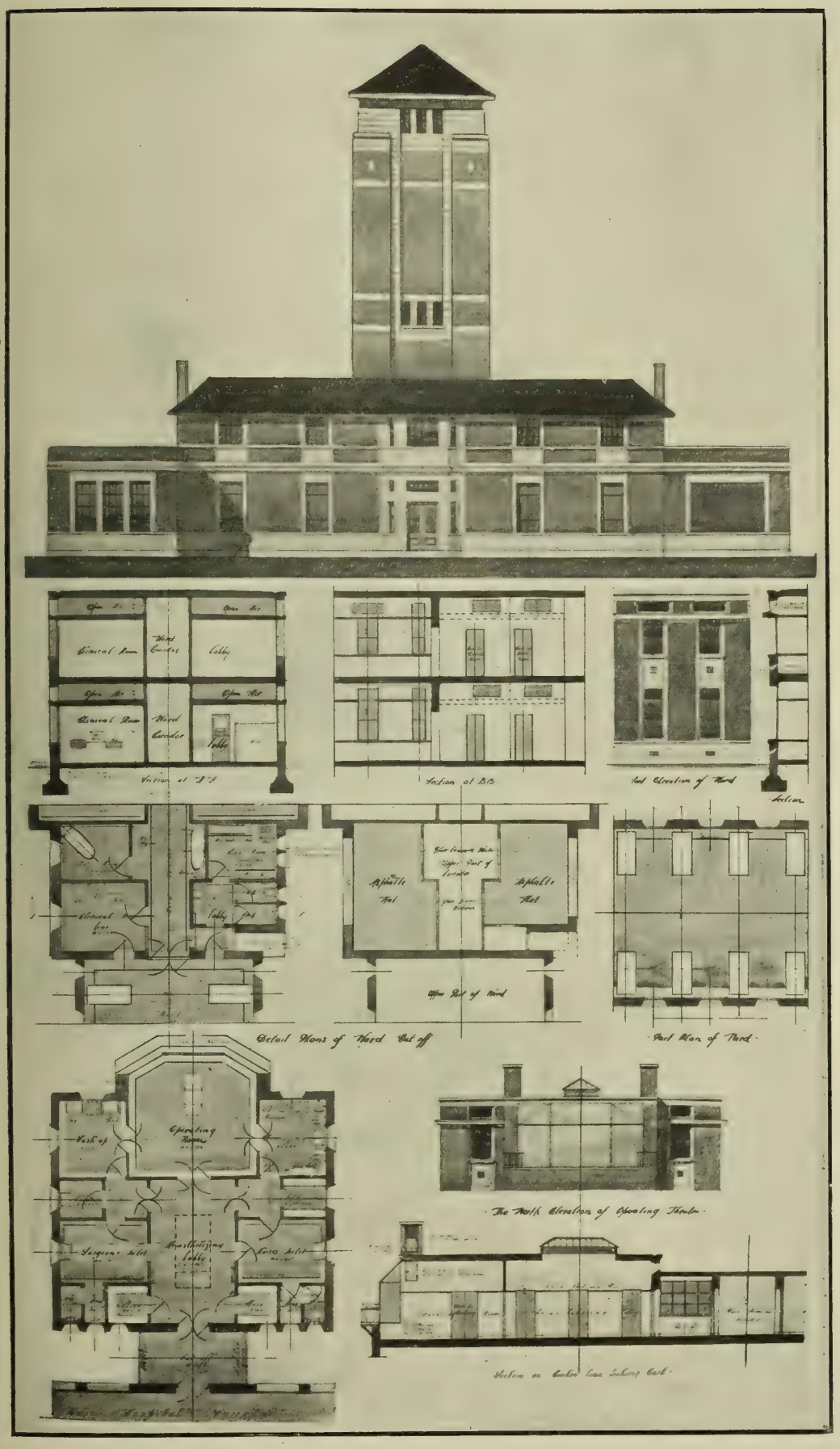
ISOLATION UNIT.



Davyhulme Hospital Competition.

Design placed First: By Messrs. Elcock & Sutcliffe, F. & A.R.I.B.A.

Key.—*A.* Future Unit. *B.* Women's Ward. *C.* Men's Ward. *D.* Administration. *E.* Nurses' Home.
F. Children's and Maternity Block. *G.* Mortuary Court. *H.* Healthy Children. *I.* Isolation Block. *J.* Workshops.



Davyhulme Hospital Competition.

Design placed First: By Messrs. Elcock & Sutcliffe, F. & A.R.I.B.A.



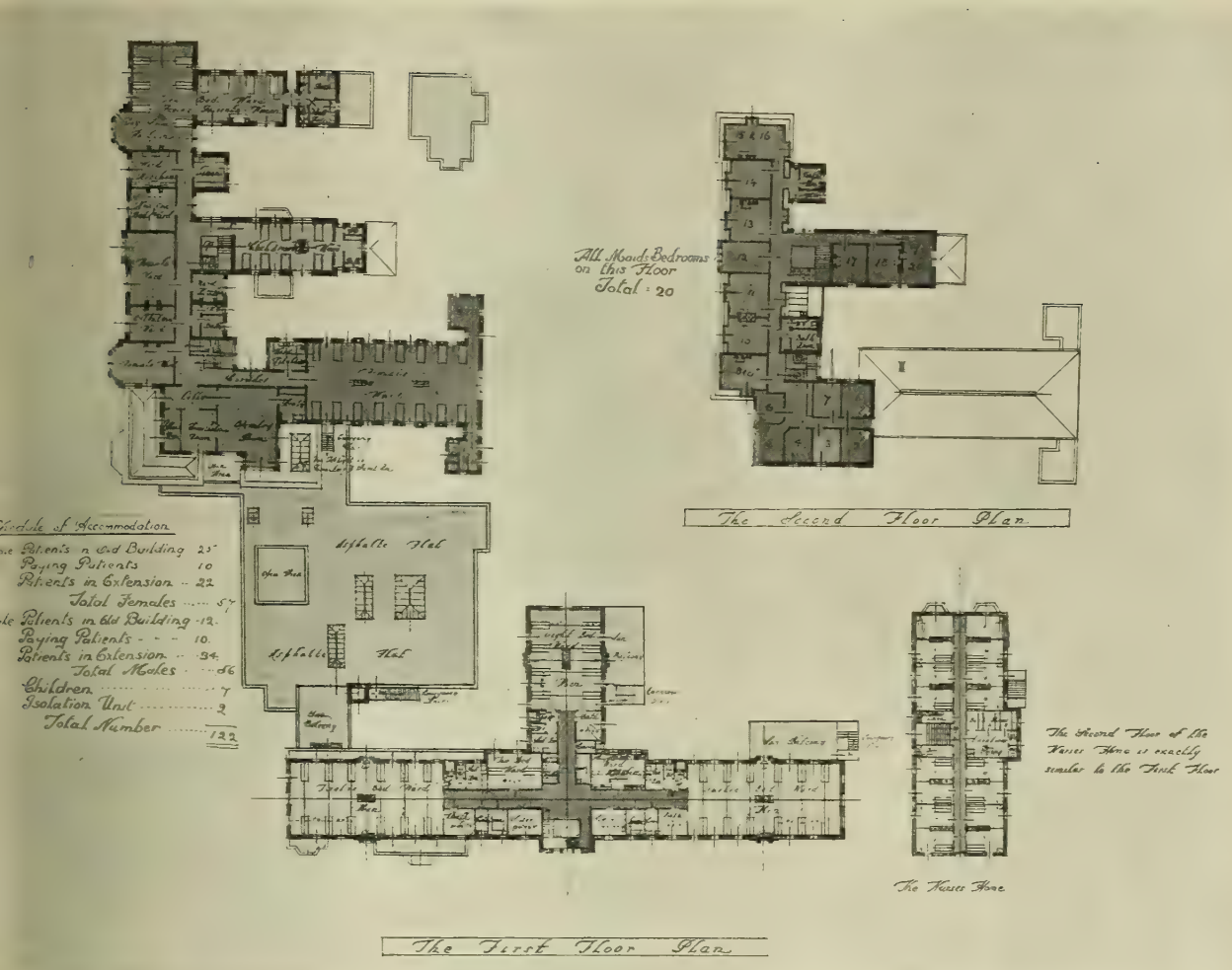






Harrogate Infirmary Competition.

Design placed First: By Messrs. Elcock & Sutcliffe, F. & A.R.I.B.A.





Harrogate Infirmary Competition. Design placed First: By Messrs. Elcock & Sutcliffe, F. & A.R.I.B.A. (*See p.* 598.)

HARROGATE INFIRMARY

In their report accompanying their design, placed first in the Harrogate Infirmary Competition, which we illustrate this week, Messrs. Elcock & Sutcliffe state, after perusing the conditions and visiting the existing hospital and the site of the proposed buildings, the opinion was formed that the following were the main ideals for which it was essential to strive: (1) To arrange the additions to the existing building so as to interfere as little as possible with the administration of the infirmary while the new buildings are being erected; (2) economy in capital cost and annual upkeep, with easy and rapid administration.

The report submitted with the design states:

"The buildings have been planned so that the extension could be erected without any interference with the working of the existing building. When the extension was completed, the patients could be moved, where necessitated, to the new buildings, and the alterations proceeded with to the older building. The present kitchen would be entirely inadequate for the complete building, and if enlarged would not be in a central position. A new kitchen unit has therefore been arranged between the existing infirmary and the extension, with an entrance gateway from Victoria-avenue and a central service court. The existing kitchen court is exclusively given up to the post-mortem department, the ambulance garage, and the isolation block.

"On the ground floor two women's wards and a side ward are provided for twelve, eight, and two beds respectively. A ward sister's office is centrally placed for all wards, and the necessary linen stores, store for patients' clothes, and the duty kitchen placed convenient for administration to the ward and side ward. The clinical room is placed opening off the corridor and convenient to all the wards. Near the entrance to each ward is placed the sanitary block, which includes a small cut-off lobby, and an outside balcony for dirty linen storage, with lavatories, patients' w.c.'s, and a sink room.

"Paying patients' wards are formed by removing the existing congested men's wards at the south end of the present building and enlarging the wards on both floors forming ward kitchens, linen stores, &c., and thus giving space on the ground floor for ten male paying patients, and on the first floor ten female paying patients, with the additional one-bed ward asked for in the conditions. Visitors to these wards therefore remain close to the main entrance of the infirmary and have not to travel through the general infirmary.

"The alterations shown to the outpatients' department could all be carried out without interfering with the normal work of the infirmary when the new portion was completed; this could be used and the alterations rapidly made to the existing outpatients' department.

"On the first floor wards are placed for men, of eight, twelve, twelve, and two beds respectively, with all offices and service rooms as specified for the ground floor wards, and with bed lift in staircase well.

"The system adopted for heating the hospital is by low pressure hot water passing through hospital radiators and heating coils, and forced circulation is arranged by duplicate pumps in the basement room, so that only small bore pipes are used to the radiators.

"Generally, the ventilation of the hospital is by 'natural' methods, but in the operating room this would be assisted by electrically-driven fans, and, if necessary, fans would be inserted in the roof of the nurses' home so as to ensure a steady extraction from each of the rooms through flues carried up above the top floor.

"The outer walls would be generally built of sound local stone to match existing work. All floors would be of fire-resisting construction, the first floors being formed of terra-cotta tubular flooring. All floor beams across the wards are formed in the thickness of the floors so as to have flush ceilings. The walls throughout are of hard plaster well worked, and in the wards bands of coloured tiles are inset. Coloured tile pictorial panels are inserted flush with the plaster. The flat roofs would be of concrete with a non-conducting layer of fine broken brick on top with a finish of cement screeding and asphalte forming the top cover. As far as possible, metal windows would be used throughout, and only a few different sizes would be used so as to standardise the patterns. Staircases be formed with granolithic treads and with dados of patent composition, which also be carried along the walls of all co and round the kitchen and laundry, ar round all sink rooms, w.c.'s, lavatories, rooms, &c."

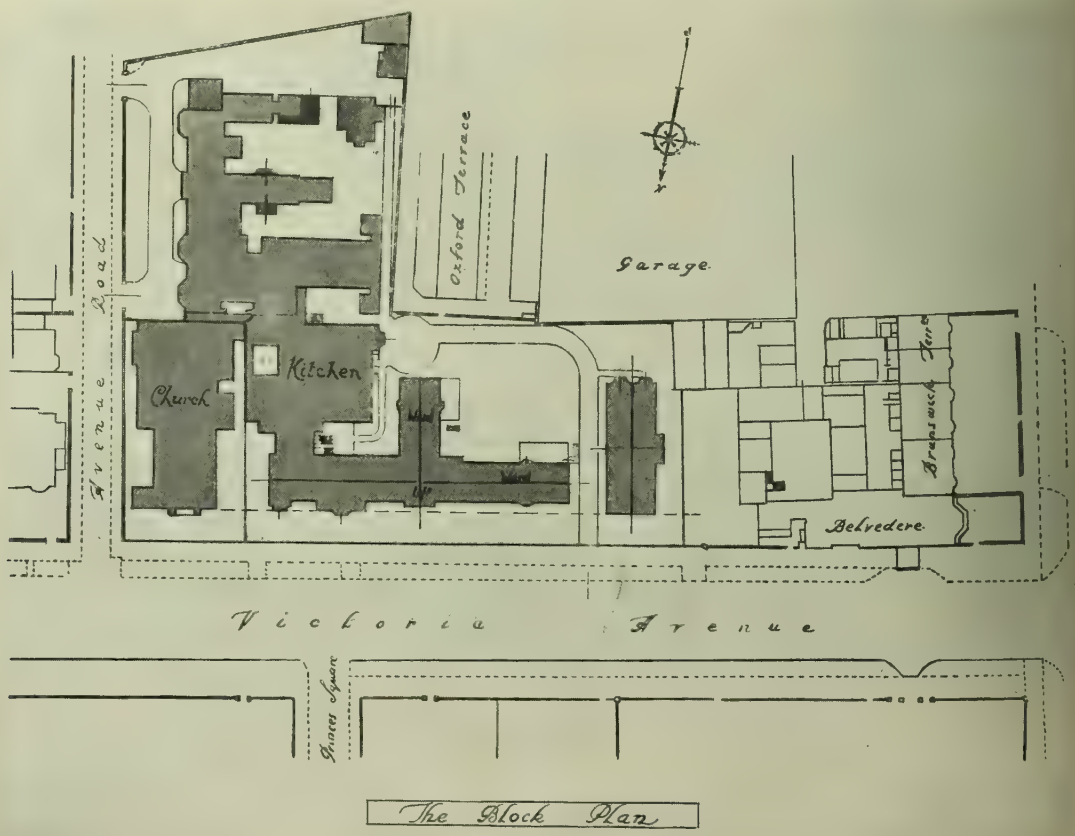
On October 8, Messrs. Elcock & S were informed that they had been place in this competition for an extension £50,000, and on the following day the informed they had been equally succes another competition for a new hospital at hulme, which will cost between £250,0 £300,000; this design is also given this

NEW COTTAGE HOSPIT ALDERLEY EDGE

The new Cottage Hospital, at Alderley near Manchester, of which we publish il tions on p. 599, was completed towar end of 1923. The Hospital was formally on February 13, 1924, by Lord Sheffield, completely equipped in every surgica medical detail, including an up-to-date ope theatre, a complete set of steam ste apparatus, steam cooking fittings, and a equipped laundry.

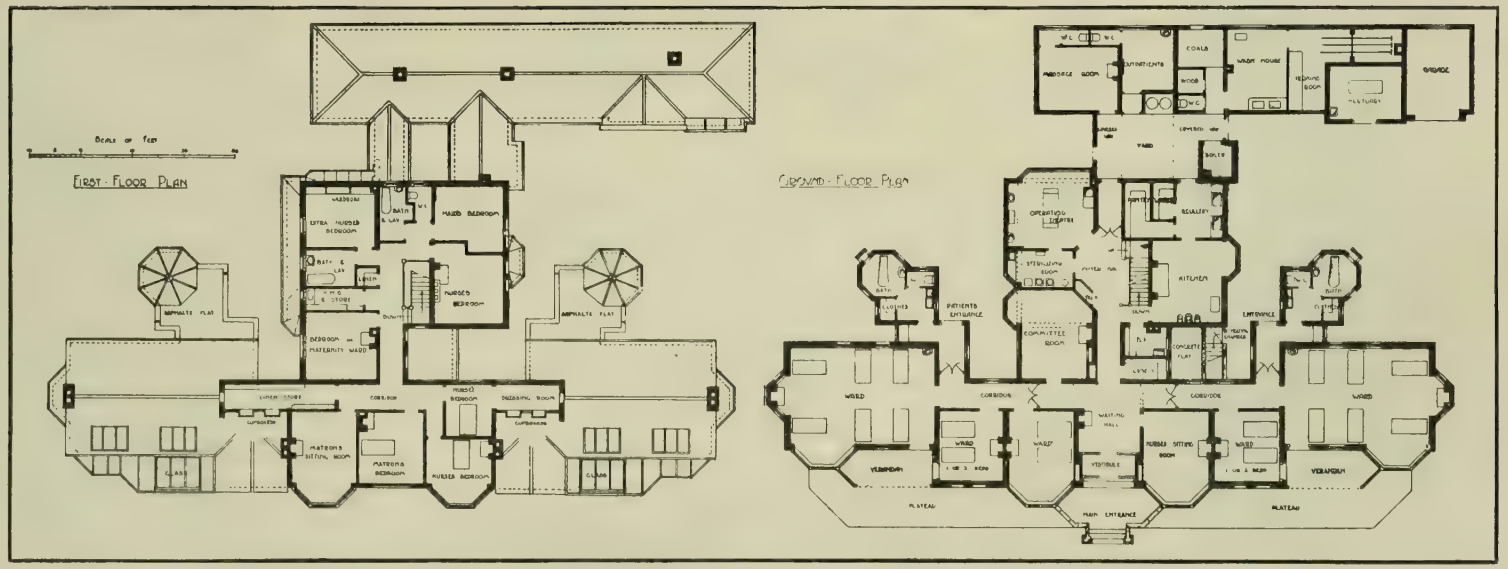
The walls are of solid brick, pebble-d with cream spar on a white cement groun roof being covered with "Rosemary" The internal treatment is extremely simpl walls being left white plaster, but wher becomes soiled it is intended to apply washable flat paint. All interior woodwo unstained pitch-pine, varnished and r down to a very fine surface, and the whole is one of sanitary cleanliness and simp The floors of wards and corridors are of "T dura" patent composition, and where pine is used for floors this is nailed to a thickness of breeze concrete, which is la top of the reinforced slab.

The sole contractors were Messrs. L. Br Sons, Ltd., of Wilmslow, Cheshire; an architect was Mr. Edmund Ware, F.S. Liverpool.



Harrogate Infirmary Competition. Design placed First: By Messrs. Elcock & Sutcliffe, F. & A.R.I.B.A.





New Cottage Hospital, Alderley Edge, Cheshire. Mr. Edmund Ware, Architect. (*See p.* 598.)

SANDERSON HOSPITAL, GALASHIELS

THE Sanderson Hospital for Infectious Diseases was opened at Galashiels last month. The buildings consist of (1) administration block, (2) scarlet fever pavilion, (3) observation pavilion, (4) outbuildings of laundry, washhouse, disinfector, mortuary, &c., and (5) entrance lodge.

The main aspect of the buildings is south-east, and they thus get all the sunshine possible. The buildings are all 40 ft. or more distant from each other, and also from all the other boundaries. The ward pavilions are on the central portion of the site. The administration block is adjacent to the wards, with which it is connected by a covered corridor. The lodge commands the avenue leading from the entrance gateway, and the laundry, &c., block is placed on the low ground to the east.

The administration block has on the ground floor matron's parlour, doctor's room and office, nurses' dining-room, cloakroom, stores, &c., and kitchen accommodation is provided in a one-story building at the back. The covered corridor from the wards communicates with the kitchen and pantry by service windows, through which food is served for conveyance to the wards. In the basement there is cellar accommodation, and on the first floor there are six bedrooms, two bathrooms, with w.c.'s, wash basins, and sink fittings, while the roof space is utilised for box-rooms, stores, &c. Throughout the building has been equipped with labour-saving appliances. The kitchen is fitted with gas cooking range, ovens, boilers, hot closet and dish washing appliances.

The scarlet fever pavilion has accommodation for twelve patients divided as follows:—A female ward for six patients, a male ward for four, and two private wards for one patient each. One of these private wards is fitted up as an emergency operating room. The nurse's duty room is placed in a central position, and by means of inspection windows the nurse can overlook each ward. There is a separate set of bathrooms, sinks, &c., for each ward. Opening off the entrance hall there are stores for linen and patients' clothes, cleaner's closet, crockery store, and press for toys and other things, and also a cloakroom and lavatory for the staff, and a doctor's room. A "sun terrace" runs along the south-east side of the building, and by means of casement windows in each ward the patients can be wheeled outside in their beds to enjoy the sunshine.

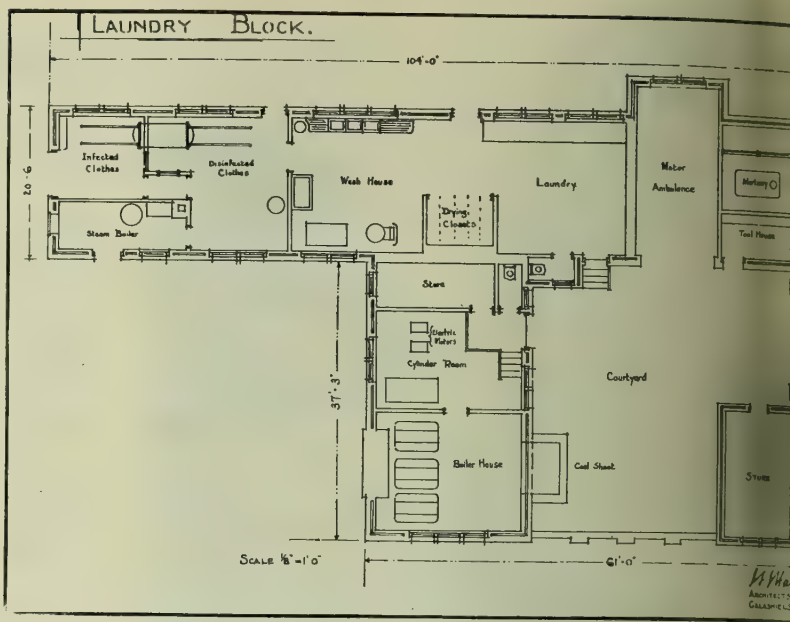
In the observation pavilion there is accommodation for eight patients in four two-bed wards, so that four different diseases can be kept under observation till their complaint has been diagnosed. A veranda runs the full length of this pavilion on the north side to give covered access to each ward, while still preserving their complete isolation.

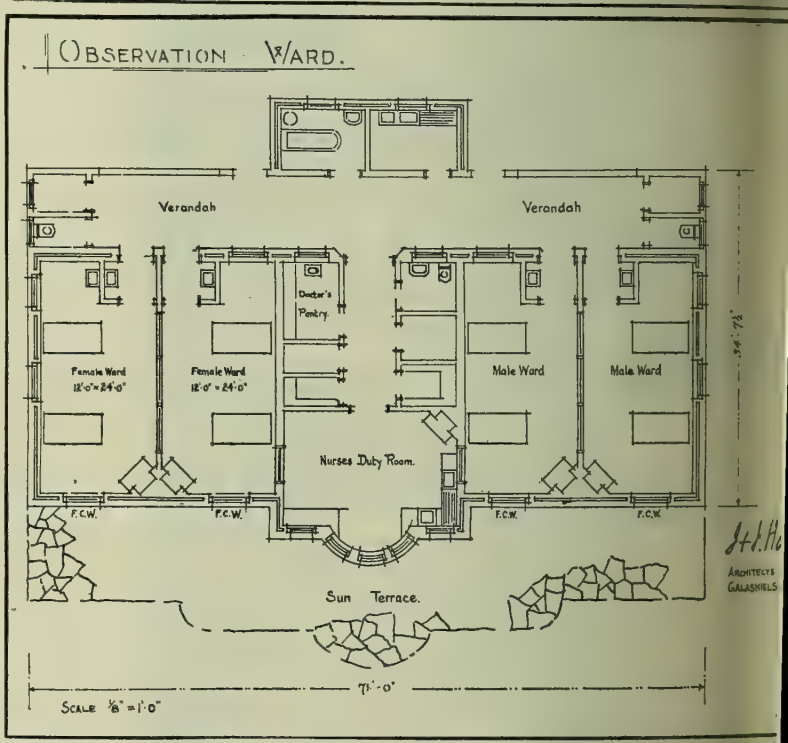
The wards are heated by means of radiators on the hot-water system. Behind each radiator is a fresh-air ventilator, so that the air before entering the ward is heated. In addition, there are open fireplaces. Natural ventilation is relied on throughout the wards. As the buildings have been placed some distance apart, a pump has been installed to accelerate the circulation of the water, both in the heating and domestic water systems, which are led underground from the laundry block to the various buildings.

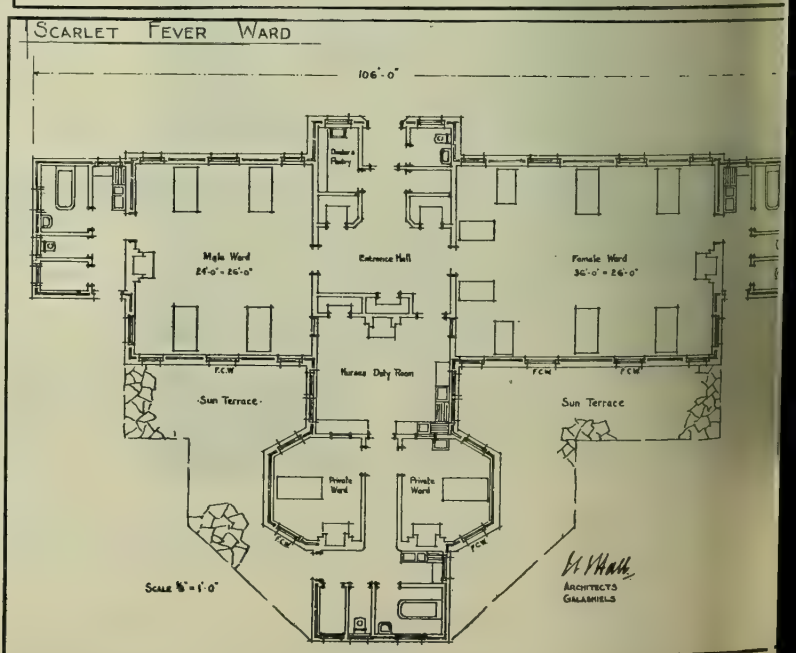
The floors of the entrance halls, lavatories, &c., are laid in terrazzo and concrete, tinted and formed in squares, and the walls have terrazzo or tiled dados of various heights. The walls of the wards are finished in hard-setting white plaster, with a brown tiled base and cove at the floor level, and all angles have been rounded. There are no projections to catch dust.

The doors of all lavatories open outwards, and are fitted with a special bolt, which in case of necessity can be opened from the outside by the nurse. Electric bells are fitted in all the wards, and can be used by any of the patients in their beds.

The drainage is divided into two separate systems—the soil and clear water drains—and each building has its own system of soil drains,







Sanderson Hospital, Galashiels. MESSRS. J. & J. HALL, Architects.

further, its own intercepting trap joins the town's sewer. The water rom the town's main, and the gas and from companies' mains. The hospital roughout with a complete system of nting, and in the administrative block one or two power plugs for use as nd shaded night lights are fitted in the wards. The contractors for the work were as follows:—

Excavator, mason, and joiner work, Messrs. Robert Hall & Co., Galashiels; plaster work, Mr. J. Gardiner, Galashiels; painting and glazier work, Messrs. J. G. Lindsay & Son, Galashiels; electric lighting and heating, Messrs. M'Kenzie & Moncur, Edinburgh; plumber and sanitary fittings, Messrs. R. Ruthven & Son, Galashiels; slater work, Messrs. L. M'Laren & Son, Galashiels; tile work, Messrs. Robert Brown & Son, Paisley. The entrance gate and iron railings were made by Mr. Thos. Scott, Melrose.

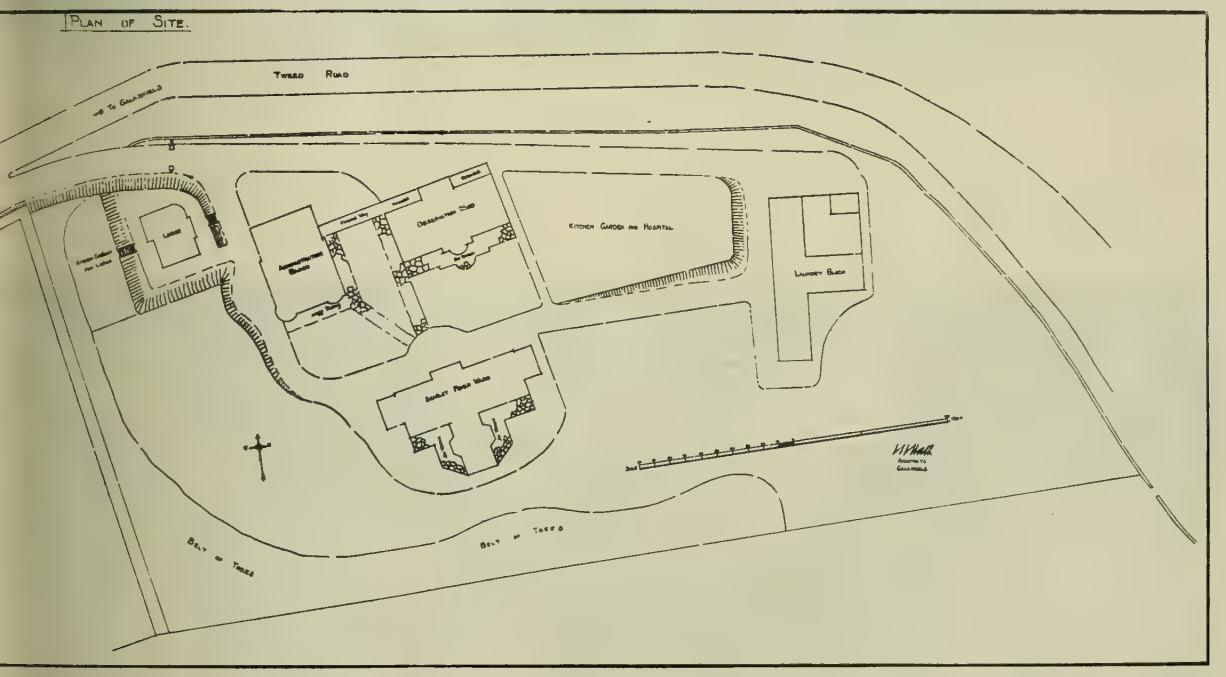
The architects are Messrs. J. & J. Hall, of Ladhope Vale, Galashiels.



Observation Ward.



Fever Ward.



Site Plan.



Left to Right: Administration Block; Observation Ward; Laundry; Scarlet Fever Ward.

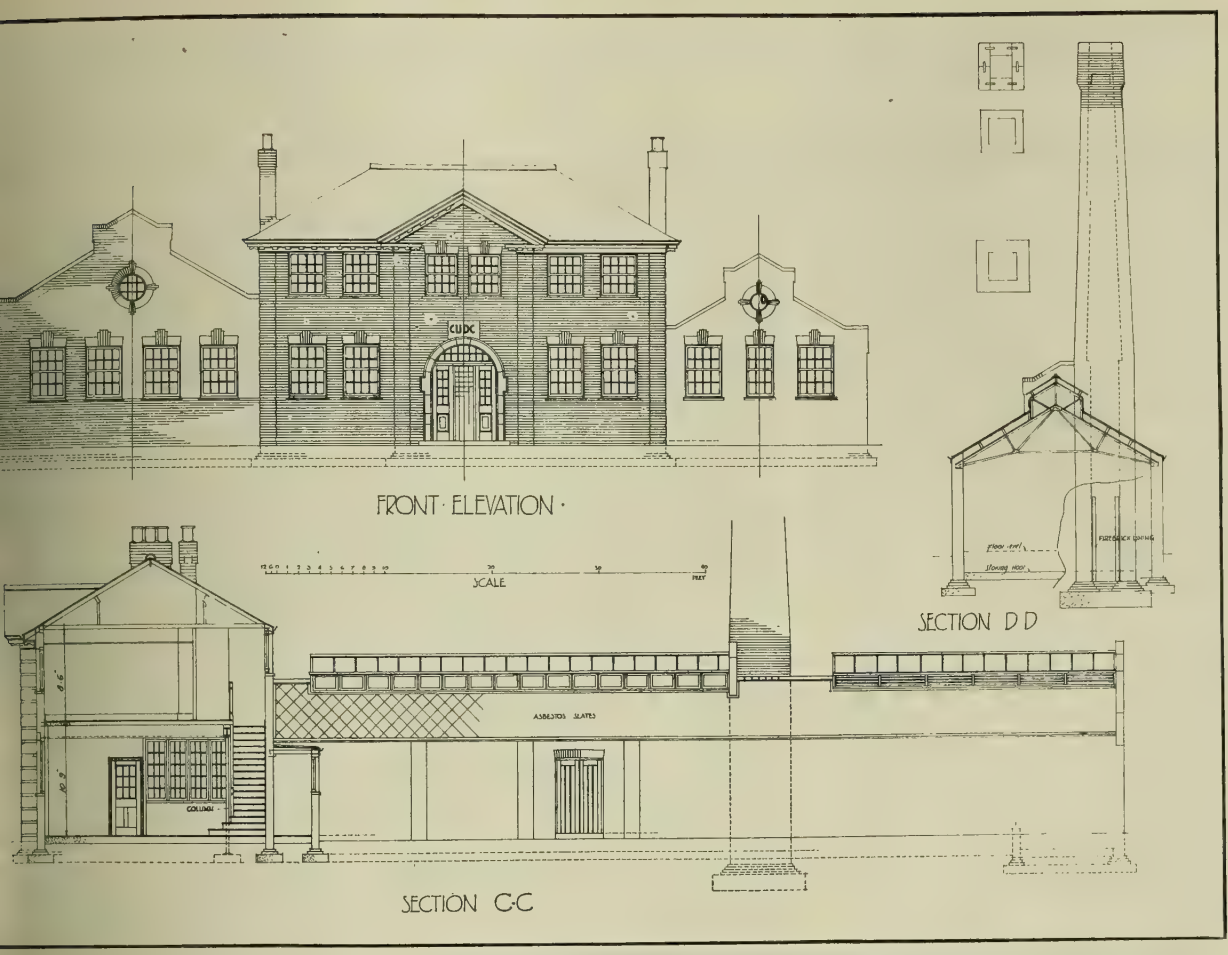
Sanderson Hospital, Galashiels. Messrs. J. & J. Hall, Architects.

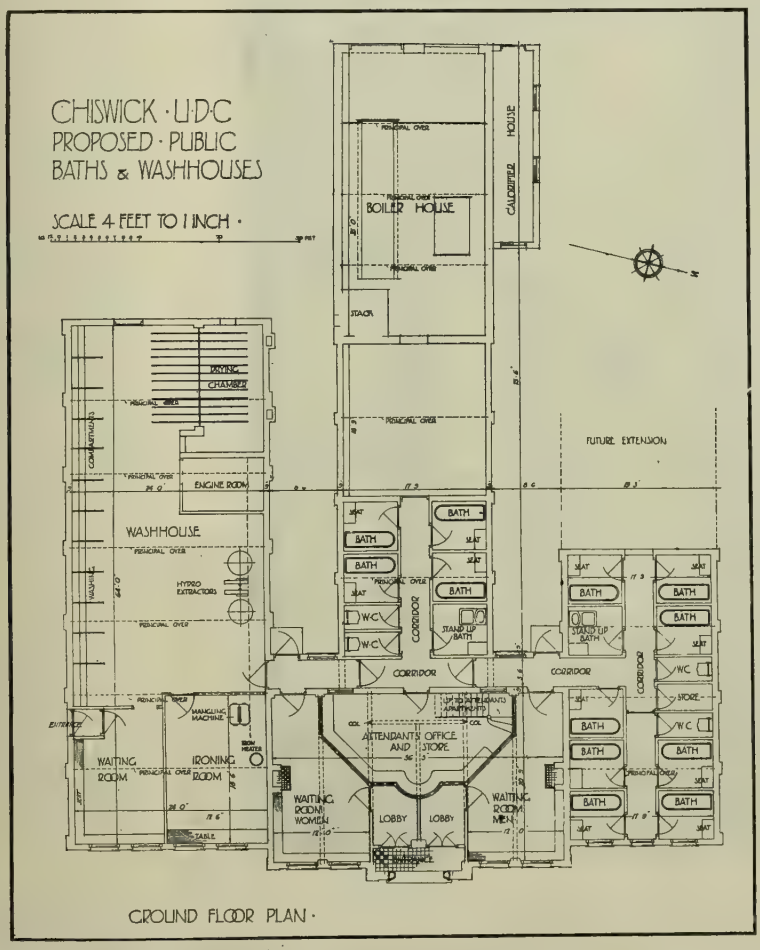




WASHHOUSE.

New Chiswick Baths and Washhouses. MR. EDWARD WILLIS, F.S.I., Architect. *See p.* 604.)





New Chiswick Baths and Washhouses. Mr. Edward Willis, F.S.I., Architect. (*See p.* 604.)

CHISWICK BATHS AND WASH HOUSES

THIS building (see pp. 602–3) consists of eight slipper baths and one spray bath for men divided into four first-class and four second-class; and four of one class only for women with one spray bath; together with the necessary lavatory accommodation for both sexes.

The whole of the heating is by steam from a "Lancashire" boiler, 20 ft. long by 6 ft. diameter, and the condensed steam is brought back to the boiler house and again utilised for boiler purposes, thus reducing as far as possible the furring up of the boiler and economising in water and fuel. The usual safety bells have been fitted, and the hot and cold water supplies for all, except the first-class and the spray baths, are operated from the corridor. Ample water storage accommodation has been provided in the roof of the main building at a suitable elevation, and a fire hydrant fixed on the premises for use in case of necessity. The major portion of the brickwork is in lime mortar with rough-cast facings, except the main front, which is in best red facings, giving an elevation without extravagance; whilst the boarded roofs have been finished with red asbestos tiling.

The whole of the engineering work has been carried out by Messrs. Thos. Bradford & Co., of Manchester, under a sub-contract. The total expenditure was estimated at £16,000, including land, road widenings, &c.; but it is expected the actual cost will be substantially less than this amount. The quantity surveyors were Messrs. Young & Brown, 104, High Holborn, W.C.; the clerk of works, Mr. W. D. Mitchell; and the assistant in charge of the work, Mr. L. A. Cooper, M.S.A. The whole work was designed and executed for the Council by their Architect and Engineer, Mr. Edward Willis, F.S.I.

HOUSE DESIGN AND COSTS

IN the course of a paper, entitled "Reducing Costs by the Proper Designing of Houses: The Architect's Opportunity," read at this year's Conference of the United States National Housing Association, Mr. Ernest Flagg said there were two important ways of obtaining better results in building, viz.: by efficiency and by economy. Reduction of quality was not economy, though often mistaken for such; it might, indeed, prove a very vicious form of extravagance. Real economy was had by eliminating useless things, such as unnecessary time spent on the work, unnecessary space lost in the building, unnecessary materials used in construction; and by simplifying, standardising and taking more direct ways to reach certain ends.

The principles necessary to the design of buildings were not many nor hard to learn. The first and most important was reason or common sense. Reason was the highest gift with which they were endowed, and to expect that any real work of art could be made without its use was unthinkable. How, then, could a design in direct conflict with reason be a work of art? Yet one saw designs of that kind on every hand.

In architecture nine parts of beauty depended on proportion, and good proportions might be had without cost. With good proportions a hut might be an object pleasant to behold and without them the most expensive structure failed. Neither ornament nor anything else could compensate for bad proportions; while with good proportions little else was needed. Proportion in building was a most subtle thing. A design which had a grand air of majestic dignity might lose it all and descend to the commonplace by a change in pro slight as to seem incredible. To proportions one must have a knowle to use many other qualities, such balance, contrast, accent, rhythm, grace, clarity, variety, interest, symplicity and the like; but a mig good proportions was to design by a module or fixed measure, as was of the ancients.

Certain combinations of numbers w to produce agreeable proportions; th in the first few digits, and with the module one might use them with They were one to one, or a square; o or two squares; one to 3, 4, 5, 6, 7 The last three were generally used fo portions of Doric, Ionic and Corinthia respectively.

It might seem a long cry from t temple to the modern small house, b not so far as some might think. By ancient methods it was easy to desig using proportions which would produc and there was no way by which increa could so easily be had. The only c little training in the fundamental pri design—principles which if they we would open up a veritable mine of w ides adding immensely to the joy of

Beginning with the plans or drawin use of a module or fixed measure the cost of making them was so greatly that one could in a few hours do wo would require almost as many wee draughtsman's time. The module commensurability into all parts; tha nothing was more conducive to sp economy both in planning and build figured dimensions were needed, yet was left in doubt. Working drawings buildings might be made on a few sheet of a letter-head and the architect gi complete control as to be almost ind of help.

Closely allied to that was standard parts. For small houses there shou more necessity for special parts such commonly made than for a new alpha time one wrote. With proper parts t might be varied *ad infinitum*; but spe there must be, unless there was commens and that could not be had without When plans were made in the ordi without commensurability, occasions stantly arise when the standard part fit and a special one must be made. case occasioned almost as much tro expense as was required for the stan itself.

Building as he did it, so far as the was concerned, resolved itself into a m of routine. Conditions were always The design varied, but conditions w Thus speed was increased and the labo per man greatly augmented. Everyth went into the building could be m quantities and at times when most c to do so. The system did for building Ford's methods did for automobile with certain differences. Mr. Fo ardised the finished product; here parts only.



CORRIDOR, MEN'S SLIPPER BATHS.

New Chiswick Baths and Wash houses. MR. EDWARD WILLIS, F.S.I., Architect.

Royal Institute of British Archi

The Inaugural Meeting of the new the Royal Institute of British which will be opened by the President will be held at 9, Conduit-street, 8.30 p.m., on November 3.

The Street Architecture Medal fo 1923, which was awarded to Mr. Verity, F.R.I.B.A., for the Shephe Pavilion, will be presented.

L. M. & S. Railway Housing Sc

The London Midland and Scottis has set aside a sum of £1,000,000 workers to build or buy their own h

TOWN-PLANNING INSTITUTE

LEEDS TOWN-PLANNING PROPOSALS.

xth annual country meeting of the nning Institute was held at Leeds, y and Saturday last week, under the y of Mr. W. T. Lancashire (Leeds neer, and President of the Institute). embers were welcomed by Alderman upton, Chairman of the Leeds Cor- Improvements Committee, and Chair- he Leeds and Bradford Joint Town- Committee, who referred to the past proposals for the future in regard to rovements. He said the work of the Joint Committee was likely to have nportant influence in getting main ough from Leeds to other important nd in opening out the country so that ld have access to the sea.

ering the thanks of the Institute for tion, Mr. G. L. Pepler (Chief Town- Inspector of the Ministry of Health) s had taken a leading place in the town planning. The regional scheme Bradford and the surrounding towns l districts, for only on a regional l the problems of urban life be solved. nning had given enormous powers to orities. No longer were they largely o keeping pace with effects, but now l and guidance of the future develop- owns and districts had been placed ands they could deal with causes. tulated Leeds on its splendid parks; t that in the amount of park and d space that a healthy community Leeds held pride of place among the

Development of Leeds.

V. T. Lancashire, M.Inst.C.E., d a paper entitled "Town- Schemes and Proposals for Leeds," he dealt with the Town-Planning 09 and 1919, and the reconstruction ntral area of Leeds and the neces- consideration of the areas which later must be reconstructed.

a of Leeds for town-planning pur- er the Acts of 1909 and 1919, viz., 00 acres, had, he said, been divided schemes. Number one was so small s hardly worth considering; it con- y 6.01 acres, and an intimation was the Local Government Board to the cil that the Act was not intended uch small proposals. Nevertheless, of dealing with such small estates n-planning conditions was consider- e grounds previously attached to lences, now in numerous cases to be d laid out for small dwellings, ought re-developed on the old by-law lines. rse the trouble necessary to obtain ning powers for small isolated s too great to allow of that method ng the desired result.

er six schemes would embrace nearly of the unbuilt-on area of the city n small areas outside. A small por- e city had been included in the the Hunslet Rural District Council d system was looked upon as the f the proposals for the scheme, and vas first of all concentrated upon it. nature of the district left little choice ation of the ring road which, what- alue might be in some cases, was n in Leeds as vital. Under the tem the town had grown without rd to cross lines of communication, k of proper connection between the uburbs was most marked. There ross-communication between radial r large areas, and the advantage g road where already constructed ghly appreciated. When completed l value would be fully realised. able lengths of ring road lay out- resent city boundary, a good many miles lay in the areas recently taken into the city, and a comparison between the ease with which those portions within these areas were obtained and the delay attending the construction of the lengths outside the city was a point of much significance.

Seven miles of ring road had been made, and 2.3 miles were in hand; 2.2 miles had been ordered by the Council, the work having been undertaken to find work for the unemployed. The lengths of other roads and widenings carried out or to be carried out by the unemployed were:—Already made, 5.4 miles; in hand, 14 miles; ordered by the City Council, 6 miles. Generally, the width of the ring road was to be 100 ft. Some other arterial roads were to be 100 ft. in width, and the City Council had agreed to a width of 125 ft. in some cases where tramways on separate tracks were to be laid. In some cases it was considered advisable to lay the tramway tracks at the side of existing fairly wide roads on land outside the present width of these roads. This was only practicable when by reason of the frontage having little value it could be done with moderate compensation to the owner, or alongside a park or housing estate belonging to the Corporation. There were examples of the two former cases in the city, and plans for the last-named were in existence. When the road was wide enough for ordinary vehicular traffic this arrangement was good, as it was much cheaper than to upset nearly the whole of the surface of the old road and to make the necessary costly alterations to the gas and water mains and other services.

Before deciding upon the widths to be adopted for new roads, all departments of the Corporation and others were called together for consultation. It was decided that in the case of wide roads, services in the way of sewers, gas, water, electric light, telegraph and telephone mains should be laid in duplicate in footpaths of 20 ft. in width. In such a district no invariable rule as to widths of roads could be laid down; for instance, along the main road to Guiseley, near Kirkstall Abbey, the road in places lay on a hillside and a width of 60 ft. only had been obtained, this moderate width having involved a cutting 28 ft. deep. In carrying out the work it had been considered advisable to secure for the present generation as much benefit as possible by making only the half width of a 100 ft. road instead of the whole, though in certain cases the full width had been made as far as earthwork was concerned in consequence of the particular circumstances to be dealt with.

After dealing with parks and recreation grounds and zoning, he said, like many other towns in that part of the West Riding, Leeds was largely composed of back-to-back houses, of which there was a total of about 77,800, made up of three types—(*a*) 34,500; (*b*) 29,080; (*c*) 14,220. Houses in Type (*a*) abutted directly on the street and generally contained larder and coals in the basement, kitchen with set-pot and sink on ground floor, and one bedroom on first floor, there being one w.c. to two houses with entrance from the street. Houses in Type (*b*) generally had a 6-ft. open space in front and were built in blocks of eight with 15 ft. open space at ends, and generally contained wash-kitchen and coals in basement, a living-room with cooking range and scullery with sink on the ground floor, two bedrooms on the first floor, and one bedroom and bathroom on the attic floor. There was one w.c. to each house in an open space at the end of the block. Houses in Type (*c*) were built in continuous rows with 15 ft. open space in front, and contained wash-kitchen, larder, coals and w.c. in basement, with entrance from garden by means of area and steps; living-room with cooking range and scullery with sink and bath on ground floor, two bedrooms on the first floor, and an attic.

There could be little doubt that sooner or later Class (*a*) would largely disappear. In future generations a higher outlook on life and its requirements might bring about a partial disappearance of Class (*b*), but at any rate the re-housing of the population of about 140,000 occupying Class (*a*) houses, or 30 per cent. of the total population, would necessitate a great redistribution of population and a very material spread in the area to be occupied by houses. That fact, in addition to the requirements for the normal increase in population, proved the necessity for rapid transit to the outer fringes of the city and reconciled the inhabitants generally to the construction of new roads of a sufficient width.

A scheme for an unhealthy area of 65 acres was approved, and provisional orders were granted in 1896 and 1901. A great deal of work had been done in re-development therein; some streets 75 ft. wide had been constructed, involving heavy engineering work in bridges, retaining walls, etc.; 1,900 yds. of subway had been made in the new and widened streets. Some considerable areas had been sold off and built on, and it was the intention of the Council to re-develop it only for factory and business premises; but although 1,982 houses and shops had been demolished, there remained 986 houses still to be removed; the net area to be built upon amounted to about 16 acres. Since the taking up of the available sites was slow, it was possible that the Council might reconsider the proposals for rebuilding and decide to rehouse some of the inhabitants thereon.

The centre of the city was well furnished with fairly wide streets running north and south, but the streets running east and west were certainly deficient in accommodation for present-day traffic. Wherever the Corporation had surplus lands to sell, it did so with the obligation thrown on to the purchaser to submit plans to the Improvements Committee for approval in the matter of elevation. In important cases outside architectural advice was obtained. For instance, when the remaining site was sold in City-square, the Leeds and West Yorkshire Architectural Society was asked to give names of three prominent architects, from which the Corporation selected Sir Reginald Blomfield to collaborate with the architect for the new "Majestic" Cinema. It was the intention of the Corporation to give special attention, from the architectural point of view, to the rebuilding of premises along the half-mile or so of street improvement running from the Town Hall in an easterly direction. Difficulties, of course, arose in these matters, as prospective purchasers were inclined to argue that they must have a free hand or they would not buy, and would go elsewhere to start their business, but the city could wait quite as well as the private individual, and it was its duty to see that such important matters, if to be done at all, should be well done. The importance of the matter for generations to come was such that a local authority, impressed by its duty in this direction, would, it was hoped, be able to resist any inducement to vary from the course it ought to pursue.

Mr. R. H. Mattock, Chief Surveyor to the Leeds and Bradford Regional Joint Town-Planning Committee, then read a paper on the work of that committee, which we hope to report in our next issue.

In the afternoon the members visited various road improvement schemes in the neighbourhood, and were received at the Art Gallery by the Lord Mayor of Leeds in the evening.

On Saturday visits were paid to Temple Newsam, Roundhay Park and various improvement schemes.

Rome Scholarships.

The Rome Scholarship in Decorative Painting for 1924 has been awarded to Mr. Robert Lyon (Royal College of Art), and the Rome Scholarship in Sculpture for 1924 to Mr. John R. Skeaping (Royal Academy Schools).

STEEL HOUSES AT THE DOMESTIC WELFARE EXHIBITION, GLASGOW

On Monday, October 13, the Domestic Welfare Exhibition was opened by the Duke of Atholl in the Kelvin Hall, Glasgow.

This is another of the series of the Housing and Health Exhibitions under a new name, but on this occasion the Glasgow Corporation, who are the promoters of the venture, have concentrated more particularly on the question of domestic and personal welfare, house finishing and equipment, labour-saving and smoke-prevention devices, and other matters that tend to make for health.

There are interesting sections showing artisan work, models, paintings, photographs, inlaid work, embroidery, sewing, knitting, and arts and crafts of all kinds, and the competitions in photography and artisan work have attracted large numbers of entries. The most outstanding exhibits are two showing the types of steel houses developed by the Duke of Atholl, in co-operation with Messrs. William Beardmore & Co.—one a complete cottage of three bedrooms, a living room, scullery and washhouse, bathroom, and all the necessary smaller apartments; and the other the lay-out of a three-roomed house of a similar type. The two steel houses are attracting enormous attention.

Steel houses! The very idea is new and arresting to the public mind. Yet this idea is simply a reflex of the stress to which ingenious brains are being subjected to ameliorate the lot of man. In the realms of art and science enormous strides are daily being made and many efforts directed towards better conditions of life.

Daily, almost, schemes are being promulgated to harness the tides, to utilise the waste energy of our waterfalls, or to girdle the earth with wireless, and now, to cope with the abnormal shortage of houses, comes the astonishing proposal to erect houses of steel.

If a Rip Van Winkle, with the genius and inspiration of a Burns, were to awake, what a play of ideas he could introduce into an imaginary dialogue between the old and the new, between a stately Scottish castle and a modern house of steel. One could easily imagine the stout old massive pile to say:—

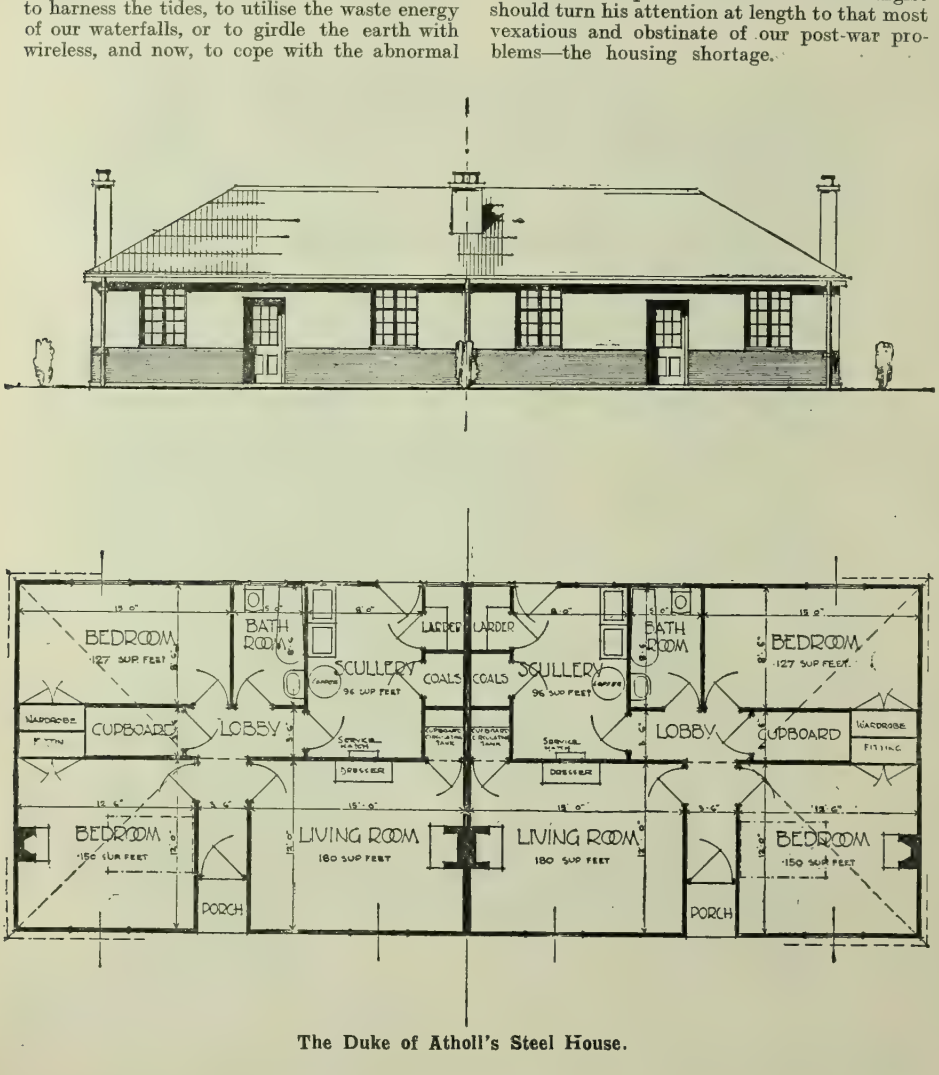
"Then down ye'll hurl (deil nor ye never rise!)
And dash the gumlie jaups up to the pouring skies!
A lesson sadly teaching, to your cost,
That Architecture's noble art is lost!"

and the modern edifice reply in sarcastic vein:—

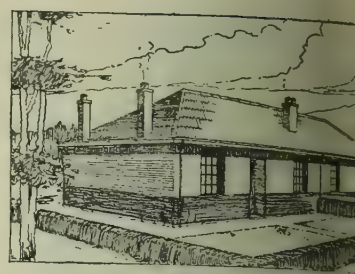
"Fine Architecture, trowth, I needs must say't o't,
The Lord be thankit that we've tint the gate o't."

Certainly, if the Duke of Atholl's proposals are carried out and houses of steel become universal, then economic pressure has compelled modern man to "tint the gate" of ancient architecture.

In support of the "Atholl Steel Houses," Messrs William Beardmore & Co., Dalmuir, Glasgow, claim that this is an Age of Steel—an era in which, in one department of industry after another, this sturdy product of the melting furnace and rolling mill has ousted wood, stone, concrete, bricks and mortar, and a host of other building materials. It is but a natural development that the metallurgist should turn his attention at length to that most vexatious and obstinate of our post-war problems—the housing shortage.



The Duke of Atholl's Steel House.



The Duke of Atholl's Steel Ho

The Atholl Steel Houses, manufactu Messrs. William Beardmore & Co., L Glasgow steel manufacturers, ship build engineers, to designs by the Duke of suggest a definite solution to this grave problem—a solution, too, which, as providing permanent houses in a frac the time formerly required for build intended to revolutionise methods industry, and make a contribution t wider employment as well.

The use of steel for walls and roofs of apart from girder-framework, is, of cou new. Light sheds, pavilions, and even dw houses of a semi-permanent nature, are e instances of this. But there is a vast dif between the light flimsy steel sheets em in such structures and the heavy steel used in the new Atholl steel houses—f latter are constructed on the same pri and of the same material as a ship. Th experience and high reputation of the mak shipbuilding, boiler-making, and similar plate work, will be familiar to British everywhere.

The framework of Atholl houses is o girders, the outer wall of heavy steel p and the inner of a non-conducting m with an air-space between, such as will ma equable temperatures in the rooms i climate. Obviously, such a house is against damp, vermin, and fire; and th being treated with a special composit the inner side, will not be subject to cor tion.

The types at present under construct eligible for the full Government subsidy, designed to meet the requirements of the w man, though their high degree of fini ample wardrobe, press and cupboard make them suitable for people of any t profession. The sections are standardi that it is a simple matter to make ho a larger type.

There are no extras to buy over and ab quoted price, and a definite date can be g delivery. We are informed the house erected on a previously prepared fou easily in a fortnight's time, rea occupancy.

The Beaux Arts Gallery.

The collection of over a hundred and drawings, at the Beaux Arts Ga Bruton-place, includes a good deal of int work of a varied kind. The honours of t are probably with the late Jules Lesse could handle both pure landscape or h with real distinction. Whether it w subjects as the sea front at Brighton, French chateau, he always had a point as regards colour and general effect wh worth giving.

Concrete Mixers.

Messrs. The Ransome Machinery C are supplying the concrete mixers for th Harbour Bridge Contract, the contra which are Messrs. Dorman, Long & C and they have also recently secured for 27 steam-driven concrete mixers, with engines, for the Central Indian C through the India Office.

RCHITECTS' AND ILDERS' INQUIRY BUREAU

e glad to give questions and answers accept responsibility for contributed pecially on legal matters.

e appeal to our correspondents to ir queries on paper of a size easily written as legibly as possible, or l, in typescript?—ED.

Moving Shuttering.

was much interested in the article Methods of Cottage Construction" st issue, specially in the reference to uttering. I should be very glad if l give me further particulars of

"S. D. D."

[REPLY.]

ef feature of moving formwork is the unt of shuttering necessary for the concrete walls. It can be applied lengths of walling or to circular h as silos or gas-holder tanks, and her of wood or steel; if steel forms a smooth surface which needs no atment is obtained. Moving forms used for the largest and the small- of building; in the construction of rain elevator at Hull a system of rms was used by which the whole side and interior walls were poured rom a centrally-situated placing his was probably the most difficult e application of moving shuttering pted in this country, and very care- sation was necessary. A shutter- 10 ft. high was used, and as the in height this was raised simul- ver the whole area of the building number of jacks, which were oper- er on the sound of a whistle.

ller buildings, such as our corre- robably has in mind, the problem simpler one. The principle of the the repeated re-use of the shutter- er steel or wood. Instead of the l method of erecting shuttering to ent height, filling in, and then rther shuttering on top of that place and again filling in, while e whole of the shuttering in place wall is completed, the shuttering e first course of the wall is raised use of for the next course above, until the wall is completed to the required. Shuttering used on the system may be of any height, but y between 1 ft. 6 in. and 3 ft. The which it may safely be raised de- large extent on the nature of the eing built, and the height of the the concrete must be allowed to itial set and to be so firm that it o out of shape when left unsup- for cottage walling it would be in practically all cases where a h Portland cement is used to raise ing 24 hours after the concrete is or a small building it would be to have the shuttering of such a the men on the job could pour a ourse in one day and commence ng at the same place as on the ; thus the forms would always be hours, and there would be no l by the operatives having to wait concrete was setting. There are types of patented steel forms on but they can be readily made of site, although, if wood forms are surface is not left so smooth as is used. In small work many raising the forms are in use, and realises the principles of moving shuttering it is a simple matter to devise a method on a small job. Unless interlocking steel forms are used it is necessary first to erect uprights at intervals around the building on each side of the walls to act as guides for the shuttering. These uprights are usually provided with grooves in each side in which the boards or sheets of metal are placed. Sometimes the shutters are kept in position by dowels, but it will generally be found that the weight of the concrete pressing against the timber will prevent it from falling inwards or slipping downwards, while the uprights in which it is slotted prevent it from bulging outwards. If a shuttering of up to 3 ft. in height is used it can be raised by two men lifting it upwards in the grooves into which it is slotted, but for a deeper shuttering it would probably be necessary to force the shutter upwards by some means or other; a simple method is to put a block of wood on the platform on which the men are working and use a plank as a lever acting on the bottom edge of the form. Raising is considerably facilitated if the forms are oiled on the inside, or, better still, if wooden forms are used, face them with thin sheet metal in order to present a smooth face to the concrete and reduce the friction.—ED.]

Concrete Blocks v. Brickwork.

[REPLY TO MR. J. WOOLLARD.]

SIR,—The whole difficulty of satisfactory concrete block construction has been and is now the uncertainty of arriving at that happy mean between the richness that keeps the water from without while holding the condensation upon the surface within, and the porosity that admits the water from without though absorbing the condensation from within. The man who can solve the problem with some certainty will have given a great impetus to concrete block construction, but at present success in this direction sometimes appears to have arrived more by luck than judgment.

As to speed, I am very sceptical of Mr. Woollard's figures. The operation of laying down the trowel between each unit, handling with both hands the heavy block, setting, adjusting and pointing and bedding the cumbersome thing seems to me very much more than a three-brick job, though there is no doubt that there are bricklayers working to-day who would not beat it. The comparison looks rather as though between a good bricklayer laying blocks and a poor bricklayer laying bricks. I know of several men who are laying their thousand a day regularly, and any of these would, I feel convinced, romp home with six or seven laid bricks before the block was laid.

As to cost, it is a remarkable thing that with very few exceptions the speculative builder is choosing bricks almost everywhere, in spite of the acute shortage, and in spite of the adequate supplies of cement and aggregate available. What has Mr. Woollard to say to this?

"BRICKS."

"Rendering Accounts."

[REPLY TO YOUNG BUILDER.]

SIR,—From an architect's point of view, and no doubt to some extent from a layman's, it is most desirable that every item, and every time-sheet concerned, should be accounted for in the builder's account. Builders who would observe this from the outset would save very much trouble and delay such as is often caused by frequent back reference to explain and amplify items that have been lumped together in a way that is impossible to check. An architect or quantity surveyor can hardly give a conscientious award otherwise, and a layman will be inclined to suspect accounts that are not fully detailed and expressive of a thorough business organisation behind them.

A fair net profit to a builder would be 10 per cent., and to this a percentage should be added for establishment charges, and this will vary according to the extent or economic running of the establishment. The percentage is not empyric, but should be assessed upon the actual figures of a previous fair period of running experience, such as "Young Builder" appears to have had. It should be quite simple for him to trace his accounts in his overhead charges as carried by the turnover of a particular period, and the calculation will be a useful index of the efficiency of his business.

"ARCHITECT."

Movable Structures.

SIR,—I should be obliged if you would advise me on the following points: I am about to erect a small repairing garage on a main road, the plan of which the council will not pass because the district is residential. In consequence of this I propose to build the structure on wheels and should be pleased if you would give me your assistance in the following:—

What is the largest building on wheels allowed by law?

Must the building have its own floor, or could the ground be used as the floor?

Must one pair of wheels be pivoted to allow for steering? Also, is there any specification as to the size or number of wheels used?

"A. G."

Made Ground.

SIR—What would be a fair, safe load to assume upon fairly mature and consolidated made ground?

On a site under which the natural surface is very many feet below the made-up surface, the cost of going down thereto with the foundations of a small house would be prohibitive and out of all proportion to that of the superstructure. There must, however, be a limit within which the resistance of the made ground may be relied upon and which can be dealt with by spreading the weight of the superstructure either upon a wide spread of reinforced concrete foundations, or upon a continuous reinforced concrete raft.

Personally, I thought ½ ton per ft. super to be a very conservative estimate for any but the most loosely tipped rubbish, but I should like to hear other views upon the matter.

"NERVOUS."

Sand Lime Bricks.

[REPLY TO "COMPETITION."]

SIR,—I have used these bricks as long as 20 years ago, and they can be seen standing the weather, &c., as well as other bricks in the side and rear walls of the Norwich Union Life Insurance Society's Head Office in Norwich. They were recommended, and I simply bought them and used them. I don't see why they should not be more extensively used. Those I used were made by a patent process, but the plant, I fancy, was rather expensive to put down and the undertaking was abandoned, although in a good district for both sand and lime, and the plant sold, I believe.

For economical building, in my opinion, patent materials and processes should be avoided.

GEORGE J. SKIPPER, F.R.I.B.A.

Abandoned Work.

[REPLY TO "BITTEN."]

SIR,—If "Bitten" who, from the tenor of his letter in your last issue, seems to have a "little knowledge," had only known this, that most respectable builders make it a rule not to tender for works costing more than £500 unless quantities are supplied them, he would not have found it necessary to write his letter. Builders are put to great expense in pricing quantities, often unsuccessfully; it is unreasonable to expect them all in competition to take off each his own quantities, hence one "taking off" is done by the surveyor and copies supplied to each builder. If the work is abandoned surely this work must be paid for; it is done and finished.

"SURVEYOR."

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

A General Election has been decided on as the result of the Government's heavy defeat. Parliament has been dissolved and polling will take place on October 29.

Cost of Parlour and Non-parlour Houses.

Mr. Wheatley, Minister of Health, informed Sir K. Wood that returns from local authorities showed that the average costs of parlour houses contracted for by such authorities during each month since January last were as follows:—Average Cost:—January, £445; February, £439; March, £459; April, £443; May, £474; June, £462; July, £494; August, £491.

The average prices of non-parlour and parlour houses (including flats) included in contracts let by local authorities in the Metropolitan Police District for each month since January were as follows:—

1924.	Average cost per house or flat (non-parlour).	Average cost per house or flat (parlour).
January ..	£437	£473
February..	402	491
March ..	468	512
April ..	484	597
May.....	438	512
June.....	493	527
July.....	600	—
August....	510	548

Houses Under Construction.

Mr. Wheatley informed Mr. T. Thomson that on September 1 last 52,930 houses were under construction in connection with State-assisted schemes; the number under construction on January 1 last was 18,975.

The Rating Bill.

Lieutenant-Commander Fletcher asked the Minister of Health if he was in a position to make any communication regarding his negotiations with associations of local authorities and other interests concerned in the draft Rating and Valuation Bill issued by his department on September 15, 1923; and if there were any immediate prospects of legislation on the lines of the Bill being introduced.

Mr. Wheatley said that as a result of the circulation of the draft Bill to Associations of local authorities and other interests concerned, many useful suggestions had been received. The work of dealing with these suggestions was still proceeding, but he was not yet in a position to make any definite statement on the prospects of legislation.

Building Committee Scheme.

Mr. Wheatley informed Mr. E. Simon and Mr. Briant that the arrangements for putting into operation the proposals of the National House Building Committee for increasing the building resources of the industry were progressing rapidly but had not been completed. He hoped to announce very shortly the appointment of a representative committee whose principal duty would be to give practical effect to those proposals.

A Disqualification.

Sir C. Yate asked the Minister of Health whether he had issued an order that any member of a rural district council who applied for and receives a certificate entitling him to the Government subsidy for a cottage he was erecting could not hold his position on the council and receive the grant, and if so, for what reason?

Mr. Wheatley said he had not issued and had no power to issue such an Order; the disqualification arose from a provision in the Local Government Act, 1894.

Building Lines.

Lieutenant-Commander Fletcher asked the Minister of Transport if he had yet ascertained what additional powers he required to enable him to ensure the general prescription of adequate building lines so that the future widening of arterial roads might be possible as it became necessary?

Mr. Gosling said he was aware what additional powers were necessary to secure the very desirable results at which the honourable member aimed, and he hoped it might be possible to frame generally acceptable clauses which could be embodied in any future highway legislation of a general character.

Scheduling Roman Camps.

Mr. E. Harvey asked the First Commissioner of Works whether he would consider the advisability of scheduling the Roman Camps at Cawthorne, near Pickering, under the powers given him by the Ancient Monuments Protection Act?

Mr. Jowett said unless in cases of immediate urgency, his Department awaited recommendations from the Ancient Monuments Board before scheduling monuments. He was not aware that there was any need to depart from this practice in the case of the Roman Camps at Cawthorne. He had no doubt, however, that the Camps would be recommended for scheduling in due course.

Two-roomed Houses.

Lieutenant-Commander Fletcher asked the Minister of Health how many two-roomed houses had been sanctioned for construction by his department since the accession of the present Government to office?

Mr. Wheatley said that information in the form desired was not available as detailed particulars of accommodation proposed to be provided were not required at the time of giving approval to a local authority's proposals where the houses to be erected would fall within the general limits of size laid down by the Housing Act, 1923. Approval had, however, been given under the Housing Acts to the erection of 316 dwellings having a floor area of less than 620 sq. ft. in the case of houses or 550 sq. ft. in the case of flats; of these 180 had been approved in connection with slum clearance schemes and 136 for aged miners' homes. These figures substantially covered the two-room accommodation approved for erection by or with the assistance of local authorities.

Houses Approved.

Mr. Greenwood informed Captain Bowyer that 161,441 houses had been authorised to date under the Housing, &c., Act, 1923. On September 1, the latest date for which information was available, 26,347 houses had been completed and a further 50,524 were in course of construction.

Mr. D. G. Somerville: Is it not a fact that a very much larger number of houses have been built by private enterprise in addition to these subsidised houses?—Sir H. Croft: Have any of these houses been built under the present Minister?—Mr. Greenwood: A large number of the houses for which I have given figures were built under the present Minister.

Pressed further by other hon. members, Mr. Greenwood admitted that all these houses had been built under the Chamberlain Act during the time Mr. Wheatley had been in office.

York Housing Scheme.

The tender of Messrs. F. Shepherd & Son, York, amounting to £130,297 10s., for the erection of 300 houses under a steel frame system, has been accepted.

Wages on Public Works.

The Public Works Conciliation Board wish it to be clearly understood that the rate for the area beyond the City and County of London (the rate for the City and County of London was given in our issue of last week) and to the limits of the Metropolitan Police Area be not more than one penny less than the basic rate (1s. 3½d.) in the City and County of London.

TOWN-PLANNING

I.—ANCIENT TOWN PLANNIN

MR. WILLIAM HAYWOOD, F.R.I.B.
giving a series of lectures on "Town
ning" at the Birmingham Universit
the course of his first lecture he said
consideration of town building duri
period 2500 B.C. to the fall of Rome
that where towns were contemporary w
early and unaided struggles for the s
of their inhabitants, no ordered plannin
to be expected; and, as a matter of fa
street plan of such towns was usua
casual as that of a nineteenth-century
trial city which had been neglected for
gles of another kind. Hundreds of
however, were built during this period
regular plan (always some variation
gridiron pattern), and these were either
tary settlements, or cities built by vi
and mature communities which had rea
abandon their original settlements.

The first notions of formal town pla
appeared to have originated in the
(Hippodamus, an Ionian of the fifth c
B.C., was the first professional town p
known to them). Many towns were
planned and built in Asia Minor afte
Alexandrian wars, and there were bu
by-laws of this period which anticipate
very latest modern practice. There w
law, for instance, which banished obn
trades beyond the city walls; another le
ing the widths of new roads and cha
road maintenance upon adjoining owner

The eastern origin of town planning
supplemented by evidence of formal
structure found in the North Italian T
mara, *i.e.*, fortified settlements of sup
lake dwellers dating back to 1400-1800
These settlements were as precise in pl
a Roman military camp, and by traditio
discovery might have influenced R
methods.

From about 200 B.C. onwards,
founded some hundreds of colonial citi
which streets and buildings were pl
as a whole. Turin, built by Augustus
28 B.C., was one of many Italian cit
which a Roman street plan was still re
as an essential part of the modern
Timgad, Ostia, and Pompeii were examp
Roman-planned cities in which the
roads and materials of the period hav
preserved without intermediate use.

The city of Rome grew slowly and
larly, and was always badly planned.
costly efforts to replace its central con
by a wonderful series of fora. The lic
irregular growth was first checke
Augustus, who limited the height of bu
to not more than 70 ft. Trajan reduc
to 60 ft., and Nero not only fixed the
of future building at not more than tw
road width, but required new streets
wider, and compelled private owners t
more substantially.

By the fourth century A.D. tenem
Rome outnumbered the domus, or sing
lighted type of dwelling, by twenty-
one; and at Ostia, the port of Rom
found remains of second-century ten
with complete tiers of flats, identical i
and lighted back and front in the
way. From which it was evident that
dential street in ancient Rome was f
modern in character than was suppose
Pompeian housing was taken to be t
dominant type.

Preliminary to his lecture Mr. H
stated the lectures on historical tow
ning would be abridged this session
room for additional lectures on the soc
and architectural aspects of the subje
modification might be regretted at
when public interest in ancient town
was being rapidly extended by the
given in the press to many new disc
but there could be no doubt that the
value of the course as a whole would
larged by the new programme.

THE BUILDING TRADE

BUILDING APPRENTICES

BY AN EDUCATIONIST.

of political excitement, the scheme
apprentices in the building industry
progress. It will be remembered that
t of the Building Trade Committee
ntrusted with the task of enquiring
neans of the industry for carrying
ull housing programme, recommended
f the National Joint Apprenticeship
should be expedited.
. Wheatley and Mr. Trevelyan, at the
Education, have been taking this
personal interest in the plans that are
ed to provide continuity of training
apprentices. During the last few
es have been received from local
authorities in answer to a circular
early last month by the Board of
These replies make it clear that
mple facilities available in this country
ng for the technical training of brick-
rpenters, slaters, and plumbers.
chnical schools report an increase this
the number of students, and if the
neme ever materialises, there will be
f lads anxious to take advantage of
unities offered.
for an intensive course lasting for
ths at local technical schools have
n up, but the Government have, of
ived at no definite decision, and there
nber of difficulties to be overcome
scheme can be transferred from the
as into that of reality.
eless, considered from the point of
e nation and of the future prosperity
lding industry, it will be all to the
ch a carefully thought-out training,
by a test, can be arranged. What-
be the future policy of housing, and
e return or not to rely upon private
alone, no real progress can be made
essential arms of the industry are
ruited and strengthened.
erefore in no spirit of criticism, or
nent of the heroic efforts that are
made behind the scenes by men
he future interests of building closely
hat some of the difficulties that stand
y of the fulfilment of the present
e enumerated here. Rather they are
in order that the practical men of
ry may know exactly what is adum-
d may possibly be able to suggest
f meeting the difficulties.
, of course, the ever-present problem
The Treasury for the last three years
the purse-strings tight, and only
know the Government service from
bear full witness to some of the
occasionally penny-wise and pound-
at have been insisted on. To provide
education for thousands of trainees
ably increase the financial burden upon
ation authorities, especially in so far
ning for certain crafts, notably brick-
mands extra and expensive equip-
The present suggestion is that this
cost shall be shared equally between
yers, through a grant received from
of Education and local ratepayers.
nowever, an inevitable demand from
alities for more money to come from
on the grounds that house-building is
and not a local concern. In all
, however, there will be eventual
that a basis of fifty-five is equitable.
n more difficult is the question of
the money for maintaining the
during the proposed three months'
course. It is improbable that em-
l be able to see their way to pay much,
anything at all, towards the expenses
of potential apprentices. A suggestion has been made by the representatives of certain local education authorities that a compromise might be effected by a student spending one week with a building contractor in the shops or on a contract, thus earning wages; and the next week, possibly at reduced wages, go into the local technical school for theoretical training. This plan has obvious difficulties.

Then there is a suggestion that maintenance charges on a fixed scale for the trainees might be partly provided out of the rates. But, even if local authorities, who are at present extremely anxious as to their financial position, because of the rising cost of outdoor relief, are prepared to pay towards the expenses of the board and lodging of youths trained for one selected industry, the problem is not solved. What guarantee can be devised so that the lads when trained, possibly at the expense of local rates, will remain in the locality on house-building work? They will be tempted to migrate to better jobs on commercial buildings in other districts, unless such movement of labour is restricted by a written agreement.

It is more than probable, therefore, that the only way of overcoming the difficulty of maintenance will be by taking the money out of existing maintenance funds that are now in the possession of local education authorities. Under special arrangements, such authorities receive a grant that has lately been increased from 6s. to 9s., according to the number of attendances at elementary schools. Can this fund be utilised to provide board and lodging for trainees during the three months' course?

There are many other difficulties that will have to be faced and overcome before the proposed scheme can become practical. There is, for example, the question of whether the trade unions concerned will agree that tests of the efficiency of the lads should be applied at the conclusion of each course.

Fortunately, in this country, we have the advantage of the experience of a similar scheme that was started in Australia early last year. According to the evidence of one of those most intimately connected with the initiation of special courses in Australia, who is now in London, they are proving to be most successful. The Operative Associations at first were strongly antagonistic, and the employers were suspicious. But the training is being given, and the building industry in Australia is being recruited by more efficient craftsmen. Quite a number of lads in Australia in the concluding tests for bricklaying laid in an eight-hour day on straight work from eleven to twelve hundred bricks. Carpentry and plumbing need, of course, far longer to learn than rough brick-laying, but all the same Australian experience proves that craftsmen able to build cottages can be trained on intensive lines. It was always said before the war that it took three years to make a soldier, but many a man in 1917 found himself in the trenches after a period of training at home that the old soldier would have regarded as absurdly inadequate. So, in the building industry, we may learn before long, and certainly Australia can teach us a lesson in this respect, that carefully devised education given in our technical schools in short courses can help to approximate the supply of skilled building labour to the demand.

Bournemouth Pavilion.

Messrs. Home & Knight, architects, of Russell-square, inform us the Minister of Health has sanctioned the first contract for the Bournemouth Pavilion. Work will be commenced on Monday.

REINFORCED CONCRETE DESIGN *

This is a remarkable book; it may be considered from two points of view—the technical treatment and the author's views on the principles of design which he sets out in an extremely interesting, albeit rather an aggressive and heterodox manner. We will deal first with the technical treatment. The author does not use the standard notation now almost universally adopted in this country, but one of his own "based on the system in use in American text-books. These, at the present moment, are the best literature on the subject." The result is that the notation is neither the standard British nor that found in the American text-books. But we like the reference to the American text-books being the best "at the present moment," with the subtle inference that, now Mr. Manning's book has appeared, this is no longer true. Frankly, we hardly think it is, and that the present book compares in many respects favourably with the American books which are usually free from the personality which is so strongly marked in Mr. Manning's work.

The book covers a very wide ground and deals in Part I, divided into eight chapters, with stresses on structural members. The treatment here is mostly on orthodox lines and is exceedingly good. Part II deals with design of members and includes a treatment of continuous beams which is new to us. This part comprises fifteen chapters and covers a wide field. Part III treats of the design of structures and deals with buildings, continuous footings, water-towers, bunkers, bridges, retaining walls and chimneys. This treatment will, we think, be of greatest value to readers who have already studied an elementary text-book on the theory of reinforced concrete; it is written in a clear style, is full of "pep," and contains much valuable practical information and advice which will be of great value to young designers.

In Table I we are given standard working stresses; this is divided into two columns, one "Standard Design," the other "Competitive Design." The stresses in the second column are 25 per cent. in excess of those in the first, thus frankly confessing that the strength of a "competitive" design is only four-fifths that of a "standard" design.

We next draw attention to a paragraph on "Cut Designs," and think it best to quote: "It may be necessary to reduce the cost of a design by reducing the quantities. This may arise through either of the two following causes. Firstly, very keen competition to secure a low tender. Secondly, attempts to retrieve a very low and unprofitable tender which has been based on faulty pricing or a mistake in the original quantities. When this second reason is further complicated by the necessity to produce satisfactory calculations of strength to lay before the owners or governing authority, then desperate measures are called for." Although Mr. Manning warns against undue cutting, we do not think that statements like this should appear in a serious text-book which "aims at establishing methods of design suitable for use in a civil engineers' office."

Obituary.

The death took place recently of Mr. P. H. O. Summers, head of the firm of Messrs. Jabez Summers & Sons, builders' ironmongers and merchants, of London-road, Kingston-on-Thames.

The death occurred recently of Mr. A. H. Tout, a well-known builder and decorator of Hendon.

The death has occurred, at Ripon, of Mr. Mavin Ramshaw, who had carried on business as a builder and contractor at Haswell, co. Durham.

* *Reinforced Concrete Design.* By G. P. MANNING. (London: Longmans, Green & Co.) Price 21s.

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A. (Barrister-at-Law), F.R.San.Inst.

XV.—BREACH OF CONTRACT.—SPECIFIC PERFORMANCE.—BANKRUPTCY OF CONTRACTORS.

If either party, without lawful excuse, abandons, or refuses to fulfil, his part of the contract, before completion, he is liable for breach.

It is not an acceptable excuse to plead that he did this because he *thought* the enterprise was unlawful, or that he signed under an error of judgment. He must be able to prove to the Court that it was, in fact, unlawful, or that his signature was obtained by fraud, causing his refusal to fulfil his undertakings.

On the other hand, the aggrieved party must be able to prove that he himself has at all times been able and willing to perform, and has not in any way unduly hindered the other party from performing, the contract.

In general, strikes, lock-outs, permission or licence, variations or extras, etc., cannot be pleaded as excuses for non-performance, undue suspension or delay, unless the defaulter—generally the contractor—can produce proof of orders from the aggrieved, showing either definite novation or some taking over of responsibility on the part of the latter.

Even if the employer has, under the conditions of the contract, lawfully entered and taken possession of the works before completion, or if he has held back payments honestly, the contractor is still open to a charge of breach, if the Court is satisfied that he did intentionally fail to complete. So that the contractor may even have to refund sums already paid. Nevertheless, some contracts have clauses protecting the contractor on all these scores; or providing for revision by an arbitrator, in any circumstances but those of intentional breach or abandonment.

If payment is provided for as in a lump sum, the contractor who breaks his contract cannot recover any payment; but, where payment by instalments is stipulated, he is to be credited with the value of work done by him before the breach. He would, ultimately, be made to lose to the extent of the extra cost of completion by another contract or of the work as contracted for by him; and if the employer completes at a saving, the contractor does not benefit by the difference resulting from the saving.

Further, if the work is useless to the employer by reason of the breach—for example, the case where stands to view a procession are not ready for use on the day—the employer can claim compensation from the contractor for his losses caused thereby.

Substitution.

The substitution of other materials, even if they be of a more expensive or valuable kind, is breach.

Suspension of Work by the Contractor.

A clause is often inserted giving the employer or his agent power to take possession, and formally eject the contractor, if the latter takes away his employees and fails to continue operations for an unreasonable time. If this clause is acted upon, the employer has a lien on all material and plant on the site, for the use of another person employed by him to complete.

Where the employer delays the work, either by failure to hand over the site punctually, or by interference during progress or failure to supply materials to be supplied by him, it would appear the best policy, on the side of the contractor, to complete with due diligence; and, in case of dispute, to rely on the fairness of the Court to relieve him from penalties or other liabilities for delay.

Or if, in his opinion, the employer is guilty of a breach, or partial breach, he may notify the latter that he considers it a partial breach, then continue to completion, and set this up as an excuse in case of dispute.

In fact, a rule found useful elsewhere is a good one—namely, "Comply first—complain after"; but it must be applied honestly, and with the obvious intention of fulfilling the terms of the contract.

For instance, in a case where a site for road works was to be handed over during the summer, and the employer failed to comply till the winter, the contractor successfully pleaded for a *quantum meruit* payment; or, in lieu, for excess of cost of such work in the winter weather and short daylight, as above and beyond the cost for the same work in the long summer days.

Specific Performance.

It is a general custom of the Courts to grant *damages* for incomplete performance, unless the contract is for a matter which the Court can itself supervise in operation. So that, as a rule, incomplete performance of a building contract (unless it is some simple matter such as the erection of a fence or gate, or some matter not required to satisfy the minutiæ of a specification) is met by damages for the loss incurred by the aggrieved. That is to say, the Court will not undertake technical or skilled supervision.

If the general contractor becomes liable to any sub-contractor for damages, due to the action of the employer, the employer must reimburse the general contractor.

It is the duty of the architect to give notice to the employer, at once, of any breach or undue delay by the contractor.

If the contractor becomes a bankrupt, it is his duty to disclose all contracts to the trustee in bankruptcy. This official may elect to complete any contract; but if he delays unreasonably, the employer may consider the contract broken and take possession, employing another person to use the materials and plant for the completion of the work.

With this in view, it is usually prudent to make, by payment included in progress certificates, all material on the site the property of the employer, so as to avoid dispute with the trustee in bankruptcy as to the value of any loose stuff, or his intrusion on the site. Everything is then the property of the employer except the plant, which he will return in due course when he has used it for its assigned purpose.

BUILDING INDUSTRY COMMITTEE

In pursuance of undertakings given when the Housing (Financial Provisions) Act of 1924 was before the House of Commons, the Minister of Health has taken steps to appoint committees of the building industry and of the manufacturers and suppliers of building materials to advise and assist him in carrying out the scheme embodied in the Act, particularly as regards the development and co-ordination of the supply of labour and materials for house building. The Building Industry Committee has been constituted as follows:

Representatives nominated by employers in the building industry: Messrs. A. Andrews, J. H. Barker, J. Carse, J. Clark, J. P. Cox, C. E. France, A. J. Forsdike, J. C. Gilchrist, F. G. Hodges, H. T. Holloway, E. W. King, H. Matthews, A. Melville, Wm. H. Nicholls, H. R. Selley, J. Somerville, E. J. Strange, A. G. White.

Representatives nominated by operatives: Messrs. T. Barron, G. Haines, H. M'Pherson, D. Merson, S. Sigsworth, G. Waddall, W. Turner, S. Taylor, A. G. Cameron, G. Hicks, W. Coles, R. Wilson, J. F. Armour, W. Cross, R. Coppock.

It is contemplated that representatives of the manufacturers and suppliers of building materials shall be added to this Committee. A separate committee representative of t facturers and suppliers of building m in process of formation, and provisio made for co-ordinating the committees of a small joint committee.

THE COST AND SPE OF BUILDING

In our issue for October 10 we gave u heading an abstract of a paper by Mr. Bromley, F.R.I.B.A., on "Slow an Building."

In the discussion that followed Mr. W of the Bricklayers' Society, said he h known any limitation of output, but exist it was due solely to a fear of u ment. He ascribed the high cost of mainly to the existence of combines, mitted that if they could give the wo guarantee of continuous employmen would be no danger of slowing down. years' time he predicted there would be rence of bad trade in the building indus

Mr. A. V. Guy, referring to the que apprenticeship, made a complaint of th nacy of the Nottingham builders, who that the wages fixed for apprentices w high and could not be induced to take Recently it was estimated that there shortage of something like 300 apprentice building trade in Nottingham alone. M suggested that the profits made by the em should be shown, and expressed a desir some guarantee of regular employment be given to the operatives.

Mr. H. G. Watkins touched upon the d ties of organisation in the building trad referred to trade union regulations with to masonry.

Mr. Bromley, in the course of his repl he sympathised with the operatives question of unemployment, but claime slowing down on the part of the operati the very thing that produced unemploym

A hearty vote of thanks was passed Bromley at the conclusion of the proceed

FLETTON BRICKWOR

A visit of inspection was recently m the Fletton works of the London Brick Forders, Ltd., by a body of the Royal I of British Architects. Under the guid Mr. W. Vernon Crompton, the chairman Science Committee, the members unc the journey to Peterborough, and m thorough inspection of some of the con works. Arriving in the morning, the were taken to the large pit which produ clay for the "Phorpres" Fletton brick then visited the group of works fed by and witnessed the distribution of th The machine shops were then visited, wh grinding, screening, and distribution clay were inspected. After passing thro perforated plates of the grinding pans t is elevated to a series of electrically-v plate screens, and then conveyed by spira distributors to the various machine actual manufacture of the brick is d means of a single unit press, which int four distinct pressures. On leaving th the bricks are taken on transfer cars continuous kilns, where they remain fo 14 to 16 days during the process of burning and cooling.

After lunch the party proceeded company's Crown Works, where the operated by electricity, and very large qu machines are employed for pressing the Here, in comparison to the larger pit, the is entirely carried out by hand owing great depth of the clay. After a visit New Peterborough section, the party co their trip with a visit to Peterborough Ca and after an expression of thanks to the Brick Co. & Forders, Ltd., returned to l

IONAL FEDERATION OF HOUSE BUILDERS.

-yearly conference of the National of House Builders was held re- e Town Hall at Leamington, under ncy of Mr. H. R. Selley.

OR (MR. G. W. HAWKINS), in wel- delegates, spoke of the difficulty in abour, and said if they insisted in de the building of houses would be l innocent people would suffer.

EY assured the Mayor that the re not the masters of the situation. the vehicles by which the cost was to those who needed the houses. f the Federation knew the stand- e workers because they themselves e tools, and had risen to the posi- loyers. What was wanted was a spirit and a little less organisation. will to do which was wanted, and er what they were going to get for He would suggest to municipalities the ways by which they could housing shortage was by en- rtisans to purchase their own dwel-

esidential address Mr. Selley pro- olution advocating the adoption of cy by all building trades employers stion of wages and conditions of said as long as there was shortage industries of bricklayers and plas- would be in the throes of continued increases of wages. The root of was that there were not nearly icklayers and plasterers. At the re was a movement on foot for demand another 4d. per hour. e trade could stand it was a ques- e who bought houses to decide. He elighted if their federation could ves across the table and become a ody and discuss points relating to s and rates of pay.

to the difficulty in getting building said in the South of England par- brick shortage was more acute It was astounding with the nemployment that there should be rtage. They had to send their rance, Belgium, and Germany to o carry on housing. It seemed it was a fact. They were de- he Peterborough and Bedfordshire ir bricks. He believed there they to give them output, but the out- ally inadequate for the demands. like the idea of money going it could advantageously be spent nd at the same time they were and high rates and taxes.

DARBYSHIRE, of Manchester (vice- econded, and said if they did not ey would be used as a lever by es to impose upon the industry o onerous to bear. It was quite our to strive for a more effective the necessities of life, but neither operatives should enjoy better t the expense of the community. d nothing but trouble since trade ame permeated with Communists, to make of it an organised men were to be paid regardless lity or worth, there was no in- a man to do his best, and the be dead level mediocrity. These find a more fertile field for their road in lifting the standard of evel of this country, which would ood of all. "We are as desirous ng the standard as the operative," rbyshire, "but it cannot be done n with low wages abroad." The wished to create the principle that duty of the State to house the there was a very general feeling al workers that they ought to be other means than their own in- rts with housing accommodation at a figure lower than an economic rent. In advancing this claim they quoted the wage of the householder and not the family income which in many cases was a high one. They opposed the decontrol of houses on becoming vacant, because in this they could see that in a few years it would make for an easy stage to total de-control and an end of the Rents Restriction Act.

The resolution was carried.

MR. NORMAN MCKELLEN, the secretary, speaking on local authorities and housing assistance, said, although there were 300,000 less men in the trade, and a great shortage of materials as compared with pre-war days, they were attempting to build 145,000 houses a year, when the greatest number of houses built in any one year before the war was about 130,000. It was an impossible position, and yet the new Housing Act contemplated a speeding of the houses to be built by local authorities. The thing could not be done on the lines which the Government were trying to follow. The country wanted houses for the working classes, and it was not getting them. If the Government would build good-class cottages in rows at 20 to the acre, they would get many more houses with the same labour and for the same money.

At the concluding session of the conference MR. H. R. SELLEY stated that any substituted material put upon the market up to the present time which had been as efficient as brick in house construction, with slate or tile roof, had been equally costly. But he attached importance to the consideration of new methods, having regard to the shortage of skilled labour in the industry and the scarcity of building materials. In order to solve the housing problem, he said, an effort must be made to cut down costs and save labour.

Allusion was made during the discussion to the new material discovered by Commander Burney, and Mr. Selley described it as the nearest approach that he had seen to a practical proposition. He did not wish to give the principle away, but it was one that commended itself to him. It fulfilled all the conditions of outside resistance to weather; it got over the difficulty of what had been referred to as condensation inside, and it reduced the call upon the bricklayer and the plasterer.

MR. JONES, of Liverpool, speaking of alternative methods, said that the wooden house, if it could be fitted electrically, was a perfect proposition, rendering brick flues and other expensive forms of equipment unnecessary.

MR. R. A. COSTAIN, of Liverpool, who introduced the subject of the alternative methods of house building, said the shortage of skilled men in certain branches of the building industry and the lack of materials were reasons which necessitated the consideration of alternative methods. He referred to various systems, and said while he was interested by the scheme proposed by Lord Weir, he would be surprised if it proved suitable for housing. That of building with concrete cellular blocks had much to commend it; and the duo-slab system had worked fairly well. But he thought, with the materials at present available, they could not hope to produce a house at a less cost than that of a corresponding brick house. He understood that Commander Burney had succeeded in discovering an entirely new material. Members of their federation would be among the first to take advantage of any improvement that might result from such an invention or discovery, because all the improvements in the housing of the people had been made by members of their industry, who had been alive to their value at the earliest possible moment. If they could increase the proportion of unskilled labour in erecting the walls of a house they would have done something towards solving the problem in regard to housing. While they endeavoured to secure the maximum number of houses by rapid construction, the houses must provide a reasonable standard of comfort and convenience, and be immune against rapid deterioration. They must avoid unreasonable demands from workers in the building trade, from the manufacturers of materials, and from builders, if there were any, who sought to secure an unreasonable profit. Mr. Costain also emphasised the importance of members of the federation training as many workmen as they possibly could in the branches of the industry which were not sufficiently supplied with workers.

THE PRESIDENT, in conclusion, said what they had got to do was to keep down the cost of building and save labour as much as possible. He hoped that they would be able to get the housing question away from "political doggery." They wanted to bring it back to an economic proposition, and help the Government to provide wholesome houses wherein to house the people.

CONCRETE HOUSES AT BIRMINGHAM

THE members of the Birmingham Corporation made their annual tour last week of the various housing schemes. The Town-Planning and Public Works Committee has in two and a-half years completed 3,710 houses, with running contracts for 4,246 more, and has acquired and is developing sites for a further 6,477, making a total provision for 14,433 houses. Since April this year 1,010 houses have been completed. Over 3,000 of the houses are of concrete. The building in concrete blocks was decided upon because they permit of the employment of a large amount of unskilled labour, and another advantage is that the bulk of the material required can as a rule be obtained on the site, whilst the time occupied in erection is generally rather less than that taken in the construction of a brick house. Variations introduced in the stucco exteriors give a more pleasing aspect than the more severe and monotonous lines of the average dwellings. Even in the non-parlour type of house, bathrooms, with the necessary hot water supply, are installed, and electric light is being adopted for all the municipal housing schemes. Concrete houses are being built in Birmingham as under: Billesley Farm Estate, 1,500 non-parlour type; Stockfield House Estate, 261 non-parlour, 209 parlour; Gipsy-lane Estate, Erdington, 287 non-parlour; Witton Lodge Farm Estate, 1,000 non-parlour.

The method of construction at Billesley consists of the use of special hollow angle blocks filled solid and reinforced. The spaces between the angle blocks are filled with 2 in. slabs with 3 in. cavities, bonded together by means of bonding iron. At Gipsy-lane the system consists of two thicknesses of concrete slabs with 3 in. cavities, the slabs being dovetailed into hollow headers. The outside is left with the natural face. The system adopted at Witton Lodge Farm comprises the erection of pre-cast concrete stanchions at the angles and at distances of about 3 ft. in the building, the intervening spaces being filled with two 3 in. slabs with 2 in. cavities. Reinforced concrete lintels are run round the building at the first-floor and wall-plate levels.

The New Housing Law.

We have received from the Garden Cities and Town-Planning Association a leaflet giving a summary and explanation of the Housing Act of 1924. There are two Housing Acts in operation at the present time, and it is necessary that a clear and precise statement should be available for all who are engaged in or interested in the housing problem. The leaflet aims at meeting this need. Copies can be supplied at 2d. each, or 1s. 6d. per dozen.

SPECIFIC PERFORMANCE: NON-DISCLOSURE OF UNUSUAL COVENANT

A POINT of some importance to purchasers of leasehold property has been decided in the recent case, Allen *v.* Smith (1924, 2 Ch., 308). The plaintiff was a builder and the defendant was a married woman whose husband was a motor driver, and the defendant and her husband, in 1923, were negotiating with the plaintiff for the purchase of a newly-erected dwelling-house, the lease to be for 99 years at a ground rent of 6 guineas per annum, and a premium of £527 10s. was also payable. On September 1, 1923, the defendant paid a deposit of £10, and she informed the plaintiff that she was anxious to obtain possession and she could find £327 10s. towards the premium, and proposed to apply to a benefit society to advance the balance in order to complete the purchase. The plaintiff informed her she could go into immediate possession if she could pay the sum of £327 10s., and on September 4 the defendant attended at the plaintiff's office with this sum in notes, when the plaintiff's manager produced a contract for her to sign, which contained a clause that the lease should be prepared in the form required by the plaintiff's solicitors and should be in the form in use on the estate of which the dwelling-house formed a part. The defendant read over this contract and asked for a copy of the lease, but was told by the plaintiff's manager that he had not got one with him for her to see, but it was quite in the ordinary form, and if there was anything in it to which her solicitor could not agree she would not be compelled to complete the purchase. The defendant signed the contract and took possession of the house on September 13.

Shortly after this a draft lease prepared by the plaintiff's solicitors was submitted to the defendant, and it was found to contain the following covenant by the lessee: "And also will pay all costs, charges and expenses (including solicitor's costs and surveyor's fees) incurred by the lessor for the purpose of or incidental to the preparation and service of a notice under Section 14 of the Conveyancing Act, 1881, requiring the lessee to remedy a breach of any of the covenants on the part of the lessee herein contained, notwithstanding forfeiture for such breach shall be avoided otherwise than by relief granted by the Court."

This covenant was objected to by the defendant's solicitor, and struck out, but was insisted upon by the plaintiff, who asserted that it was an ordinary and usual covenant and not oppressive, and he claimed specific performance of the agreement of September 4. The defendant, by her defence, pleaded that she was ready to pay the balance of the purchase-money and to complete if the covenant objected to was omitted. The building society had declined to make any advance on the security of a lease containing such a covenant.

The plaintiff denied that any representation had been made by him or on his behalf, that the lease was in the ordinary form and contained nothing unusual. The court held that the substance of the action was whether the covenant in question was one of a nature to impose upon the vendor the obligation of disclosing its existence, or was of such a character that the purchaser could not object to it as being in the ordinary form and containing nothing unusual or extraordinary, and came to the conclusion that, in deciding whether a covenant is an ordinary one or an unusual one, regard must be had to the nature of the leasehold affected. In the case of a property likely to call for considerable repairs and held for a comparatively short term, for instance, such a clause as that inserted into this agreement might be regarded as a reasonable one, but it would be different when a new house is let for a term of 99 years at a moderate ground rent, the chief concern of the landlord in such a case being to see that the ground rent is adequately secured and his adjoining property not injured in value by the house falling into a condition likely to effect this. In the latter case, the covenant in question would be an onerous covenant to which the purchaser's attention ought to be called by the vendor.

The action for specific performance therefore failed, and the defendant succeeded on her counterclaim for repayment of the £327 10s. with interest at 4 per cent., she submitting to pay a reasonable sum for occupation rent for the period she had been in possession.

This case raises an interesting point as on certain estates within our knowledge it has been the custom to grant building leases for 999 years at a ground rent which, as the estate has developed, has been gradually increased, and in these leases there are covenants which would only be appropriate to leases of houses let on quite short terms, but which under the leases apply to the houses erected by the purchasers and, of course, are applicable for the whole term of 999 years. Unless the terms of these leases have been disclosed to the purchasers beforehand, the present case would appear to show that specific performance could not be obtained upon the preliminary contract, for on a term of 999 years covenants only suitable to short term leases would almost certainly be held to be onerous and unreasonable.

INDUSTRIAL EXHIBITIONS

THE following Industrial Exhibitions will take place in the near future:—Portsmouth Industrial Trades Fair (Fifth)—November. Organised by the Manufacturers' Association, Royal Insurance Buildings, Town Hall-square, Portsmouth. Newport Ideal Homes and General Trades Exhibition—October 23–November 1. Messrs. Hamiltons, Ltd., Granville Chambers, Bury-street, London, W.C.1. Ipswich Ideal Homes and General Trades Exhibition—December 3–13. Messrs. Hamiltons, Ltd., London, W.C.1. Warrington Industrial Trade Exhibition (Second Annual)—Empire Hall, February 11–21, 1925. Organiser, Mr. L. Batley, Gorsey Works, Stockport.

Lyons Fair, March, 1925—Apply to Hotel de Ville, Lyon. International Exhibition of Modern Decorative and Industrial Arts, April to October, 1925—Apply to Commissariat général, Grand-Palais, Porte C, Paris (8e). Commercial and Industrial Exhibition, Champ de Mars, Nantes, May–October—Apply to Chambre de Commerce, Nantes. Commercial Organisation Exhibition, Paris, October 9–19—Apply to Mr. G. Ravisse, 7, Rue des Grands-Degrés, Paris (5e). Domestic Appliances Exhibition, Paris, October 21–November 9—Apply to Office National des Recherches et Inventions, 52, Rue de Bellechasse, Paris (7e).

NEW INVENTION

NEW SYSTEM OF BUILDING.

MR. W. E. BAKER, of 13, Francis-road, Upper Parkestone, Dorset, sends us some particulars of a new building process which he has invented and which he puts forward as yet another means by which the housing shortage might be overtaken.

The system consists of a wooden framework on concrete foundations, with slabs of a special composition fitted between the same. The slabs are then coated with coarse cement outside, finished roughcast or smooth stucco as desired, and inside with rough plaster finished with smooth damp-proof plaster.

The inventor naturally does not divulge the constituents of the composition slabs, but he indicates that their cost is no more than half that of cement and that they can be manufactured on the job, to be damp-proof and non-sweating, the two faults between which it has been found so difficult to strike a just balance in ordinary cement concrete slab work.

The feeling that more houses will follow cheaper houses, and that cheaper building implies more drastic revolution in method, probably in the direction of the u units than the traditional brick, some financier to examine this me more closely. His verdict will lar upon the nature of the special comp upon whether its component parts obtainable and sound when made

Recognising the importance of the building methods, we are glad to gi tunity to those who believe they h at a solution. There is no need to r experiments on the slightest prete well to neglect no chance of coming a problem that daily becomes mo acute.

PATENTS

APPLICATIONS PUBLISHED

219,519.—A. E. White (Raymo Pile Co.): Pile drivers.

212,876.—Interaf. Akt.-Ges.: Too or recessing wood and like material

219,576.—A. Carpmael (Ferguson facturing Co.): Folding tables.

211,121.—G. Grimaud: Reinfor stake.

219,606.—H. Addison & Co., L Evans: Folding tables and desks.

211,865.—A. G. Larson: Hinges.

211,870.—C. Delolme: Lifts.

219,718.—H. Abraham and Rub Ltd.: Roof coverings.

219,759.—J. Ferneyhough: Cons iron or steel reinforcement for con slabs.

219,783.—G. R. Unthank and E. F Stays for hinged doors, casement and similarly hinged members.

219,784.—O. Burkhardt: Stone posite piles.

203,308.—Raymond Concrete Pile

219,819.—F. M. Taylor: Sliding sa

219,824.—G. Beaton & Son (1919 G. Beaton: Sliding window closur

219,853.—B. D. W. Luff and N Rubber Co., Ltd.: Method for the of decorative or other effects in rubber.

219,859.—H. H. Blanchford: Me in making walls and other structures

219, 808.—J. T. Case: Combined riddle.

219,821.—H. T. Tallack: Surve

219,831.—J. Fejes: Pipe joints.

204,701.—Van Zile Ventilating C Ventilating devices.

219,854.—D. E. Barnett: Adapter lamp holders, wall-plugs, connector terminal fittings.

219,855.—E. J. Burt: Paving-b

220,014.—H. Clarke: Automati apparatus for use in the extinguish

220,016.—E. J. Grierson-Jackson Grierson-Jackson: Paints.

220,023.—D. E. Dempster: Loc for doors controllable from a dist

220,050.—N. P. Olsen: Locks.

220,053.—Triplex Foundry, Ltd. Horrell: Cooking grates and range

220,106.—R. H. Rogers: Concret

220,107.—J. A. Craig, J. M. Sin Burnip: Drying lumber and other

220,143.—J. Jones and A. McCo Ltd.: Fire-grates.

220,158.—V. F. Lake: S machines.

220,176.—W. H. Coward: C pulverisers.

220,193.—G. Gummer, junr., an Ltd.: Water taps.

205,824.—Moreaux, Fils, et Boy doors.

220,198.—G. Weyman: Domest

220,204.—R. H. Rogers: Movab for use in concrete constructional w

220,242.—E. Ligonnet: Wire re for pipes and similar articles of cer

* All these applications are now in which opposition to the grant of Pate may be made.

INSTITUTE OF TRANSPORT

ordinary meeting this session of
f Transport, Sir Lynden Macassey,
of his presidential address, said,
o the problem of London traffic,
vn accustomed, certainly now for
, to talk of the "problem of
ic." The phrase had been so
almost to leave them despondent
limited, solution. With fatalistic
ey were prepared to associate
nfusion as naturally inherent in
transit and locomotion for a com-
eat as London.
London there was no master-mind
h compelling power. The cause
traffic problem, that was to say,
roper and adequate streets, was
finance, nor the great growth of
as the want through the centuries
resent time of some controlling
h comprehensive power, such as
Paris, Berlin, Vienna. The Royal
lso discovered that precisely the
nd none other, was responsible for
atic provision and the over-
ndon railways, tubes and tram-
vas no authority charged with the
ing a general plan, and of advising
om time to time of the general
whole London area, when Parlia-
g asked to pass some local railway,
ay bill. So, too, the unco-ordi-
on of railways, tubes and tram-
yal Commission found, was also
sence of any authority charged
of considering the traffic needs of
on as a whole.
ce to the solution of the problem,
l proved the urgent need of some
authority with effective juris-
ll the local authorities' districts
"Traffic London." The precise
fic London depended on the size
olitan area in which it was con-
should be one general scheme of
and transit. The Royal Com-
5, after its investigations, was of
Greater London, that was to say,
ting of the City of London and
an Police District, the traffic
ne and indivisible. It was their
endation that no area less than
on" should be taken as "Traffic
ideal thing would be to set up
lected an expert traffic dictator
powers to control and regu-
s of locomotion local to the

t matter for the new Committee's
as whether it was practicable to
sent pressure of traffic, or to
ease of the pressure, in central
ne process of what he might call
on." There was this well-known
f a city's growth—while its zones
mainly under the influences of
s and followed in all great cities
ries of expansions, they could be,
e, modified in character, in
wth, in position and in area by
l directive effort—legislative,
or municipal. All great cities
embryonic stage of development
strial and commercial nucleus
zone of dwelling houses. The
on stage, exhibited the central
e, with the surrounding zone of
ed with shopping centres, and
residential suburbs. The final
an inner zone confined mainly
administrative and judicial pur-
ding zone consisting mainly of
nd the residences of wealthy
xt outer zone comprising resi-
more or less self-supporting,
st zone of all, a manufacturing
al Commission found that this
evolutionary tendency charac-
rge cities, whether ancient or modern, in Europe and the United States of America. The final stage could be expedited by directive efforts and discreet town planning.

When it had decided the kind of London it was going to try to mould, the new Committee would naturally take up the question of what new streets and street improvements would best conduce to that end, and would most conveniently meet the needs of a community so distributed.

The stress on all sides of financial stringency made it imperative to examine whether any cheaper alternative existed to the construction of new, or the widening of existing streets, in districts where additional street accommodation was required. It might well be that heroic methods were justified, indeed overdue. Lord Montagu with his characteristic bold foresight, proposed in *The Times* of August 21, 1924, the construction of "double-deck" streets. He, personally, thought they would be driven to that expedient, and at no distant date. If streets could not be extended laterally, they must be extended upwards. Surely to see "London walking on stilts," would be preferable to seeing London unable to walk at all. The steady increase of vehicular traffic indicated that this latter condition was no mere morbid apprehension. The Royal Commission, advised by distinguished engineers, considered that "two-story" streets were practicable, but forbore to recommend them as it desired not to detract from the eminent desirability of the new streets and street improvements, which it did recommend, being constructed on the surface.

With reference to bridges, the time had come when not merely the demands of cross-river street traffic, but the structural condition of some bridges, made immediately imperative the consideration of the whole question of London's bridges across the Thames. No one could deny that London enjoyed a smaller measure of bridge facilities for cross-river street traffic than Paris, Berlin or Vienna. The distance between Blackfriars Bridge and Waterloo Bridge was 960 yards; between the latter bridge and Westminster Bridge, 1,063 yards; and between Westminster Bridge and Vauxhall Bridge, 1,699 yards. The reconstruction of Lambeth Bridge would reduce this last gap. But across the River Seine and serving the central districts of Paris, there were, in a length of river of about 3,800 yards, or almost the same distance as between Blackfriars and Vauxhall Bridges, no less than twelve bridges, with an average distance between them of 345 yards, the maximum distance being about 492 yards. In Vienna there were in a length of about 5,740 yards eight bridges across the Danube Canal, which intersected the city, the average distance between them being 819 yards. In Berlin there were twenty-six bridges across the River Spree in a length of 10,936 yards, the average distance between them being 437 yards. Not only was there an insufficiency of bridges in the central area of London, but certain of the bridges did not point in the right direction for important streams of traffic. Notably was this the case on the Middlesex side between Westminster Bridge and Blackfriars Bridge. And other important bridges, *e.g.*, Chelsea, Albert and Hammersmith, were subject to weight restrictions.

If the new Committee could induce the London County Council and the Corporation of London to appoint a Joint Committee to go into the whole question of cross-river street traffic, and report to the new Committee their recommendations, it would be a good beginning of a great public work. No true lover of London had yet lost heart that along her ancient highway, the Thames, there might again be established a service of passenger carrying vessels. When one saw the services maintained on the Seine at Paris, it was hard to accept past experiences as conclusive that such services could not pay in London.

TRADE NEWS

The National Boiler and General Insurance Co., of Manchester, has recently issued a pamphlet, entitled "Heating Boilers." It contains a series of notes on boilers and installations for heating buildings and for hot-water supply. The price of the pamphlet is 1s. 6d.

We have received from Messrs. John Wright & Co. a pamphlet entitled "Warming Large Buildings." The heating of large interiors efficiently and economically is a problem that has for a long time called for a scientific solution. Messrs. John Wright & Co., Essex Works, Aston, Birmingham, claim to have solved this problem scientifically by the St. Andrew gas-heated steam radiator. Each radiator is self-contained, needing only a gas supply connection, and is fitted with a patent automatic valve. The function of this mechanism is to regulate the heat automatically by means of steam pressure, so that the room is kept at an even temperature whatever the fluctuations of temperature outside; this control is effected by actually cutting down or increasing the gas supply, and thus a great saving in fuel is attained. Copies of this pamphlet can be had on application to Messrs. John Wright & Co. (Dept. S.C.).

Messrs. Parker, Winder & Achurch, of Birmingham, inform us they are frequently asked to supply galvanised door and window fittings. But they state that galvanised fittings, while fulfilling the purpose, do not add to the æsthetic appearance. They have, therefore, put upon the market Parwinac Rustless Finish, containing chemicals which enable them to guarantee any fittings thus coated to be permanently rustproof. While they find it impossible to give "art black" finish, Parwinac is stated to be less obtrusive than japanning, and borders upon "egg shell" black. It has a smooth-like surface which, they claim, is easily cleaned down and takes an excellent polish. The Parwinac Finish can be applied to interior and exterior fittings, and adds to the efficiency and durability of door and window fittings generally. The objection to brass fittings has, of course, been the cost; and iron fittings, although coated, have been prone to rust. It can, therefore, be fairly claimed that Parwinac Rustless Finish has a just claim to recognition. The extra cost involved on casement fastenings and stays is inconsiderable compared with the advantage gained. Parwinac Rustless Finish can only be obtained from Messrs. Parker, Winder & Achurch, Ltd., Birmingham.

We had an opportunity last week of seeing a demonstration of a new solvent for removing paint, called "Klenostrip," which has been put on the market by the British & Colonial Chemical Co., Ltd., of 6, Smith-street, Chelsea, S.W.3. The method of using this solvent is first to wash over the old paint with water, apply the solvent (which is of the consistency of thick paste) with a fibre brush, and then remove the paint by scraping or washing it off. It takes about five hours for the solvent to act on the paint sufficiently to soften it so that it can be easily removed with a brush, and although it commences to soften the paint as soon as applied its action gets stronger after it has been applied for an hour or two. It is recommended that the work of the painters be so arranged that the solvent can be left in position for five hours before it is removed, so as to avoid wasting time waiting for it to act sufficiently or having to scrape unduly hard because it has not been applied long enough. The solvent has no smell, and does not affect or discolour the hands. The test took place at a house in Westminster which had apparently not been decorated for many years, and here it was seen that the solvent made it an easy matter to remove several old coats of paint, afterwards varnished.

NEW BUILDINGS IN LONDON

Euston-road.—BUILDING.—New headquarters for the Society of Friends, Endsleigh-gardens, Euston-road. The contract for this building has now been placed with Messrs. Grace & Marsh, of Croydon, and the work is proceeding with a view to completion by Easter, 1926. The exterior brickwork will be in Luton grey bricks with Portland stone dressings, the latter supplied by the Bath and Portland Stone Firms, Ltd. The steelwork is by Messrs. Dorman, Long & Co. Mr. Hubert Lidbitter, of 12, Norfolk-street, Strand, is the architect; and the quantities were prepared by Mr. Arthur Boxall.

Wood-street.—FLATS.—A block of residential flats is to be built on a site of 5,450 square ft., in Wood-street, Westminster, S.W. 1. The plans show a building of six stories on a frontage of 40 ft. Brick construction is proposed with stone dressings to relieve the principal elevation. The floors will be of concrete (reinforced), and steel will be introduced to carry all loads. The roof will be flat, of concrete, with an outer coating of asphalte. The flats will be of varying sizes, consisting of four, five, and six rooms. The architect is Mr. Matthew Dawson, 9, New-square, Lincoln's-inn, W.C. 2.

Haymarket.—THEATRE.—The site in Haymarket, known as Nos. 62-65, is being excavated, and existing foundations removed, in order to make way for the new "Carlton" Theatre. The building will be built on a steel framework with cantilever balconies and an exterior façade of Portland stone. The total number of seats to be provided will be 1,200; whilst considerable space will be devoted to lounges, refreshment rooms, &c. The total cost of the building is estimated at £160,000. The site has an area of 12,170 ft., with a rear frontage to St. Alban's-place. The architect is Mr. Frank T. Verity, F.R.I.B.A., 7, Sackville-street, W. 1., acting on the instructions of the Carlton Theatre Co., Ltd., of Austin Friars, E.C. 2. The excavation work is being carried out by Messrs. H. J. Greenham, Ltd., of Fulham and Isleworth.

Fleet-street.—OFFICES.—New premises for use as headquarters for their various publications are to be erected by Messrs. Benn Bros., Ltd., the publishers, of 8, Bouverie-street, E.C. 4. A portion of Fleet-street, comprising Nos. 154, 155, 156, 157, 158, 159, and 160, extending over a frontage of about 75 ft., from St. Dunstan's-court to Bolt-court, has been acquired. A seven-story building of steel frame construction, with a frontage of Portland stone, is proposed. The entire construction will be fireproof, and all the floors will be reinforced concrete. Steel windows will be installed. The premises will have a ground floor area of 12,000 square ft., reaching to Gough-square in the rear. The architects are Messrs. Campbell Jones, Son & Smithers, 9, Dowgate-hill, Cannon-street, London, E.C. 4. The demolition work and clearance of the site is being carried out by Messrs. B. Goodman, 33, Haggerston-road, E.8.

Gresham-street. — WAREHOUSE. — The steelwork is now nearly all in position on the large warehouse and office building, on the site of 47-57, Gresham-street and 22-26, Wood-street, E.C. 2. The site covers an area of about 15,000 square ft., and has a frontage of 220 ft. The area totals about 67,000 square ft. Portland stone is being used for the elevations, with a mansard roof of slates. The building will be supported on a steel framework, with hollow tile fireproof floors. The architects are Messrs. Richardson & Gill, FF.R.I.B.A., of 41, Russell-square, W. 1, acting on the instructions of the London and Northern Estates, Ltd. The consulting engineer is Mr. Adrian Collins, M.Inst.C.E., of 61, Old Broad-street, E.C. 2. The general contractors are Messrs. W. H. Lorden & Son, Ltd., 107, Trinity-road, Wandsworth, S.W. 17, whilst the following subcontracts have been placed: Steelwork, Messrs. Dorman, Long & Co., Ltd., 4, Central Buildings, Westminster, S.W. 1; steel windows, Messrs. The Crittall Manufacturing Co., Ltd., 246, High Holborn, W.C. 1; heating installation, Messrs. F. A. Norris & Dutton, Ltd., 11, St. Andrews-hill, E.C. 4; sprinklers, Messrs. The Vigilant Sprinklers, Ltd.; lifts, Messrs. The Express Lift Co., Ltd., Greycourt-street Works, S.W. 1; artesian wells, Messrs. Alfred Williams & Son, 14, Victoria-street, S.W. 1.

Regent-street.—CINEMA.—Foundation work is being carried out on the site of the old New Gallery Kinema, in Regent-street, W. 1, owned by the Provincial Cinematograph Theatres, Ltd., 189, Piccadilly, W. 1., which is being rebuilt. The elevation of the building will be carried out in Portland stone. Marble and fibrous plaster work, richly gilded, will be used for decorating the interior of the theatre. The architects for the work are Messrs. Nicholas & Dixon-Spain, 14, Hanover-square, W. 1; whilst the quantity surveyor is Mr. H. J. Venning, 5, Bedford-row, W.C. 1. The contractors for the first section of the reconstruction are Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W. 1; and for the second section, Messrs. William Downs, Ltd., Hampton-street, Walworth, S.E. 17

Bouverie-street.—OFFICES.—The *Daily News* and *Star*, Ltd., of Bouverie-street, E.C. 4, are erecting a large manufacturing works as an extension to their present premises at the corner of Bouverie-street and Tudor-street, E.C. 4. It is proposed to build premises with a large basement for housing the heavy printing press, and with four floors above for lighter plant, and for offices, storage, &c. Plans have been prepared by Mr. Marcus Evelyn Collins, F.R.I.B.A., of 61, Old Broad-street, E.C. 2; whilst the consulting engineers for the steel work and civil engineering are Sir Douglas Fox and Partners, of 38, Bedford-place, W.C. 1. The general contractors are Messrs. Trollope & Colls, Ltd., of 5, Coleman-street, E.C. 2; and excavation work is now in progress.

Merton.—HALL.—A new hall is to be built on a site in Merton High-street, S.W. 19, by the Temperance Billiard Halls, Ltd., of 638, Wandsworth Bridge-road, London, S.W. 8. The new building will be of concrete block construction, with a pitched roof, covered with slates. Plans have been prepared by Mr. S. B. Pritlove, 38, Great Windmill-street, W. 1; whilst the work on the site is being carried out by the company's own building staff.

Wood-street. — TELEPHONE EXCHANGE. — Plans are in preparation by H.M. Office of Works, at Storey's-gate, S.W. 1., for the new building. The work on the site is being carried out by Messrs. John Mowlem & Co., Ltd., of Ebury Bridge-road, S.W. 1.

Woolwich. — HOSPITAL. — Work has just started on the contract for the erection of the first section of Woolwich's large War Memorial Hospital. The entire cost is estimated at about £200,000, of which £100,000 has been collected. The architect is Mr. W. A. Pite, F.R.I.B.A., of Pite, Son & Fairweather, 12, Cartaret-street, Westminster, S.W. 1; the consulting engineer is Mr. J. T. R. Kiernan, B.Sc., A.M.Inst.C.E., 17, Victoria-street, S.W. 1; and Mr. W. J. Falkner, 12, Cartaret-street, S.W. 1, is the quantity surveyor. The general contractors are Messrs. Foster & Dicksee, Ltd., of Manresa-road, S.W. 1., and Rugby.

Chelsea.—HOTEL.—The "Queen's Head" Hotel, at 27, Tryon-street, Chelsea, S.W. 3, is to be rebuilt at a cost of about £10,000. The building will be erected in Doulton stone, with a roof of red tiles, floors of fireproof construction covered with composition. Heating and electric lighting systems will be installed. The window casements will be of steel, with leaded lights. All the interior joinery will be of oak. Plans have been prepared by Mr. S. G. Newnham, surveyor to Messrs. Barclay, Perkins & Co., Ltd., the brewers, of Park-street, Southwark, S.E. 1; whilst the general contractors are Messrs. White & Johnson, of 27, College-place, Chelsea, S.W. 3.

Cockspur-street.—EXTENSIONS.—Lar
sions are to be carried out to the offices
spur-street, S.W. 1, of the Royal M
Packet Company, of Royal Mail Hou
gate, E.C. 2. It is proposed to e
a building of five stories and basement,
a ground area of 5,800 ft. The structu
supported on a steel framework with a
of Portland stone. Floors will be of
construction, and the roof will be
covered with asphalte. High-class
joinery and fittings will be installed,
window casements will also be of woo
pressure hot-water system, electric
a passenger lift will be installed. P
been prepared by Messrs. Grace &
of 3, Wardrobe-place, E.C. 4. The
contractors are Messrs. Trollope & C
of 5, Coleman-street, E.C. 2; whilst
was cleared by Messrs. B. Goodm
33, Haggerston-road, E. 8.

Little Britain.—HALL.—New quarter
of the City livery companies is to b
on a site in Little Britain, E.C. 1.
building will be five stories in height,
elevation in Portland stone. The acc
tion will include a reception room a
on the ground floor, with a stately
leading to the council chamber on
floor. The upper floors will be used a
Plans have been prepared by Messrs.
T. S. Vickery, of 50, Gresham-street,
the general contractors being Messrs
& Gayford, Ltd., of 87, Worship-street

Regent-street.—CAFÉ ROYAL.—It is e
that work will be put in hand shortly
erection of a further section of the large
projected by the proprietors of the Caf
in Regent-street, W.1. Two further por
the extensive site still remain to be de
and the operations will, it is expected,
well over four years, involving an expen
between £400,000 and £500,000. E
cellarage is contemplated and a sy
ventilation to keep the temperature at a
level is to be installed. Messrs. Trollope
Ltd., 5, Coleman-street, London, E.C.2,
general contractors, whilst the following
principal sub-contractors:—Steelwork,
Moreland, Hayne & Co., Ltd., 80, Gosw
E.C.1; shop fronts, Messrs. Frederi
& Co., Ltd., 58, Gray's Inn-road, W.C.1;
and ventilating, Messrs. Richard Critta
Ltd., 43, Bloomsbury-square, W.C.1;
lighting, Messrs. Higgins & Griffiths,
Orchard-street, W.1; vacuum cleaning
tion, Messrs. The Sturtevant Enginee
Ltd., 147, Queen Victoria-street, E.C.
Messrs. The Express Lift Co., Ltd.,
street Works, S.W.1.; metal work,
Comyn Ching & Co., Ltd., 54, Castle-str
Acre, W.C.2; asphalte, Messrs. Thom
& Co., Ltd., Windsor House, Kingsway,
reinforcement, Messrs. The British R
Concrete Engineering Co., Ltd., Kings
Smith-square, S.W.1.

The architects are Messrs. Henry T.
3, Hanover-square, W.1.

Greycoat-street.—BUILDING.—New h
ters for the Girls' Friendly Society a
built in Greycoat-street and Roche
S.W.1, at a cost of about £40,000. The
will occupy a site with a frontage of abo
extending back about 50 ft. Of four
height, with a basement, the building
erected in brick on a steel frame, with
stone dressings. The floors will be of
materials, the window casements being
The basement will contain large store
heating chamber, coke stores, &c.; t
floor will comprise a large semi-circula
hall and a shop; the first floor o
needlework department, whilst the
stories will be sub-divided as required
purposes. The building will be equipp
passenger lift, lighting, heating and v
systems. The general contractors a
J. W. Falkner & Son, 24, Ossory-ro
The architects to the Society are Mes
& Kaula, 3, Southampton-street,
W.C.1.

RT OF LABOUR
IMISSION ON
RODUCTION

of the Committee which was
he National Joint Council repre-
rade Union Congress National
Labour Party Executive Com-
e Parliamentary Labour Party
on " as reported in the *Times*,
pears to be a somewhat extra-
ction itself. With the first of
s arrived at most people will be
as it finds that " productive
nsiderably lower than it might
it ought to be." The second
er. puts the blame for this on
" and employers: " That the
for this inefficiency must be
present system of industrial or-
by employers collectively and
But the third finding, which
any reasoning, states, " That
ources of waste and efficiency,"
mably loss of efficiency, " are
of status, responsibility, and
e of incentive to work for
ndustry, insecurity of workers
unemployment, effects of the
adequate, defective and out-of-
. plant and equipment, defec-
orks, etc., lack of co-ordination
tries and parts of industries,
isation of works, defects in the
m. deliberate restriction of out-
n prices, and long hours, low
healthy conditions of work."

concludes with the statement
ittee hope to present construc-
or remedying the evils disclosed
report. It is not difficult to
those proposals will be, as,
sons taught during the war of
anagement of private enter-
r " still considers nationalisa-
r all evils, but at any rate it is
ow nationalisation will secure
status, responsibility, and con-
irect action is contemplated as
o the Government of the day,
ive to work for profit-making
l certainly be absent. The
passage reads: Municipal
so shown that public bodies
le to renew plant and revise
ate enterprise. The tramways
ion of this.

aints come strangely from a
has opposed co-partnership
e it saps the loyalty of trade
. and is averse to arbitration
loyers and employees being in
compulsory, and that restricts
f employees in a particular
p up wages.

necessary to comment on the
hours as limiting production
when hours are so abbreviated
tional necessity, in fact, much
akes the reader rub his eyes
he is reading about industrial
some old paper of 50 years

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ckwood Book Amalgamation.

Builders' Price Book" and
Builders' Price Book" are to
to form one comprehensive
Book," under the title of
kwood's Builders' Price Book,"
gement of Kelly's Directories,
publication will continue all
s of both books, and Messrs.
es. Ltd., will have the book
e new year. This joint book
ee of Lockwood's "Builders'
n Crosby Lockwood's future
will be available either from
Directories, Ltd., or from
Lockwood & Son.

RATES OF WAGES IN THE BUILDING TRADE.

The following are the rates of wages in the building trade in England and Wales. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

(For rates of wages in the Building Trade in Scotland, see page 621.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

OCTOBER 18.—**Clacton-on-Sea.**—HOUSES.—For the erection of 44 houses on the Croft Estate, for the U.D.C. Mr. Geo. T. Lewis, Clerk to the Council, Council Offices.

OCTOBER 18.—**Grays, Essex.**—HOUSES.—Erection of 106 houses, together with roads, sewers, fencing, and attendant works at West Thurrock, Grays, Essex, for the Lafarge Aluminous Cement Co., Ltd., of Lincoln House, High Holborn, W.C.1. Mr. Edward Fincham, A.R.I.B.A., P.A.S.I., Architect and Surveyor, 4, Orsett-road, Grays, Essex. Deposit £2 2s.

OCTOBER 18.—**Haslemere.**—HOUSE.—For construction of an engine house at Sturt-road, for the U.D.C. Mr. C. A. Best, Surveyor to the Council, Council Offices. Deposit £1 1s.

OCTOBER 18.—**Tilbury.**—FENCING.—For providing and fixing approximately 1½ miles of reinforced concrete fencing consisting of posts 10 ft. apart, in the South Ward of Tilbury, for the U.D.C. Mr. A. W. Buckner, Clerk of the Council, Council Offices.

OCTOBER 20.—**Cudworth.**—BUNGALOW.—For erection of a bungalow, for the Miners' Welfare Scheme. Mr. J. A. Haigh, Architect to Scheme, Council Offices. Deposit £2 2s.

OCTOBER 20.—**Harrogate.**—ALTERATIONS.—For alterations at Harrogate Station, for the L.N.E. Railway. Messrs. James McLaren & G. F. Thurston, joint secretaries, Secretary's Office, Marylebone Station.

OCTOBER 20.—**Port Talbot.**—LODGES.—For erection of two lodges at the main entrance to the Talbot Memorial Park. Mr. Moses Thomas, Town Clerk.

OCTOBER 20.—**Romford (Essex).**—BUILDING ROADS, DRAINS, AND PAINTING.—Erection of lorry sheds, workshop and cart sheds, including roads, fences, drains, &c., and for repairing and painting existing depot buildings and caretaker's cottage, at the Depot Buildings, in Rainham-road, Hornchurch, Essex, for the Romford R.D.C. Mr. W. J. Grant, Surveyor to the Council, 16A, South-street, Romford.

OCTOBER 20.—**Southend-on-Sea.**—HUTS, &C.—For (*a*) the construction of concrete, steel and wood bathing huts and platforms on the foreshore, and (*b*) timber bathing huts, and incidental works, for the T.C. Mr. H. J. Worwood, Town Clerk, Municipal Buildings, Clarence-road. Deposit £2 each.

OCTOBER 20.—**Southport.**—HOUSES.—Erection of 50 houses at Halsall-road and 50 houses at Canning-road, for the Corporation of the County Borough of Southport. The tenders invited are for the whole or not less than ten houses. Mr. A. E. Jackson, Borough Engineer, Town Hall, Southport. Deposit £1 1s.

OCTOBER 20.—**Tredegar.**—CENTRE.—For erection of a centre for instruction in handicrafts and domestic subjects at Georgetown Council School. Mr. C. Dauncey, Secretary, County Hall, Newport, Mon.

OCTOBER 20.—**Wood Green.**—PAVILION.—For erection of a pavilion in the Albert-road Recreation Ground, for the U.D.C. Mr. C. Eric Staddon, Clerk of the Council, Town Hall. Deposit £1 1s.

OCTOBER 21.—**Caerphilly.**—SHOP.—For erection of shop, for G.W.R. Mr. A. E. Bolter, Paddington Station, W.2.

OCTOBER 21.—**London, S.W.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange in Battersea, London, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Secretary.)

OCTOBER 21.—**Southend-on-Sea.**—BUILDING.—For erection of the strand arcade, hall, &c., on a site in Warrior-square, Southend-on-Sea, for Messrs. The Warrior-square Picture Theatre Co., Ltd. Mr. P. R. Fincher, architect, Bank Chambers, Broadway-parade, Leigh-on-Sea. Deposit £3 3s.

OCTOBER 22.—**Barming.**—ADDITIONS.—For an addition to pumping station and the construction of about 1,290 yds. of 6 in. cast-iron main, for the Maidstone Waterworks Co. Secretary. Deposit £5.

OCTOBER 22.—**Brentwood, Essex.**—ADAPTATIONS.—Adaptations (to form a telephone exchange) at Brentwood, Essex, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 22.—**East Grinstead.**—COTTAGES.—For erection of one block of four cottages at Pound Hill, Worth, and one pair of cottages at Copthorne, for the R.D.C. Mr. Alan Huggett, Clerk to the Council. Deposit £1 1s.

OCTOBER 22.—**Ecclesfield.**—ROOM.—For the erection of a teachers' room at Warren Council School, for the West Riding C.C. The Education Department, County Hall, Wakefield.

OCTOBER 22.—**Great Ouseburn.**—ADDITIONS.—For alterations and additions to Great Ouseburn council school: (*a*) Excavator, Mason, and Bricklayer; (*b*) Carpenter and Joiner; (*c*) Slater; (*d*) Plumber; (*e*) Plasterer; (*f*) Painter, for the West Riding E.C. The Education Department, County Hall, Wakefield.

OCTOBER 22.—**Thurnscoe.**—SCHOOL.—For erection of a new school. Education Department, West Riding E.C., County Hall, Wakefield.

OCTOBER 22.—**Whittingham.**—VARIOUS.—Various work is required for the erection of sixteen cottages on a site near the Whittingham Mental Hospital, as follows: (1) Roads and sewers: (2) brick and stone-work; (3) slating; (4) plastering; (5) woodwork; (6) plumbing. Mr. L. Cotman, Clerk to the Committee of Visitors. Deposit 10s. 6d. each.

OCTOBER 23.—**Ashford, Middlesex.**—FIRE ALARM, LINING SWIMMING BATH WITH GLAZED BRICKS.—(*a*) Providing electric fire alarm: and (*b*) lining bottom of swimming bath pond with glazed bricks, at the West London District School, Ashford, Middlesex. Mr. F. G. Beeching, Clerk to the Managers, Ashford, Middlesex, on receipt of a stamped addressed envelope of brief size.

OCTOBER 23.—**Dublin.**—REBUILDING.—For rebuilding of Rathfarnham Courthouse, County Dublin County Council. Seamus Ua Laoidhleis, An Runaidhe, 11, Parnell-square, Dublin. Deposit £1.

OCTOBER 23.—**Leeds.**—ALTERATIONS.—For structural alterations to premises in Alexander-street, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings.

OCTOBER 23.—**London, E.1.**—BALCONIES.—Providing and fixing new balconies to certain wards at the Hospital at Raine-street, Old Gravel-lane, E.1, for the Guardians of St. George in the East. Mr. R. M. Lochner, Clerk, Guardians' Offices, Raine-street, Old Gravel-lane, E.1, on receipt of postage (3d).

OCTOBER 23.—**Plymouth.**—SCHOOL.—For erection of new public school at Cobourg-street. Mr. E. Chandler Cook, Secretary for Education, Education Offices.

OCTOBER 23.—**Rochford, Essex.**—ALTERATIONS.—Alterations, &c., to the Post Office, Rochford, Essex, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 24.—**Cheltenham.**—CONCRETE CONSTRUCTION.—Construction of pre-filter tanks of ferro-concrete, and the building of an engine house of concrete blocks (provided by the Corporation), and works incidental thereto at the Water Works, Dowdeswell, for the Corporation of the Borough of Cheltenham. Mr. J. S. Pickering, Municipal Offices, Cheltenham. Deposit £3.

OCTOBER 24.—**Redruth.**—MEMORIAL.—For granite war memorial. Mr. L. Winn, M.S.A., architect and surveyor, 10, Clinton-road.

OCTOBER 25.—**Carlton.**—PAVILION.—For the erection of pavilion, walls, and levelling of bowling green, for the "Welfare Scheme." Mr. J. R. Shepheard, Town Hall, Hoyland.

OCTOBER 25.—**Usk.**—BUILDINGS, &C.—For the erection of buildings for the Agricultural Institute, comprising residential block, scholastic block, additions to dairy, and power house. Mr. C. Dauncey, Secretary, County Hall, Newport, Mon. Deposit £2 2s.

OCTOBER 27.—**Barlby.**—SCHOOL.—For erection of a council school for 80 scholars, for the East Riding of Yorkshire C.C. Mr. J. Bickersteth, Clerk of the East Riding E.C., County Hall, Beverley. Deposit £1 1s.

OCTOBER 27.—**Edinburgh.**—PAINTING.—For painter work at James Clark School extension, for the E.C. Mr. J. Stewart, Executive Officer, Education Offices.

OCTOBER 27.—**Edinburgh.**—VARIOUS.—Various work for St. John's R.C. School, Portobello—mason, joiner, slater, plasterer, plumber, steel work. Mr. J. Stewart, S.S.C., Executive Officer, Education Offices.

OCTOBER 27.—**London, S.E.18.**—LAVATORY ACCOMMODATION.—Erection of additional lavatory accommodation at the Guardians' Offices, 394, High-street, Lewisham, S.E.13, for the Guardians of the Poor of the Lewisham Union. Guardians' Offices, 394, High-street, Lewisham, S.E. Deposit £1 1s.

OCTOBER 27.—**London, E.**—DWELLINGS.—Erection of a block of dwellings on the Whitemore Estate (Ware-street area), Shoreditch, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2, payable to the Cashier.

OCTOBER 27.—**Mexborough.**—HOUSES.—For erection of 40 houses on the Council's site in Harlington-road, for the U.D.C. Mr. G. F. Carter, Surveyor to the Council.

OCTOBER 27.—**Newmarket.**—HOUSES.—Erection of 10 brick and slated houses in five pairs, at Stamford-street, Newmarket, in the County of Suffolk, for the Urban District Council of Newmarket. Mr. W. H. Eley, Surveyor, Godolphin House, Newmarket.

OCTOBER 27.—**Salcombe.**—ALTERATIONS.—For alterations, &c., at the Salcombe Hotel, Salcombe. Mr. E. H. A. Barron, architect, 11, The Crescent, Plymouth.

✱OCTOBER 28.—**Barking.**—HOUSES.—Erection of about 59 houses on the Eastbury Estate, Ripple-road, Barking, for the Barking Town U.D.C. Council's Architect, Mr. C. J. Dawson, F.R.I.B.A., Clock House Chambers, East-street, Barking. Deposit £5.

OCTOBER 28.—**Basford, near Nottingham.**—TELEPHONE EXCHANGE.—Erection of a Telephone Exchange at Basford, near Nottingham, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 28.—**Castlemaine.**—REBU
building of Castlemaine Station buil
for the Great Southern & Weste
C. E. Riley, Secretary, Kingsbridge T
Deposit £1 1s.

OCTOBER 28.—**Preston.**—HOUSES.
erection of 50 houses, Miller-road.
Borough. Mr. A. Howarth, Town Cl

OCTOBER 28.—**Windsor.**—CONCR
Erection of six houses in concrete
provide their own designs and es
Windsor T.C. Mr. E. A. Stickland, B
Alma-road, Windsor.

✱OCTOBER 29.—**Gravesend.**—ALT
Alterations to the Post Office and e
telephone exchange at Gravesend,
sioners of His Majesty's Office of W
Branch, H.M.O.W., King Charles-stree
Deposit £1 1s. (cheques payable to th

OCTOBER 29.—**Greasbrough.**—B
completion of eight bungalows, Cro
U.D.C. Mr. J. H. Jackson, Clerk
Council Office.

OCTOBER 30.—**Glasgow.**—VARIOUS.
quired in connection with the prop
248 houses and 13 shops at Belvidere
brick, and mason works, &c., for t
Lindsay, Town Clerk, City Chambers

✱OCTOBER 30.—**London, N.19.**
PAINTING TO SCHOOLS.—General repa
to the exterior of the blocks of buil
walls, roofs, &c., at the schools
Hornsey-road, N., in accordance w
and specification prepared by the
Guardians of the Poor of the Pari
Islington. Mr. Edmund J. Harriso
23, Berkeley-road, Crouch End, N.8.

✱OCTOBER 31.—**Liverpool.**—ALTER
tions to the Employment Exchan
Liverpool, for the Commissioners o
Office of Works. Contracts Branch,
Charles-street, London, S.W.1. D
(cheques payable to the Secretary).

NOVEMBER 3.—**Cornwall.**—FARMHO
tion of eight new farmhouses at Tr
Newlyn East, for the C.C. The Coun
County Hall, Truro. Deposit £1 1s.

NOVEMBER 3.—**Gateshead.**—PAINTIN
ing works at the Poor Law Institute
Mr. G. Craighill, Union Clerk, Poor La

✱NOVEMBER 3.—**Surrey.**—Mo
Modernisation of blocks "J" and "
stead Mental Hospital, Surrey, for t
Architect to the Council, The Coun
minster Bridge, S.E.1. Deposit £2.
cashier.

NOVEMBER 4.—**Dublin.**—RESTORAT
toration of Bansha Civic Guard Station
for the Commissioners of Works. M
Secretary, Office of Public Works, Ba

✱NOVEMBER 4.—**Gillingham, Kent.**
AND TELEPHONE EXCHANGE.—Erection
and telephone exchange at Gillingham
Commissioners of His Majesty's Of
Contracts Branch, H.M.O.W., King
London, S.W.1. Deposit £1 1s. (chec
the Secretary).

NOVEMBER 5.—**Hales Owen.**—HOUSES
and completion of 40 houses on the Hi
for the R.D.C. Mr. E. H. Grove, Churc
Deposit £2 2s.

✱NOVEMBER 6.—**London, E.14.**—
Erection of 24 tenements on a site at
street, for the Metropolitan Borough Co
Mr. Harley Heckford, M.Inst.C.E., Bor
Council Offices, Poplar. Deposit £3 3s.

NO DATE.—**Murfield.**—SHOPS.—For
new shops, for the Mirfield Industri
Society, Ltd. Mr. C. H. Ledgard,
Secretary.

FURNITURE, MATERIA

OCTOBER 20.—**Beckenham.**—PAVIN
and delivery of about 5,000 super yds. o
paving, for the U.D.C. Mr. F. W. G
the Council, Council Offices. Deposit

OCTOBER 21.—**Plymouth.**—PIPES.—
delivery of 1,500 yds. of 9 in. cast-iron
Howarth, Water Engineer, Stonehouse

OCTOBER 22.—**Hertford.**—GRANITE.—
of broken granite, slag, limestone, gra
tar, &c. Mr. A. Baker, Town Clerk.

OCTOBER 25.—**Dartford.**—GRANITE.—
delivery of 500 tons of 2½ in. hand-
for the U.D.C. Mr. J. James Hurtle
Council, Council Offices.

OCTOBER 27.—**Broadstairs.**—GRANITE
road materials: 565 tons of granite mac
of 6 in. by 12 in. granite kerbing; 7
hard core; 170 tons of tarred slag; 1,9
channelling, for the Broadstairs U.
Skinner, Clerk to the Council, Pierrem
stairs.

NOVEMBER 10.—**Dublin.**—STEELWO
of steelwork for bridges, for the Midlan
Railway of Ireland Co. Mr. E. H.
Secretary, Broadstone Terminus. Cl

ENGINEERING, IRON AN

OCTOBER 22.—**Dundee.**—STEEL B
construction, supply, delivery and ere
at the entrance to Camperdown Dock
caisson, for the Harbour Trust.
Thompson, General Manager and E
Harbour Trust.

OCTOBER 24.—**Cheltenham.**—TANK
struction of pre-filter tanks of ferro-
building of an engine house of concret
S. Pickering, Borough Engineer, M
Deposit £3.

4.—**London, E.C.4.**—LIFT.—Erection of the G.P.O. (South), Queen Victoria-street, Commissioners of His Majesty's Office of tracts Branch, H.M.O.W., King Charles- n, S.W.1. Deposit £1 1s. (cheques pay- ecretary).

7.—**Berwick.**—BRIDGE.—For construction crete bridge over the Tweed, consisting of nd arches up to 360 ft. in span. Messrs. el & Partners, Ltd., Civil Engineers, ings, 25, New Bridge-street, Newcastle- posit £100.

7.—**Bristol.**—BRIDGE.—For the recon- he swing bridge over the Junction Lock, asin, for the Port of Bristol. Mr. T. A. Engineer, Chief Engineer's Office, Avon- Deposit £5.

27.—**Bristol.**—HOT WATER HEATING.— fixing of a low-pressure accelerated hot apparatus at Eastville Institution, in ith revised plans and specification, for of the Poor, City and County of Bristol. amb, Clerk to the Guardians, St. Peter's tol.

27.—**Findochty.**—EXTENSION.—For the the harbour, comprising the excavation r bed and the construction of a mass , mass and reinforced concrete quay lative works, for the Burgh. Mr. W. r, 12, East Church-street, Buckie.

28.—**Aberdeen.**—RECONSTRUCTION.—For of the public road bridge over the at Waterside of Slains, near Newburgh, Messrs. Tawse & Allan, civil engineers, d-square, Aberdeen. Deposit £2 2s.

8.—**Wellington, N.Z.**—BRIDGE SPANS.— der spans for Wairoa, Rangitaiki and es, for N.Z. Public Works Board. Dept. rade, 35, Old Queen-street, S.W.1.

1.—**Beaufort West (Cape Province).**— ON.—Electric power station plant, for the nent of Overseas Trade (Room 52).

3.—**Sydney, N.S.W.**—BRIDGE SPANS.— rk for superstructure of bridge at Tom for Department of Public Works, Sydney. seas Trade, 35, Old Queen-street, S.W.1.

5.—**Kingston-on-Thames.**—TANKS.—For of two concrete humus tanks and the crete channels, timber sluice gates, &c., mp house at their sewage works, for the A. Winser, Town Clerk, Municipal sit £1 1s.

20.—**Chile.**—HARBOUR WORKS.—**For in the port of Lebu. Chilean Legation, -square, W.1.**

31.—**Hamilton.**—BRIDGE.—Erection of Hamilton, for the Joint Committee of ouncil of the County of Lanark, Town Burgh of Hamilton, and Town Council of of Motherwell and Wishaw. Messrs. 'Call, C.E., 160, Hope-street, Glasgow.

SANITARY, AND WATER WORKS.

0.—**Burntisland.**—RESERVOIR.—For the f a storage reservoir, &c., on a site near rm. Messrs. Brown & Gilmour, Joint Town Clerks' Office.

0.—**Fermanagh.**—ROADS.—For construc- for the C.C. Mr. J. P. Burkett, County iskillen. Deposit £5.

20.—**Greenford.**—DRAINAGE.—For the the main drainage system, comprising s of 7 in., 9 in., and 12 in. sewers, man- . A. Lloyd Jones, Clerk to the Council, y Chambers, New Broadway, Ealing.

—**Heckmondwike.**—RECONSTRUCTION.— ction of about three-quarters of a mile d Huddersfield main road, within the . H. Redfearn, Clerk, Council Offices.

—**Oswestry.**—MAINS.—For laying 4 in. iron mains, &c., and building a concrete he R.D.C. Mr. C. H. Bull, Clerk, Bailey- it £2 2s.

—**Plymouth.**—MAKING-UP.—For making ting Brunel-avenue, Brunel Terrace-lane, ce-lane, Trayes Terrace-lane, Stanley- ayes-terrace sewer. Mr. J. Wibberley, eer, Municipal Offices.

0.—**Rochester.**—SEWERAGE.—For con- stoneware pipe sewers as follows:— in. sewers; 1,286 lin. yds. 9 in. sewers; in. sewers; 322 lin. yds. 15 in. sewers, Mr. Apsley Kennette, Town Clerk, eposit £5 5s.

—**Wantage.**—SEWERS.—For laying of in., and 225 yds. 7 in. stoneware and ll and auxiliary sewers, &c., for the . B. Ormond, Clerk to the Council, osit £2 2s.

—**Woodford.**—ROADS.—For works of paving, including reinforced concrete r the U.D.C. Mr. W. Farrington, he Council, Council Offices. Deposit

—**Barrow-on-Soar.**—SEWERS.—For the about 5,000 yds. of 6 in., 7 in., 9 in. eware pipe sewers, and about 3,000 yds. nd 9 in. cast-iron pipe sewers, together and of a main pumping station, sub- chamber, settling tank. continuous ibution works of the Parish of Rothley. ward, Clerk to the Council. Deposit

—**Chelmsford.**—ROADS.—For laying of struction of roads, &c., in Browning's- . E. Barford, Town Clerk, Municipal rd House.

OCTOBER 21.—**Dover.**—WIDENING.—(1) For road widening and tarmacadam works, Limekiln-street and Bulwark-street; and (2) building alterations to the drainage works, and incidental constructional works. Mr. Wm. Boulton Smith, Borough Engineer, Maison Dieu House. Deposit £1 1s. each.

OCTOBER 21.—**Surrey.**—RECONSTRUCTION.—For reconstruction, in reinforced concrete, of Crockford Bridge, on the Byfleet–Addlestonemoor main road, for the C.C. Mr. W. P. Robinson, County Surveyor, County Hall, Kingston-on-Thames. Deposit £2 2s.

OCTOBER 21.—**Surrey.**—WIDENING.—For widening, in reinforced concrete, of Bonehurst Bridge, on the London–Brighton road, for the C.C. Mr. W. P. Robinson, County Surveyor, County Hall, Kingston-on-Thames. Deposit £2 2s.

OCTOBER 22.—**East Grinstead.**—SEWERAGE.—For provision and laying of about 530 yds. of 6 in. stoneware pipe sewer, &c., for the R.D.C. Mr. Alan Huggett, Clerk to the Council. Deposit £1 1s.

OCTOBER 22.—**Hammersmith.**—ROADS.—For making-up a portion of Adelaide-road. Mr. H. Royle, Town Clerk, Town Hall. Deposit £3 3s.

OCTOBER 25.—**Plygyrhiw.**—ROAD.—For the construction of two sections of new road at Plygyrhiw and Penlan, near Llandyssul, for the Carmarthenshire C.C. Mr. R. W. Jones, County Surveyor, County Offices, Carmarthen. Deposit £3 3s.

OCTOBER 27.—**Bolton-upon-Dearne.**—SEWERAGE.—For construction of two humus beds, for the U.D.C. Mr. J. Ledger Hawksworth, Clerk of the Council, Council Offices. Deposit £1 1s.

OCTOBER 27.—**Conisbrough, near Rotherham.**—DRAINAGE, ROADS, AND ERECTION OF CARETAKER'S HOUSE.—(A) Works: For the execution of all the works, including subsoil drainage, surface water drainage, excavation works, and the laying of reinforced concrete roads and footpaths *in situ*. The tender to be based on the specification and quantities. (B) Works: The erection of a caretaker's house. The tender to be a lump sum tender, based on the specification and drawings, for the Conisbrough and Conisbrough Parks Joint Burial Committee, New Burial Ground, Denaby Main. Mr. H. Thirlwall, M.I.M. & C.E., Surveyor, Council Offices, Conisbrough. Deposit £1 1s.

OCTOBER 27.—**Coulsdon.**—ROADS.—For making-up of Kendall-avenue South and Penwortham-road, Sanderstead, for the U.D.C. Mr. E. C. King, Clerk to the Council, Council Offices. Deposit £2 2s.

OCTOBER 27.—**Saltburn-by-the-Sea.**—SEWER.—For the new sewerage works consisting of the laying of a new outfall sewer and other sewers, for the U.D.C. Mr. R. Wood, Clerk to the Council, Council Offices. Deposit £5 5s.

OCTOBER 31.—**Blackpool.**—MAINS.—For laying cast-iron mains between Stocks Reservoir, in the West Riding, and Westby Reservoir, near Blackpool, in the County of Lancaster: (1) 12,919 yds. of 27 in. main; (2) 12,518 yds. of 27 in. main; (3) 12,346 yds. of 25 in. main; (4) 12,240 yds. of 25 in. main. Mr. G. F. Atkinson, Engineer, The Fylde Water Board, Seftonstreet. Deposit £5.

OCTOBER 31.—**Disley.**—SEWER.—For laying and jointing about 140 yds. of 9 in. cast-iron sewer, on reinforced concrete piers, and the construction of tanks in reinforced concrete, filters, &c., for sewage purification, for the R.D.C. Mr. John L. Lowe, Clerk to the Council, Council Office. Deposit £2 2s.

Competitions.

(*See Competition News, page* 588.)

Auction Sales, Tenders, etc.

OCTOBER 20.—**Barnes, S.W.**—Mr. Richard J. Steel has been instructed by Mr. P. Vine to sell, upon the premises, The Field, Lonsdale-road, Barnes, S.W., a quantity of new and second-hand building material of a large variety, three bow huts, sectional huts, vans, coal trolleys, tip-carts and numerous other items. Auctioneers, 2, Plough-terrace, South Ealing, W.5.

OCTOBER 21 AND 22.—**Swindon, Wilts.**—Mr. F. H. Clark will sell, without reserve, at the Central Stores Depot No. 18, Swindon, Wilts (near Swindon Station, G.W. Railway) final clearance sale of timber buildings and building materials. Auctioneer, Railway Wharf, York-road, Wandsworth, S.W.18.

✱OCTOBER 22.—**Hillingdon, near Uxbridge.**—Messrs. Newton & Co. will sell, on the premises of the Halden Estates, Ltd., Hillingdon Estate, the plant of the Halden Estates, Ltd. Auctioneers, 27, Chancery-lane, W.C.2.

✱OCTOBER 22.—**London, S.E.15.**—Mr. C. E. Clark will sell, without reserve, at Rollin's Wharf, Canterbury-road, S.E.15, prime new timber just landed. Auctioneers, Beddington House, Beddington, near Croydon.

OCTOBER 23.—**London, E.14.**—Messrs. Henry Butcher & Co. will sell, by order of H. T. Bloor, Esq., A.C.A., receiver for the Debenture Holders *re* F. W. Bunt & Co., Ltd., on the premises, London-street, Commercial-road, Stepney, E.14, packing-case manufacturers' plant and woodworking machinery, &c. Auctioneers, 63–64, Chancery-lane, London, W.C.1.

✱OCTOBER 24.—**London, W.1.**—Messrs. Knight, Frank & Rutley will offer for sale, by direction of Lloyds Bank, as a whole or in two lots, in the Hanover-square Estate Room, the famous premises, 16, Charing Cross (formerly Cox's Bank), (for disposal owing to the Company's removal to Pall Mall), site of 19,300 sq. ft., 291 ft. of frontage; vacant possession. Auctioneers, 20, Hanover-square, W.1.

✱NOVEMBER 5.—**London, E.C.2.**—Messrs. St. Quintin, Son, & Stanley will let, by auction, on building leases for 99 years, at Winchester House, Old Broad-street, E.C.2, building sites in the City of London and City of Westminster. Auctioneers, 34, Clement's-lane, Lombard-street, E.C.4.

✱NOVEMBER 11.—**London, S.W.1.**—Messrs. Hampton & Sons will sell, in the St. James' Estate Rooms, 20, St. James's-square, S.W.1, Lot 1, "The Poplars," country house, just off Brockley Hill, Edgware, grounds about 2½ acres. Lot 2, a high-laying meadow of nearly 2¾ acres, part of which has a potential building value, at Edgware; vacant possession of each lot. Auctioneers, 20, St. James'-square, S.W.1.

NOVEMBER 18.—**London, E.C.2.**—Messrs. Ventom, Cooper & Co. will sell, by order of the owners, who no longer require this section of their extensive works (unless previously disposed of privately), in one or more lots, the valuable freehold property erected by Brifco, Ltd., at Ashtead, on an enclosure of about 17 acres of land, mainly walled in, and comprising five extensive modern blocks of buildings, plant and machinery. Auctioneers, 35, Old Jewry, London, E.C.2.

✱NOVEMBER 18.—**London, S.W.1.**—Messrs. Hampton & Sons will sell, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1, freehold building site known as No. 70, Drayton-gardens, South Kensington, having a frontage of about 64 ft., and containing an area of about 6,600 sq. ft. Auctioneers, 20, St. James's-square, S.W.1.

✱NO DATE.—**London, W.1.**—Messrs. Knight, Frank & Rutley will offer for sale, by direction of the executors of the late Mr. F. Heywood, on a date to be announced (unless previously sold privately as a whole), the freehold building property forming part of the Scrubbs Hill-place Estate, situate in the parishes of Egham and Chobham, Surrey; other well placed building sites, two picturesque cottage holdings, the property extends to about 23 acres. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

OCTOBER 20.—**Leeds.**—Full-time Lecturer in the Department of Building, to teach building construction and allied subjects required at the Leeds Technical School by the Leeds Education Committee. Mr. James Graham, Director of Education, Education Offices, Leeds.

✱OCTOBER 24.—**Southport.**—Clerk of Works: (*a*) To take charge of the remodelling of the Victoria Baths, Southport, under the direction of the Borough Engineer; (*b*) to take charge of the Corporation housing scheme (100 houses), under the direction of the Borough Engineer, for the County Borough of Southport. Mr. A. E. Jackson, M.Inst.C.E., Borough Engineer, Town Hall, Southport.

✱OCTOBER 31.—**Lewes.**—Architectural Assistant required by the East Sussex County Council on their temporary staff. Mr. F. J. Wood, A.M.I.C.E., M.S.A., County Surveyor, County Hall, Lewes.

✱NOVEMBER 3.—**Wilts.**—Architectural Assistant required in the County Architect's Office by the Wilts County Council. Mr. W. L. Bown, Clerk of the County Council, County Offices, Trowbridge.

✱NOVEMBER 4.—**London, N.15.**—Clerk of Works required in connection with the Tottenham housing scheme, by the Tottenham District Council. Mr. Reginald C. Graves, Clerk and Solicitor of the Council, Town Hall, Tottenham, N.15.

✱NO DATE.—**London, N.**—Instructor for Building Mathematics required by the Middlesex Education Committee on Wednesday evenings, from 7.30 to 9.30, at the Tottenham Polytechnic. Mr. H. P. Shallard, M.A., The Polytechnic, High-road, N.15.

✱NO DATE.—**London, S.E.1.**—Quantity Surveyor's Assistants required for temporary engagements in the Architect's Department of the London County Council. (*a*) Quantity Surveyor's Assistants with first-class experience in taking off, measuring and adjusting variations, preparation of estimates, and measurements of works of minor repairs, &c., under a schedule of prices. (*b*) Assistants for abstracting and billing. Architect to the Council, County Hall, Westminster Bridge, S.E.1.

Paddington Hall and Library.

The Paddington Baths and Washhouses Committee has had a scheme prepared by Mr. Herbert Shepherd, F.R.I.B.A., for the erection of a public hall, a lending library, and shops on the Porchester-road frontage of "The Lodge" site. The scheme provides for a large public hall at the first floor level, with five shops and a lending library on the ground floor. The public hall principal entrance will be in the centre of the main façade fronting upon Porchester-road. This entrance will be at pavement level, through an arcade—with show windows to the shops on each side—leading to the vestibule hall and stairs to the basement and first floor. The hall, which will be some 30 ft. high, 50 ft. wide, and 105 ft. long—exclusive of a semi-circular platform of a depth of about 18 ft.—will accommodate between 800 and 1,000 persons (including standing room), and there will be additional accommodation on the east side in the large lounge recesses overlooking Porchester-road. The lending library at the north end of the site will be about 40 ft. by 21 ft., and has been planned on the open access system, with a portico entrance and vestibule at the north-east angle. The construction of the premises is proposed to be on the principle of a steel-frame structure, with reinforced and fire-resisting floors and walls.

The estimated cost of the scheme is as follows:—Public hall and shops, £59,450; lending library, £5,400; total, £64,850.

PROPOSED NEW BUILDINGS & OTHER WORKS *

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

ABERDEEN.—Plans passed by the T.C.: Bungalow, Queen's-road, for Mr. George Donald, per Mr. T. S. Sutherland, architect; petrol tank and pumps, 21, Bon Accord-street, for T. C. Smith & Co., Ltd., per Messrs. J. & J. Cameron, architects.

ALDERSHOT.—Plans approved by the B.C.: Aldershot & District Traction Co., football stand and office building at Foden-road; Mr. F. Padgham, house, Ayling hill; Mr. D. E. Wakelin, house, Sandford-road. The Council propose erecting 50 houses on a suggested lay-out at Aldershot Park.

ASHINGTON.—The Ashington Coal Co. have prepared plans for the erection of 200 houses.

BACUP.—The Housing Committee of the T.C. have instructed the B.E. to invite tenders for a further 60 houses to be erected on the Council's land at Heath Hill. A commencement has been made with the erection of a hall behind the Stacksteads Wesleyan School. The estimated cost of the scheme is about £1,800.

BALBY.—A large hotel is shortly to be erected at the junction of Low-road and Cross-street, for the Barnsley Brewery Co., Ltd., and plans are being prepared by Messrs. Wilburn & Atkinson, of Doncaster.

BARKING.—The Essex County E.C. proposes the provision of dining room accommodation at the Barking Abbey School, at a cost of £3,560.

BARKING TOWN.—Plans passed by U.D.C.: Eighteen houses, Hurstbourne-gardens, for Mr. Samborough.—The U.D.C. is to erect eight houses on the Abbey-street land; tenders are to be invited for the erection of houses at Eastbury estate; the architect is to prepare plans for houses at Bamber-road.

BARWICK.—West Riding C.C. proposes to erect an elementary school for about 200 children.

BATLEY.—The Technical School is to be enlarged by the West Riding C.C., at a cost of £4,210.

BEDFORD.—Plans passed: Four houses, Tennyson-road, for Mr. Bowler.

BENTLEY.—Messrs. Barbour, Walker & Co. are to erect a new hall for the Girl Guides.

BEXHILL.—Plans passed by the T.C.: House, Collington-grove, Mr. J. E. Maynard, for Mrs. Aitchison; bungalow, South-cliff, Mr. J. E. Maynard, for Mr. G. Ravenshear; house, Terminus-road, Mr. J. E. Maynard, for Mr. H. P. Farnfield; house, Collington-grove, Mr. J. E. Maynard, for Mr. H. P. Farnfield; house, Wickham-avenue, Mr. J. E. Maynard, for Messrs. J. & T. Skinner; shop with flats over, Collington-avenue, Mr. J. E. Maynard, for Mr. C. T. Burgess; house, Wickham-avenue, Mr. J. E. Maynard, for Messrs. J. & T. Skinner; two pairs of semi-detached houses, at junction of Hastings-road and De La Warr-road, Mr. G. H. Gray, for Mr. J. Rogers; two houses, Cantelupe-road, Mr. G. H. Gray, for Mr. F. Bruce; house, Barnhorn-lane, Mr. D. B. Sceats, for Mr. R. W. Evans-Vaughan; house, Richmond-avenue, Messrs. Wall, Callow & Callow, for Mr. O. Cooke; house, Barnhorn-lane, for Messrs. Matthews & Co.; house, Sedgewick-road, Messrs. Tubbs & Messer, for Mr. W. B. Godwin; house, Kewhurst-avenue, Messrs. Murray, Delves, & Murray, for Mrs. E. W. Broad; house, Parson's Wood, Little Common-road, Messrs. Wood & Burleigh, for Mr. W. S. Bremner; house, Glassenbury-drive. Messrs. Harrison Smith, Ltd., for Mrs. Stapylton Smith; house, Glassenbury-drive, for Mr. W. Shannon; house, Withyham-road, Messrs. Stevens & Son, for Mrs. B. Dowson; house, De La Warr-road, Mr. E. H. Gandy, for Mr. C. Clifton; house, private-road, off Wrestwood-road, Messrs. Ching & Co., for Mr. E. Weldon; cottage, Ninfield-road, Mr. J. H. Lye, for Mr. W. Parker; garden shed, 19, Sutherland-avenue, Mr. J. E. Maynard, for Mr. R. B. Harvey; house, Mayo-lane, Messrs. F. Metcalfe & Sons, for Mr. F. G. McWilliams; semi-detached house, London-road, Mr. D. B. Sceats, for Mr. H. Cockett; bungalow, St. Andrew's-road, Messrs. Stevens & Sons, for Mr. G. Matthews; cottage, Barrack-road, Mr. F. Metcalfe, for Mr. W. Wakefield.

BIRKENHEAD.—Plans passed by the T.C.: Conversion of 294, Conway-street into a house and shop; pair of semi-detached houses, Bidstone-avenue, near Tollemach-road.—The Sessions House is to be redecorated at a cost of £430.—The B.S. has prepared a report with reference to the development of the foreshore between Rock Ferry and New Ferry.—The M.H. has sanctioned the borrowing of £87,167 for the Derby Park housing scheme.—The B.E. has approved modified plans for the St. Peter's School premises, providing accommodation for 690.

BOGNOR.—The U.D.C. passed plans: Two flats, Burnham-avenue South, for Miss Roche; two houses, Sheepwash-lane, for Mr. A. A. W. Tribe; house, Linden-avenue, for Mrs. Woodlands; house, Nyewood-lane, for Mr. Westall; house, Havelock-road, for Mrs. Southerton; house, Spencer-street, for Messrs. E. H. Chapman & Son; house, Burnham-road, for Miss M. J. Phipps; house, Victoria-road, for Messrs. Capon & Woodlands; two houses, Essex-road, for Mr. H. Geall; six houses, Sheepwash-lane, for Messrs. A. E. Cheney, Ltd.; house, Victoria-drive, for Mrs. Gifford.

BOLTON.—The B.S. has been instructed to prepare plans for extending the fire station.—Plans passed: 26 houses, Bayswater-street, for Mr. J. Middlehurst; 12 houses, Ainslie-road, for Mr. A. S. Woods; 15 houses, Chorpey Old-road and Maple-avenue, for Bolton Modern Building Co.; pavilion, Halliwell, for St. Paul's Club; pavilion, Church-road, for Messrs. Knowles, Ltd.; presbytery, Long-lane, for Rev. Lineham; club, Ellesmere-road, for Bolton Labour Association.

BRADFORD.—The City Architect has been instructed to invite tenders for the construction of Russian and Turkish baths at the Bowling district baths. The M.H. has sanctioned a loan of £5,282 to cover the cost of the Russian baths and a loan of £242 for the Turkish baths.—The M.H. has now agreed to sanction a loan of £16,464 for the erection of warehouses for the Conditioning House Committee, in Canal-road.—Sanction has been given to a loan of £5,500 for baths at West Bowling.—A bandstand is to be erected at Horton Park, at a cost of £500.—The Mental Deficiency Committee has prepared a scheme for accommodation for 600, on the Westwood Estate, at an estimated cost of £179,000.—A sub-station is to be erected at Four Lane-ends, at a cost of £17,000.—Plans passed: Six houses, Lister-road, for Mr. A. Dickinson; eight houses, Beacon-lane, for Mrs. M. Wharris; six houses, Norman-avenue, for Mr. J. H. Smith; sixteen houses, Heaton-road, for Messrs. Patchett Bros.; four houses, Hawes-road, for Mr. S. Priestley; two houses, Whitby-terrace, for Messrs. Foster Bros.; three houses, Heathfield-street, for Mr. Wray; two houses, Wheatlands-drive, for Mr. Swailes; house, Haworth-road, for Miss Dooley; house, Haworth-road, for Mr. F. Bannister; house, St. Enoch's-road, for Mr. Akeroid; house, Wharncliffe-drive, for Mr. W. Breary.

BRAITHWELL.—The West Riding E.C. has decided to purchase land for a new school.

BURNLEY.—The T.C. propose to erect an additional 56 houses on the Palace House Estate.

BUXTON.—The T.C. approved plans: Messrs. Granger, Sellers and Fletcher, three houses, Sylvan Cliff; Whaley Bridge and Buxton Co-operative Society, branch premises, in Byron-street.

CAERPHILLY.—Proposals are being considered by the Glamorgan Territorial Army Association for the alteration and improvement of the drill hall premises at Caerphilly.

CARLISLE.—The T.C. Housing Committee has decided that, as part of the housing programme for the next two years, the offer of Messrs. J. Laing & Son, Ltd., to erect 300 houses be accepted. The B.S. has also been instructed to invite tenders for the erection of additional houses. Land at Blackwell is to be purchased for housing. Plans passed: Eight houses, Brunton-avenue, for Messrs. Benwell & Slack; four houses, Brunton-avenue, for Mr. E. J. Hill; two houses, Newtown-road, for Mr. H. E. Scarborough.

CHELTENHAM.—Houses are to be built in Swindon-road.—Plans passed: Bungalow, Old Bath-road, for Mr. W. Forty; house, Gloucester-road, for Mr. G. Day; bungalow, Gloucester-road, for Mr. T. Hough; three houses, Sydenham-road, for Messrs. Bendall & Sons; house, Old Bath-road, for Messrs. Bendall & Sons.

CONISBOROUGH.—The B.E. has approved of a proposal for the erection of a middle school and a R.C. school.

CROOK.—The U.D.C. has appointed a committee to go thoroughly into the question of a new town hall. The estimate for the scheme is £8,000.

CROWLE.—The U.D.C. are to confer with the Isle of Axholme R.D.C. with a view to a joint isolation hospital being erected for the district.

CROYDON.—T.C. approved plans: J. Midmer, 25 houses, Elgar-avenue; Young & Macintosh, six houses, Briar-avenue; Young & Macintosh, house, Grovelands-avenue; Young & Macintosh, four houses, The Chase, Norbury; Young & Macintosh, six houses, The Chase, Norbury; Young & Macintosh, two houses, The Chase, Norbury; Young & Macintosh, 25 houses, Green-lane; Thorn & Co., two houses, Ryecroft-road; Crowley Bros., 46 houses, Barmouth-road; W. G. Gratton, four houses, Westbourne-road; E. Inman, house, Addiscombe-road; Cox & Sons, two houses, Alton-road, two houses, Relief-road; J. P. Emmett, 12 garages and store, 57, South End; H. Dicksee, four shops with rooms over, London-road and Wharfedale-gardens; S. Suburban Co-op. Society, Ltd., warehouse and stable at rear of 69–71, London-road; G. H. Dales, six houses, Waddon Park-avenue; P. Richardson, three houses, Birchanger-road, South Norwood; P. Richardson, two houses, Limpfield-avenue; P. Richardson, 16 houses, Cedar-road; P. Richardson, house and shop, Meadvale-road; C. Midmer & Son, house, Ryecroft-road; F. Windsor, three houses, Denning-avenue; G. Poulton & Sons, house and garage, Plot 38, Shirley Church-road; G. Poulton & Sons, three garages, 16, 18, and 32, Shirley Church-road; Reith Bros., two houses, Birdhurst-avenue; H. E. Davey, house, Albert-road; The Universal Housing Co., house, Cargreen-road; Scratchley Bros., 17 houses, Grange Park-road; Coulsdon and Purley U.D.C., two houses, Brighton-road; Barclay Bros., house, Ryecroft-road; E. Law, house, Monks' Orchard Estate; A. C. Wright, two houses, Pampisford-road; A. E. Bates, 22 houses, Tenterton-road; J. T. Roberts, three houses, Brighton-road; H. Finlay, three houses, Clyde-road; A. E. Stent, 12 houses, Limpsfield-avenue; P. Richardson, 15 houses, Morland-road; P. Richardson, 12 houses, Beckford-road; W. G. Ingram, 11 houses, Virginia-road; C. Banks, six shops, Lower Addiscombe-road; C. H. Ridge, house, Northway-road; H. E. Davey, two houses, Canham-road, South Norwood; F. Jennings, cinema and dance hall, London-road, Norbury; F. G. Bex, house Bramley Hill-road; Young & Macintosh, house, Sydenham-road; two houses, Ashburton-road; R. Hobbs, Woodmere-avenue.

CUDWORTH.—The U.D.C. recommended to be erected on the Sidcop site. This wa and application is to be made to the M necessary sanction.

DAGENHAM.—Essex C.C. is purchasing a elementary school.—A caretaker's house erected, at a cost of £750, at Green-lane s

DEWSBURY.—The T.C. approved plans: house, Cowper-street; Mr. A. Ward, bun Common, Earlsheaton; J. E. Humphries, Wakefield-road site; Messrs. Booth . two bungalows, Wakefield-road site; Mrs. house, Wakefield-road site; William Gr Sons, warehouse, Providence Mills, Earls Cooper, bungalow, Chickenley-lane; Mirfi Co., Ltd., 10 houses, Bradbury-street, Rav

DONCASTER.—Plans have been prepared Spiritualist Church upon a site at the Wa of Baker-street. The cost of the building, to the seating accommodation, is estimated Messrs. J. Simmons & Son, of High-street, have prepared the plans.

DOUGLAS (I.O.M.).—Plans passed: Tw Thomode-road, for Mr. F. Douglas; bungalo road, for Mrs. Hobson.

DOVERCOURT. The Harwich T.C. has £1,500 mud wall scheme.

DUBLIN.—The Corporation passed plan boro'-road, house, for The Fingal Motor Tra Seafield-road, Clontarf, seven bungalows, Curran, Hunt & Co.; Howth-road, Clontarf for Miss Woods.

DUDLEY.—The T.C. has signed the cont houses and the work has been commenced. mittee has now under consideration a sche erection of 24 houses off the Claughton-road.

DURHAM.—The B.G. have agreed, subj approval of the M.H., to erect a number homes to accommodate children at pres Gilesgate Boys' Home and the Church-st Home, and also for some children in the loc tion.

EASTBOURNE.—The T.C. passed plans: house, Le Brun-road (S. Box, architect); W. H three houses, Brassey-avenue (F. C. Benz, a M. Hookham, seven houses, Penhale-road architect); Miss Carroll, house, Pashley-road Dennis & Ball, architects); Artizans' Dwel cottages, Roselands Estate (A. Ford, archite

FEATHERSTONE.—Plans passed: House fract-road, Purstow, for Mr. F. Wilby.

FINCHLEY.—Plans passed by U.D.C.: Eigh Brocklend-hill, for Messrs. Garsubil, Ltd.; Grove-avenue, for Mr. H. Clare; chapel and Great North-road, for Deacons of Soho Chapel; house, High-road, for Mr. W. S. house, Southway, for Mr. C. W. Petitt; thr Stanhope-avenue, for Mrs. A. Peake; tw Hendon-avenue, for Mr. Simmonds; Sunda Northway, for Garden Suburb Church; ho Hall Estate, for Mr. Stoke-Vaughan; tw Wildwood-road, for Mr. H. Lawrence; for Brunner-close, for Mr. G. Swanson; two ho End-road, for Mr. A. Leopold; six houses road, for Mr. W. Pigott; fourteen houses, l gardens, for Messrs. Cramb Bros., Ltd.; tw Bishop's-avenue, for Mr. Tomblin.

FOLKESTONE.—T.C. approved plans: M Riddell, house Avereng-road (Mr. A. R architect); Mr. E. J. Bishop, house, Gor (Messrs. Cowdell & Bryan, architects); Bromley, house, Welson-road (Mr. J. L. architect).—The T.C. propose to build a ne on what is known as the West Cliff House s

GELLYGAER.—A site has been obtained Penrhiwceiber and Matthewstown war me which the architect is Mr. T. Williams, Mon which is to take the form of a clock tower to at cost of £1,000.—The U.D.C. is to spend the erection of ladies' and gent's lavato modation at Bargoed.

GLASGOW.—A site in Avenue Park-stree purchased for the erection of a child welfar The City Engineer has prepared plans for and wash-houses, at Shettleston, and tende invited.—A report on the Glasgow subw indicates that an expenditure of £100,0 necessary, and it is recommended that Par powers shall be sought for the scheme, and made for a grant.—A bandstand is to be Bellahouston Park, at a cost of £4,000.—Th Hebrew Congregation is negotiating for Cromwell-road, for the erection of a sy A showroom is to be erected by the Gas in Victoria-road, at a cost of £2,600.

GLOSSOP.—Plans are to be prepared for footbridge in place of the existing Corona at Harehills.—A scheme for slipper baths is to be prepared.—A scheme for the conve closets and consequential sewerage has bee the cost being estimated at £5,500.

HARTLEPOOL.—The T.C. has received approval of plans for the lay-out of a numb at Howard-street, and the erection of si Union-road, at an estimated cost of £45 each.

HARWICH.—B.C. approved plans: Ho court, for Mr. A. A. Sage; two houses, Do Mr. H. Bradford; house, Stour View Est court, for Mr. Hawkins; house, Manor-r court, for Mr. E. E. Newton.

HASTINGS.—The T.C. has received a l the extension and completion of the ha cost is estimated at about £250,000, and to be borne by a private individual.

HECKMONDWIKE.—The Housing Comm U.D.C. have accepted tenders for the twelve houses on the Stubley Farm Estate architect, of Heckmondwike, has prepared

HEMSWORTH.—The M.H. have approved

* See also our List of Contracts, Competitions, etc.

a proposed new infirmary, and the
).C. has been instructed to prepare
s.—Plans passed by R.D.C.: Two
Shafton, and bungalow at Shafton,
The Surveyor is to prepare lay-out
on of 262 houses at South Kirby.
niences are to be erected between
Kirby Green.
ield, is to be purchased by the West
secondary school.
has approved plans: C. S. Burton,
d; Harrison & Whettingstall, for
Leicester-villas; F. M. Cashmore,
wford, house, Nizell's-avenue; F.
-detached houses, Leicester-villas;
H. W. Tingley, six houses, Modena-
r Messrs. Fisher & Bone, pair semi-
fallyburton-road.
. propose improvements to North
at £114,000.—Subject to arrange-
with the L.N.E.Rly. Co. for finance,
oposes to seek powers to construct a
on to replace the existing inadequate
imate is over £200,000.
C. approved plans: Seven lock-up
n-road for Hickman Bros.; six
n-road, for Mr. E. Cobb.
ns passed by T.C.: House, Malsis-
s Midgley; two houses, Oakworth-
n Laycock; house, Park-lane, for
house, Highfield-lane, for Mr. W.
Woodville-road, for Mr. W. D.
ouses, Grafton-road, for Messrs.
—Plans passed by R.D.C.: Ware-
ver Crest-road, Riddlesden, for Mr.
use building, Main-road, Riddlesden,
two houses, Main-road, Riddlesden,

site is to be purchased by the West
Council school.
ns passed by the T.C.: Pair of
for Mr. J. Medwell; house, Gay-
r. H. Winter; four semi-detached
for Messrs. Foreman & Sons; two
ses, Loke-road, for Mr. J. C. Horn;
d houses, Vancouver-avenue, for
use, Vancouver-avenue, for Mrs. F.

he D.C. have instructed their
re plans for the erection of public
ces on a site at the rear of the old

ations are now being conducted by
orities for the purchase of land on
hurch and a school at Crossgates.
n approved for the erection of a
the Compton-road site, and branch
y and Burley.
City Council is making application
rrow £24,326, the estimated cost of
es.
B.C. has applied for sanction to
purchase of a site at Llanerch on
new school.—The G.W.R. Co. is
nd at Llanelly on which to erect

ELL).—Plans prepared by the Sur-
ut of Manor Court Green have been
passed: Flats, Milton-road, for
re-building Royal Hotel, Boston-
wery Co.; house, Studland-road, for
nd Co.
HAM).—Plans passed by the B.C.:
12 shops with flats over, in Rendles-
& Jones, eight houses, Coniston-
ng, five houses, Hither Green-lane;
houses, Marvels-lane; Walker,
ee houses, Pearfield-road.
OUSE).—The Rev. F. Higley is
rovide a new Catholic church for

GTON).—Plans passed by the B.C.:
e-road, for S. Clough.
COUGH.—Plans passed: House and
for Mr. J. James; house, Great
frs. Burton; house, Great Bowden
s; house, Burmill-road, for Mr. J.
anville-street, for Mr. Gregory.—
o be sewered, at a cost of £400.
public convenience is to be erected
lm Estate.—Plans passed: Ware-
et, for Mr. F. Simpson; two houses,
r. G. Carter; house, Hawarden-
obson; house, Morecambe-road, for
hree houses, Bare-lane, for Messrs.
; six houses, Westminster-avenue,
; two houses, South-road, for Mr.
o houses, Sulby-grove, for Messrs.
two houses, Elizabeth-street, for
Atherton; bungalow, Elizabeth-
. Mitchell & Co.
D.—The E.C. has obtained per-
.E. for the purchase of school sites
nmouth. The Committee is also
C.C. to purchase about 10 acres,
am Grammar School, at £5,800.
Riding E.C. proposes to make per-
to the Grammar School, at a cost
E. has approved a site at Gawthorpe
an elementary school.
C. has suggested certain modifica-
r the erection of new buildings for
.—The U.D.C. is to erect 48 houses

approved by the T.C.: F. B.
onsdale-road; Summertown War
e, memorial hall, Portland-road;
the Training of Teachers, lecture
ardens.
—The C.C. is to repair the police
.—The Tenby T.C. is to prepare
John's Hill and Greenhill.
passed plans: Pearce Bros., four houses, Edgcumbe-avenue, Stoke; Mrs. Bence, bungalow, Row-lane, St. Budeaux; M. L. Finch, 24 houses, Lower Compton-road; W. H. Joce, four houses in new street, Hartley Estate; J. Congdon, two houses in new street, Hartley Estate; F. Mussel, 14 houses, Thornbury Park-avenue; Western Morning News Co., reconstruction of printing premises, Frankfort-street: W. R. Swiss, and T. F. Savage, two bungalows, Wolseley-road, St. Budeaux; J. Binmore, six houses, West Down-road; F. Westcott, six houses, West Down-road; A. D. Bickell, two houses, West Down-road; W. A. Heath, six houses, West Down-road; J. Ware, six bungalows, Wolseley-road, St. Budeaux; J. E. Deans, 14 houses, Belair-road; S. B. Burch, bungalow, Wingfield-road; C. A. Pope, garage, rear of 1, Woodland-terrace; J. E. Deans, four houses, Meredith-road; R. Bate, four houses, West Down-road, Swilly.

PLYMPTON.—The Devon County Architect is to prepare a scheme for the erection of additional rooms at the Council school.

PONTEFRACT.—Plans passed by T.C.: Bungalow, Engine House Farm, for Mr. J. W. Bywater; lock-up shop, Love-lane, for Mr. C. Johnson.

PORTISHEAD.—Plans passed: Bungalow, Bead-road, for Mr. Edwards; house, Nore-road, for Mr. Scott.

PREESALL.—Plans passed: Bungalow at Sandy-lane, for Mr. N. Kirkham. Application is being made by the District Council to the Public Works Loan Board for a loan of £2,000 for housing purposes.

READING.—Plans passed by the Corporation: Theatre, for the Reading Palace (Theatre) of Varieties, Ltd., Cheapside; Catholic Church, for the Bishop of Portsmouth, in Liebenrood-road, Reading; bridge, by Messrs. Sutton & Sons, in Abbey-square; 12 houses proposed to be erected by Messrs. Sheppard, Ryder & Taylor, in Kidmore-road and Uplands-road.

REIGATE.—The T.C.'s Borough Surveyor has been instructed to bring up a scheme for the erection of houses at South Park.

RIPON.—The City Council has adopted a lay-out for the erection of 32 dwellings in Bondgate.

ROCHDALE.—Plans passed by T.C.: Blake Motor Co., eight houses, Yorkshire-street.

ROTHWELL.—Plans passed by U.D.C.: Two houses, Haigh-road, for Ulyett & Greaves; two houses, Haigh-road, for Hanson & Rhodes; house, Ouzewell Green, for Mr. J. Hardwick.

ST. ALBANS.—The R.D.C. has decided to build 28 houses at London Colney. They also decided to build 12 houses at Tyttenhanger Green and 12 at Frogmore. The Council decided to advertise for tenders.

SCARBOROUGH.—The M.H. has sanctioned a loan of £3,000 being raised for the purpose of providing new public conveniences, on the Sandside.

SEGHILL.—The U.D.C. has approved of plans for the erection, by private enterprise, of 90 semi-detached houses on Seghill-road.

SELBY.—It is now proposed to proceed with a scheme for the erection of an elementary school, estimated to cost £14,500.

SHELTON.—The parishioners have taken in hand a big scheme of church restoration and renovation, costing £1,000.

SHIPLEY.—The Surveyor is to prepare plans for a smallpox hospital in brick and rough-cast.—The Surveyor is to prepare schemes for houses on land at Hurst Wood.—The Architect (Mr. Dawson) has prepared plans for a maternity and child welfare centre at the grounds of Somerset House, the cost being estimated at £4,750.—Plans passed: House, Carmona-gardens, for Mr. E. Dawson; two houses and shop, Hurst Wood-road, for Mr. J. Cooper; house, Glen View-road, for Mr. M. Driver.—The U.D.C. are to erect 180 dwellings in the near future. The site on which it is proposed to build the houses is situate on the Albert-road Estate.

SHITLINGTON.—A new school for 450 children is to be provided by the West Riding E.C.

SHREWSBURY.—The T.C. is to discuss with the C.C. the widening of the English Bridge and approaches.—Mr. John Vaughan, builder, Oswestry, who has the contract for 24 houses on the Sultan-road estate, has agreed to erect 46 others at a cost of £16,942.—Sir Chas. Nicholson, architect, has now prepared a scheme for the adaptation of the Castle as a Council Chamber and museum, at a cost of £3,500.

SIDCUP.—The U.D.C. are proposing a town-planning scheme.

SLEAFORD.—The U.D.C. is inviting Mr. W. H. Maxey to act as architect for the first instalment of the Drove-lane housing scheme.

SOLIHULL.—The D.C. has decided to apply to the M.H. for provisional approval to the erection of 150 dwellings, as follows: Solihull, 60; Tanworth, 32; Knowle, Balsall, and Lapworth, 12 each; Packwood, 8; Baddesley Clinton, 6; Barston and Elmdon, 4 each.

SOUTH KIRBY.—West Riding E.C. is purchasing land for a proposed school.

SOWERBY BRIDGE.—Plans passed: Two lock-up shops near County Bridge, for Mr. J. Sykes; mill at Mearsclough, for Mr. H. Spedding; and six houses in Hollins-lane, for Helliwell & Shaw.

STAFFORD.—The R.D.C. recommended that the Surveyor should repair the rock road at Hopton; that the re-surfacing of the Weston-road should be carried out by contract on receipt of the approval of the M.T.—A plan was submitted, showing the suggested improved line in the borough of Silkmore-lane, as approved by the T.C., together with the suggested continuation of this improvement through the area of the rural district, and it was resolved to co-operate with the T.C.—Plans approved: House at Hyde Lee, for Mr. J. Lamb; bungalow, Brocton, for Mrs. J. Wallace; house, Baswich-lane, for Mr. H. Pye.—Plans approved by the T.C.: Mr. G. J. R. Millington, house, Rowley Park; Mr. F. W. Heggs, house, Lichfield-road; Mr. H. W. Machin, house, Doxey; Mr. C. B. Cantrill, four houses, Queensville.

STANFORD-LE-HOPE.—A new R.C. school for 100 children is to be built in Southend-road.

STANLEY (YORKS).—Plans passed: Bungalow Potovens-lane, Outwood, for Mr. J. G. Hoole.

STOKE-ON-TRENT.—Plans passed by T.C.: Two houses, Princes-road, for Messrs. J. Grant, Ltd.; house, Trentham-road, for M. G. Wall; three houses, Lansdowne-road, for Mr. Gibson; assembly hall, Penkville-road, for Boy Scouts Association; house, Star and Garter-lane, for Mr. W. C. Tams.

STOKESLEY.—Plans passed by the R.D.C.: Bungalow, Tame Bridge, Stokesley, for Mr. G. Pagett; bungalow, Rudd's Banks, Yarm, for Mr. F. Dantry; house, Bridge-street, Great Ayton, for Mr. E. N. Hove.

STRETFORD.—The U.D.C. has received the B.E. approval for the erection of Gorse Hill Central School. Application has been made to the M.H. for sanction to a loan of £16,130 to defray the cost.—The M.H. has been asked to sanction the borrowing of the sum of £24,586 for the cost of erecting 50 houses and the construction of road and sewer works on the Seymour-grove housing site.—Preliminary arrangements are to be made in respect to the last instalment of 56 houses on the Seymour-grove site. Plans passed by the U.D.C.: Four houses, Halvis-grove, for Messrs. Halliday & Davies; 10 houses, Avondale-road, for Mr. George A. Russell; six houses, King's-road, for the Artistic Housing Co., Ltd.

SUNDERLAND.—The T.C. has empowered the Borough Engineer to proceed with the erection of 62 houses on the Spark Farm Estate.—Plans were passed for the erection of 40 houses by Mr. M. McGlynn, on a site adjoining Reginald-street, and it was resolved to apply to the M.H. for permission to borrow £4,800 for the necessary grants.

TADCASTER.—Plans passed: Bungalow at Owlett Hall-lane, Kippax, for Mr. Lawton; two houses at Horner-avenue, Scholes, for Mr. J. H. Moss.

THETFORD.—A concrete wall is to be made along the Little Ouse, at a cost of about £1,000.—Plans passed: Bungalow, Norwich-road, for Mr. Large.

TILBURY.—Land in Dock-road has been purchased by the Standing Joint Committee for the erection of police houses.

TYNEMOUTH.—The B.G. has purchased a site near Military-road, for the erection of a receiving home for children.—The T.C. has asked the B.S. to report as to the provision of conveniences at Tynemouth and Cullercoats.—The Electricity Committee proposes the erection of a sub-station.—Plans passed: Semi-detached houses, Kenner's Dene, for Messrs. J. F. Newbold & Co.; eight cottages, Alexandra-road, for Aged Mine Workers' Association; sixteen houses, Hunt Hill Estate, for Mr. J. Carruthers; six houses, Hawkey's Hall Estate, for Mr. G. Leck.

UPPER RENFREWSHIRE.—Plans approved: Double cottage, Roxburgh-circus, Cardonald, for W. M'Lean and C. Cormick; bungalow, Roxburgh-circus, Cardonald, for Mrs. Harper; public shelter and lavatories at Clarkston Toll, for the C.C.; eight terrace houses, Lochiel-terrace, Thornliebank, for the Calico Printers' Association, Ltd.; nine bungalows, Busby-road, Giffnock, for J. & J. Dixon; bungalow, Broadlie-road, Neilston, for J. Turnbull; bungalow, Commercial-road, Barrhead, for A. Logan; cottage, Linwood-avenue, Clarkston, for J. P. Campbell.

UPTON.—West Riding E.C. is to purchase a site at a cost of £924 for a school to accommodate 1,000 children.

WALTHAMSTOW.—Revised plans have now been prepared by the Essex County Architect for a secondary school for boys, with accommodation for 460, and estimated to cost £48,500.

WAYLAND.—The R.D.C. recommend houses as follows: Attleborough 4, Stow Bedon, 2, Watton 4, Rocklands 4, Great Ellingham 2, Old and New Buckenham 4, Banham 2, and Hockham 2.

WELLINGBOROUGH.—The U.D.C. passed plans for two houses in the Drive, four in Roberts-street, two in Melton-road South, and one in Highfield-road.

WEST HARTLEPOOL.—Application is to be made by the T.C. to the M.H. for sanction to borrow the requisite sum for erecting 161 houses on the Raby-road Estate.

WIGAN.—A B.E. inquiry is to be held into the application of the managers of St. John's Church for approval of a scheme for the enlargement of their day schools by the provision of additional accommodation for about 365 children. Application is to be made to the M.H. for a loan to defray the cost of the erection of new baths at Pemberton, in accordance with the plans submitted and approved by the Baths Committee. The question of the erection of a new pavilion in Mesnes Park is under consideration.

WOODFORD.—Plans passed by U.D.C.: Three houses, Woodville-road; two houses, King's-avenue; extension, mission hall, Beechcroft-road; three houses, Snakes-lane; two houses, King's-avenue.

WORTHING.—Plans approved by the T.C.: 24 houses, Ham-road, for A. Clare; four houses, Browning-road, for H. Hill; house, St. Lawrence-avenue, for F. C. Wentworth, by G. J. Norris; nine houses and seven garages, St. Botolph's-road and Tarring-road, for J. F. Collier; 32 houses to front a proposed extension of Leigh-road, for The Broadwater Building Co., Ltd., by H. F. Carmichael; three houses, Highdown-avenue, for J. C. Roberts, by E. J. Love; house, South-street, Tarring, for W. S. Nockolds, by T. R. Hyde; four houses fronting the west side of Shakespeare-road and the south side of Browning-road, for F. H. Butler, by J. E. Lund; house, Rowlands-road, for E. H. Tyler; 10 houses, Browning-road, for W. C. Butler, by J. E. Lund; three houses, St. Wilfred's-road, for Worthing Estates Building Co., by F. G. Abell; house and shop, Broadwater-road, for Miss Webb, by F. Slaughter; two houses, Chesswood-road, for H. Tier & Son, by J. E. Lund; house, Wallace-avenue, for P. Elliott, by J. H. Hockman, Ltd.; garage rear of "Sea Breeze," St. Valerie-road, for G. A. Little; two shops and house, Railway-approach, for H. P. Brazier, by A. P. Brazier; house, Parkfield-road, for J. H. Hayes, by H. M. Potter; house, St. Lawrence-avenue, for H. Harwood.

YORK.—The City Council approved a tender for erection of 300 steel-framed concrete houses at a cost of £139,297 10s., and it was decided to ask permission from the M.H. to borrow £146,262.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inqu

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose ..	9 15 0
Do. Bullnose ..	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick:—			
2½ in.	8 11 0	3 in.	10 3 0
GLAZED BRICKS—			
Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends ..	32 10 0
Headers	22 10 0	Two Sides and one End	33 10 0
Quoins, Bullnose and 4½ in. Flats	29 10 0	Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
⅜ in. Shingle for Ferro-Concrete	14 0	" "
½ in. "	15 0	" "
⅝ in. Broken Brick "	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

	£ s. d.
Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE.	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station London.	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4
HARD YORK—	
Delivered at any Goods Station London.	
Scappled random blocks Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags. Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	.... £32 0	3 × 6	.... £23 0
4 × 9	.... 28 0	3 × 11	.... 28 0
4 × 8	.... 26 0	2 × 11	.... 28 0
4 × 7	.... 26 0	3 × 9	.... 26 0
3 × 8	.... 24 0	2½ × 9	.... 26 0
3 × 7	.... 23 0	3 × 4½	.... 24 0
2½ × 7	.... 23 0	3 × 4	.... 24 0

PLANED BOARDS.

1 × 11 .... £34 10 1 × 9 .... £32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
¾	16/6
⅞	20/-
1	25/-

BATTENS

Inches	s. d.
2 × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 6
Dry Wainscot Oak, per ft. super, as inch	0 2 0 to 0 2 6
¾ in. do. do.	0 1 6 to 0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9 to 0 2 6
Cuba Mahogany	0 3 0 to 0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0 to —
American Whitewood planks, per ft. cube ..	0 12 0 to 0 14 0
Best Scotch Glue, per cwt.	4 10 0 to —
Liquid Glue, per cwt. ..	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
⅛ in.	16 10 0	⅝ in. to ⅞ in.	13 10 0
¼ in.	14 10 0	1 in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up.	Fittings. ½"to¼" inclusive.	Flanges ¾"&up.	Flanges ½"to¼" inclusive
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water ..	45 %	45 %	42½ %	55 %	52½ %
Red Steam ..	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas ..	35 %	40 %	37½ %	50 %	47½ %
" Water.	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0¾	3½d.
4 in.	1/4	1/1¾	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7¾	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2¾	3½d.
3½ in.	1/6½	1/2¾	3½d.
4 in.	1/7¾	1/4	3½d.
4½ in.	1/9¼	1/6½	4d.
5 in.	2/1¾	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1¾	1/8
2½ in. "	1/9¾	1/4	2/0½
3 in. "	2/1¾	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	..	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	..	2 8
2½ in. "	3 6½	2 5½	..	3 3½
3 in. "	4 2½	2 8	..	4 0½
3½ in. "	4 7	3 3½	..	4 8½
4 in. "	5 1	3 9½	..	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends stock angles. s. d.	..	Branches stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	..	8 10
4 in. " "	6 3	6 8	..	11 4
5 in. " "	7 6	11 6	..	18 2
6 in. " "	8 10	14 4	..	23 5

IRON—	Per ton in London. £ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	12 10 0
Hoop iron, basis price	16 10 0
" Galvanised	31 0 0
Soft Steel Sheets, Black—	
Ordinary sizes to 20 g...	14 10 0
" " " 24 g...	15 10 0
" " " 26 g	17 10 0
Sheets Flat Best Soft Steel, C.R. & C.A.	
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0
Flat and Galvanised Corrugated Sheets—	
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0
Sheets Galvanised Flat, Best quality—	
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0
Best Soft Steel Sheets, 26 g.	26 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0

METAL WINDOWS—Standard sizes suitab plete houses, including all fittings, p coats, and delivery to job, average pric to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	
NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s	
Old lead, ex London area, at Mills ..... per ton	32 0 0
Do., ex country, carriage forward ..... per ton	33 0 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

¾ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
29/-	45/-	76/-	153/-	246/-	51

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in
41/6	62/-	92/-	174/-	300/-	588

NEW RIVER PATTERN SCREW DOWN MAIN

¾ in.	¾ in.	1 in.
39/6	60/-	116/6 per d

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- p

NEW RIVER PATTERN CROYDON BALL VAL

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRAS SCREW.

	1¼ in.	1½ in.	2 in.	3
8 lbs. P. traps ..	33/-	41/-	56/-	10
8 lbs. S. traps ..	35/-	45/-	66/-	12

COPPER—	£ s. d.
Strong Sheet ....per lb.	0 2 3
Thin " .... "	0 2 4
Copper nails .... "	0 2 3
Copper wire .... "	0 2 4
TIN—English Ingots "	0 2 6
SOLDER—Plumbers' "	0 1 2
Tinmen's ..... "	0 1 4
Blowpipe ..... "	0 1 5

PAINTS, &c.

Raw Linseed Oil, in pipes .....per gallon	
" " " in barrels .... "	
" " " in drums .... "	
Boiled " in barrels .... "	
" " " in drums .... "	
Turpentine in barrels ..... "	
" in drums (10 gall.) .. "	
Genuine Ground English White Lead, per t (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms" "Park," "Supremus," "St. Paul's "Spedol" and other best brands 14 lb. tins) not less than 5 cwt. lots per ton deliver	
Red Lead, Dry (packages extra) ....per t	
Best Linseed Oil Putty .....per c	
Filocol .....per c	
Size. XD Quality ..... fl	

[*Continued on next page*

* The information given on this page has compiled for THE BUILDER and is copyrigh this list is to give, as far as possible, the of materials, not necessarily the highest or l and quantity obviously affect prices—a fact be remembered by those who make use of th

URRENT OF MATERIALS *(contd.)*

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
ıs ..	3¾d.	32 oz. ıourths	8¾d.
....	4½d.	32 „ thirds	10½d
ıs ..	5d.	Obscured Sheet, 15 oz.	4d
....	6½d.	„ „ 21 „	5½d
ıs ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d
....	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

ccording to size and substance for squares tock.

OLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
ate	4½d.
lled	5½d
lled	5⅞d
olled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large white	6½d.
, tinted	9d.
eet	6d.
lled Cathedral	5½d.
do.	7½d

late is same price as rough rolled.

VARNISHES, &c.

	Per gallon. £ s. d.
..... Outside	0 14 0
..... ditto	0 16 0
..... ditto	0 18 0
..... ditto	1 0 0
arriage ..... ditto	1 4 0
..... ditto	1 12 0
ı ..... Inside	0 18 0
per ..... ditto	0 18 0
abinet ..... ditto	1 2 6
latting ..... ditto	1 0 6
Oak..... ditto	0 18 0
rying Oak ..... ditto	0 19 0
arnish ..... ditto	1 0 0
..... ditto	1 2 0
..... ditto	1 12 0
Gold Size	0 10 0
apan	0 10 6
ogany Stain (water).....	0 12 0
ack.....	0 7 6
.....	0 14 6
ent)	1 5 0
Brush Polish	0 17 0
in Terebine.....	0 9 0
Enamel.....	0 7 0

Obituary.

occurred recently at the age of 47, Barnhill, of Mr. Robert L. Hardie, f Gauldie & Hardie, architects and undee.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Glasgow.—Various.—The following plans have been lodged with the Dean of Guild Court for approval: Eight houses, at Newlands, for Mr. John C. Lyle (architects, Messrs. Wilson & McGill, of Motherwell); 15 houses, at Crompton-avenue, Cathcart, for Southern Building Co. (architects, Messrs. J. J. Craig & Son, 219, St. Vincent-street); house, at Hatfield-drive, W., for Mr. Wm. B. Inglis, 261, West George-street; six houses on new road between Danes-drive and Northland-drive, for Scotstoun Estate Building Co.

Ayrshire.—Houses.—Plans passed: Five houses, 3 bungalows, and a semi-detached bungalow, all to be erected at West Kilbride; two cottages, at Kilwinning; bungalow, at Stewarton.

Hamilton.—Factory.—A site has been obtained in Almada-street, for the erection of a knitting factory, and plans of a building to accommodate 300 workers have been passed by the Dean of Guild Court.

Stirling.—School.—The Property Committee of the E.C. have received sketch plans from the architect in connection with the proposed school at Riverside, the estimated cost of which, according to the plans submitted, is £40,000. The plans have been forwarded to the Education Department for their observations, and negotiations are taking place regarding the ground with Stirling T.C.

Edinburgh.—Houses, &c.—Plans passed by the Dean of Guild Court: Six-flatted villas, at Willowbrae-avenue, for Thomas Anderson; residence for students of divinity, &c., for the Trustees of the Church of Scotland; bungalow, at Granton-road, for Mrs. Magdalene Wood Dickson, of McKelvie; house, at Ravelston-dykes, for George Roberts; seven bungalows, at Queen's-road, Blackhall, for Thomas Sutherland Henderson; eight houses, at Saughtonhall-avenue, for McKendrick & Co.; three houses, at Templeland-crescent, for Geo. Paterson. The City is to erect 926 houses at Lochend according to plans by the Director of Housing.

Gourock.—Club House.—The Dean of Guild Court has approved of plans for a new club-house of the bungalow type to be erected for the Golf Club.

Stirlingshire. — Additions. — Mr. Malcolm, architect, has submitted sketch plans showing alternately how the new accommodation required at Lennoxtown School could be provided, and the Property Committee of the E.C. of the County of Stirling has recommended that the reconstruction of the school and the additions shown be proceeded with, at an estimated cost of £4,517, and also that the architect be authorised to procure estimates. Mr. Malcolm also submitted plans showing how the accommodation at St. Machan's School could be provided, and the Committee recommended that these alterations and additions should also be proceeded with, at an estimated cost of £2,800. The recommendations were approved on condition that specifications be submitted to the authority before work is commenced.

Perthshire.—School.—The E.C. has sanctioned the erection of a joint school for Caputh and Spitalfield, for the Blairgowrie District Primary Schools Committee. The site will be midway between the two villages.

DOMESTIC WELFARE EXHIBITION

The Domestic Welfare Exhibition opened in the Kelvin Hall, Glasgow, on October 13. Probably the outstanding exhibit of the show is the steel house built by Messrs. Beardmore's, of Dalmuir, for the Duke of Atholl, which was inspected last Saturday by Mr. Wheatley's Advisory Committee. This is a four-roomed bungalow cottage, with scullery, bathroom, &c. The external walls are made of large steel sections, three-eighths of an inch thick, treated on the inner side with a preparation designed to eliminate sweating. The internal walls are composed of asbestos fittings with air spaces between the outer and inner walls. The asbestos walls may be painted or papered like an ordinary plaster wall. A special preparation having all the durable qualities of cement but warmer underfoot is used as flooring material. It can be made in any colour. Coloured tiles or slates are used for the roof. Another interesting exhibit is a full-size "lay-out" of a three-apartment house of steel construction.

The steel house was inspected recently by Miss Ritson, a member of the Scottish Board of Health, Mr. John L. Jack, Director of Housing of the Scottish Board of Health, and Mr. MacNiven, Chief Engineer to the Scottish Board of Health. After inspecting the bungalow, the official visitors expressed themselves as very well pleased with the house. Illustrations of this house, together with a description, are given in this issue.

Greenock War Memorial.

The unveiling took place recently of the Greenock War Memorial. It is of white granite, in the form of an obelisk set on a massive pedestal. At the base of the obelisk is the prow of a Viking ship, on the deck of which is a winged figure of Victory, while near the top of the obelisk a Celtic cross is inlaid in red granite, having on its face a Scottish two-handed sword. Messrs. G. Washington Browne, R.S.A., and Pittendrigh Macgillivray, R.S.A., were advisers to the local committee. The architects were Messrs. Wright & Wylie, and Mr. Alexander Proudfoot, A.R.S.A., was the sculptor.

DING TRADE WAGES IN SCOTLAND.*

ng are the present rates of wages in the building trade in the principal towns of very endeavour is made to ensure accuracy, but we cannot be responsible for errors eur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plumbers.	Painters.	Brick-layers' Masons' Labourers.	Plas-terers' Labourers.
....	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
....	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
....	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
....	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
....	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
....	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
....	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
....	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
....	1/6	1/6	1/6	1/6-1/6½	1/6	1/6	1/6	1/2	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
....	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
....	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
tern									
....	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

tion given in this table is copyright. The rates of wages in the various towns in England and

n page 615

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	„ „	7	6
Add if in floors 6 in. thick	„ „	3	6
Add if in beams	„ „	4	0
Add if aggregate 1 : 2 : 4	„ „	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	„	7	10	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	1	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	„ „	9	0
¾ inch on flats in two thicknesses	„ „	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	3

MASON.

York stone templates fixed	per foot cube	12	6
York stone sills fixed	„ „	21	6
Bath stone and all labour fixed	„ „	10	6
Portland stone fixed	„ „	19	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	„	80	9
Do. 24 in. × 12 in. Do. Do.	„	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	3
Do. joists	„ „	5	9
Do. roofs, floors and partitions	„ „	6	3
Do. trusses	„ „	8	3

	¾″	1″	1¼″	2″
Deal rough close boarding per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	„	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	„	1	6
Gutter boards and bearers	„	1	0

FLOORING.	¾″	1″	1½″	1½″
Deal-edges shot per sq.		49/-	58/-	67/-
Do. tongued and grooved „		54/-	65/-	72/-
Do. matchings „	45/-	55/-		
Moulded skirting, including backings and grounds per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	„ „	3	9

DOORS.	1½″	1¾″	2″
Two-panel square framed per ft. sup.	2/1	2/4	2/6
Four-panel Do. „	2/5	2/8	2/11
Two-panel moulded both sides „	2/8	2/11	3/2
Four-panel Do. Do. „	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

	1″	1½
Deal wrot moulded and rebated per foot cube		
Plain deal jamb linings framed per ft. sup.	1/8	1
Deal shelves and bearers „	1/5	1
Add if cross tongued „	2d.	2

STAIRCASES.

	1″	1¼″	1½″	
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	-
Deal strings wrot on both sides and framed	1/8	2/-	2/2	

Housings for steps and risers	e
Deal balusters, 1 in. × 1¼ in.	per ft. run
Mahogany handrail; average 3 in. × 3 in.	„ „
Add if ramped	„ „
Add if wreathed	„

FIXING ONLY IRONMONGERY (INCLUDING SCREW

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges	
Casement stays	1/2	letting in to floor	
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	per c
Plain compound girders	„
Do. stanchions	„
In roof work	„

RAIN-WATER GOODS.

		3″	4″	5″
Half-round plain rebated joints	ft. run	1/11	2/4½	3/
Ogee Do. Do.	„	2/4½	3/1	3/
Rain-water pipes with ears	„	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	„	1/11	2/4½	3/
Do. nozzles for inlets	„	2/2	2/7	3/

PLUMBER.

Milled lead and laying in flashings and gutters	per cw
Do. Do. in flats	„
Extra labour and solder in coated cesspools	each
Welt joint	per ft. ru
Soldered seam	„
Copper nailing	„

	½″	¾″	1″	1½″	2″
Drawn lead waste per ft. run	1/1	1/9	1/11	3/5	4/
Do. service „	1/8	2/2	2/7	3/10	
Do. soil „					3/
Bends in lead pipe each					
Soldered stop ends „	1/2	1/8	2/1	2/10	3/
Red lead joints „	11d.	1/-	1/3	1/11	2/
Wiped soldered joints „	2/10	3/6	4/-	4/11	6/
Lead traps and cleaning screws „				14/7	19/
Bib cocks and joints „	6/4	9/7	15/4	41/-	
Stop cocks and joints „	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard s	
Do. Do. Sirapite	„	„
Do. Do. Keen's	„	„
Add sawn lathing	„	„
Add metal lathing	„	„
Portland cement screed	„	„
Do. plain face	„	„
Mouldings in plaster	per 1 girt	
One-and-a-half granolithic pavings	per yard s	

GLAZIER.

21 oz. sheet plain	per foot s
26 oz. Do.	„ „
Obscured sheet	„ „
⅛ in. rolled plate	„ „
¼ in. rough rolled or cast plate	„ „
¼ in. wired cast plate	„ „

PAINTER.

Preparing and distempering, 2 coats	per yard	
Knotting and priming	„	„
Plain painting 1 coat	„	„
Do. 2 coats	„	„
Do. 3 coats	„	„
Do. 4 coats	„	„
Graining	„	„
Varnishing twice	„	„
Sizing	„	„
Flatting	„	„
Enamel	„	„
Wax polishing	per foot	
French polishing	„	„
Preparing for and hanging paper	per piece	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment c percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The w

information given on this page is copyright.

W CINEMAS AND PAVILIONS

nder of Messrs. F. Sandell & Sons, Approach-road, Worthing, has been n connection with the reconstruction rthing Pier Pavilion and Bandstand. hitects are Messrs. Adshead & 46, Great Russell-street, W.C., and ting engineer is Mr. Burnard Green, oria-street, S.W.1, whilst the quan- yor is Mr. J. J. Taylor, Little Col- , S.W.1.

nder of. Messrs. Bovis, Ltd., has ed by the Ilfracombe Town Council ection of a new concert hall in the Pavilion, Ilfracombe. Operations commenced immediately. The archi- Messrs. Frank Matcham & Co., 9, court, W.C.1.

ne is being discussed for the erection e hall and teashop with a balcony at Southport. Plans are to be pre- Messrs. Thomas & Wilkins, 30, -terrace, Southsea, at an estimated re of £75,000.

ndations of a large cinema at High- lihull, Birmingham, have been com- Mr. H. G. Bradley, 10a, Temple- ningham, is the architect, and the for building work has been placed srs. E. Garfield, Ltd., Perry Bar, am. Contracts are open for the fol- Fibrous plaster, decorative panel- coverings, terrazzo, compo, tiles, tiling, central heating, ventilating, ittings, seats, electric lighting and ronmongery and door furniture.

est Mitcham Improvement Associa- ose to erect a new hall at Colliers W.19.

sonic Lodge at Stroud, Glos, intend t the subscription rooms into a new hall. Messrs. Falconer, Baker & Amberley, Glos, and 27, Soho- V.1, have the plans in hand.

chley United Services Club, Ltd., of da," Ballards-lane, Finchley, N.12, ed a tender for the erection of a new at the back of the existing premises. s were commenced recently by C. F. Day, Ltd., High-road, N.17. The hall will measure ap- y 70 ft. by 26 ft., with dance floor ists' room, etc., the hall to be elec- ghted and heated, accommodating

Pavilion (Troon) Ltd." has been re- s a company with a capital of connection with the erection of a na, Mr. George Kay, Fairlie, Ayr- ng the architect. Plans are being

Taylor, F.R.I.B.A., is preparing the new theatre and cinema, which is ted on the site of the Old Market Aylesbury. The hall will be on the rinciple, and will seat nearly 1,000

ha is to be built at Wombwell. been submitted, the architect being astelow, of Leeds. The plans of A. Hinchcliffe, of Regent-street, for a new cinema theatre on the the old Hippodrome, Goldthorpe, , have been passed by the local Mr. J. T. Henshaw, 15, Rich- ce, Blackburn, will be architect for ed new Regent Cinema in King- ckburn. Plans for a new cinema dge have been prepared by Mr. yard, 60, Market-square, and work ng. Messrs. Bovis, Ltd., have the or re-building the New Gallery egent-street.

Mitchell & Telfer, 2, Randolph- Edinburgh, are architects for the um Cinema, Nalford-road, Edin- Messrs. Blackmore & Sykes, Scale- are proceeding with the work in connection with the building of a new cinema on the site of the old Theatre de Luxe. Messrs. Satchwell & Roberts, 53, Newhall-street, are architects for the new Capitol Cinema, West End, Birmingham. Mr. Bertie Crewe has plans in hand for the addition of a dance hall, stage, bars, and other attractions. Mr. H. G. Robson, Banforth-street, Sheffield, is the architect for the new super-cinema at Knifesmith Gate, Chesterfield. Mr. John Knight, 5, Cross-street, Manchester, has prepared the plans for the new cinema in Cheetham Hill-road, and work is proceeding. The proposed new picture theatre at Fitzwilliam, Wakefield, is being planned by Messrs. Garside & Pennington, Roper Gate, Pontefract. Mr. William Burrows, Leamington-on-Tyne, is preparing plans for a new cinema at Trockley, Newburn.

NEW COMPANIES.

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

Huckle, Ltd. (199,782). Registered August 7. Builders and contractors. &c. Nominal capital, £300.

Weldons (Bournemouth), Ltd. (199,888). Registered August 13. Builders, decorators, &c. Nominal capital, £500.

Gough's General Distributing Co., Ltd. (199,956). Registered August 20. Factors, manufacturers, dealers and agents for coal, iron, steel and cement, and all descriptions of building materials, &c. Nominal capital, £25,000.

Charles Brightman & Son, Ltd. (199,932). Registered August 15. Ebury-road Works, Watford, Hertford. Builders and contractors. Nominal capital, £10,000.

Condual Construction Co., Ltd. (199,908). Registered August 14. 3, Grosvenor-gardens, Westminster, S.W. 1. Builders, contractors, engineers, &c. Nominal capital, £2,000.

Lime Stone Brick Co., Ltd. (199,913). Registered August 14. 53, Dyke-road, Brighton. Brick and tile manufacturers and merchants, clay workers and potters, &c. Nominal capital, £2,000.

A.M.A. Portable and Permanent Building Works, Ltd. (199,822). Registered August 11. Northumberland-avenue, Laindon, Essex. Builders and contractors, &c. Nominal capital, £1,000.

Anglesey Stone Co., Ltd. (199,823). Registered August 11. Albert Buildings, 22, Preeson's-row, Liverpool. Quarry owners, quarry masters and merchants. Nominal capital, £10,000.

Hadsphaltic Roads, Ltd. (199,835). Registered August 11. 79, Mark-lane, E.C. Builders and contractors, road and pavement constructors, &c. Nominal capital, £10,000.

Modern Homes and Estates, Ltd. (199,982). Registered August 21. 28, Budge-row, Cannon-street, E.C. Builders and building contractors Nominal capital, £10,000.

Homelands, Ltd. (199,977). Registered August 21. 139, Cannon-street, E.C. 4. House and estate agents, architects, surveyors, and managers of property. Nominal capital, £5,000.

Rushden Brick and Tile Co., Ltd. (199,984). Registered August 21. Brick and tile makers, heretofore carried on at Rushden, under the style of "The Rushden Brick and Tile Co." Nominal capital, £4,000.

Frank Davies, Ltd. (199,994). Registered August 22. 245, Kingsland-road, E. 2. Auctioneers, valuers, surveyors, architects, estate agents, &c.

A. E. Farr, Ltd. (199,971). Registered August 21. 39, Victoria-street, Westminster, S.W. 1. Builders and contractors, engineers, &c. Nominal capital, £1,000.

A. C. Corringham, Ltd. (200,056). Registered August 25. Joiner, builder and contractor. Nominal capital, £1,000.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

BOURNEMOUTH.—For alterations and additions to "Woodcote," Gervis-road, for girls' high school, for the T.C. :—

*F. A. Grigg & Sons..... £6,375

(Subject to the B.E.)

COLNE.—For construction of reinforced concrete sewer, &c. Borough Surveyor, Town Hall, Colne :—

*Jas. Byrom, Ltd., Bury.

CREDITON.—Alterations and additions Grammar School, for Devon C.C. :—

‡Maben & Waldron £3,546 7

EDWORTH (BEDS).—For alterations to Edworth Rectory, for the Rev. R. W. Sparway. Mr. W. B. Stonebridge, Diocesan Surveyor, Bedford :—

Bailey & Co.	£930
Redhouse & Son	898
Ragan & Son	869
*H. Cope, Sandy	846

DURHAM.—For reconstruction of the Durham Castle western foundations :—

J. Thompson & Sons, Peterborough.

FOLKESTONE.— For additions to the Corporation offices :—

*O. Marx £1,795

GLASGOW.—For the completion of joiner, &c., works at Shettleston and Tollcross Hall, for the T.C. :—

*R. Gilchrist & Son £4,806 7 4

GLASGOW.—For widening bridge over London-road, for the T.C. :—

*William Taylor & Son £6,480

GLASGOW.—For the erection of houses at Hamilton-hill, for the T.C. :—

Mason and Brick Work—	
*John Taylor, Clydebank ..	£52,168 2 2
Joiner Work—	
*Samuel M. Stark.....	33,764 13 0
Slater Work—	
*William Walker & Sons ..	7,241 10 2
Plumber Work—	
*Hugh Twaddle & Son	26,550 5 11
Plaster Work—	
*David H. M'Kellar.....	8,331 12 3
Glazier Work—	
*John Wilson.....	834 7 4

GLASGOW.—Erection of pavilion at Bellefield Sanatorium, for the T.C. :—

Slater Work—	
*Steel & Campbell, Lanark	£1,078
Tile Work—	
*James Philip, Motherwell	844

HONITON.—For erection of 20 houses, for the B.C. :—

Pulman & Son (8)	£500 per house
E. A. Dodd (2).....	585 per house
A. J. Redfern (10)·	

ILFRACOMBE.—For erection of a concert hall, for the U.D.C. :—

*Bovis & Co.

KNARESBOROUGH.—For additions to the Infirmary, for the B.G. :—

Masons' work—	
C. A. Nettleton, Harrogate..	£1,864 5 0
Joiners' work—	
G. H. Carrick, Harrogate ..	507 0 0
Slaters' work—	
Luty Bros., Harrogate.....	107 7 6
Plumbers' work—	
Simmonds, Killinghall	210 0 0

LEEDS.—Extension of golf house, Roundhay, for T.C. :—

*Wood Bros. (Leeds), Ltd..... £1,658

LICHFIELD.—For erection of 20 houses, with sewers and water mains, for the T.C. Mr. P. A. Benn, F.S.I., Surveyor, Guildhall :—

*H. Dickinson, Lichfield £8,989

LITTLE WOOLSTONE (BUCKS).—For additions to the Church Farm House, for the Rev. H. W. Smith. Mr. W. B. Stonebridge, architect, Bedford :—

Wilford & Sons.....	£1,253
*P. C. Tary, Newport Pagnell.....	845

LONGBENTON.—For erection of 40 houses, for the U.D.C. Mr. W. Bean, Council Offices, Longbenton :—

J. W. Braithwaite & Co.....	£19,904 0 0
Jos. Oliver & Sons, Forest Hall	19,265 0 0
T. E. Ridley, "Oaklands," Gosforth	17,743 11 8
*Co-operative Society, Newcastle-on-Tyne	17,195 14 4
T. F. Dixon, Jesmond, Newcastle-on-Tyne	17 140 0 0

NORTHAMPTON.—For the T.C. :—
18 houses, B3 type—
*A. Glenn & Son £10,424
16 houses, B3 type—
*A. Glenn & Son 8,540
10 houses, B3 type—
*A. L. & H. W. Chown 5,304
12 houses, B3 type—
*A. Glenn & Son 6,440
12 houses, B3 type—
*A. L. & H. W. Chown 6,324
16 houses, A3 type—
*R. West 6,408


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WHITEWOOD, &c.
REGISTERED OFFICE AND WHARF
CARPENTERS RD.
STRATFORD
LONDON E.15
Telephone: EAST 3771 (5 lines)
Telegrams: GLIKSTEN 'PHONE LONDON.

PLYMOUTH.—For the erection of new porter's lodge and offices for the Plymouth B.G. Messrs. Thornely & Rooke, architects, Sussex-terrace, Plymouth :—
*The Plymouth Builders £1,406 6 8

PLYMOUTH.—For erection of a sub-station at Pasley-street, Devonport, for the T.C. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices :—
*A. C. Jones & Son, Plymouth..... £1,145

PORTSMOUTH.—Erection of golf club house, Eastern Parade, for T.C. :—
‡E. A. Sprigings £1,570 0
Tanner Bros. 1,574 0
L. Hoad 1,675 0
Humphreys, Ltd. 1,947 0
Light Bros. & Flowers, Ltd. 2,035 17

PORTSMOUTH.—Construction of underground convenience at golf course, for T.C. :—
‡J. Croad £1,550 0
E. A. Sprigings 1,570 0
Tanner Bros. 1,666 0
L. Hoad 1,757 0
Light Bros. & Flowers, Ltd..... 2,051 12

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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

No. 4264. OCTOBER 24 1924.

HOUSES AND POLITICS

NE of the only points on which those interested in housing can agree is that it should not be made a party question, and yet every time we get a general election—a contingency that is becoming distressingly frequent—we find speakers of all parties sing as a catch-cry. They all promise much the ng, they all draw attention to other people's housing nd all swear that they would do great things. There nuous policy that the public knows will be proceeded rdless of which side is in power.

analyse candidly the lines upon which the different n their housing. One party, broadly speaking, con- t housing must be left as far as possible free from nd that private enterprise must be encouraged in . This principle it carries to the length of permitting n of houses which may be and often are below the hat ought to be insisted upon in State-aided schemes. ren allow overcrowding, lack of light, and similar winked at, because by so doing a few more houses ed to the number of those built. This policy is fatal, ilding the wrong kind of house we are perpetuating the that we are supposed to be removing. If we cannot uate houses, we may be driven to build inadequate they must not be permanently inadequate. If, for re could build two temporary houses to last twenty e price of one that would last sixty years, there would ng case for building temporary houses. Again, it is to build houses in two stages, let us say, to roof with corrugated iron, and to slate or tile them at a but it never can be right to build permanent houses ther bad in accommodation, grouping or appear- s is the lesson the party must learn if its housing carry conviction.

no one can find fault with the attitude of another rds the housing standard, yet a programme that ovide houses at the low rental contemplated must to disaster. Such an interference with the natural events throws the whole housing market hope- of gear, creates a privileged class, and places a bility on the country greater than it can bear. A s programme" sounds very nice, but since everyone a future Government can, and probably will, close short notice, the whole benefit of continuity is lost. ontinuity could only be attained if the great parties ed to it and if it were of so practicable a nature blic could pin faith upon its realisation.

using plans of these two parties are completely and they both contain fatal weaknesses. Whether rty would be able to evolve a housing scheme that erection of unsatisfactory houses on the one hand gravation of uneconomic conditions on the other be seen, but continuity in housing progress can ired by steering a middle course—and this is never party undoubtedly realises the urgent necessity illed labour, for in its election manifesto it says: "It has long been obvious that the solution of the housing problem depends mainly on a sufficiency of skilled building labour being made available. Mr. Wheatley's Housing Act professed to deal specifically with this part of the problem. But no effective measures have been taken to train young apprentices or otherwise to increase the number of building craftsmen. Instead of its being possible to say that under the Wheatley Act progress in house building has been made, the fact is that fewer houses are now being begun than when the Government came into office." The policy of this party on housing is to insist that the reserve of unemployed labour should be utilised to build houses for the people.

We must compromise somewhere, and the best compromise would seem to lie in the adoption of devices that would render houses reasonably habitable for the time being, but would not prevent them from being turned into entirely satisfactory houses later on when we can afford it. We might perhaps make a more extended use of corrugated iron, which would, of course, be tarred or painted, as a temporary roofing material, and there are numerous other ways in which cheap and common materials could be used for the time being with a view to their subsequent replacement. But in toying with such a proposal we must keep steadfastly in mind the necessity of ultimately obtaining an entirely satisfactory house. We must not compromise over the sizes of rooms, eliminate bathrooms, or build too many houses to the acre, these unfortunately being the first points that strike some politicians in attempting to deal with the problem.

The use of carefully chosen temporary substitutes may well prove to be the key to our present difficulties, but such materials should be available or easily procurable everywhere, and should make no demand upon skilled labour. The inhabitants of Messina and the neighbourhood had recourse to corrugated iron after the earthquake, and in every part of the world it is found acting as a stop-gap, and often as a permanency in the absence of better material. It is, of course, vulnerable to extremes of temperature, but our climate is singularly free from extremes and a layer of tarred felt under the iron would take the edge off the cold.

Sooner or later everyone will have to face the truth that no party or combination of parties is going to give us adequate houses for the lower paid workers at reasonable rents; and the question, therefore, resolves itself into where to draw the line of inadequacy. If we are to avoid putting up permanently useless houses we must concentrate upon building houses in such a way that they will serve their purpose of relieving families from their present distress and at the same time will not be incapable of improvement in the future.

We shall do well to note the opinion of Major Barnes, the Vice-Chairman of the Committee recently set up by the Government to inquire into new methods of construction and new materials for building, in his article on p. 632: "I cannot help thinking that we have not yet exhausted or nearly approached the exhaustion of the supplies of those well-tested and time-approved materials heretofore classed as building materials."

NOTES.

Standardisation and Unemployment.

EVERY Party and most individuals are turning their attention to devising new materials and methods of building in view of the shortage of labour in the building industry, and standardisation is becoming to be thought the only cure which can be applied to overcome the present shortage of houses. The war affected the building industry as it did so many other industries, causing a heavy toll of men, but since the war there has been time, if there had been the will, to increase the numbers of those engaged in the building trade; the trade unions, however, have set their faces to limiting their numbers instead of augmenting them. Are the trade unions alive to the position they are creating? If new methods designed to save labour can be successfully introduced, do they think these new methods will cease to be employed directly the shortage is made up? Who can tell what will happen? But it seems a serious thing in any industry to create such an artificial shortage of men that labour saving or other methods have to be turned to. Unemployment is rife, and it seems an anomaly that restriction should be put on labour in any trade at such a time, but the restricted and protected industries should look a little beyond the immediate future and have regard to what may lie before them. In old times the operatives engaged in industry opposed even with violence the introduction of machinery, not having sufficiently far-sighted vision to see what the effect of increased output might be in increasing wages and trade, but the trade unions in the building industry are erring in the opposite direction—to secure what they deem necessary at the present time they are actually encouraging methods to be devised which may very well develop until their labour can be dispensed with. It is well that their attention should be called to what may be the ultimate result of their present action.

New Methods.

IT seems odd that a party at an election should adopt "new methods of house building" as one of the main items in an election programme, because one would imagine that everybody, of whatever political creed, would welcome any new method that promised to be successful. In the opinion of many, house construction has been so thoroughly explored in the past that some startling new discovery that will revolutionise the industry lies almost beyond the bounds of possibility. Those who argue thus hold that hard work is our only hope—a depressing thought, but probably a true one, the saddest part being that thousands who would be able and willing to work hard can get nothing to do.

Housing and Employment.

DR. ADDISON, in a speech at Hammersmith, maintained that it was impossible to overcome the housing shortage by private enterprise, and advocated a scheme run on the lines adopted by the Ministry of Munitions when there was a shortage of munitions during the war. That it should be possible for a desperate shortage of houses to exist side by side with a desperate degree of unemployment and dole-giving is an absurdity and argues that something is wrong. What? Is it organisation and co-operation that are lacking, or merely good will? Whatever may be wrong we cannot believe that a repetition of Ministry of Munition methods is likely to set matters right. It seems to be human nature that is at fault, because, while in theory there may be no flaw in Dr. Addison's proposal, in practice unquestionably turn out to b flaw.



Two Cottages at Rudgwick, Sussex.
(Restored by MR. MANNING ROBERTSON, A.R.I.B.A.)

Housing a Local Affair.

THE more one st housing question does one conclud should be a loc Any district that possessed ha men of position, endowed with and determination, who put energy into solving local difficult certainly succeed in doing so; with the help of the State subsi a fearful amount of drive and overcome the obstacles that a every turn—the price of land, t ings of everyone concerned, th of skilled labour and materials, as to the next change in our kal legislation all tend to make the housing enthusiast terribly disa

Every-day Architecture.

WE have receiv culars of an excel of articles by Mr. Robertson, A.R.I. "Every Day Architecture," w appearing in the *Home Reading* (National Home Reading Union Buildings, Adelphi, W.C.). The be six articles and the first has been considered with the interesting the lay reader in arc and we may congratulate magazine and the author of th on their good intentions. It that the lay reader should k some modern architects, too—t essence of architecture lies, no mentation (for an architectural may be, and usually is, simplic but it depends upon the qualiti portion, texture, and colour. satisfactory effects it is first of all that the designer of the buildi be interested and conscientiou work. It is the absence of thi during the nineteenth centu accounts for the lamentable resi do not expect fine and enduring from the man who is commis write thirty columns a month, carries out his task in the spirit through it somehow in order t money; neither can we ex architecture from the builder w care is to 'attract purchase neither the builder nor the know or care anything abo tecture."

Report of the British Institute of Industrial Art.

WE have rece Report of this from 1919 to 19 an account of its the date of its Its object is to the organisation bitions of industrial art and t standard of quality in it, linki with the activities of the a museums, and other institutio with art training. There is a



Cottage at Rudgwick, Sussex, after Restoration.

above illustration and that on p. 626 show two workmen's cottages which have tored by Mr. Manning Robertson, A.R.I.B.A., to form one residence. The builder is Mr. James Marden, of Rudgwick.]

t in regard to its financial s since the withdrawal of a grant. Since that time the has had to depend on public and an appeal is made to place ermanent basis. We have to be hen reading such an account Report gives of the extensive y of organisation which its include, to look at the other he picture. What has been its n "maintaining and raising" ndard of industrial art"? Art y is a difficult thing to encourage ays. Do we not owe improve- her to the direct initiative of e the Underground Railways, e so much improved on past of advertising? There is no t public and professional opinion l to believe most in the slow increased personal responsi- the manufacturer finding an nd profits, on the increased ss of the craftsman to art.

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of al g. It is no doubt true that the British Institute aims whole-heartedly to show the work of craftsmen and manufac- illustrate this higher aim and e their work and example—an enough in itself but one difficult , and amid which conflicting rvene to complicate the issue. t speaking here of the pressure cial interests or the detachment t craftsmen, who feel uncertain kind of stimulation for beauty, danger lying in such organisa- omoting the average at the cost , for the average, the good, is so nemy. Moreover, the minds of cautious of us are not able to nce for granted, however well that those who set themselves ique expert committees are the only judges of what is best. Is it, then, so easy to know the best and to recognise it when we see it? It would be a different world were it so. Herein lies the danger of so much of the organisation to promote art, and we confess to a preference for the little leaven. We do not say that these difficulties are altogether ignored by those whose trust in machinery is greater than our own, but it needs great conviction and disinterestedness to secure that the good is not encouraged at the cost of the best, that such movements do not consolidate the average at the cost of the more endowed.

The Permanent Collection. We have already referred in these columns to the permanent collection at the Victoria and Albert Museum, and of the difficulties it represents. On the face of it, it is somewhat absurd to confer the prestige of exhibition in a national museum in such unrepresentative ways. Though the exhibition is not without interest, it would be possible to fill ten times the space with exhibits but little less, and some much more, representative than those already shown. Is the Institute to be regarded as the "unique" adviser on an art the representation of which is so neglected? There are those who doubt whether art can be conjoined to modern industrial methods without great changes. It may be the Institute will help towards these changes. We should like to see it succeed and obtain the support that is necessary to carry on its work. But if it is to do so, it must be accompanied by an outlook holding the balance firmly between commerce and art, recognising that progress does not lie in commerce making use of art so much as in its conversion to the belief of the importance of art to life.

Unfair Restrictions We think Mr. Baillie Scott has done well to call attention to the connection between unemployment and the restrictions imposed by the trade unions. Why should not the unemployed find employment in building houses? we may ask. We all know the answer. It is because the trade unions will not let them. When so many are houseless and workless, how long would it take to train a man in the simple task of laying bricks? Why are we not allowed to do that? Because the trade unions will not allow it. Mr. Baillie Scott rightly says too much skill in building is a curse rather than a blessing. He says, "Is it not possible to remove the baleful and stupid tyranny from the most vital of our industries so that houses may be built for the houseless and work be found for the workless?"



From the Exhibition of the Royal Institute of Oil Painters.

"Over the Bridge." By Mr. Hesketh Hubbard, R.O.I.

GENERAL NEWS

Sheffield Society of Architects.

The Sheffield, Yorkshire and District Society of Architects and Surveyors commenced its programme for the coming session recently, when Mr. H. L. Paterson, the President, delivered his presidential address at Sheffield University.

Royal Academy of Arts.

The Secretary of the Royal Academy states that Professor Laurie's last lecture to the Royal Academy on Wednesday, November 19, at 4 p.m., will be on "Some English Cathedrals and Stone Decay" (instead of "Building Materials," as announced).

A Chair of Building.

During the recent vacation at Cambridge, mention was made of the project to establish a Chair of Building Science and Art at the University. The Institute of Builders is issuing an appeal to its members for £25,000 for this purpose.

Remembrance Day Report.

The Report for Remembrance Day, 1923, has just been issued. Over £259,000 was raised. The Report states that this year it is hoped, irrespective of politics, that all who are interested in the men who saved this country from the horror and degradation of defeat will render practical assistance to the Organising Secretary, Captain W. G. Wilcox, 26, Eccleston-square, London, S.W.1.

Trafalgar-square Subways.

The hoarding recently erected near the Charles I statue in Trafalgar-square indicates a commencement has been made with the improvements to be carried out, which include the construction of new subways for pedestrians. The subways will afford access from the south side of Charing-cross to the Underground station. Trafalgar-square Underground station is also to be entirely reconstructed.

Cast-Iron Houses.

At a recent meeting of the Sheffield County Council it was suggested that the possibilities of other building materials, especially cast-iron, be explored. The use of this would, it was stated, save the country millions of pounds, would set every foundry working, and would find a great deal of employment. It was claimed that houses could be built for £80 less than the Corporation was paying at present.

The Society of Architects.

At a special general meeting of the Society of Architects, held on October 16, Mr. Alfred John Taylor, F.S.Arch., of Bath, was elected President of the Society for the session 1924–1925, commencing on November 1. He succeeds Mr. E. J. Partridge, F.S.Arch., who served the office of President for two consecutive years, during the latter of which he took a leading part in the negotiations which resulted in an agreement for the amalgamation of the Society of Architects with the Royal Institute of British Architects, which it is anticipated will shortly be effected.



From the Exhibition of the Royal Institute of Oil Painters.

"Pont Aux Anguilles, Antwerp."

By Mr. Hesketh Hubbard, R.O.I

COMPETITION N

Barrow Hill Memorial Club.

Designs are invited for the extensi club. The total expenditure for and additions is not to be more th No payment will be made by the t drawings or plans (which will be submitted, but the accepted archite engaged to carry out the work. day, November 10. Particulars Secretary, 10, Station-road, Barrow

Jugo-Slav Competition for Landscape

The Department of the Board of received from the Legation of the K the Serbs, Croats, and Slovenes par an international competition open to architects, &c., for the submission designed for the elaboration of the ge of the Toptchider Park, near Belgra

The prizes for the best plans subm as follows:—1st prize, £400; 2nd pr 3rd prize, £200; 4th prize, £150; £100.

In addition, the sum of £250 is set the purchase of designs failing to sec

Plans must be submitted to the M Agriculture and Water, rue Prole M Belgrade, by December 31, 1924. the competition and plans of the pres may be obtained from the office of the at that address.

Master Painters' Organisation

An international travelling scholarsh value of £50 is to be awarded to appr the course of completing their appre with members of the National Fede Master Painters. Particulars, Mr. W 9, Albert-square, Manchester. For see p. 652.

Harrogate Infirmary Competitio

The design awarded third premium competition was submitted by Messrs. Pite and John S. Hodges as joint a 101 Great Russell-street.

The address of Messrs. Lancheste & Lodge, whose design is placed secon competition, is 19, Bedford Square, W not as given in our last issue.

Christian Science Church, Southp

Designs are invited for a new ch Sunday school at the First Church Scientist, Southport. Premiums of and £30 are offered respectively. The are Messrs. J. E. Sanders & Son, A 219A, Lord-street, Southport, to whom tion should be made, accompanied by a of 10s., returnable only to those wh designs.

Valletta Lay-out Competitio

Designs are invited for the lay-o open spaces and fortifications betwee and Floriana and those encircling Applications for particulars, with a £5, to be made to the Minister of Pub Public Works Office, Valletta, Malta, than December 1. Premiums of £1,00 are offered to the first and second c respectively. An indemnity of £10 awarded to three other designs sho spicuous merit. Sending-in day, Jun Conditions can be seen at this office

Other Competitions.

Other competitions still open u following (the dates given are, first the date, and second the issue of *The* which full particulars were given) Hall (May 1). Manchester Art Galler Aug. 22). Concrete Cottages (Oct. 31

VIEWS CONCERNING BUILDING

(With apologies to the memory of Samuel Butler.)

By JOHN ANGUS.

ere mention that five hundred years rewhonian manner of building houses the same as in our own country. f revolutions had cost the country s in blood and money. During that ouses were built, and a benevolent passed forbidding any increase in e consequence was astonishing, but ful; the shortage of houses increased, one would build. There had been a city of able-bodied, healthy men for urposes, and the leaders began to hemselves in conditions of living, viously, they had taken as a matter

portunity was ripe for doctrinaires their housing schemes maintained at expense. Building tradesmen ob- h wages, and the costs of building uch that people could not afford to without help from the State. The ns began to notice that wages and d according to the number of houses lt. If the scheme were a big one, ld go up; if it were reduced, prices in consequence. It was even hinted uilding trade embraced every oppor- encouraging these State schemes. s were blamed, and newspapers by giving various reasons for the , and warning their readers to watch of people who were taking advantage ation.

be seen that the Erewhonians are by the nose, and are quick to offer on sense at the shrine of logic. As s, they refused to build houses because too costly, so they must be built by There was a great number of un- in the country at the time, and the s, I understand, had predicted that ld be found for them in the building ut with the gradual advance of civili- the meantime, it was found that ons had developed to such an extent umber of men to be allowed to work lding trade was strictly limited, and mit was also fixed.

political party in the country was opportunity of dealing with the roblem, and it was noticed that the building programmes depended upon he deciding factor was sentiment or The Erewhonians were slow to at they were confusing their housing h the problem of how to give houses rkers. When the houses came to be it may be said that the classification kers" was not sufficiently careful, gan to be evident that if everybody ht to a State house no one had an over his neighbour. When the State ened with the responsibility of build- erybody it was realised that the costs much greater than if the individual his own house. It should be stated, s to the Erewhonians, that their had led them to believe that financial houses, paid by the State, were in the gifts.

he evil reached such a pitch that the e, and but for the prescience of a houses would have become as scarce ds. This was the same man, I was was responsible for an Act forbidding n of a statue to any public man or l he or she had been dead at least ed years. He succeeded this time an Act that buildings need not be what had commonly been known as naterials. The effect was instan- An engineer almost at once brought eme for a cheap metal house, and who had already brought cheap r the multitude to a state of per- w turned their attention to the simpler problem of designing a stationary article. At one blow the Erewhonians found that the whole of their labour and material difficulties were automatically settled. Costs of building with the old-fashioned materials and methods came down rapidly to meet the competition, but the development once begun could not be stopped. Traditional methods of building were abandoned, and the industry passed into other hands.

Having settled their housing shortage, the Erewhonians were loth to return to the early forms and methods of building. Amongst many people there was a certain amount of regret that this development should have arisen, but I understood from my informant that the majority considered the whole thing had turned out to be a blessing in disguise. The builders—or rather their tradesmen—had forced the issue, and the Erewhonians had no regrets about knocking on the head an art which had become a trade and then a monopoly. The Erewhonians, five hundred years ago, understood nothing of all this—I doubt whether they even do so now. They wanted to get houses quickly, and cheaply, regardless of the consequences. They came, in a roundabout way, to the conclusion that it was a mistake to build houses to last too long. Housing Acts were amended to keep pace with the great developments in the design and construction of houses, and no Act was allowed to operate for more than five years unless at the end of that time a jury of twenty-four men taken at random from the street pronounced in favour of its being allowed a second five years of life. So cheap were the houses that repairing was discouraged, and the result was, I am told, that the terrible problem of slum clearing was never heard of again.

The mass of the nation are well pleased with existing arrangements, and believe that their treatment of the problem leaves nothing to be desired; but there is an energetic minority, who hold what are considered to be extreme opinions, and who are not at all disposed to rest contented until the early forms of building are revived. I was at some pains to discover the opinions of these men, and their reasons for entertaining them. They admit that most of the old buildings that were abandoned were bad, but some few works were so good that architects of to-day wring their hands over some of the fragments that have been preserved in museums up and down the country. Nevertheless, there were parts of the scheme of which I could not comprehend the fitness, although I fully admit that this inability was probably the result of my having been trained so very differently. I sometimes wondered how it was that the mischief done was not more clearly perceptible. As for the actual houses, I cannot say that I was overmuch impressed with their appearance, although in every other respect they were most satisfactory. They were neat and business-like, but there was too great a uniformity in design to be altogether pleasing to one brought up in an English country-side. The thatched roofs, the mellow tones of the brick, and the stone mullioned windows were always a joy to me, and I cannot believe we should ever want to part with them.



From the Exhibition of the Royal Institute of Oil Painters.

"Haver Werf, Malines." By Mr. Hesketh Hubbard, R.O.I.

CORRESPONDENCE

Peace in the Building Industry.

Sir,—In view of the suggestion that the R.I.B.A. ought to do something and that up to now it has done nothing but wait to be asked, I would like to point out that after the war we took the initiative in forming the Building Industries Consultative Board, and it was much to our regret and that of the representatives of the operatives that the Board ceased to exist owing to the withdrawal of the employers. Again, when the Building Trades Parliament was formed without representatives of the architectural profession, we urged that representation of the R.I.B.A. should be provided for and, as a result of our representation, an amendment was made in the constitution and four representatives of the R.I.B.A. were added to the Building Trades Parliament. The fate of that body is, of course, well known. Within the last few months we have also been endeavouring to get the other parties in the industry to confer with us on the question of building labour and apprenticeship. We have so far failed to get them into a room with us—strikes and other things have intervened. It is all very well to say that the R.I.B.A. must insist on this or that, but if the other parties refuse, what are we to do? It cannot be said that we have not done our best. They are not to be forced.

Arthur Keen,
Hon. Secretary, R.I.B.A.

Sir,—I have read with interest the articles in your two recent issues, and I am generally in accord with the views expressed. I am of opinion that the present condition of the industry needs all the scientific and constructive brains available to restore it to the robust health it used to enjoy. The recent strike appears not to have improved the outlook; on the contrary, matters look to be even worse than before.

Clearly matters cannot remain where they are. There is a general feeling that the high cost of building work is in the main unwarranted. The public mind must be satisfied on this point. While I desire to avoid controversy regarding the handling of the industry, I cannot make myself believe that the best and most lasting results will be obtained, so long as certain sections only of the industry interest themselves directly in its welfare. During the past year I have on several occasions mentioned the matter of the representation of architects on a Joint Board to consider the welfare of the industry, and the suggestion has been warmly received.

It is to architects mainly to whom the public looks to safeguard its interest. Are we to fail them? If so, I venture to think we fail the industry and we fail ourselves.

I am convinced that the time has come when a much wider outlook and a broader handling of matters is essential. I trust the Council of the R.I.B.A. will give this vital question its urgent consideration, with a view to arranging a round-table conference of all parties concerned. If it succeeds it will deserve the gratitude of all concerned. To meet together on such matters is to create a greater understanding and a fuller appreciation of each other's point of view. Only in such an atmosphere, I am convinced, can good and lasting results be obtained.

Herbert A. Welch.

Civic Societies.

Sir,—I am very much interested in your Editorial for October 17, and it occurs to me that you may be interested in the enclosed pamphlet dealing with the old village of Northfield, near Birmingham, published by the Birmingham Civic Society in 1921.* While we have not carried our enquiry in this case so far as is suggested in the letter in the correspondence columns of your same issue, we have been actuated by the point of view which he stresses, and with which we are in entire sympathy.

In the case of Northfield, our effort was stimulated by the danger that this old village might lose much of its charm by the development of improved traffic facilities in the vicinity, and we, therefore, prepared a plan showing how present traffic needs could be accommodated not only without interfering with things as they are, but even providing an opportunity for adding to their attraction.

William Haywood,
Hon. Secretary.
The Birmingham Civic Society.

[*This brochure was reviewed in our columns on Sept. 16, 1921. As our readers know, the work of the Birmingham Civic Society has had good results, and we should like to see similar societies formed in other cities.—Ed.]

A Plea and Plan for an Annual World's Art Exhibition.

Sir,—Though art is universal, it would appear from the catalogues of the three leading art exhibitions in England, America, and France (the Royal Academy, the National Academy of Design, and the Salons) that few artists show their work regularly outside their own country.

This year in London we have had an opportunity of seeing at the British Empire Exhibition an interesting collection of modern British and Colonial art, and quite recently at Burlington House representative exhibitions of Australian and Swedish art have opened our eyes as to what is being done in those countries. The Royal Institute of British Architects have held exhibitions of Swedish, Dutch, and American architectural drawings, photographs and models; some of the provincial art galleries, like Brighton, periodically show modern foreign art. But all these exhibitions bear no relation to one another; they are irregular and ephemeral Some graphic art societies, like the Senefelder Club and The Print Society, regularly send their members' work across the seas, but they would be the last to claim them as national exhibitions, and they do not show foreign work in this country in exchange for the work they send abroad.

Is there no hope ever of seeing regularly in London the work that is being done by the best artists in other countries? I do not think it is possible for any existing society to materialise such a dream because no private society is thoroughly representative of a country—they are limited and handicapped by the very fact that they have members to whom they must give preference, to whom they have obligations. But is it quite impossible to form an international association with no subscribing members? What I feel is wanted is a competent permanent secretary in each country, yet in touch with some central headquarters in each country; a specially selected national committee, not necessarily of artists. In a central gallery in London, New York, or Paris an annual exhibition might be held—one room devoted to each country, as at the Venice International, the exhibits of each country being chosen by its national committee. In a word, is it not possible to have an annual exhibition of the art of all nations?

Just as every nation should be represented, so the exhibition should be shown in every country represented—if not as a whole, at least sections could be exchanged. After it had been shown in a few great cities as a complete exhibition it could be split up and the French section, say, could be shown in New York, and in exchange the American section shown in Paris; and so on—the exhibits thus being shown in many cities during the course of the year. The expenses might possibly be borne by each country concerned.

Now how could such a dream be ised? I would suggest it being start abridged form, say between two c and so developed year by year unti leading countries became participan if a start is to be made, why not America and this country? Extrac little contemporary American art is s here.

We have at this moment on view a ley one of the most representative tions of modern British art that assembled for a long time. Could th sent to America to be shown there u auspices of a specially appointed Committee who, in exchange, cou and send us a representative colle contemporary American art to be sh der the auspices of the Fine Art C of the British Empire Exhibition at (if it is to be opened next year) London gallery or museum such as that is to be opened next month at County Hall at Spring Gardens? our section already brought together; an impartial committee already in ex so now is the time to act. From wha heard from American artists they wo come the opportunity of showing th in London.

Architectural drawings and should, of course, be given as prom place in such an exhibition as pictu the public must be made to realise th tecture is the parent art on which depend.

The advantages to the artists co are, of course, obvious; but I believe scheme properly carried out would ha wider benefits. The exchange of su tesies between nations must surely foster better international feeling. W remember that artists are the une spokesmen of their nation, reflecting t of their age and country. To underst art of a country is a long way towards standing the country and its people.

Hesketh Hubbard,
R.O.I., R

THE ARCHITECTUR ASSOCIATION

The list of meetings and other gathe connection with the Architectural Ass for the 1924–5 session has now been issue Monday meetings for the session are as fo October 27, "Yesterday and To-morro H. S. Goodhart Rendel, F.R.I.B.A.; N 24, "A.A. Excursion to Spain," Mr. Lutyens, A.R.I.B.A.; January 12, "T neering Work at Wembley," Sir Owen W January 26, "The Architect as Des Furniture," Miss Margaret Jourdain; J 23, "The Lessons of Northern Archi Messrs. H. M. Robertson and F. R. Y March 23, "Architecture in Paintin Charles Marriott; April 27, Subject to b Mr. Fred Bramley; May 25, to be anno

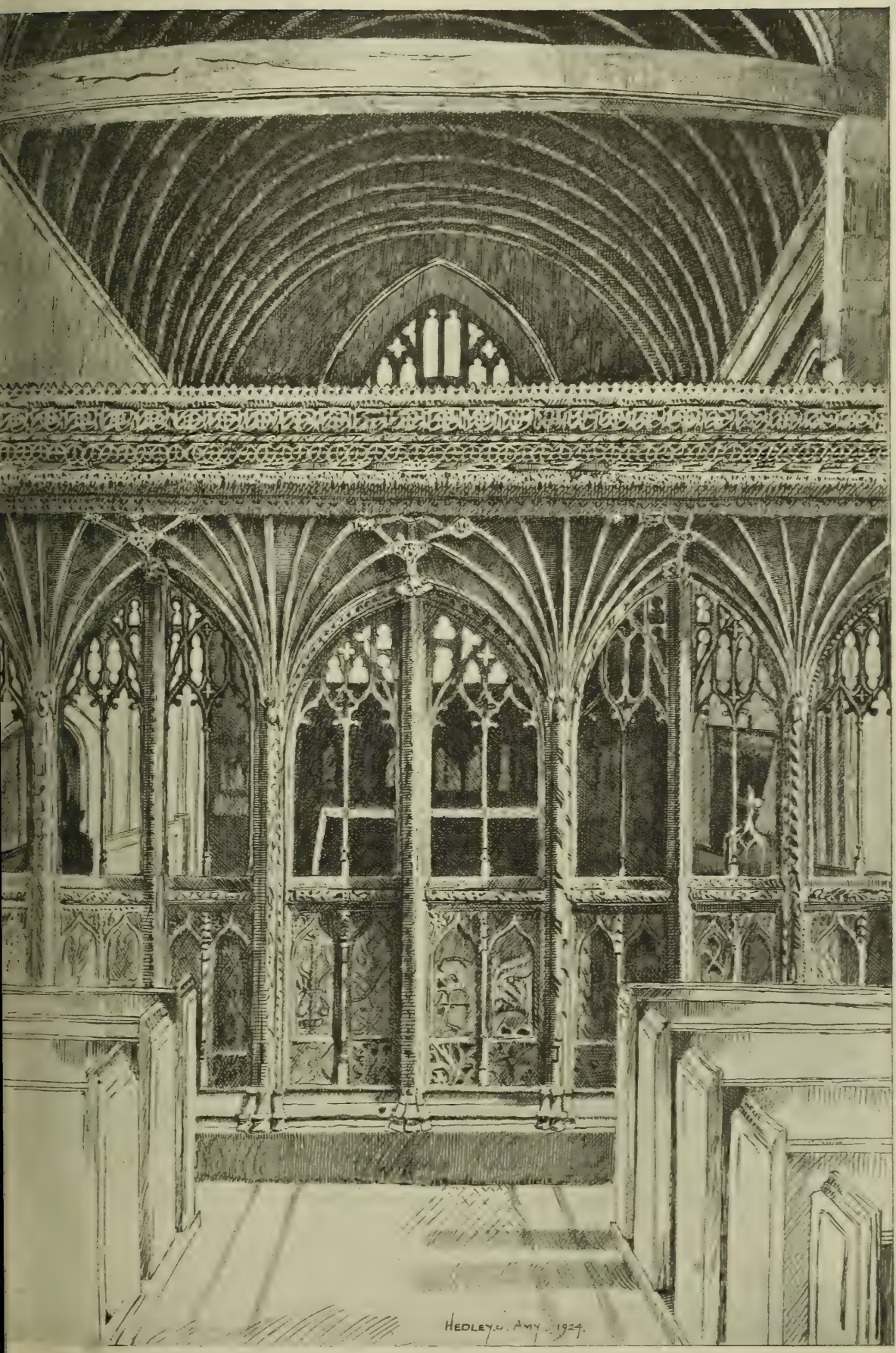
The Spring Visits will take place on 7, 21, and March 7, 21. The Summer May 9, 23, June 20, and July 4. The exhibitions (open from 10 a.m. to October 27, Members' Holiday Further exhibitions will be announce A.A. Journal.

MEETINGS

Monday, *October* 27.

Architectural Association.—Mr. H. hart Rendel on "Yesterday and To- 34 & 35, Bedford-square, W.C. 1. 7

Sir Frank Baines, C.V.O., will le "The Preservation of Ancient Monun Historic Buildings." Northern Polyte stitute, Holloway, London, N.7. 7



Old Oak Rood Screen and Beam (c. 1420) at Swimbridge Church, Devon.

From a Sketch by Mr. Hedley J. Amy, Probationer, R.I.B.A.

THE ARCHITECT, THE BUILDER, AND THE CLIENT

BY MAJOR HARRY BARNES.

THE Architect, the Builder, and the Client make what in another connection has been called the eternal triangle, and have some of the same disadvantages. The architect between the two may sing with Macheath, "How happy could I be with either were t'other dear charmer away." How happy the life with a host of clients who could be satisfied with designs without demanding execution; what bliss to build without the necessity to consult either the pocket or the taste of a client! Such joys are not for us, ours the more sober and less exhilarating task of satisfying the one and not disappointing too much the other. It is a difficult performance, and that it is so frequently accomplished we may assert is greatly to our credit—if we ourselves have said it. To both clients and builders I tender my profound respects. Without you we should be nothing—embryos *in vacuo*—without either impulse or medium, our castles would be built in the air, and our houses certainly not made with hands.

May I ask you, our clients, to join with us in considering for a little while, usefully I have no doubt, the business in which we become, if only temporarily, partners? This business of building is an ancient and honourable one. I know none which is more, or more likely to endure. I can imagine a society so stable that the lawyer found his occupation gone; so healthy that there was no place for the doctor; so virtuous that no priest should be there, but, while winds blow, rain falls, and sun shines, I cannot imagine the work of building at an end. There is a great canon of evolution that function precedes organism, and it may with equal truth be said that human need, desire and impulse precede the act of building. From this standpoint the client is the individual through which this need, this desire, and this impulse proceed to action. All a little abstract, one may say, but a proper apprehension of it will lead to very concrete results. If an art is to satisfy a need that need must be understood.

Oh, ye clients, if we are to satisfy your wants we must know what they are, and if this is to be so it would seem necessary that you should first know what they are yourselves. Let us get hold of that at the outset. The perfect building is not one which constrains and limits some human activity, but one which covers it as perfectly as the supple skin covers the rippling muscles of the athlete. If we are to design such buildings for you we must know what activities they are going to cover, what sort of human functions, industrial and commercial processes they are intended to house. This you will see is far from an abstraction; it is the intensest realism.

Building begins not with the laying of bricks and mortar, but with the correlation of muscular processes, and the sequence of connected acts. The design of a cowbyre is conditioned by no philosophical theory, but by the sheer naturalism of the physical structure and physiological processes of the animals occupying it, and that same sequential course of raw material and finished products will determine the correct design of the most extensive factory and mill. That being so, you clients must "get over to us," as people in America are supposed to say, your needs. Give us a chance; don't tell us you want a house, or a shop, or any other kind of building and expect us to know just all you mean by that. Building is not a guessing competition, it is worth a little foresight, a little self-analysis, a little analysis of the process in which one is engaged. We architects do become specialists and we can help you to types, but if you want what is individual to yourself or your occupation you must take some trouble to tell us what it is. That will take a little time on your part, and demand a little time on ours. Be patient, we really are remarkably quick in picking up what is meant, but it can't be done absolutely instanter. We shall try to convey to you what we understand you to want. On your part spend a little time to make sure we have really got hold of it. It will pay us both. Don't credit us with a superhuman faculty of intuition, we really haven't got it; most of us have nothing but a capacity, infinite or not I will not say, of more or less laboriously acquainting ourselves with our clients' needs. Some day, perhaps, you will be willing to make it possible for us to furnish you at the outset with the services of a new member of our staff who, for want of a better word I will call an "apprehender" or "comprehender," who will be at your pleasure for a sufficient period of time in your home, or your place of business, or your club, or wherever it is you want our services, to observe and note those special requirements of yours which we must meet if the building we are to supply you with is to fit you like your glove. Meantime give us what chances you can to become as intimate as may be with your desires, so we may escape at the end the complaint that this has been overlooked and that has not been foreseen.

There are other matters on which I may perhaps take advantage of this opportunity to bring before our clients in this impersonal way. Building, after all, is something which does concern in some of its aspects others than the three who are the subject of my pen; it is not entirely our own affair. The part of the building which presents itself to the public gaze may either add to or detract from the amenities of the area in which it is placed. We architects are sometimes charged with being more particular about the external appearance of our buildings than about their internal disposition. This charge I need hardly say is neither true nor merited, but it is one of the great parts of our task to endeavour to present the embodiment of the private necessities of our clients to the world in such a guise as not to be offensive, and in this part of our task I crave the co-operation of our clients.

I have no space in which to enter on a disposition upon æsthetics, or to attempt to solve the baffling mystery of proportion, line, texture and colour which in harmony make an object agreeable, and in discord make it objectionable. We must get rid of the feeling from which comes the expression, "it doesn't matter how it looks as long as it serves its purpose." There is no necessary divorce between beauty and usefulness. On the contrary, whether it can be exactly proved or not, there is little doubt that the more perfectly adapted an instrument is to its purpose the more beautiful it is likely to be. You must come to us then, not only with a sense of your requirements and your capacity to pay for them, but also with the conviction that in erecting a building you are permanently imposing upon public notice a spectacle which may be edifying and gratifying, or the reverse. To behave decently in public is not something which is to be confined to our speech or gestures, it needs to be extended to the clothes that cover us and the houses that shelter us.

In the eighteenth century, if not at other times, it was regarded as part of a polite education to have an appreciation of the fine arts. We shall certainly never achieve the building distinction we seek until you, our clients, be you private or public, approach us with an interest not only in the utilitarian objects which the buildings you contemplate are intended to serve, but also in the æsthetic value they may possess for the general culture of the times.

A note or two on building costs. The ideal expenditure of money is that which produces the largest result in quantity and the best result in quality, and at such results it is proper to aim. If I might offer one piece of advice to our clients on this matter it is that if to obtain the two is impossible, if sacrifice must be made, then let quantity be sacrificed to quality, and reverse nothing be done.

The hardest part of the architect's is the effort to fit the quart of accom into the pint pot of financial resource give the client all he would like to g money. Of that, may I say to ou don't press us to the makeshift and t tute. Be content as far as may be to requirements wait upon your resources, the limitations that the use of so struction and good material may imp you rather than fly to the expansio by flimsy and inferior alternatives. T be counsels of perfection it may be, aim at achievement of which both of be proud. You place in us much co you give us much power, you entrust position of much of your resources to relationship between us is peculiar and i we appreciate it all and would have it off by a completeness of understand sympathy, of which the building work w take together shall be the joint produ

Complete, however, as the understand be between architect and client, the re of their common interests rests large their common friend, the builder. I term "friend" advisedly, for buildin mere transfer of commodities which effected without any human nexus; i inter-weaving of services that can only their most and best if given in an atmos goodwill.

I can imagine some of the things member of the Institute of Builders mig and very usefully say, to the architectur fession, and with that in my mind, will from entering on any observations that offer the least excuse for recrimination are neither of us infallible or omniscien being human, do err. You builders co our offices and see our drawings, and the politeness which is native to you, kee opinion of them to yourselves. Well you however, and well we know it, that, if t to pass from paper to solid tangible it will only be by the application of yo perience, ability, and resource. Throug we get access to the craftmanship and ma that are to be embodied in our work design, but you execute, and on that exe how much depends. You have to bring your treasures things new and old if ou is to become what we want it to be.

I am not going to write anything abou tracts or specifications and quantiti certificates and penalty clauses. I would remind the builder that he is the keeper door through which both craftsmanshi material reach the work. If these are maintained at the highest standard, cannot be without your support. It i we should get behind the financial relati formed under a building contract and trate rather on the work that has to formed. We know very well of the diff you have to encounter in carrying o industry—the limited supply of labo materials, and the unprecedented dema both. To overcome these difficulties, d from the builder of to-day qualities an cities far beyond what was necessary predecessors. Labour disputes and a manipulation of the main building ma so as to produce price inflations, all m contractor's task an increasingly onero Of these I would say no more than to w a happy issue out of all your troubles.

What I would bespeak is a continu developing interest in the fostering o elements of our joint undertaking, the of the skilled craftsman, and the produ sound and artistic materials. It is not to comment on their absence, it req ensure their presence. If it be that system of apprenticeship is no longer priate to the working conditions of the i it is for the builder, perhaps more than a section of it, to be devising a new me producing the skilled workman. Don't difficult financial aspects of your crowd out these considerations. We m

workmen if we are to have good building, ood workmen are made, not born. It is for o take the principal hand in their making, ne only hand—in these days that is im-ble; there must be secured the co-operation e workman, and I am one of those who e that a common interest in the craft do much to ease the situation when the lt questions of wages and hours reach their ing crises.

regards materials there is also ground for eration. It is to all our interests—clients, actors, architects and operatives—to have undant and cheap supply of the best ials. Can we not unite to explore the ilities of securing this? We have a Board ilding Research, we have a Science Com-e at the Royal Institute; why cannot the parties in the art of building unite in a serious effort to discover new, or expand urces of supply? We architects can control roportions, the mass, the outline of our ngs, but for their texture and their colour pend and must depend on the quality of aterials that are available.

vice-chairman of the Committee recently by the Government to inquire into new ds of construction and new materials in or building, I have an open mind for all sals and am willing to take any new depar-that can be justified, but I cannot help ng that we have not yet exhausted or approached the exhaustion of the supplies se well-tested and time-approved materials fore classed as building materials. The e and colour of them at their best are as things of beauty and a joy for ever as any ever spun. Whoever has had the good e to see old brickwork and stonework that ot been exposed to a smoke and sulphur-atmosphere will endorse what I have said, as to wood, how it mellows with age and, cared for, takes on a bloom which might a nut-brown maid.

't let us divide the terms of art, and do uilders not let the architect reserve to f such terms as colour and texture, while you are content with cubic feet and square yards. Let us agree that building is not to be measured geometrically alone, but by those finer scales that will take into account not only the size, weight, and breaking stress of the materials employed, but also their surface values as they appear to the trained and cultured eye. Let us join to deliver the goods to our joint employer, the building owner.

But I hear a murmuring: "What of yourselves; are there no admonitions for architects?" Alas! for me, if anything I have written has sounded like admonition it arose from admiration out of experience; but I agree I should not round off my topic had I no word for our own ears. We architects are not unconscious of our own imperfections; are we not reminded of them in every building we pass?

I can well imagine that if our clients and our builders forgathered and discussed us our ears might burn a little. Still, we do well to remind ourselves occasionally what may properly be expected of us as we take our place in this trinity of building agents.

First, I think it is that every work entrusted to us deserves equal consideration, not in extent but in kind. There are no degrees in perfection and it is at perfection we must aim. After all, the number of small jobs must always far exceed the number of large ones, and if we are to get that elusive quality of charm into our villages, towns and cities, it will be on account of the work of those of us who live on the small commissions much more than of those to whom are entrusted the larger ones. It is not by size, not by cost, but by the love and care of the designer and craftsman that beauty is revealed. Let us put our best at the whole-hearted service of our client, whatever the depth of his pocket.

Then let us, too, not be found wanting in the civic spirit; there is a kind of team play wanted in architecture as well as in football. We must resist the people who want to control the artist in his work, but it is perhaps not too much to ask of the artist that he should control himself, if but a little. Don't let us disregard too much what stands beside our work; let us take a lesson from the designers of Bush House, which, rising like a cliff from the Strand, pays on its face the most delicate of tributes to St. Mary-le-Strand. Architecture is an engrossing pursuit, and leaves its devotees but little time from their devotions, but I cannot help hoping that a growing number of its practitioners may find some time to give to public duties, realising that the great art is to be served at the council table as at the drawing board, or on the work.

When we are seized of our client's needs and in the spirit I have indicated are engaged in their satisfaction, we might perhaps take our courage in our hands and tell him what he can have for his money and what he can't. It is perhaps not easy to be the chilling wind to his expectations and to nip them in the bud, but much of the dissatisfaction that does arise is due to the failure to face the facts and to convince our clients at the outset of what is a reasonable expectation to form of the provision their resources will afford. Perhaps we might even sometimes go beyond that and not only tell him the cost of providing for his wants, but also indicate to him which of those wants are real wants, and which are artificial or unsocial.

Such speech cannot be mere bluntness; it must be tempered by tact and guided by discretion, and based on the belief that only time is required to bring our client to the same conviction as ourselves.

Perhaps most of all we should be continually reminding ourselves of the great and exceptional confidence that is placed in us as a profession both by the client and the builder. In no walk of life is more implicit confidence placed in the probity of the human conduct of affairs. Great problems are entrusted us to solve, great resources to expend, and great discretion to exercise. Our opinion on many things is taken as final and our good faith accepted without question. These are matters that should make for humility, coupled with a determination to be worthy of our high calling and so to act that from client and contractor alike we may retain a confidence unimpaired.



Competition for a Memorial at Ottawa, Canada, to the Late Sir Wilfrid Laurier.
Design placed first. By M. J. Emile Brunet (of Paris).

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ILLUSTRATIONS

The New Zealand Memorial at Gallipoli.

The British Memorial at Cape Helles (previously illustrated in *The Builder*), designed by Sir John Burnet, A.R.A., R.S.A., marks the landing of the British Forces on April 25, 1915; the impressive New Zealand Memorial at Chunuk Bair marks the climax of the campaign.

The New Zealand monuments on other battlefields have been erected so that effect is gained at close quarters. At Gallipoli the work has been done with a view to obtaining the greatest effect at a long distance, and in designing the Chunuk Bair Memorial the architect, Mr. S. Hurst Seager, F.R.I.B.A., has kept in mind those who pass in and out of the Dardanelles, the great maritime gateway of Asia.

The monument is 45 ft. in height, 20 ft. in width at the base, diminishing to 13 ft. at the top. Its plan is in the form of a Greek cross; the buttress-like projections forming the arms of the cross face nearly to the cardinal points, so that in sunshine the southern buttress is illuminated throughout the day and throws its shadow within the bright outline of the monument, thus enabling it to be seen from a much longer distance than would otherwise be the case. The whole of the structure is of reinforced concrete faced with stone—a white, compact limestone from the Unger Dere quarry on the Peninsula. The surfaces of the stones are worked to a rock face. A magnificent view of the monument is obtained from the Ægean Sea, but there is very little traffic down this west coast of the Peninsula. Though the distance of the memorial from the eastern coast is greater, it can be easily seen from the decks of the many vessels which pass up and down the Narrows. It is also visible from Chanak, eight and a half miles distant.

Just below the monument is the Chunuk Bair Cemetery, where eight known and 856 unknown New Zealanders lie buried. The beautiful work in this cemetery—simple and dignified—has been designed by Sir John Burnet. Its ordered rows of headstones, the memorial cross set in the centre of the stone balustrade, the background of dark green trees and shrubs, all lead up harmoniously to the massive towerlike monument beyond—perfectly attuned to its setting and conveying its message to all those who pass to and fro on the highways of the sea.

The contractors were Sir Payne Galway & Co., who have carried out their work under the superintendence of the staff of the Imperial War Graves Commission.

Leicester Fire Station Competition.

We give this week the accepted design in the Leicester Fire Station Competition, by Messrs. A. E. & T. Sawday, F. & A.R.I.B.A. Mr. Stockdale Harrison was the assessor. The full result of the competition was given in our issue for February 29.

The site of the new fire station is on Lancaster-road. The station and the houses for the brigade will utilise all the front land from the railway to the bowling green at the corner of Victoria-road. Lancaster-road, now 40 ft. wide, is to have 20 ft. added to its width on each side, and the fire-engine house will be set back 40 ft. from the road, so that from the building line of the station itself to the other side of the road there will be a space of 120 ft.

The estimate for the scheme is £36,284. Plans were required for a fire station, houses for the chief and the first and second officers, and 37 cottages for the firemen. Provision is made for a square block of buildings of two stories, embracing the engine-house and administrative department and offices, on the front. The workshops and stores will occupy the ground floor in the rear. A large yard will divide the front from the back, enabling the engines, upon returning from a fire, to be driven along a carriageway south of the engine-house to the rear of the latter. The story above the workshops and stores will serve for a recreation-room and other offices.

Davyhulme Hospital Competition.

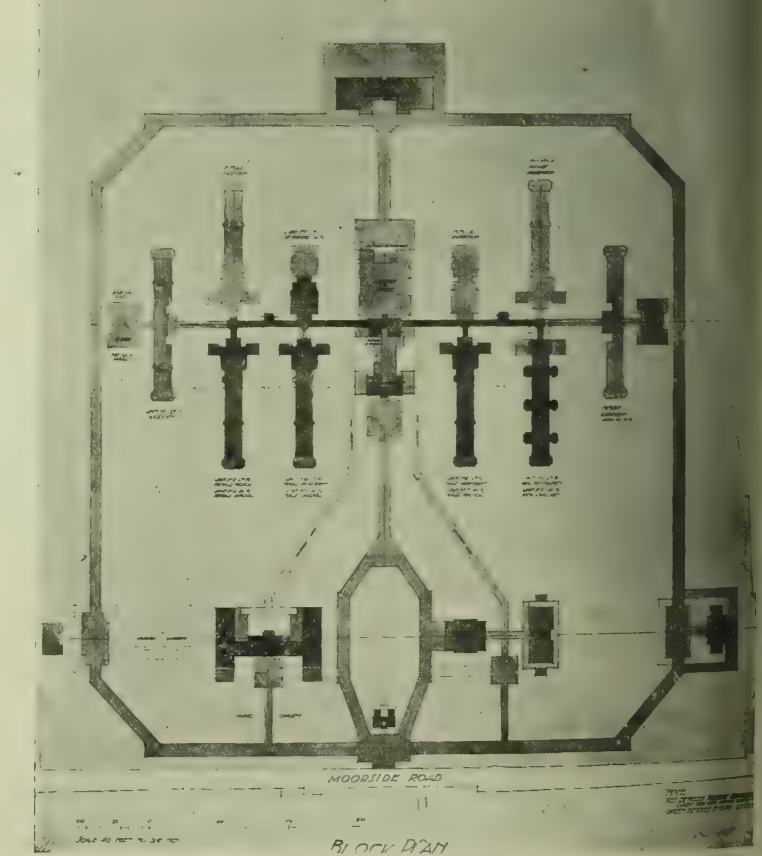
We give this week the designs placed second and third in the Davyhulme Hospital Competition, by Messrs. H. V. Ashley & Winton Newman, FF.R.I.B.A., and Messrs. Adams & Holden, FF.R.I.B.A., respectively. The design placed first, by Messrs. Elcock & Sutcliffe, F. and A.R.I.B.A., together with a review of the designs submitted, were given in our last issue.

"Greenbank," Chester.

"Greenbank," Eaton-road, Chester, w in 1820, in the prevailing neo-Grec style, typical painted stucco house of that peri interior decorations were strongly influe Soane, and the architect may have bee Harrison, who designed the County B and the Dee Bridge at Chester. Oppo was taken during some recent interior struction to remove the old painted stu to recoat with "Atlas White" cement, a gatehouse which provides accommoda two of the servants, and to erect new e gates and frontage walls. The gateho been built to the design of Professor R Liverpool University, and the entranc were designed and supplied by The Birm Guild, Ltd. The low pitch of the ga roof precluded the use of tiles or slates, roof is covered with sheets made of steel with bitumen and asbestos, manufactu Ellesmere Port, Cheshire, by the Wolverh Corrugated Iron Co., Ltd. The carrying the work and much of the planning h superintended by the owner, Mr. E. Peter and the interior decorations have been out by Messrs. Ashby Tabb, Ltd., Liver

Chiswick Baths and Washhouses.

In our description of this building in o issue we inadvertently omitted to sta the general contractors for the work we well-known firm of Messrs. A. Roberts Ltd., 74, Earl's Court-road, Kensington.



Davyhulme Hospital Competition.
Design placed Third: By Messrs. H. V. Ashley & Winton Newman, FF.R.I.B.A.

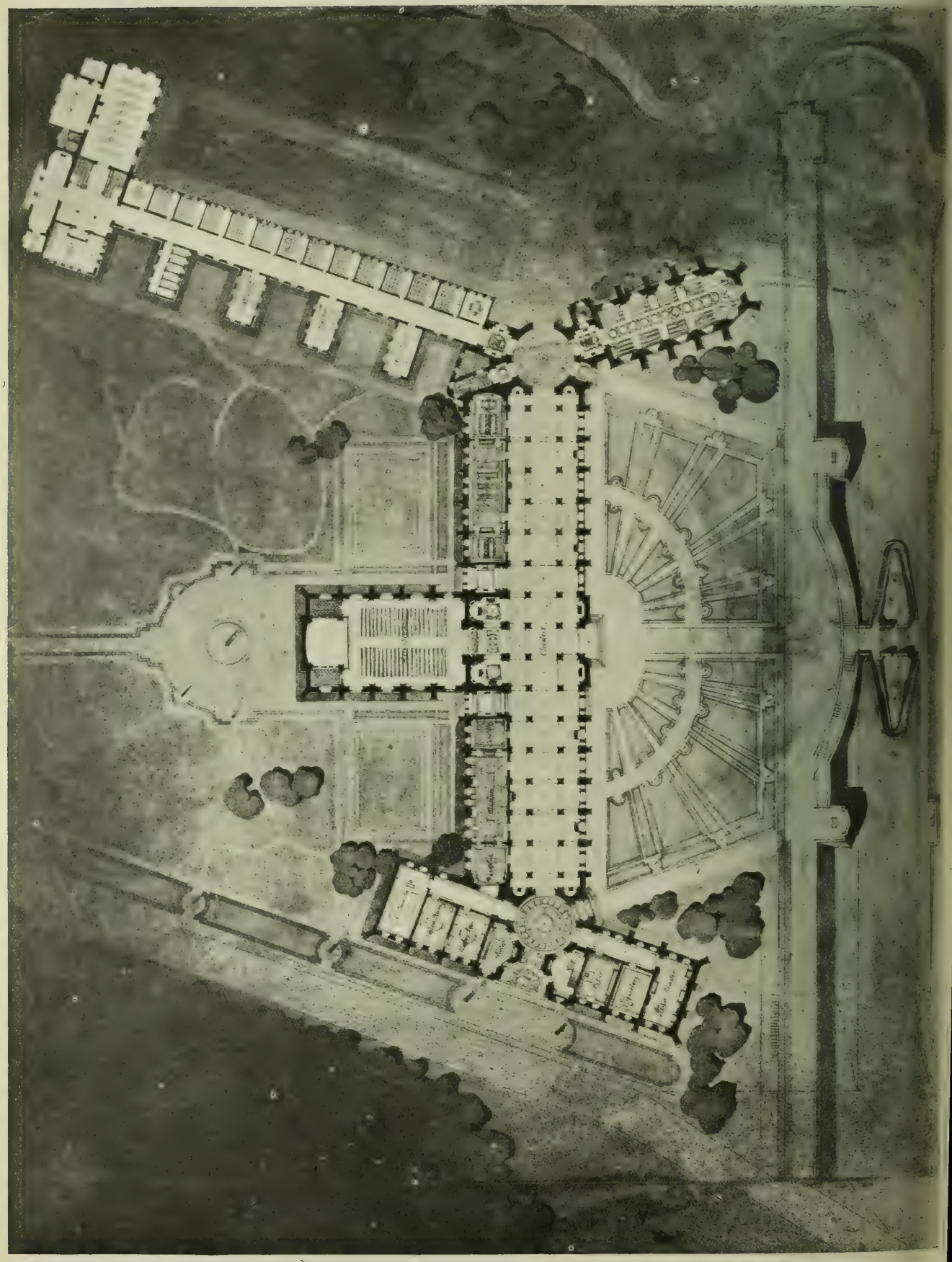




Society of Architects' Victory Scholarship Competition.

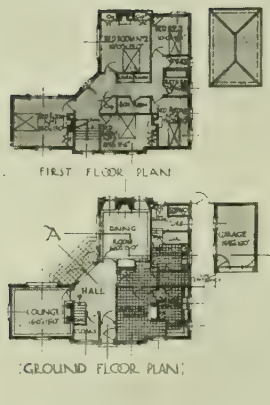
Main Group of Buildings for a Public School.

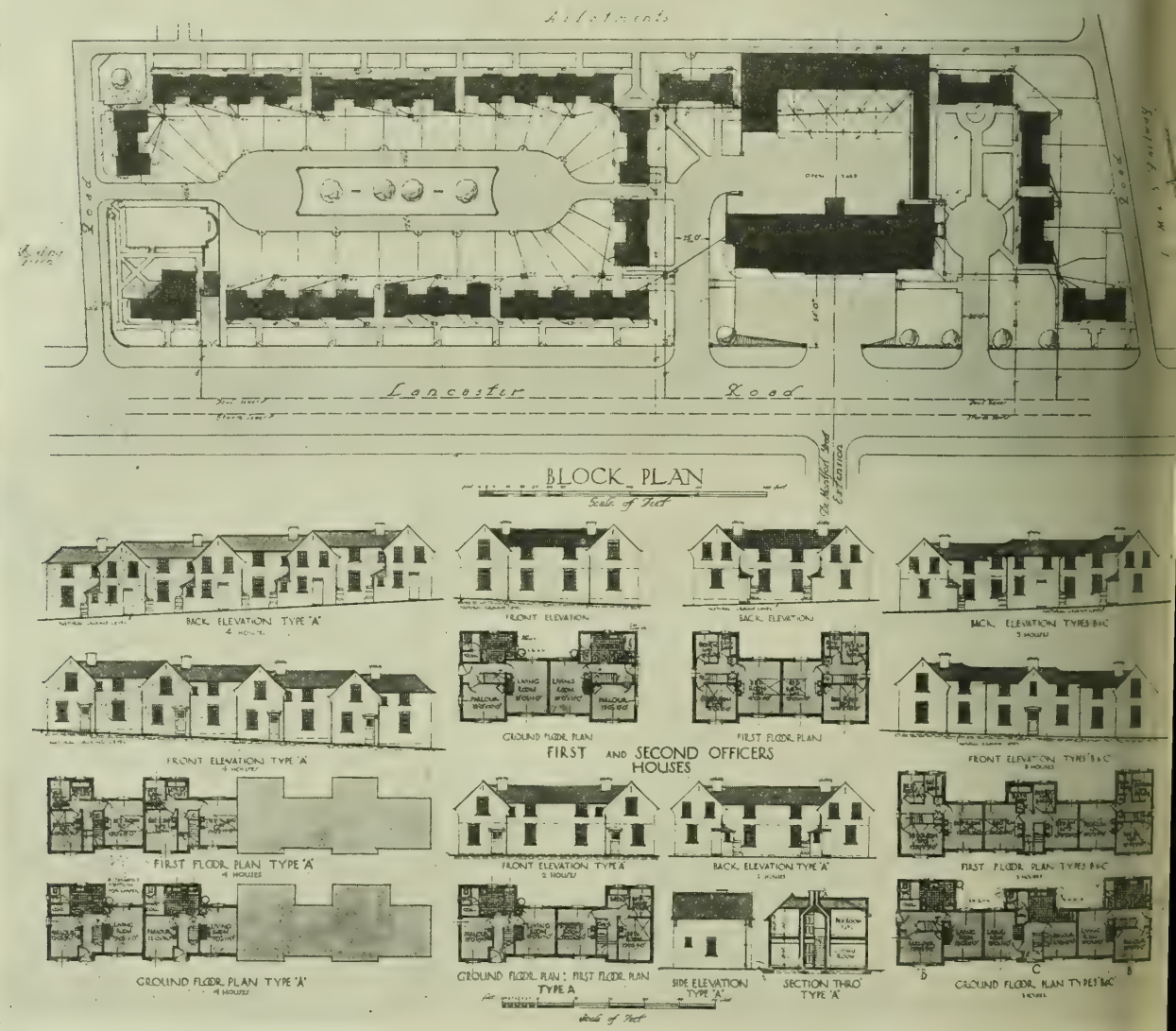
Design placed First: By MR. C. H. SHORT (University of London School of Architecture). (*See p.* 643).



CITY OF LEICESTER

FIRE STATION & HOUSES FOR FIREMEN.

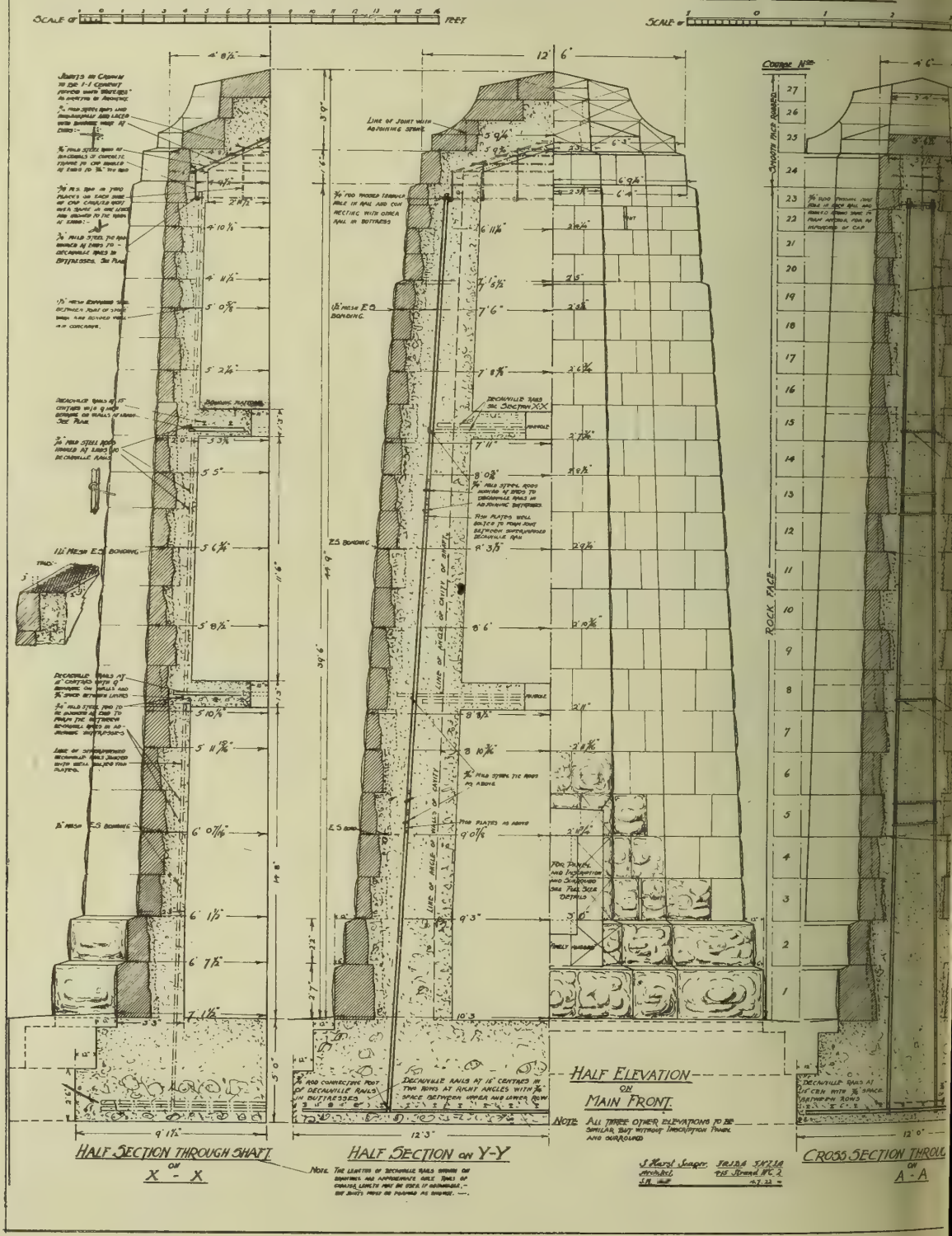




Leicester Fire Station Competition.

Design placed First: By Messrs. A. E. & T. Sawday, F. & A.R.I.B.A.

NEW ZEALAND MEMORIAL AT CHUNUK BAIR.



J. Hurst Seager, Architect, Wellington, N.Z. 1918

MR. S. HURST



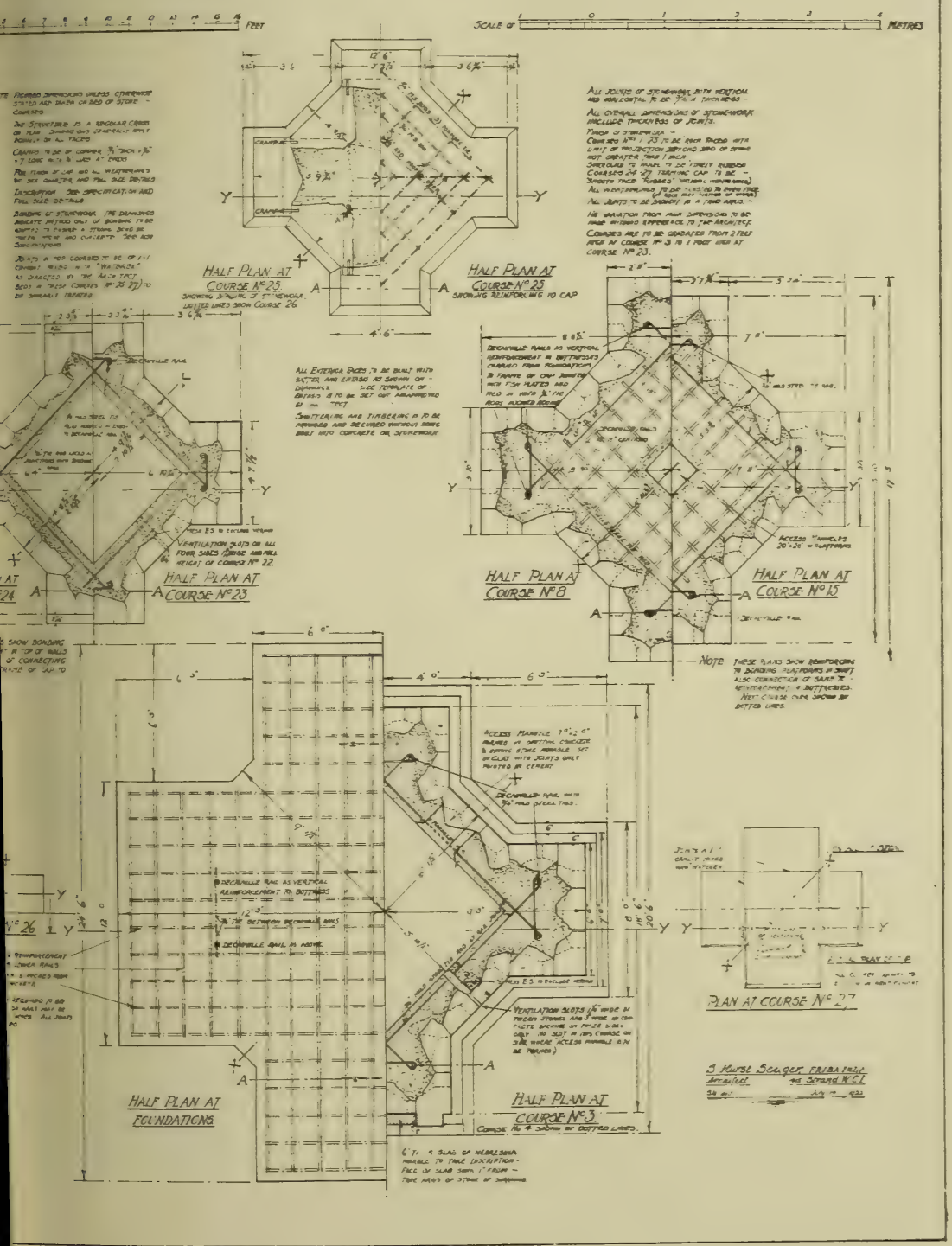
NEW ZEALAND MONUMENT AT GALLIPOLI.

MR. S. HURST SEAGER, F.R.I.B.A., ARCHITECT; SIR JOHN BURNET, A.R.A., R.S.A., ARCHITECT FOR THE CEMETERY MONUMENT.



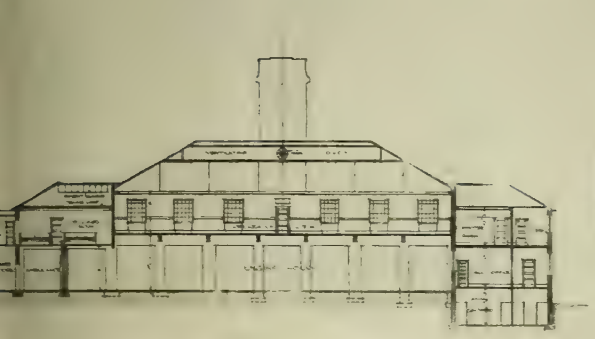
NEW ZEALAND MONUMENT AT GALLIPOLI. MR. S. HURST SEAGER, F.R.I.B.A., ARCHITECT.

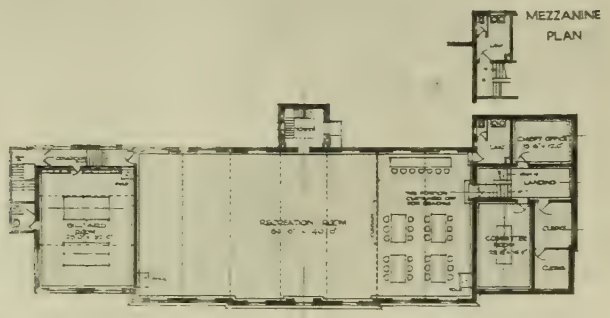
(VIEW TOWARDS SUVLA BAY, AND SHOWING ON THE PLAIN ONE OF THE MANY CEMETERIES IN THE ANZAC AREA.)


Scale of Feet
Scale of Metres
HALF PLAN AT COURSE No 23
HALF PLAN AT COURSE No 25
HALF PLAN AT COURSE No 23
HALF PLAN AT COURSE No 8
HALF PLAN AT COURSE No 15
HALF PLAN AT FOUNDATIONS
HALF PLAN AT COURSE No 3
PLAN AT COURSE No 27
NOTE
J Hurst Seager FRIBA
Architect

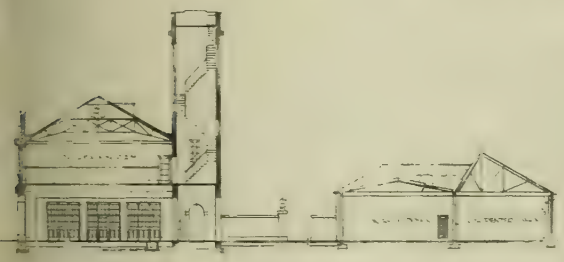
CITY OF LEICESTER.

FIRE STATION & HOUSES FOR FIREMEN.





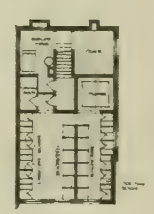
FIRST FLOOR PLAN.



SECTION



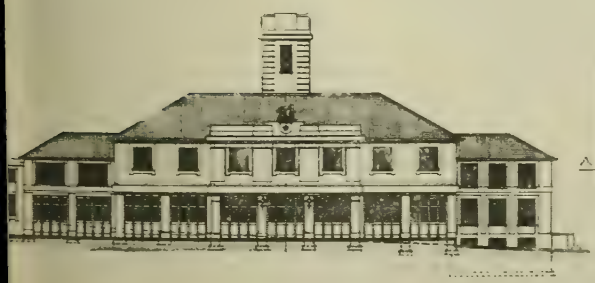
ELEVATION OF ADMINISTRATIVE BLOCK.



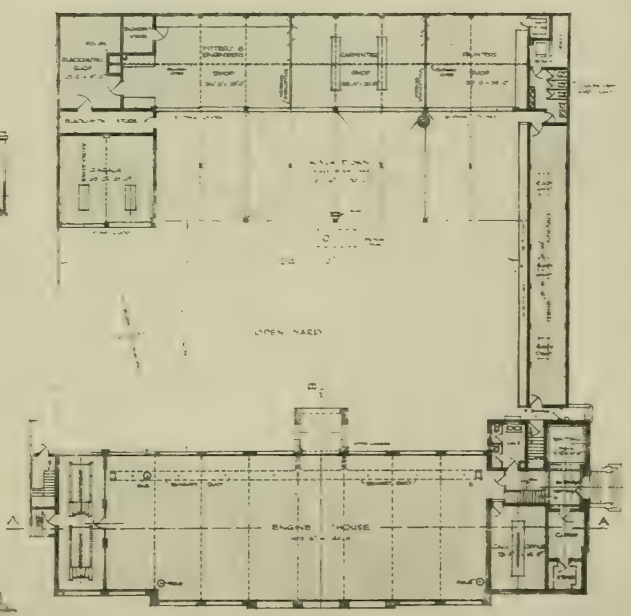
BASEMENT PLAN



ELEVATION TO



ELEVATION TO LANCASTER ROAD.



GROUND FLOOR PLAN



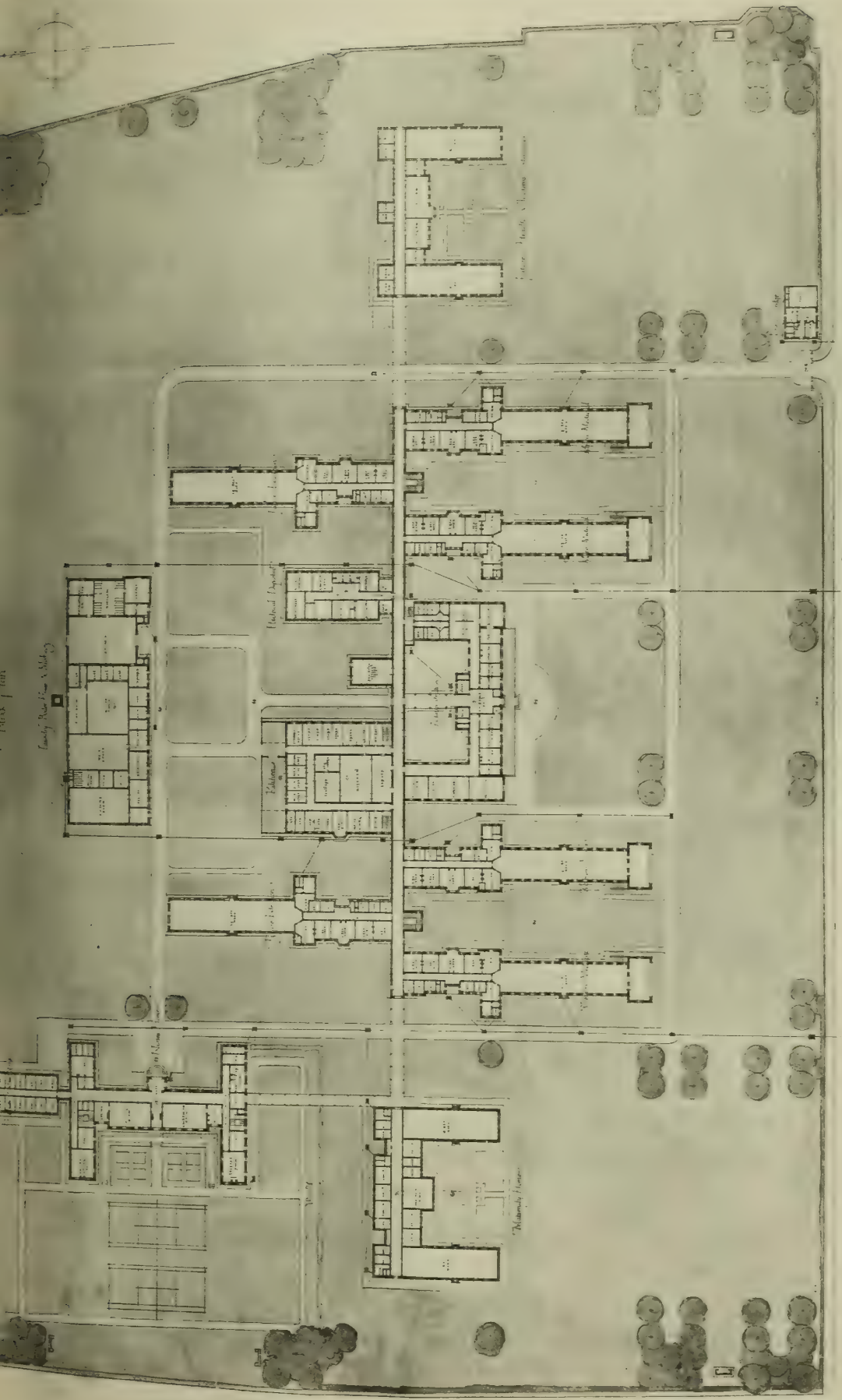
Leicester Fire Station Competition.

Design placed first: By Messrs. A. E. & T. Sawday, F. & A.R.I.B.A.

Leicester Fire Station Competition.

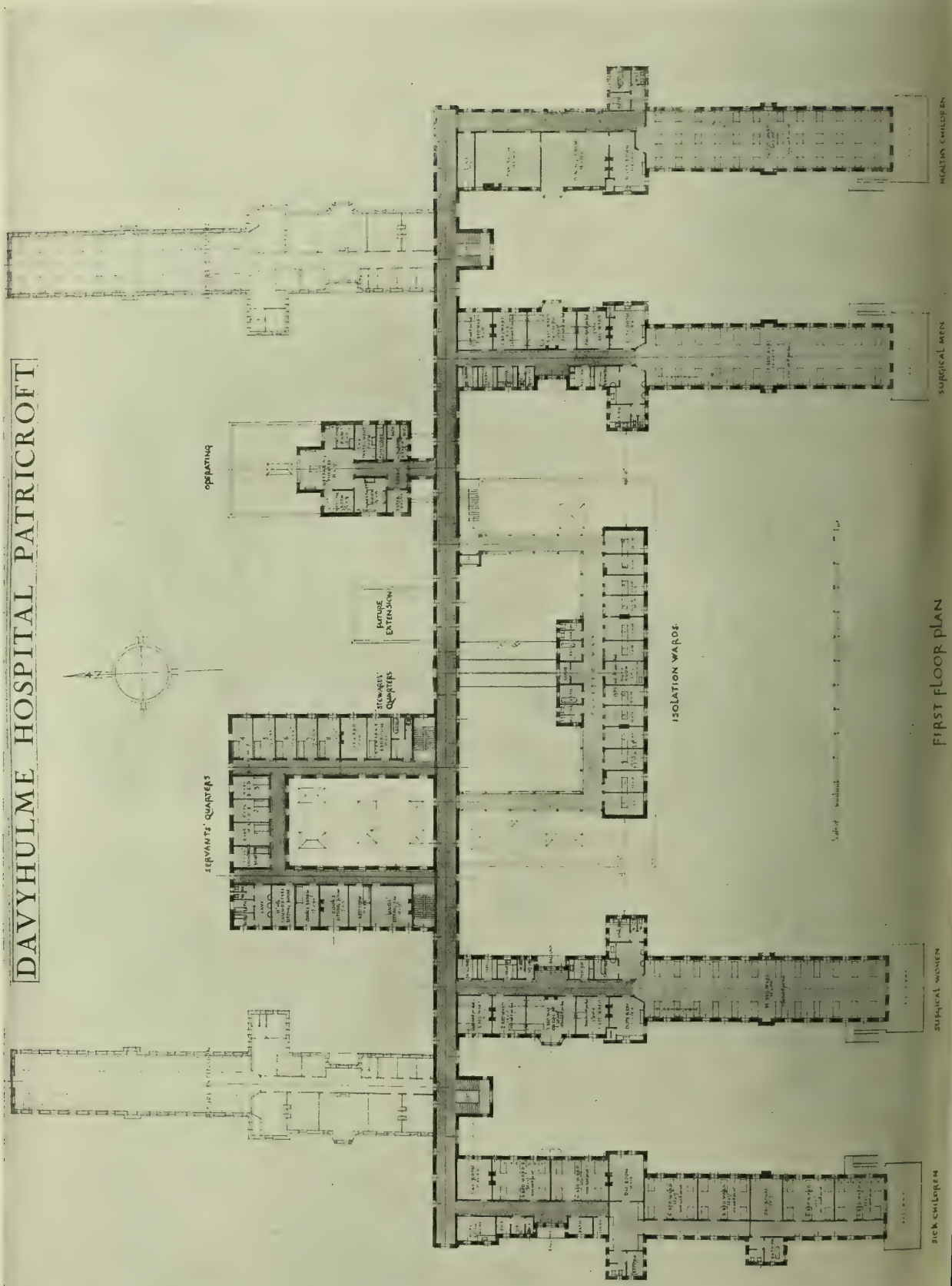
Design placed First: By Messrs. A. E. & T. Sawday, F. & A.R.I.B.A.

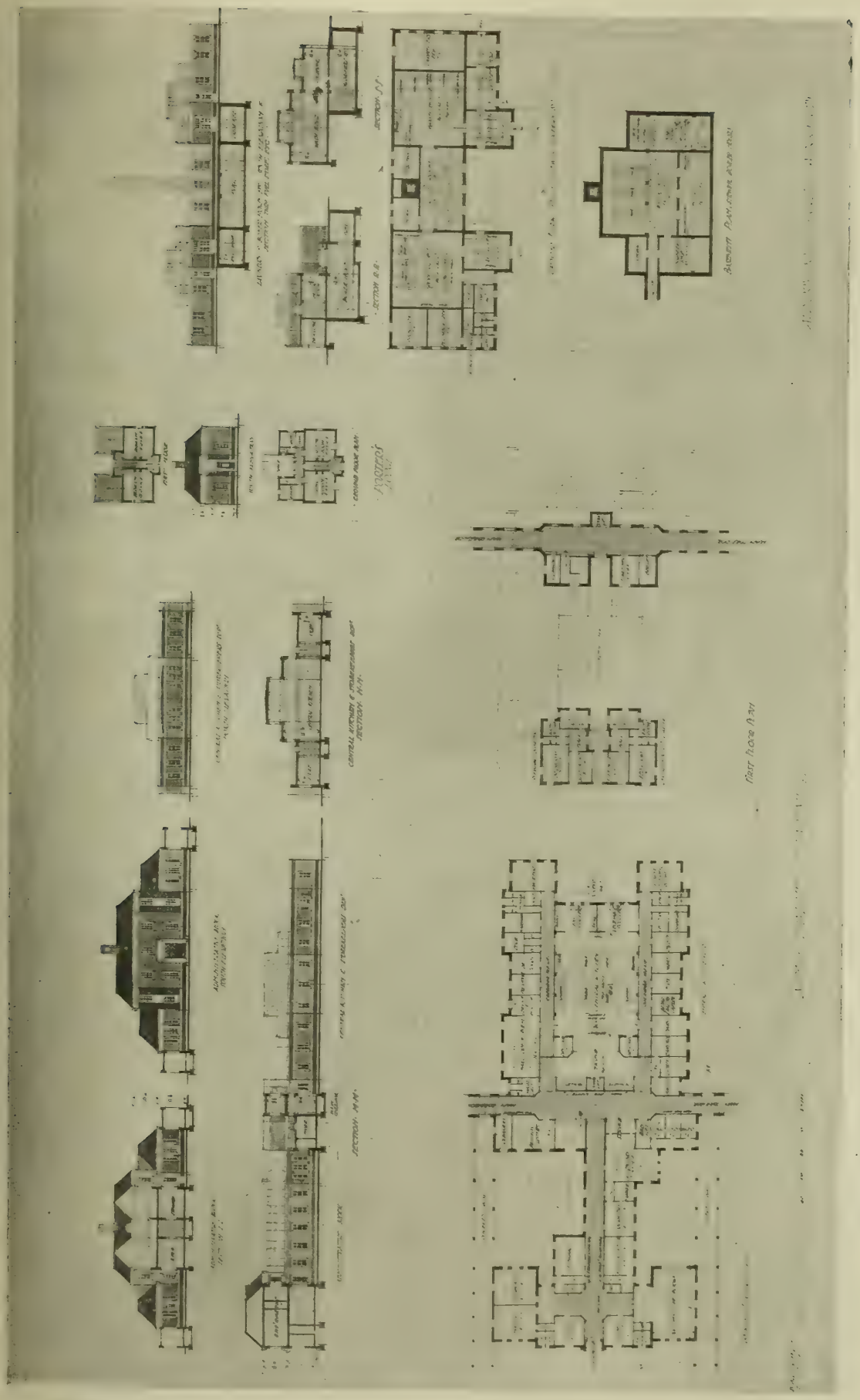
SOUTH ELEVATION
SECTION THROUGH ADMINISTRATION BUILDING, KITCHEN &c.
EAST ELEVATION OF NURSES HOME.
LAST ELEVATION OF KITCHEN BLOCK
SECTION THROUGH ELECTRICAL PLANT & OPERATING THEATRE



Davyhulme Hospital Competition.

Design placed Second: By Messrs. Adams & Holden, FF.R.I.B.A.


DAVYHULME HOSPITAL PATRICROFT
FIRST FLOOR PLAN
OPERATING
FUTURE EXTENSION
STEWARDS' QUARTERS
SERVANTS' QUARTERS
ISOLATION WARDS
HEALTHY CHILDREN
SURGICAL MEN
SURGICAL WOMEN
SICK CHILDREN



Davyhulme Hospital Competition. Design placed Third: By Messrs. H. V. Ashley & Winton Newman, FF.R.I.B.A.

Davyhulme Hospital Competition.

NCO-BRITISH UNION OF ARCHITECTS

urth annual meeting of the Franco-Union of Architects was held in the the Société des Architects Diplômés, the 10th inst.

al, official business was limited to a , and the chief part of the meeting of a visit to the Opera and to recent in Paris, etc.

egard to the meeting itself, the only f particular interest were the election resident and Bureau for the session and the unanimous agreement arrived oint a special sub-committee of the inquire into the working of the exist-ations for international architectural ons and the desirability of amending ying the same from the standpoint chitectural societies of Great Britain ice.

ommittee, consisting of the following : Messrs. Defrasse (vice-president, ., and architect to the Bank of etc.); S. D. Adshead, F.R.I.B.A.; J. Davis, F.R.I.B.A. (hon. sec., Committee, U.F.B.A.); Légros (pre-S.A.D.G.); Louvet (past president, .); H. V. Lanchester, F.R.I.B.A.; Simpson (past president, R.I.B.A., president, U.F.B.A.); and Tournaire, de la Fédération Française des es, will conduct a preliminary exami-the whole question and report on r to the next general meeting, which place in London about July 15, 1925. from this it may be of interest to the Bureau of the Union for the session 1924-25 is constituted as

nt, Paul Waterhouse, M.A., F.S.A., .A.; *Vice-President*, A. Defrasse, e en chef des Bâtiments Civils et Palais s, Architecte de Banque de France, esident S.A.D.G.; *Secretary-General*, Fart de Lafontaine, T.D., O.B.E.; , J. M. Poupinel; *Hon. Sec. British* e, A. J. Davis, F.R.I.B.A.; *Hon. Sec. Committee*, A. Schneider, S.A.D.G.

s: British Committee—S. D. Ads-.I.B.A.; Sir John J. Burnet, A.R.A., LL.D., &c.; E. G. Dawber, V.P. H. M. Fletcher, F.R.I.B.A.; H. C. , F.R.I.B.A.; Arthur J. Davis, . (*Hon. Sec.*). French Committee— ident of the Société des Architectes ; Charles Girault (Royal Gold Medal-Bérard, S.A.D.G.; J. Hébrard, de Saint Maurice, S.A.D.G.; A. S.A.D.G. (*Hon. Sec.*).

llowing gentlemen were elected as of the Union:—H. W. Ansell, M.C., .; E. M. Collins, F.R.I.B.A.; Sir Lorimer, A.R.S.A., A.R.H., .; A. C. Dickie, F.R.I.B.A.; Holt, A.R.I.B.A.; P. D. Hepworth, .; Gilbert H. Jenkins, F.R.I.B.A.; Jones, F.R.I.B.A.; S. Rowland .R.I.B.A.; L. Sylvester Sullivan, .; Henry Tanner, F.R.I.B.A.

day two visits took place: in the he new branch office of the Bank of the Place Malesherbes was in-der the guidance of Monsieur A. architect to the Bank, and in the a visit was paid to the Opera, nsieur Patouillard-Devienne, the rchitect, kindly conducted the party portions of the building not usually to the public. Both visits were of le interest: in the first case, the unique because the many interest-of art which existed when the as acquired have been carefully pre-incorporated in the alterations, and se the very extensive strong rooms are surrounded by a moat and a movable drawbridge which, when withdrawn by electric power, not only removes access to the strong room but also closes the steel gates, etc.

In the visit to the Opera, the Conservatoire and administrative departments were inspected.

On Saturday a visit was arranged to the important public baths at Les Tourelles, Porte des Lilas. This is an interesting reinforced concrete structure with a great open-air bath some 150 ft. long by 60 ft. wide. It was constructed in eight months at a cost of approximately 8 million francs for the recent Olympic Games.

After this visit a certain number of delegates went on to see the new church of St. Louis de Vincennes, also in reinforced concrete, which was explained by Monsieur Marrast, the architect.

In the evening the official banquet given in honour of the British section by the S.A.D.G., took place at the Salle de l'Hotel Lutetia. There was a large attendance, and among the guests were Mr. Yeames (representing H.E. the British Ambassador), and Monsieur Roussel le Roy (representing the Prime Minister of France). In accordance with the unwritten law of the Union, speeches were limited to a minimum.

Monsieur Godefroy, President, proposed the health of His Majesty the King, the Queen, and the other members of the Royal family, and subsequently delivered an address of welcome to the British delegates, concluding with the toast of the R.I.B.A. and the Franco-British Union.

Sir John Simpson proposed the toast of the President of the French Republic, and referred to the achievements of French architects, and the great heritage of their glorious tradition.

Monsieur Paul Léon welcomed the British members on behalf of the French Government, and said that he need not remind those present that England was an island or that it possessed a long and glorious history. In times past the seas may have presented a barrier, but this was no longer the case. The exchange of ideas for which the Union was formed united the " intellectuels " of the two countries. In France the influence of English architects was marked in the home, and in both their countries architects had an important place in the history of civilisation. He would like to take this opportunity of referring to the important exhibition of the Decorative Arts which was now being organised by the French Government, and which was to take place in Paris next year. Its scope was no doubt not so vast as the exhibition at Wembley, which he had recently visited, but he thought they would find much that would interest them in the Exposition des Arts Decoratifs. Monsieur Léon concluded his remarks by saying that he thought his audience would agree that the greatest misfortune that could befall mankind would be the extinction of the architects.

On Sunday the proceedings terminated with a visit to the " Maison des Artistes " in the fine house of the late Monsieur Rothschild, left to the State for this purpose under the terms of his will. Here Monsieur Paul Léon received delegates on behalf of the French Government, and a visit was made to the fine library which contains many unique artistic treasures.

Durham Architectural Society.

Members of the Durham and Northumberland Archæological and Architectural Society held their fourth outing of the year recently, when they visited Cleveland. They commenced from Stockton, and were conducted by the President, Mr. A. Hamilton Thompson, F.S.A., round Kirklevington Church, Crathorne Church, and Hutton Rudby.

SOCIETY OF ARCHITECTS

The jury appointed by the council of the Society of Architects to adjudicate upon the drawings submitted in the Victory Scholarship this year have awarded the Gold Medal and the prize of one hundred pounds for the design sent in by Mr. C. H. Short (*see p.* 635-6), of the University of London School of Architecture. In addition to this prize each competitor who completed his designs in the final round was awarded the completion prize of five pounds. The whole of the designs in the final Competition are on view at 28, Bedford-square. A full criticism of them will be given by Mr. H. V. Lanchester, F.R.I.B.A., on November 13, at 8 p.m. The programme for the final round this year required a design for the main group of buildings for a public school. The Society was represented on the jury by Messrs. L. Sylvester Sullivan and H. M. Robertson, the University College by Professor Richardson, the competing schools by Messrs. L. H. Bucknell, G. Hake and L. Budden. The external members were Messrs. A. J. Davis and H. V. Lanchester.

The competition has produced some good work although the response is perhaps hardly so good as one would hope for, but the award is not one which is likely to be questioned.

The winning design shows skill in the plan and some originality in the exterior treatment. Neither the hall nor the cloister are very happy in proportion or detail, but the design as a whole appears to deserve the award.

No. 177 deserves special mention for its elevational treatment, and 172 for its combined quality of plan and elevation shown in a very well executed set of drawings.

Though there are points of quality in some of the other designs, they can hardly be said to have been in the running.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

We have received the Syllabus of the Royal Institute of British Architects for the session 1924–25. The principal meetings are as follows:—November 3—Inaugural meeting: President's address. Nov. 17—General meeting: " Planning for Good Acoustics," Mr. Hope Bagenal. December 15—General meeting: " Shop Fronts and Their Treatment," Mr. Arthur J. Davis. January 19—General meeting: " Applications in Building and Foundations of Modern Engineering Construction," Dr. Oscar Faber. February 2—General meeting: President's Address to Students at 8.30. Presentation of prizes. Feb. 16—General meeting: " Sculpture in Relation to Architecture," Mr. D. S. McColl. March 16—General meeting: " The Corporate Spirit in Architecture," Mr. F. R. Hiorns. 30—General meeting: " The Architectural Treatment of Ferro-Concrete," Mr. A. Beresford Pite. April 20—General meeting: " Natural and Artificial Lighting," Mr. Percy J. Waldram. May 18—General meeting: " The Influence of the Popes on Renaissance Architecture," Mrs. Arthur Strong. June 22—Presentation of the Royal Gold Medal.

After the inaugural address by Mr. J. Alfred Gotch on November 3, the R.I.B.A. medal and diploma for the best London street frontage, 1923, will be presented to Mr. Francis T. Verity, F.R.I.B.A.

Town-planning Lectures.

A course of seven lectures on Town-planning and Town Improvement has been arranged, under the auspices of Armstrong College, Newcastle. The first lecture was delivered on October 21 by Mr. Raymond Unwin, who dealt with " How Town-planning May Improve City Life." At the conclusion of the course a public exhibition will be held with the co-operation of the M.H. and the Newcastle civic authorities in the King Edward VII. School of Art.



"Greenbank," Chester.



"Greenbank," Chester.

PROFESSOR C. H. REILLY, F.R.I.B.A., Architect of the Gatehouse. (*See p.* 634.)



"Greenbank," Chester.



Wrought Iron Entrance Gates, "Greenbank," Chester.

Made by the Birmingham Guild, Ltd., to the design of Mr. C. A. L. Roberts.

TOWN-PLANNING INSTITUTE

LEEDS AND BRADFORD REGIONAL COMMITTEE

We give below an extract of a paper read by Mr. R. H. Mattocks, Chief Surveyor to the Leeds and Bradford Regional Joint Town-planning Committee, at the annual country meeting of the Town-planning Institute at Leeds recently. A paper read at the meeting by Mr. W. T. Lancashire (President) on "Town-planning Schemes of the Leeds Corporation" was given in our last issue.

The work of the Committee, he said, was the necessary complement to proposals of the Leeds Corporation. Each authority in making its scheme naturally tried to obtain the maximum improvement in its own area, and usually in the areas immediately adjoining. When acting alone on a scheme which reached to its boundary, an authority could only secure adequate protection for its zoned areas by going beyond that boundary. Yet many authorities shrank from the trouble and antagonism which might arise—and the extra cost involved—when a portion of the area of another authority was included. The result was that they either did not go forward with their schemes or else knowingly left them incomplete by stopping at their own borders.

Regional planning, substituting as it did co-operation between neighbours for the compulsion of one by the other, provided a via media for these authorities, and an encouragement to go forward with the preparation of their town-planning schemes. In addition it could make possible the provision of many improvements which could only be secured by co-operation, *e.g.*, the widening of a main road from end to end. Also without proper co-operation it was useless to attempt the development of new cross-country routes; the short section within the area of one authority might have no connection to any other main road under that authority, but, linked up through the region and joined on to the section in the next region, its effect on development in that area might be incalculable.

The functions of the Committee, as given in the constitution, were under four heads:

(1) To advise in the promotion, co-ordination, and linking up of town-planning schemes within the area. Like other regions they had authorities at all stages of town-planning development. The majority had not passed the first resolution, whilst others had their schemes finally approved. The former were just beginning to realise how unprepared they were to criticise the schemes of their neighbours, and how the lack of organised ideas as to the future development of their areas made it possible for those schemes, whilst apparently doing no damage, to be really blocking some desirable line of development. Some eleven or twelve authorities had already passed the resolution, others were preparing Map No. 1, whilst others seemed to be waiting until the regional map began to take shape. It would be a great pity if many were to stay in this last class, as intensive study of local problems was bound to be helpful to the authority and also to the proper understanding of the suggestions for the regional map. He always endeavoured, when meeting the members and officials of the various authorities, to get at the purely local view of the desirable development, as each view gained was another sidelight on the problems in that area.

(2) To proceed at once with the preparation of a regional plan for the area, indicating by way of recommendations, together with any other particulars which the Committee might consider necessary, the following:—

(*a*) Chief lines of communication by road, rail, and water, including suggested widenings and improvements of existing roads, and the lines of suggested new roads. These were being examined and considered historically, commercially, and from the topographical point of view.

(*b*) The zoning would be a most important consideration, and a very careful study of existing conditions and proposals would be necessary before suggestions were made.

(*c*) In studying the problem of open spaces a number of factors would have to be considered. For instance, there was the question of water catchment areas, and their possible extension in the future. Then there was the land liable to flood; what effect would the extension of the catchment areas and dams and the consequent reduction in the amount of water escaping into the rivers have on it? Could this good effect be helped by a judicious afforestation of some of the high land? That was worth inquiring into, as it was well known that the water from heavy rains, checked in its descent by meeting first with the foliage of the trees, was better retained in forest soil than on bare land. Under a close cover of trees there collected a spongy humus soil formed from the decay of fallen leaves. Through that the rain water slowly filtered, and its passage was further retarded by the stems and roots of the trees. Such conditions were particularly effective in reducing the liability to sudden floods after heavy thunderstorms. The reservation of open space for the preservation of pieces of beautiful country and other aspects of the open space question would be inquired into, particularly those which affected those built-up areas now tending to grow together.

(*d*) The geological, geographical and topographical conditions pertaining in the area. Geographically the area was centrally placed, being so situated that goods could be shipped with equal facility from either east or west coast ports. The region was also near the large home market formed by the busy Lancashire factory area. For power they had the great coalfields which underlay most of the region. For health and pleasure they had Ilkley within their border and two spas, Harrogate and Boston Spa, just outside, whilst within a radius of seventy miles struck from midway between Leeds and Bradford lay many of the east and west coast holiday resorts, including Whitby, Scarborough, Bridlington, Morecambe, Blackpool, and Southport. In or near the area were many places of archæological or scenic interest.

(3) To consider and make suggestions or recommendations on any matter relating to the effective town or regional planning or development of the area, or upon any other co-essential matter. Perhaps the most important part of the work under this head was the collecting, by means of personal interviews with the surveyors and other interested people connected with each authority, of the local viewpoints on all matters relating to the development of each unit of the region. It was only by the collection of this local knowledge that the proper steps could be taken to reconcile differences between adjoining authorities. Such knowledge was also necessary when examining a town-planning scheme for one district adjoining another which had not yet commenced to prepare a scheme.

There was the most important point of co-operation between regional committees. This was quite as important as co-operation between the various units of the region, and they were hoping that the adjoining committees would soon begin to function properly and allow of the appointment of the liaison committee proposed by the Manchester and District Regional Committee.

Penrhos College Hall.

A new assembly hall is in course of erection at Penrhos College, Colwyn Bay. It is estimated the building will cost £150,000; the architects are Messrs. J. M. Porter & Co., Colwyn Bay.

MEDIÆVAL TOWN PLANNING.

Mr. William Haywood, F.R.I.B.A., second lecture on town planning at Birm University, said the period of conques A.D. 1000, in Europe, led to the b of many towns of an almost exclusively r character. The first Norman towns of En the Bastille towns built in Proven Louis IX, to wear down the resistance Albigensians; and the English towns of and North Wales built by Edward I, a trated the predominant character of th

It was only here and there that they the building of cities undertaken sole residential and commercial purposes, such towns Salisbury, Hull, and Win in England and Carcassonne in Provenc examples.

The new Salisbury was built becau inconvenience of the old hill city was too a handicap for its inhabitants in time of In A.D. 1220 Bishop Richard le Poer l new city in the rich meadow lands so Old Sarum for the greater convenience flock, and with the uncharitable obj diverting trade from the flourishing b of Wilton, three miles to the west. The was of the chequer-board type; there w defensive walls; the waters of the encircled and protected the town; an spacious streets—each with a central st of running water—were unusually attra Hull was built by Edward I as a port t City of York, and to replace Ravenser w by the erosion of the east coast, was threat with destruction.

The New Winchelsea (originally Iham built by Edward I in 1281, to replace Winchelsea. The King assessed the new very heavily, and it was not until the threatened the old town with complete truction that its people yielded to this pulsion, and an abatement was made o original terms. A few of the original 3 sulæ still remained.

The lower town of Carcassonne was bui Louis IX in 1247 without walls, because King wished to house an industrious and u people, while depriving them of the mean resist his authority. The town still ret the chequer board pattern of its original pla

This consideration of ancient towns had been planned outright would be incom without reference to the inconvenience monotony of the square mesh arrangeme streets which was almost universal down t sixteenth century, and which had persist many places—notably in America—until to The chief inconvenience of this arrang arose from a lack of roads in a diagonal dire the need for which was apparent from the and costly schemes of alteration imposed modern American towns in order to make this deficiency.

Ancient towns were usually so small in and the traffic needs were of such a kind the need for diagonal routes was probabl felt, but whether the town be large or the gridiron type of design was inconv and costly on hilly sites. Its characte monotonous, and it was directly oppos an adequate architectural treatment of forms. Many mediæval towns with appa no regularity of plan, and even an appe of confusion, would be found well adap the local topography and far more conv and pleasant to live in than towns whic a greater appearance of utility because plan was highly artificial.

New Wolverhampton Factory.

Messrs. Melville Dundas & Whits Glasgow, have obtained the contract for new factory at Bushbury, Wolverha Messrs. Courtaulds, Coventry, for whom th is being undertaken, are reported to be sp £1,500,000 on the building. Work is started immediately.

UIPMENT OF A LARGE COUNTRY HOUSE

. H. Barker, B.Sc., Lecturer in Heat- Ventilating Engineering, University recently gave an address at the on this subject. In the course remarks he said he gave a lecture equipment of a small house last year, would be interesting, as a contrast, to the equipment of a large house, where blishment was more or less dependent own resources, and where the equip- as not curtailed for lack of means, as ly was in a small house. The out- requirement of an establishment of racter which might be supposed to be by a country gentleman of some who was in the habit of entertaining iderable number of visitors, was y. This feature was one of the most nt to the success of a plant of this r. A country house, especially if far from railway station, town or village not infrequently the case), was very dependent on its own resources for the comforts and amenities of life. far beyond the reach of a gas main, wer or electric-power station; there r might not be a water main; and, r. all supplies of every kind from coal had to be conveyed a long distance op or railway. Owners of such would not be content to occupy nless they were able to have d of the ordinary facilities and com- which they were accustomed in their uses. Indeed, unless it were possible the same sort of life in the country, ds comfort, as was possible in town, ht suppose that houses of this nature e largely de-populated. Hence, if f this grade were to live a country ll, it followed that the supply of the must be provided by special small

Supply.—Chief among these require- ust be a good supply of water, without fe in a house of this character would pportable—indeed, impossible. For pose recourse was frequently had to There were many places far out in try where a main water supply was ; it was, nevertheless, usually neces- ink a well and to provide the necessary equipment and reservoir, and if r. storage tanks in the house itself. oper equipment was possible the vil- p was the only resource. Sometimes, e, water could be obtained from a the vicinity, and if such be situated ground, it might be that a perfect pply could be obtained at very little high degree of purity. Failing this, ften several hundred feet deep might be sunk, from which the water was ther by a windmill specially provided urpose, or by the usual means. In y cases it was necessary to rely on mping from a shallow well, up to f the house, and this often was done ardener or odd man employed about ses. It was always found a nuisance. cases it was possible by ingenious o do the pumping satisfactorily by f a simple hot-air engine or small paraffin engine. In one case known ecturer the family motor cycle was ts spare time for pumping the water e top of the building. Whatever as adopted, a good cold-water supply very foundation of success of the ng equipment, and whatever the size. re far removed from the ordinary of modern life, the proper provision ntailed an amount of organisation s often difficult to maintain.

Requirement.—The next general re- t was that of mechanical power. factory modern life a supply of power st a necessity though, perhaps, not any rate for the type of house they were chiefly considering it might be said to be necessary. If outside power was required, it was necessary to introduce either locally fixed engines driven by paraffin or petrol for individual purposes or, far preferably, supply a central power plant with battery of cells for the production of electric current. For a relatively small electric plant of this character, it was not advisable on many grounds to exceed a voltage of 110 to 120, otherwise the battery became alarmingly expensive. There were other reasons why a higher voltage than this was undesirable. If such an equipment was provided, the tendency was to rely on it absolutely for a great many services, and a breakdown of the electrical—especially the generating—equipment would paralyse the activities of the whole house. It was therefore necessary, if an electrical outfit was provided, that it should be in duplicate, so that one engine was at all times at rest, and both could be kept in perfect order without stopping the supply. The type of engine most desirable for this service depended to some extent on the amount of power called for.

If it were a small place, very useful combinations were on the market of petrol-driven engines combined with somewhat low voltage dynamos and batteries. Twenty-five volts was common, 50 was less frequently used, but the most desirable for a place of moderately large size was 100 volts. The amount of power required varied greatly according to the habits of the establishment. A very wealthy establishment used proportionately an enormously greater amount of power than an economically administered one. It was difficult to lay down any definite rule.

Petrol-Gas.—Another service of great value to a country house of this character was an installation of petrol-gas. There were several excellent appliances on the market for satisfying this most useful requirement. These were quite automatic in action, and would give a supply quite as good as town gas for an outlay which (dependent, of course, on the price of petrol) was in any case very little more and usually considerably less in the depths of the country than the cost of a town supply. The purposes for which it could be used were such as might in other circumstances be served by power electricity, such, for instance, as cooking, heating by gas fires, and perhaps the boiling of water and the heating of laundry irons, and possibly a certain amount of lighting in places where for some reason it was inconvenient to supply electrical power—certain stand-by gas lighting might be very useful on some occasions. The ramifications of gas pipes could extend all over the outbuildings, and there were many cases where gas was of very great utility, especially in the laundry, in refectories and similar institutions. If, however, the mains were very widely distributed, trouble was sometimes experienced with condensation, and with the necessity for drawing off a good deal of the gas before it could be successfully lighted. Otherwise a gas service of this character, properly laid and carefully designed, was of the utmost possible service. There were, of course, a very large number of types of house, and it was difficult to deal with them all. In many country houses, something in the nature of a home park, or perhaps a horse-breeding establishment, or a dairy, was included in the property. These all made calls on the electrical installation and to some extent on the other installations also.

Where a large estate was concerned, there was generally plenty of space, and the buildings were so far scattered about that it was sometimes preferable to have separate installations for such services as heating and hot-water supply for the buildings where these were required.

Drainage.—The service with which there was commonly the greatest difficulty was the drainage system. It was, of course, generally necessary that the drainage should be wholly independent of any other system. This condition called for septic tank treatment. The drains should be very carefully laid. The latest type of plumbing was even more necessary in a house of this character than a town house, because of the difficulty, expense, and trouble attendant on any repairs, alterations or stoppages that might be necessary. A good fall, and numerous manholes for the proper attention to the drains, were very necessary, and good septic tanks at as great a distance from the house as could conveniently be arranged. Not infrequently considerable difficulty was experienced in obtaining the requisite fall. The drainage system should, in fact, be very carefully thought out.

The design of the house, to some extent, was controlled by the possibilities of drainage. A bad drainage system in a house of this nature was an intolerable and dangerous nuisance, and could only be rectified at great expense and inconvenience.

Heating.—The heating apparatus in a building such as they were discussing might vary very widely indeed according to the size of the house, the conditions of the surroundings and, in particular, the ideas of the occupants. There were persons who would not at any price endure anything in the nature of a central heating apparatus. Such persons, however, were commonly either those who had never experienced the comfort which a reasonably designed apparatus of that character could secure, or, on the other hand, those who had lived in an over-heated house. He could hardly say which he disliked most; a house quite unheated or an overheated one. There was no real comfort to be obtained in either. It was not too much to say, perhaps, that no large house could be kept within the limits of temperature regarded by ordinary people as comfortable, merely by the aid of open fires, without a very large expenditure of labour and fuel. A comparatively small heating apparatus in practically all cases added very greatly to the comfort of a domestic dwelling either large or small, and had extremely few disadvantages, and gave a degree of flexibility and control which, if properly handled, enabled it to satisfy all the requirements of all persons, from the aged and infirm who required a high temperature, to those more robust, to whom any suggestion of stuffiness in the winter was anathema. He did not know any type of building the heating of which needed more consideration than a country house.

In the first place, his view of the functions of a central heating apparatus in a private house was rather to prevent it being a cold house than to make it a warm one. He was persuaded that a warm house in winter was an unhealthy one. He did not in the least believe that changes of temperature between different parts of a house were undesirable, and he was fully persuaded that a warm bedroom was an easy way to make a healthy person into an unhealthy one. At the same time, he accepted the absolute necessity for a person to be thoroughly warm and comfortable when sitting in a room.

Primary Heating.—Branches were taken all over the house. The returns from separate sections were brought back separately. If at any time it was desirable to bring one of these branches into use, the opening of a valve in close proximity to the boiler would enable the heat from the kitchen to be transferred to any part of the house with no labour at all. This was a very great advantage for an ordinary cold summer, such as they had had lately, and indeed at all times, for a combination of a boiler and an oven was not in itself an arrangement economical in fuel. Less fuel would be used if the oven and the boiler were separate and used only when required, but the convenience of having heat, as it were, always on tap was well worth the little bit of extra fuel burnt. The difficulty of installing an apparatus without disfiguring an old house was, he thought, commonly exaggerated.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

*** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Raising of Party Wall.

[REPLY TO "J. B." OCT. 10.]

SIR,—"J. B." does not give the situation of the property. In the Administrative County of London there is a statute law regarding party walls; but outside London there is none, though the by-laws which may be made under Section 157 of the Public Health Act, 1875, may affect them.

A consideration of the following may be of assistance:—

At Common Law the wall at rear is a party-wall if either it be a wall of which "J. B." and his neighbours are tenants in common; or, a wall which belongs entirely to one of them, but is subject to an easement or right in the other, to have it maintained, as a dividing wall between the two tenements. If the quantity of land which each of them contributed to the site of the wall is known, the property in the wall follows the property in the land, and each party is the owner of so much of the wall as stands upon his land.

The ordinary and primary meaning of the term party-wall was stated in Watson *v.* Gray (1880, 14 Ch. D. 192) to be a wall of which two adjoining owners are tenants in common.

One tenant of a party-wall cannot maintain trespass against another for injury done to the wall, unless there has been complete ouster, or some destruction of the common property. The whole wall, however, may be destroyed for the purpose of erecting another in its place; though, in Stedman *v.* Smith (1857, 8 E. and B.1), where one tenant in common, after pulling down a building on his side of the wall, increased the height, and built a house with a roof to it occupying the entire width of the top of the party-wall, and also inserted a stone to the effect that it was his wall, it was held that there was an ouster sufficient to enable the other tenant to maintain trespass.

Section 5 subsection (16) of the London Building Act, 1894, defines a party-wall as meaning (*a*) a wall forming part of a building, and used, or constructed to be used, for separation of adjoining buildings belonging to different owners, &c.; or (*b*), a wall forming part of a building, and standing to a greater extent than the projection of the footings, on lands of different owners.

By Section 88 of the Act, a building owner has twelve rights in respect of a party-wall.

No. 8 gives power to cut into a party-wall on making good damage to adjoining premises.

No. 9, to cut away projections in order to build against a party-wall, but must make good damage.

No. 10, to cut away overhanging eaves, &c., in order to build against the party-wall, but must make fresh gutters, &c.

No. 11, to perform any necessary incidental works.

No. 12, to raise a party-fence wall, or to pull it down and rebuild as a party-wall.

With the above in mind, and answering the queries in the order put:—

Query 1.—At Common Law, if it be a party-wall, "J. B.'s" neighbours could only sue him in trespass, where there has been actual expulsion, or acts which amount to actual ouster. If he is excluded from using the top of the wall by his neighbours placing an obstruction thereon, he is entitled to remove the obstruction.

If the property be within the Administrative County of London, and it be a party-wall, then "J. B." has the rights and obligations under the Act above referred to, and need not comply with his neighbour's illegal demand.

If, however, as it appears, there is an easement, then at Common Law "J. B." has no remedy, and is bound to submit to the best terms he can make with his neighbours, for the extinguishment of the easement.

Query 2.—"J. B.'s" neighbours cannot demand access to the gutter from the yard, since it does not discharge over the yard; and he can build as sketch No. 2, since the wall, &c., is on or over his own land.

Query 3.—If built as in Sketch No. 2, the wall need only be the prescribed thickness required by the by-laws in force in the district. If built as a party-wall it need only be the prescribed thickness for a party-wall, when in fact it is a party-wall; for a wall may be in part of its length and height a party-wall and as regards the rest an external wall.

Query 4.—No, if there is an existing easement; but if within London, then the rights above referred to under the Act can be made use of.

"T. P."

[REPLY TO "J. B."]

SIR,—A letter in your last week's number, signed "J. B." and referring among other things to the right acquired by an overhanging gutter, has reminded me of something I was recently told, and which I think may interest some of your readers, and of which I should like to hear some confirmation.

It referred to the back-to-back houses in some districts in the North and Midlands in which it is common to find a narrow gap between such houses, known as the "eaves-drop." Such area cannot be built over, and it is usual to find one small window opening on to it from each house, from which it is believed it was once the practice to throw out slops and rubbish, to the neglect of the most elementary rules of health. I was interested to hear the suggestion that this is the origin of the term "eavesdropping," as these narrow passages lent themselves very readily to the attentions of spies, who could creep up them and overhear conversations through the windows, with little fear of detection.

I should be very interested to hear anything any of your readers can say upon this matter either in correction or amplification.

"BOOKWORM."

[REPLY TO "J. B."]

SIR,—Query No. 1: The adjoining owners have no right to demand anything of the kind mentioned. Their surveyor should be met on the site, and the defects of the existing roof examined. Responsibility for damage arising out of the bad state of repair thereof should be disclaimed. The work on the gutter should be executed with the utmost care, and the roof left watertight so far as disturbed by the alterations. It will, of course, be necessary to serve the necessary party-wall notice upon the adjoining owner.

Query No. 2: The wall being admitted as a party wall, the "right" of access to the gutter is "J. B.'s" own right, and it is quite unnecessary to go to the expense of the work indicated on the sketch (No. 2).

Query No. 3: The wall may be raised of the minimum thickness required by the local by-laws, and if subsequently used by the adjoining owner in raising his own premises, a proportion of the present cost of raising will be recoverable from him.

Query No. 4: Yes, provided the necessary notices have been served, and the wall passed as fit for raising, but the adjoining owner may apply for an injunction to restrain pending litigation. He would, however, be very ill-advised to do so on such a slight case. "J. B." will probably find that it is largely a matter of "bluff."

"CAST IRON."

Abandoned Work.

[REPLY TO "SURVEYOR." OCT. 17.]

SIR,—"Surveyor" has, apparently, not quite "got" my question. I know perfectly well that it is often necessary to take off c in order to obtain tenders, and tha practice saves much duplication of labo part of contractors, but I do not know these facts may be taken to be comm ledge, or whether it is necessary t a client thereof at the outset, in ord able to claim quantity fees in the eve work being abandoned. The bare s does not quite satisfy me. It might b correct to say that it is necessary t prints of drawings, in order to obtain but it would hardly be upheld that the could claim the cost of these in like stances. The cases are not quite para this is merely an instance in which the is put to necessary expense which ca recovered.

"BIT

[REPLY TO "BITTEN." OCT. 1

SIR,—The point to be decided is wheth was an implied instruction to the archit quantities should be taken out in this ca general, an architect has no implied auth employ a quantity surveyor, or to act himself; such authority must be given e by the employer. It has, however, bee where works are of such great magnitude is impracticable for contractors to tende factorily without the aid of quantities, an the contractors expected such aid as a m custom, that such authority was implied instructions to the architect to invite te and any claim for fees for preparing quan further supported if the employer knew quantities had been taken out, and were made use of, and he had actively or acquiesced to the fact. In Lansdowne *v.* S ville (1862, 3 F. & F., 236) the jury foun there existed a local custom according to architects took out quantities for works that therefore the employer both knew custom and contracted on that footing. a later case—Antisell *v.* Doyle (1899, 2 I.R an Irish case—the jury found, in similar c stances, that no such custom was recogni the district, and that the employment w within the scope of the architect's authorit sanctioned by the employer, and the arch claim was disallowed.

Therefore it would appear that "Bitte order successfully to uphold his claim f full fees must prove that the custom of tects taking out quantities for works magnitude of that abandoned exists in his and was "common knowledge" accessible employer, or that the employer knew th quantities were being used for the purp obtaining tenders, and that therefore his c for his services was made on that footing of course, if the employer had been an authority, not an individual, and th claimed exceed £50, he must have a contract.

"T.

[REPLY TO "BITTEN."]

SIR,—In certain districts it is no common practice to take off quantities purpose of obtaining tenders, but for v over £1,000 value it is practically imp to obtain them otherwise from firms standing. In such cases the architec take instructions to obtain tenders to the adoption of such means to that en are the custom in the district.

It is, however, always wise to mak that a client understands what his instr are involving him in, and it is fair to tell him in advance that quantities wi to be taken off and that the fees there be included in the contract, but will be able to him in the event of the wor abandoned.

"FOREWAR

[REPLY TO "BITTEN."]

SIR,—"Bitten" may rest assured definite, an undisputed instruction to tenders—tenders which cannot be unless bills of quantities be prepared—

ructor, the client, the liability to
m.
he legal aspect of the case, but a
nce would cause one to modify or
t claim where the client has from
even his own fault, not received
the work done.

STOTT & SONS.

Movable Structures.

PLY TO "A.G.," Oct. 17.]

idea of building small garden huts
o avoid building restrictions in the
od concerned, was fairly prevalent
ar, but has been less noticeable since,
ing to the relaxation of building

however, remember the idea having
l to buildings of any size or conse-
know of no rules setting a limit of
ich structures.
able that the local authorities would
case to bring forward in objection
ure was beyond the size and weight
olice authorities would allow upon
oads in the neighbourhood, which
essed upon a limit of half the width
owest road in approach, and not
ne allowed weight over any bridge
that might be crossed if the struc-
be towed away in the future.
shall not be exceeding my purpose
the opinion that the practice sug-
s to be very deplorable.
y land and build in a neighbourhood
n restrictions, which, though they
eir projects, have the advantage of
em that the neighbourhood will
e character it possesses. It is,
ossly unfair that such restrictions
elaxed, and though some may find
er-riding them the offence generally
them in some form or other sooner

strongly advise your correspondent
the idea he has in mind, and seek
ite near by that may allow him to
roper and straightforward manner.

"PRO BONO PUBLICO."

Soft Water.

all be grateful if you can obtain
as to the desirability of using
or a hot water system where the
nwater collected from the roof in
if such water would be discoloured
n coming from the cold supply for
e.

J. A. GRICE.

Incinerators.

MR. JOHN GABBERTAS, Oct. 10.]

most durable form of incinerator
brick shell tied in with strong
rner brackets, and with cast-iron
e and steel chimney. The walls
tructed of fire brick on the inside
y, as these retain the heat much
ordinary brickwork, and wear
d and weather.
e half a ton of refuse per day,
well cover the three dustbins
inside dimensions of the brick
e 2 ft. 3½ in. square on plan, by
h to feed lid, and 7 ft. 6 in. high

lso ready-made cast-iron incinera-
he market.
ator should be designed to draw
om the newly charged material
h the hottest part of the fire
g through the flue.

REFUSE.

Rough Cast.

Y TO "STUCCO," Oct. 10.]

er the walls with cement and
than ½ in. thick, and rough cast
ite chippings and cement. While
dry chippings of granite should
be dashed on to the surface, and this will, I think, give the result at which "Stucco" is aiming.

"GRANO."

Estimating Quantities.

[REPLY TO "QUANTITY SURVEYOR," Oct. 10.]

SIR,—The allowance for waste, &c., varies with different trades and materials. The items mentioned by your correspondent will require the following allowances, on the authority of that very excellent work, "How to Estimate," by J. T. Rea—a work your correspondent would find of great use to him:—

Brickwork, 2½ per cent. Flooring, 10 per cent. Tiling, 2½ per cent. for tiles, 5 per cent. for laths, nails and plugs.

The item for brickwork is based on the figures that 1 cubic yard of brickwork requires 380 bricks nett, and 390 bricks gross.

"SUPER."

Traction Drive.

SIR,—I should be obliged if you would inform me through the medium of your "Inquiry Bureau" as to the minimum "turn" required in a drive for a carriage and pair, and also for a large motor car.

"BERKS."

Made Ground.

[REPLY TO "NERVOUS," Oct. 17.]

SIR,—I know of a large building in the City, consisting of basement, ground, and four floors, that was built on poor ground upon a concrete raft calculated to spread the weight thereon to lead the ground up to one ton per ft. super. I forget if the ground were made or not, but remember it was pretty poor stuff. The building referred to is still standing and without a settlement crack in it.

My personal opinion is that "Nervous" may safely change his *nom de plume* to—

"CONFIDENT."

Wire Bells.

SIR,—Could any of your readers inform me of what metal, good-toned, wire house-bells should be composed? This class of bell is so seldom used nowadays that it is difficult to obtain reliable information about them.

"OLD FASHIONED."

[If "Young Builder" will send his name and address, not for publication, we shall be glad to insert his inquiry.]

Central School of Arts and Crafts.

IN his third lecture at the Central School of Arts and Crafts, recently, Sir Banister Fletcher gave a description of the structural principles of Gothic cathedrals, more especially in regard to the building-up of their "vaulting," or arched stone ceilings, their buttresses, to resist the thrust of such vaults, and their flying buttresses, to bring the pressures of the high vaults down across intervening roofs to the outer edge of the buildings. These features, originally purely scientific in their purpose, came to be designed in such a way as to combine æsthetic values with the constructive ones, and have thus thrown a glorious mantle of elaborate vaulting and framework over these mediæval churches. The weight of a building was now, instead of being distributed over solid walls, as in earlier periods, concentrated on isolated supports, thus leaving free spaces for vast coloured windows. So far from the immense blocks of masonry used in Egyptian and Greek times, only small units of rough stone were now usually obtainable, and this evolved a totally different method of building. Building thus became an experimental science of effectively balancing small stones on one another, thus producing a new principle of lateral thrust and counter-thrust. The old Roman building stood solid on the ground; the Gothic structure soared lightly into the air. Thus the Christian cathedral of Reims, in all its panoply of lacework panels, statues, portals, and windows, was borne aloft by pier and buttress at a tremendous height.

BOOK REVIEWS

Small Family Houses. By A. RANDAL PHILLIPS. (*Country Life* Office.) Price, 10s. 6d.

To those desirous of building, and in doubt as to the style of house required, this should prove a welcome volume, containing, as it does, numerous examples of houses ranging in cost from one to four thousand pounds. With few exceptions, all are illustrated from photographs from the actual buildings. The types illustrated are well chosen, and the various plans are skilfully and compactly schemed, avoiding all waste space. We welcome the disappearance of the lounge hall in small houses, at one time such a feature, usually provided at the expense of the living rooms; the ingle nook is also a thing of the past. The various elevations are well proportioned, and devoid of unnecessary ornament; whilst the treatment of the materials used is properly recognised. The interiors illustrated are simply treated, and restful in appearance. The practical side is not overlooked; numerous up-to-date labour-saving devices are shown, so essential in these servantless and self-help days. The old dirt-catching open dresser has disappeared in favour of the glazed. Through the necessity of economy, many difficulties have been overcome in house-planning to-day, which at one time would have been thought impossible. This is to the credit of our architects, who have given these matters close study. The gardens have also been laid out in a practical manner. The book concludes with a chapter on choosing an architect; in this, much sound advice is given.

Aspects of Houses in Relation to Wind, Rainfall, and Sunshine. By NATHANIEL LLOYD, R.I.B.A. 1924. Price 2s.

The author's object is to show us that aspect is a more complicated affair than many of us suspect. He points out, for example, that dressing and breakfasting in the sun are not consistent with adopting the normal south aspect, and that it is unwise to place one's house to face the prevailing winds and storms. In illustration of his points he takes a plan with a flat "garden front," containing all the living rooms and bedrooms and shows the effects of placing such a front at various angles. The diagrams are valuable so far as they go, but they take no account of the illumination from windows not on "the front." Now the morning sun is clearly desirable in a dining room, but if this house faces due south the side window can give the dining room the east sun as well as the south sun. The truth is that each house should be designed to suit its own site, and Mr. Lloyd has done well to show that we must not blindly build our houses to face south without inquiring into the other factors—wind, rainfall, and local peculiarities. After careful consideration of the pros and cons of the various aspects the author fixes upon the south-east as the best of all aspects. But a room that faces south-east is still better if it has another window facing south-west. The pamphlet contains some tables showing the average hours of bright sunshine at different stations and these tables all go to disprove the author's contention that "most of the records indicate more bright sunshine in the morning than in the afternoon." In these tables the sun after midday is in every case an easy winner.

Books Received.

ENGLISH DECORATION AND FURNITURE, 1500–1650. By M. Jourdain. (London: B. T. Batsford, Ltd.) Price £3.

THE DECORATION AND RENOVATION OF THE HOME. By Arthur Seymour Jennings. (London: Trade Papers Publishing Co., Ltd.). Price, 12s. 6d.

NARCISSUS. By Gerald Heard. (London: Kegan Paul, Trench, Trubner & Co., Ltd.). Price 2s. 6d.

THE CIVIL ENGINEER'S COST BOOK. By T. E. Coleman. (London: E. & F. N. Spon, Ltd.). Price 10s. 6d.

THE BUILDING TRADE

ESTIMATING FOR SMALL BUILDERS

By J. H. BARNS, F.I.O.B.

PAINTER, &c.—*Continued.*

Washing off Ceilings and Distempering.

The cost to wash off ceilings would be from 1d. to 6d. per yard super, and will in a measure depend upon whether the ceiling is washed off right back to the plaster or only the dirt washed off and the old distemper left on. It would also depend upon whether it is a common distemper composed of size and whiting or it is one of the proprietary distempers, which will be dealt with later. If only the dirt is washed off it may be necessary to bind down the old distemper with a coat of size or claircolle. The washing off is done with brushes and water. Sometimes hot water mixed with some solvent is used to expedite the removal of the old distemper. The ordinary distemper is composed of whiting, size and a little stainings.

Common work can be sublet for labour only at 1½d. per yard, including use of brushes. For ordinary plain work it is worth from 4d. to 6d. per yard.

Yds.

— sup. Washing off and twice distempering ceilings (common work).

Materials.

	Per cwt. s.	d.
Ball whiting	3	6
Gilders whiting	3	6
Powdered whiting	3	0
Size (jelly) extra double	11	6
„ „ treble extra	15	0
„ „ patent transparent	23	0
Concentrated size powder	90	0
„ „ „	70	0
„ „ „	60	0

Example :—

For 100 yards.

	£	s.	d.
21 lb. whiting			9
1 lb. blue			6
7 lb. size		1	0
Scaffolding, &c. say		3	0
Use of brushes „		3	0
Labour, washing and distempering (see above)	2	10	0
	£2	18	3
Profit and oncosts, 15 per cent.		8	9
For 100 yards	3	7	0
For 1 yard			8

Washing Off and Distempering.

If washing off and distempering are done to walls instead of ceilings, the cost would be similar but as the walls are usually finished to some definite tint a little extra must be allowed for this. In distempering on old work, after the washing off has been done, it is usual to apply a thin coat of size and whiting called claircolle to bind down the old work and this would take the place of one of the coats of distemper, unless otherwise specified. It would cost about 10 per cent. extra over the cost of common distempering to ceilings, for distempering plain cornices. If the cornice is elaborate or enriched the cost would be higher. If ceilings above 12 ft. high, something must be added for increased cost of scaffolding.

Distempering Walls and Ceilings with Washable Distemper or Washable Water Paint.

These are supplied in paste or powder form and have to be thinned out to the required consistency with fluid usually called petrifying liquid.

The price of the distemper differs with the tint to which it is supplied. The prices of the materials and the approximate covering capacity can be obtained from the makers. There are two qualities supplied, one for inside work and the other for outside. In cases where an alteration of tint is required other than that possible by intermixing standard shades of the proprietary article, the manufacturers will supply special stainers at prices varying from 1s. to 3s. per lb., according to colour.

Water paints are usually of an open, porous nature, which allows dirt to get into the structure and this gives a streaky appearance when washed.

Example of Cost :—

	£	s.	d.
1 cwt. water paint (60s.)	3	0	0
3 galls. petrifying liquid (4s. 2d.)		12	6
For 300 yards super	£3	12	6
For 1 yard super			3
Labour			4
Scaffolding say			½
Use of brushes			½
			8
Profit and oncosts, 15 per cent.			1½
Per yard			9½d.

Removing Washable Distemper.

Washable distempers if applied in accordance with instructions are usually quite washable, and in fact they are very difficult indeed to wash off. When commencing to re-distemper a wall previously treated with washable distemper, it may be found that the work which has been re-distempered on the old material after a time flakes, probably due to the contraction of the old material underneath, so that the only way to make a satisfactory job of the work is to remove the old washable distemper, and this is a very difficult operation unless some kind of paint remover is used, and some of the makers of proprietary distempers are selling paint remover for the purpose, the usual price for which is 7s. 6d. for a 14 lbs. tin, and this would cost about 3d. per yard for material, and to apply to old distemper to remove the same labour would be about 3d. per yard.

"Stoppon."

When the washable distemper has been removed from the walls, it is sometimes advisable to give the surface a coat of "Stoppon," at 14s. per gallon, which will cover from 100 to 120 yds. super., and would take the place of the ordinary claircolle.

Stippling.

Distempering is sometimes specified to be finished with a stippled face, which is worth about 1d. per yard additional. Stippling obliterates the brush marks left by the distemper-brush, and seems to give a denser surface to the work.

Water Paint on Woodwork.

For unimportant work of an urgent nature, water paint is sometimes used for painting woodwork, as it dries quickly, and two or three coats can be applied in a day. The finishing coat should be an oil paint or varnish, as water paints are porous.

Wall Papers.

Before hanging wall papers, it is usual to apply a coat of size to the wall to stop the suction of the wall plaster, and this is worth 1d. or 1½d. per yd. A better method, when time will allow, is to apply a coat of raw linseed oil to the plaster, as when dry it is like a coat of paint and tends to stop the plaster causing the colours on the wall paper to fade. It would cost 3d. or 4d. per yd. for labour and materials. Some people use a thin paint composed mainly of white lead and turpentine for this purpose. The turpentine evaporates, leaving the white lead adhering to the surface, and this is usually rubbed off before applying the next first coat of such material is therefo value.

Hanging Papers.

The cost of hanging wall papers is f per piece upwards, the better qual requiring greater care in trimming an For cheap work the papers are tri edge and lapped the other, but for both edges are trimmed and butte papers have a tendency to shrink afte is applied, leaving a very ugly joint; may be minimised by previously lini with a tinted lining paper. Borde papers are worth about 1½d. per yd.

Writer.

The cost will, in a measure, depend quantity of work to be done, as if the one name to be written, say, on a doo of going to and from the job must b The prices given, therefore, can only as approximate. For writing on doors lar sort of work the cost would be 8d. inches up to 4 in. high, either painte or colours. In measuring the letters, only is taken, and, as an example, seen that six letters 2 in. high wo a dozen inches, or four letters 3 in. h cost as much. This price is for all types of letter. Fancy or ornament would be additional. If the letters wa the cost would be roughly double sa per dozen inches. In the case of comp large signs, these could be written fo dozen inches, and gilding double. prices must be added cost of scaffol attendance, if any.

Kingsway and Aldwych.

The London County Council recei sidered the lease of the island site in th The lease of the site had been let fo nine years to the Bush Terminal Comp a progressive scale of rent, the ultimate £55,000 a year being agreed to in Octo The company had written the Counc that it had come to the conclusion th existing economic conditions, it was i able to proceed, as intended, with the ment of the remaining two wings on of the existing apportioned ground r Improvements Committee of the Cou that they had come reluctantly to the that they had no option but to recon Council to determine the building a estreat the deposit of £35,000, and to obtain new offers for the letting o as a whole or in plots. A recommen this effect was carried.

Bombay Development Schem

A booklet has just been issued Bombay Development Department. that when the various schemes in ha viding sites for high-class residences a Bombay will have more room to spre she is likely to need for years to con supply catches up with the deman course of time overtakes it, it is hope fall automatically. The scheme p building 163 blocks of 80 single-ro ments each, or a total of 13,040 which may be converted into two-ro ments if desired. The construction is of concrete reinforced with steel. of building these tenements has been tised that the rate of progress is equi output of one block of 80 tenements A large area of swamp land just b buildings is being reclaimed, and w laid out as a park for the benefit of and their children. The industr schemes on which work is now go shortly to begin, will altogether pr tenements which, allowing five including children, for each, will affo dation for 250,000 persons.

NICAL EDUCATION ND BUILDING

Manchester Conference.

D by an informal committee of chers in the N.W. area, a conference education was held at the Manchester Technology, on October 18. This rth of a series of what have now ual meetings held in this area. The as attended in the main by teachers a wide area, but there were also ne members of the Institute of rincipals of technical schools, and sted in this question. Considerable ttended recent attempts to improve and to widen the scope of the provided in technical schools for and others in this industry. Since e have been increases in the numbers r instruction in several parts of the

Pearson (Preston) reported on the a small joint committee which was ar ago, consisting of a number of s of the Manchester Branch of the Builders and a number of building Ie referred to the discussion and establishment of a number of rses" in the area, which were meet the needs of the less ambitious entice, being less wide in scope and in character than the normal course the work of the industry as a whole. t with the progress which had been setting up of a scheme for that area awards to building students in the ed classes, those awards to consist ver and bronze medals, and also of ds—the former having been given tute of Builders, and the latter by d Master Builders of Manchester. outlined the draft scheme which had l, and expressed the hope that little now occur in the final acceptance of by the various educational bodies

Drury, M.Sc., dealt with the need for posts of responsibility in the Ie outlined the changes which had place in the industry in recent years n in the number of large building ncreasing complexity and size of dings, changes in the methods and ed, and, generally, the increasing he problems with which the modern o deal in the control of large estab- l in the execution of large contracts. led to create a demand for well- , having a sound foundation of owledge and practical experience. it had led to greater attention o the problems of administration In this connection, he welcomed of some reference to this topic ce examination recently instituted ite of Builders. While they might with the exact form in which the een included in that examination— l to over-emphasise the importance e work of book-keeping—still he would all agree that the institution nation had given importance to the e problems of administration and oped that when changes were next details of those examinations, e closer co-operation between the the schools, and that greater ould be given to the great need nd technical improvements within The complete treatment of those ld only be possible if the instruc- intended to occupy important the industry could be carried ge to which it could be developed cal schools, and that it might ntages which came from its treat- he walls of a university. A frank discussion of the whole problem and he was glad to know that the Institute of Builders had already taken some steps in that direction.

Mr. W. F. Anderson dealt with the subject of trade courses. He said this development was an experiment. Its success depended most upon the support which the industry might give in the way of sending their apprentices to attend those courses. The courses had been established in order to meet the criticism that the usual building course was too difficult for the average apprentice. Such specialisation in the provision of instruction meant a division of the groups of students they had to deal with; it was only possible with largely increased numbers. Apart from this, it was no doubt sound to arrange that the apprentice who was keenly interested in his trade should have the fullest opportunity possible for developing his skill and knowledge in it. At the same time, they must safeguard the interests of the more capable apprentice, who might with advantage extend his studies beyond the limits of his trade; this he could do in the general building course. He believed that the arrangements they had made in that area would secure those points, and it was now for the teachers and the industry to give the scheme a fair trial.

During the discussion it was suggested that the effect of the institution of those simpler courses would be to improve still further the work which it was possible to do in the main course for builders, and in addition those trade courses might form a suitable basis upon which to build the special intensive courses which in all likelihood they might be called upon to set up to deal with the present emergency.

A paper on "Building Examinations," which was read by Mr. J. W. Riley (Rochdale), and which was, in effect, a summary of a paper which he read recently before a joint meeting of the Institute of Builders and Building Teachers, held in London last July, showed in a concise way that nearly all the problems which had been discussed at the meeting, in so far as they related to education, eventually took the form of the establishment of suitable conditions in which the teachers could prosecute their work and the students develop their knowledge and experience. Mr. Riley sketched the recent history of the provision or absence of technical examinations for building students. He referred to the excellent local arrangements which they enjoyed in Lancashire and Cheshire in this respect, but suggested that they should not rest content until their own and other local schemes, however satisfactory they might be, were linked up by some form of national examination in building, which had both the approval and the support of the industry and also of the education authorities and the Board of Education. He referred to the recently instituted national examinations which had been set up jointly by the Board of Education and various professional bodies representing some of the other great industries.

Mr. Scholes Hague, of Liverpool, during the discussion that followed, mentioned the great service which had been rendered to technical education by the establishment of national examinations of the type to which Mr. Riley had referred; he also mentioned that, in Liverpool, they had been able to make considerable progress in the matter of building education in the past year by the establishment of a joint committee, consisting of employers, operatives, and the education authorities.

Mr. Walter Thorpe, F.I.O.B., supported the idea of the introduction of national examinations in connection with building, from which nothing but good could result to the industry. He was sure that the Institute of Builders would be quite prepared to do their share to help forward such a desirable movement.



A Wireless Set.

[This wireless set consists of an "Ethophone" instrument, made by Messrs. Burndept, Ltd., Bedford-street, W.C., standing on a cabinet containing the batteries and loud speaker.]

MASTER PAINTERS' COMPETITION

We give below the conditions of this competition :—

(1) The scholarship is open to apprentices who have completed or are in course of completing the terms of their apprenticeship with members of the National Federation of Master Painters and Decorators of England and Wales, the National Federation of Master Painters of Scotland, and the National Association of Master Painters in Ireland, and to the sons of members.

(2) Competitors for the scholarship must not be more than 25 years of age on August 31 preceding the competition in which they take part, and must prior thereto have been candidates at one or more of the annual competitions for apprentices promoted by the three contributing bodies.

(3) Each competitor is required to sit for a compulsory qualifying examination on a date to be fixed by the committee, not less than six months prior to October, 1925. Only such competitors who satisfy the examiners will be allowed to complete their works for the scholarship examination.

(4) Competitors who have successfully passed the preliminary examination will be required to submit to a further written examination, and complete practical tests as specified on dates as fixed by the committee.

(5) Competitors will receive from the committee not later than March 1, 1925, full instructions regarding the further testimonies of study required from them. One month's notice will be given to each competitor of the date on which the completed works must be delivered to the committee.

(6) All works submitted in competition for the scholarship will be retained for exhibition at the annual conventions of the three contributing bodies, following the receiving date and for such longer period as the committee may determine. No responsibility for damage or the safe custody of any or all of the works submitted by competitors will be accepted by the committee.

(7) The committee reserves the right to withhold the award of the scholarship if, in their opinion or that of the examiners, no competitors reach the required standard.

(8) The successful competitor will be required to submit an itinerary of his proposed tour to the committee, who may vary it at their discretion. The competitor must undertake to abide by the committee's decision. He shall also be required to produce and hand over to the committee coloured drawings and other studies of decorative work as the committee may determine and require.

(9) The committee may terminate, cancel or withdraw any scholarship if they consider that the work, conduct or character of the holder of the scholarship is not satisfactory, and the decision of the committee on these points shall be final.

The preliminary qualifying examination will consist of :—(1) A test of the competitors' knowledge of architecture and colour. (2) The setting of a test in applied ornament and colour.

The scholarship examination will consist of :—(1) A written paper (under examination conditions) on some aspect of decoration. (2) A panel of painted ornament (prepared under examination conditions).

The submission of testimonies of study to include :—(*a*) Measured drawing mounted on card size 30 by 40, showing the modern tendency of design in architecture for public buildings. (*b*) Coloured designs for the decoration of an existing building. The competitor to prepare measured drawings and submit perspective sketch and photos of the actual building (instructions will be given by the committee as to the type of building). (*c*) Three sheets of studies at the competitor's discretion (mounted on card). These must include one showing heraldic decoration in colour. (*d*) Sketch book. The competitor is required to include actual studies of architectural details, decoration and fitments, drawn direct from the object with place and date of sketch given. Drawings made from printed copies will disqualify the competitor.

Trustees : Messrs. J. Higson (England and Wales), J. M. Orr (Scotland), J. Sibthorpe (Ireland). Chairman : Mr. J. Sibthorpe, National Association of Master Painters in Ireland. Hon. Treasurer : Mr. J. W. Sellars, National Federation of Master Painters of Scotland. Committee.—England and Wales : Messrs. R. Barker, R. Brown, J. H. Cantrill, A. Campbell. Scotland : Messrs. D. Colquhoun, W. H. Cameron, J. Scott, J. W. Sellars. Ireland : Messrs. J. Sibthorpe, J. Tetlow (Original Founders). Secretary : Mr. W. Mellor, 9, Albert-square, Manchester.

FURTHER ADVANTAGES OF THE NEW STEEL JOISTS.—II

By M. B. BUXTON, A.M.Inst.C.E.

In an article published in the last New Year's Number of *The Builder* it was pointed out that there were marked advantages to be derived from the use as beams or girders of the new 1920 range of steel joists instead of the older range, which many engineers and architects have not been slow to appreciate.

Besides beams there are of necessity a considerable number of stanchions or pillars in every large work, and it will be shown in this article that similar advantages accrue from the use of the new 1920 sections rather than the old for this purpose.

This question is not nearly so simple, for the theory of the strength of pillars or stanchions is an extremely complicated mathematical problem, nor are practical data sufficiently available to form a generally accepted simple formula.

In designing a stanchion, when the load to be carried has been calculated, we have to consider several matters before a suitable section can be chosen. We must decide upon the material of which the pillar is to be composed. This in most cases is mild steel since cast iron is hardly used at all at the present time for building purposes. Then we must consider as to how securely or otherwise the ends are fixed either to grillages or to beams, and whether any allowance must be made for eccentric loading. But the deciding factor in our choice is generally the "slenderness ratio," by which we mean the quantity found by dividing the length of pillar in inches by the least radius of gyration in inch units of the section. The least radius of gyration for every section is tabulated in the various makers' handbooks and is derived from the relation between the area of the section and its moment of inertia.

There are numerous formulæ in use for stanchion design, but those most general in this country are the London County Council's, Moncrieff's and Claxton Fiddler's.

The permissible stress per square inch of section for various values of the slenderness ration has been calculated by these various formulæ and is published in the form of tables for general use. For instance, the L.C.C. value for a slenderness ratio of 100 for a stanchion with fixed ends is 4 tons per square inch, for 200 is ·5 ton per square inch. Multiplying the appropriate value by the area of cross section of the pillar we have the permissible safe central load which can be carried on a stanchion, and we can then finally decide if our section is suitable.

All joists are stiffer in the plane of the web than in the other, and yet a stanchion has to be designed to resist buckling due to a given load along its weaker axis, which means that the least radius of gyration governs the situation. Since the permissible stress per square inch increases as the slenderness ratio decreases the importance of increasing the least radius of gyration is obvious.

It is equally important in stan that the ratio between the greate radii of gyration should be as smal Take, for instance, a 9 in. by 4 i joist of the old range of sections radius of gyration 3·6 and least ·8. of 9 ft. by Moncrieff's formula, th 22 tons with " ends flat " as a stan compare a 1920 section, the 5 in 20 lbs., with maximum radius of and least 1, and under the same carries 32 tons, though it is a light the case of the 9 in. by 4 in. at 21 the ratio between the radii of while in the case of the 5 in. by 4½ it is 2, and so the latter joist is section to use as a stanchion. that the broad and compact joist to aim for as an economical stanch

Now these scientific facts were of those responsible for the design range of sections, and they have greater number of joists with broa act as stanchions, and have in increased the least radius of gyr better disposition of metal.

We have the 4 in. by 3 in. at 10 4½ in. at 20 lbs., 6 in. by 5 in. at by 6 in. at 35 lbs., and though thes in size to the old range the ratio radii of gyration is decreased so th capable of bearing greater loads t joists and so are more economical.

The 9 in. by 7 in. at 58 lbs. and t 8 in. at 70 lbs. of the old range are to 50 lbs. and 55 lbs. respectively. render them of more general use building work as the old sections wer to be greatly used and had too in the webs to make economical stanchions.

The most marked changes are in t joists of the old range : 12 in. by 6 14 in. by 6 in. at 57 lbs., 16 in. 62 lbs., and 18 in. by 7 in. at 75 have now been improved by g broader flanges, in every case 8 in. 6 in., and so we find 12 in. by 8 in. 14 in. by 8 in. at 70 lbs., 16 in. 75 lbs., and 18 in. by 8 in. at 80 lbs.

For the reasons explained above, compact joists can carry from 25 40 per cent. heavier loads than t For instance, the permissible cent the 12 in. by 6 in. at 54 lbs. old joi length, when calculated by the L.C is 67 tons. The new 12 in. by 8 i will carry a load of 93 tons unde conditions, which is an increase 40 per cent.

These larger joists can be used as stanchions where formerly it been necessary to use a compoun formed by riveting plates to the joist. The increased weight of th and the labour of riveting the p flanges much increased the cost of stanchion when compared to a stanchion.

When we come down to smal details it will be plain to those w much experience of stanchion des deep webs and the broad flanges advantages for supporting the en girders. If a specially strong necessary we can have, with these not only a stiff bracket to rest t and a top cleat, but also a pair on the girder which will greatly s connection.

It cannot be too strongly emp these sections are now general The Steel Rolling Mills are rol sections, and almost all the steel country roll several, while one a large selection. Many constr neers have considerable stocks a and engineers who know where to advantage will find they have in getting these new sections derive a considerable benefit.

NEW BUILDINGS IN LONDON

.—Hospital.—Tenders are being om selected contractors for the f the West-Park Mental Hospital n County Council Mental Hospitals This institution has already ut £1,000,000 on its building and nd it is estimated that £105,000 is mplete the scheme. The buildings cted are additions to the infirmary, rds. a new chapel, &c. The archi- Clifford Smith, the Committee's he quantity surveyors are Messrs. Neighbour & Nicholson, 55, Chan- .C.2.

lith. — Housing. — An important me is to be carried out at Hammer- e the Trustees of the Peabody nd have bought a site of about four proposed to build 33 blocks of five containing self-contained flats of nd four rooms, together with 58 ive rooms each. The flats will be ll labour-saving devices, gas ranges &c., whilst the cottages will be of type. New roads and sewers and services will be constructed. The Mr. Victor Wilkins, of 12, York delphi, W.C.2. The contract for f the work has been placed with ter Lawrence & Son, Ltd., 19, nare, E.C.2, who have just started site.

treet. — Extension. — The Old reet Infirmary, S.W.1, owned by the Council, is to be leased to the ospital, who propose to adapt the n annexe. Being in a bad state of uildings will necessitate complete decoration, and new equipment, £20,000. Of this sum about £8,500 ended on general repairs and the be used for adaptation works, stallation of adequate heating and ms. The plans have been approved Council as lessees. The architects Young & Hall, of 17, Southampton- l.

re. — Cinema. — The Tottenham Entertainment Co., Ltd., of the ace-grove, London, N.17, are con- he erection of a new hall in Bruce- s by Mr. A. P. Lloyd, 7, New- oln's Inn, W.C.2, provide for a one- g for dances, meetings, &c., accom- out 5,000, and the contracts will be o tender very shortly. They have of erection a smaller hall to accom- 0, the contractors being Messrs. nt & Son, 16, Bruce-grove, N.17. ns in connection with the "50–50" rdour-street, W., the contract has with Messrs. Arthur & Pirkis, Ltd., reet, S.W., who have just com- ations.

-Hospital.—The London County uly approved the preparation of quantities, &c., for the modernisa ght large three-floor blocks at Ban- Hospital. It is proposed (1) to "J" into a two-ward block by of one story to the existing end- d the re-distribution of dormitory on on the ground and first floor; nvert block "K" into a three- by the addition of two stories to room, and the re-arrangement of y accommodation on all three proposed alterations necessitate a rease, ward sculleries, boot rooms, ry accommodation, &c., and an will be made in the size of the the better lighting of the wards. l cost of the alterations is £30,265. ve been prepared by Mr. Clifford I.B.A. (L.C.C. Mental Hospital ociated with Mr. Leolin C. Gregory,

eet.—Offices.—Work has started l section of the new premises on the corner site in Gresham-street and Coleman-street, E.C. 2, of the Swiss Bank Corporation, Ltd. The new building will be of five stories, the two top ones being contained in a "Mansard" roof, and two basements. The foundations are composed of reinforced concrete. All the floors will be of hollow tiles reinforced with steel bars. The elevation will be executed in Portland stone, the ground floor being of polished granite. Marble and hardwood panelling will be extensively used in the decoration of the banking hall and principal offices on the ground floor. The sloping roof will be slated with Cumberland slates and finished with a flat of concrete surfaced with asphalte. The window casements will be of bronze on the ground floor, fitted with rolling shutters. The other windows will be of steel. An artesian well will provide a private supply of water to the building. Extensive strong-rooms will be found in the basement. The architects are Messrs. Meakin, Archer & Co., of 73, King William-street, E.C.; and the builders are Messrs. Ashby & Horner, Ltd., of 8, Aldgate, E. 1.

Regent-street.—Shops.—Another 50 ft. frontage of Regent-street—Nos. 91 & 93—is about to be rebuilt. Plans have been completed for a block of six stories, to consist of two large double-fronted shop fronts on the ground floor and five floors of office accommodation above, approached by a separate entrance. One story will be contained in the Mansard roof. A basement will necessitate excavation to about 20 ft. The building will have an elevation conforming to the Crown scheme of reconstruction, faced with Portland stone. A steel frame will carry all the principal loads, whilst the floors will be of some fireproof material. The shop fronts will be of bronze with marble skirtings and linings and art metal decorations. The roof will be covered with Cumberland slates. Systems of heating and lighting will be installed throughout the premises, whilst a lift will serve all floors. The architects are Messrs. Yates, Cook & Darbyshire, of 43, Great Marlborough-street, London, W. 1.

Ilford.—Hall.—It is proposed, as a local war memorial, to build a small hall at Ilford, Essex. Plans have been prepared for a circular building, measuring about 30 ft. in diameter. The hall will have a domed roof, constructed of reinforced concrete, with steel bars. The walls will be of brick, faced with Portland stone and red brick. The architects are Messrs. C. J. Dawson, Son & Allardyce, of Clock House Chambers, Barking, Essex.

Carshalton.—Houses.—A housing scheme is being carried out at Carshalton by the Carshalton Housing Co., Ltd., of 10, Lower Grosvenor-road, S.W. 1. About 70 houses are to be built, each containing living room, kitchen, scullery, bathroom, lavatories, &c., and three bedrooms. Each house will have a 30 ft. frontage on a new road to be constructed, and will extend back for about 150 ft. Sewers and other public utility services will be laid on. The contractors are Messrs. J. Cracknell, Ltd., of Huntley-grove, Peterborough. The plans have been prepared by Mr. Arnold Mitchell, of 17, Hanover-square, W. 1.

Golder's Green.—Extension.—An adjoining vacant piece of land will be purchased by the owners of the Ionic Cinema, at Finchley-road, Golder's Green, N.W. 10, with a view to extension. It is proposed, at an early date, to considerably enlarge the auditorium and galleries, and to build an up-to-date tea and refreshment room. The architect is Mr. J. Stanley Beard, of 52, Baker-street, London, W. 1.

Streatham Hill.—Flats.—A large row of flats is to be built on the Leigham Court Estate, at Streatham Hill, S.W., for the Artisans', Labourers' and General Dwellings Co., Ltd., of 1, Cromwell-road, South Kensington, S.W. There will be 34 flats in all, and each one will consist of living-room, kitchen, scullery, bathroom, and w.c., and two or three bedrooms. Facing bricks will be used for the street frontage, whilst the interior equipment will include cooking ranges with hot-water boiler, grates, and electric-light fittings. The general contractors are Messrs. Walter Jones & Sons, Ltd., 64, Victoria-street, S.W. 1; whilst the plans were prepared by the Dwelling Company's own architect.

Chelsea.—Shops.—The large site at the corner of King's-road and Vale-avenue, Chelsea, S.W., is being developed by the erection of a row of some 17 or 18 shops with showrooms and dwelling accommodation above. At the end of the row, adjoining Vale-avenue, there will be a new branch for Messrs. Barclays Bank, Ltd.; whilst at the other end will be a modern restaurant and café. The elevation will be carried out in good quality facing brick, relieved by stone dressings. The general contractors are Messrs. R. Dixon & Sons, Britannia Works, Park-walk, S.W. 10; whilst the architect is Mr. G. W. Booth, of 45, Chandos-street, W.C. 2.

Croydon.—Additions.—It is hoped to complete the working drawings by the end of this month for the new additions to the Croydon General Hospital. Funds are now in hand in order to enable a start to be made of the first portion of the plans, the total cost of the complete scheme being £250,000. The first section provides for a new out-patients' department, a new block for two wards, and additional bedrooms for the nursing staff. It is estimated that this section will cost about £36,500. The entire scheme includes a ward block for 12 beds, an extension of present wards for 28 beds, a small recreation hall for use as a chapel on Sundays, with a large operating theatre above it. A paying patients' block to accommodate 30 patients in small wards and single-bedded rooms is also to be provided. The architects to the hospital are Messrs. H. Berney & Sons, of High-street, Croydon.

Pancras-street.—Buildings.—Extensive buildings are to be erected on a site in Huntley-street and Pancras-street, W.C. 1, for the Royal Ear Hospital. A four-story block, covering a ground area of 7,500 ft., is to be built at a cost of about £45,000. The hospital will be constructed of brick on a steel frame, with Portland stone dressings. On the ground floor will be an out-patients' department, writing-room and lavatories, operating theatre, dispensary, and consulting rooms. On the first floor will be a board room, private patients' wards, bathrooms, men's wards, duty-rooms, &c. On the second floor will be a women's room, matron's room, lavatories, &c.; whilst on the third floor will be children's wards and operating theatre, dressing room, &c. A basement will also be fitted up for radiography, examination rooms, &c. The architects are Messrs. Edmund Wimperis & Simpson, of 61, South Molton-street, London, W. 1, acting on the instructions of Mr. Geoffrey Duveen, the chairman of the Hospital, who is erecting the Hospital as a memorial to his late father.

The Surveyors' Institution.

Prior to delivering his presidential address at the opening meeting of the Institution session, at 8 p.m., on November 10, Sir Edwin Savill will unveil the portraits in oils of the Rt. Hon. G. F. Stewart, P.C., and Mr. J. I. Davidson, the two first Presidents respectively elected from the Irish and Scottish Branches of the Institution.

During the earlier part of the session, Mr. L. E. Tanner will read a paper, on January 12, 1925, on "The Building of the Abbey Church of Westminster."

The Council has set up a special committee to consider and report upon the practicability, advantages and disadvantages of extending the Town-Planning Acts, in particular the powers with regard to zoning, to built-up areas. Mr. W. Edgar Horne is acting as chairman of the committee, other members being Messrs. C. H. Bedells, W. R. Davidge, J. J. Done, E. W. Eason, F. M. Elgood, J. G. Head, F. Longstreth Thompson, Dendy Watney, and John Willmot.

WATER PIPES AND FITTINGS.

THE preparation of new by-laws by water undertakings recently aroused some discussion among the manufacturers of water fittings as to what would be required under the proposed new regulations, and in view of this position the Minister of Health appointed a committee to advise him on questions relating to (*a*) the construction and standardisation and testing of water pipes and fittings, and (*b*) by-laws or regulations for preventing the waste, undue consumption, misuse, or contamination of water. This committee has now issued its report, which takes the form of a specification showing what should be the minimum requirements as to water fittings commonly in use in order to prevent waste of water and undue expense for repairs and renewals. It is hoped that this specification will do much towards standardisation in the important parts of water fittings, but it is not thought advisable at present to endeavour to enforce strict standardisation. The Committee recommends that all water fittings be tested before use, but is not prepared to recommend that at the present time legislation should be introduced to make testing compulsory; the opinion is expressed, however, that it would be of great benefit if a sufficient number of testing stations were set up under the joint management of water undertakings and manufacturers, in which there would be a uniform standard of testing. Copies of the report, containing the specification, which deals with (*a*) supply, distributing, flushing and warming pipes; (*b*) cisterns; (*c*) water closet apparatus; (*d*) hot-water apparatus; (*e*) baths, lavatories and sinks, and (*f*) taps and valves, may be obtained from H.M. Stationery Office, price 3d. net. The next task of the committee is to consider what modifications should be made in the by-laws relating to water fittings now in use, and measures have been taken to this end.

TRADE NEWS

We have received from Messrs. J. H. Heathman, Ltd., Fulham, London, S.W., an illustrated catalogue dealing with their well-known ladders, trestles and steps. The fire-protection appliances cover almost every conceivable range, from a folding Eton ladder which can be closed in a box to wheeled ladders which can be extended to suit all ordinary purposes. A number of portable fire extinguishers are also illustrated. On the domestic side there is a variety of steps and ladders for all requirements.

The British Industries Fair, Birmingham, which will be held from February 16 to 27, 1925, includes in the Construction, Building and Decoration Group: Building materials, builders' ironmongery and hardware, architectural and ornamental work, constructional steelwork, ferro-concrete, sanitary apparatus, appliances and fittings, contractors' plant, shop, bar and restaurant fittings, paints, colours, enamels, varnishes, stains, polishes, lacquers, metal powders, glues and adhesives, mechanical and hand-painting and spraying apparatus, decorating materials, wall papers and coverings.

NEW INVENTION

AN ingenious new rule, called the "Interlox" master slide rule, has been put on the market by Messrs. Clark, Hunt & Co., Ltd., Middlesex Ironworks, E.1. The rule is of the extension type, which, when closed, measures only 8 in. by 2 in., and when fully extended is 5 ft. in length. Whether open or closed, the slides are securely locked with an interlocking device which operates automatically as the rule is extended. One side of the rule is marked off in inches and fractions of an inch in the ordinary way, and the reverse may be used as an inside caliper. It is claimed to be the only rule in the world which takes inside measurements rapidly and accurately and which reads direct, and has many uses for the architect in taking inside measurements in positions which are difficult to get at. It is light and can be easily carried in the pocket. Various sizes are made to meet different requirements.

RATES OF WAGES IN THE BUILDING TR

The following are the rates of wages in the building trade in England and W endeavour is made to ensure accuracy, but we cannot be responsible for errors that m

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	La
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 659.

CONTRACTS, COMPETITIONS, &c.

ontracts still open, but not included in this List, see previous issues. Those with an asterisk d in this number. Certain conditions beyond those given in the following information n some cases, such as that advertisers do not bind themselves to accept the lowest or any a fair wages clause shall be observed; that no allowance will be made for tenders: and are returned on receipt of a bona-fide tender unless stated to the contrary.

ven at the commencement of each paragraph is the latest date when the tender, or the names to submit tenders, may be sent in; the name and address at the end is the person from whom quantities, forms of tender, &c., may be obtained.

DING AND PAINTING.

-Carlton.—PAVILION.—For the erection ls, and levelling of bowling green, for cheme." Mr. J. R. Shepheard, Town

.—Usk.—BUILDINGS, &C.—For the ldings for the Agricultural Institute, ential block, scholastic block, additions wer house. Mr. C. Dauncey, Secretary, ewport, Mon. Deposit £2 2s.

-Barlby.—SCHOOL.—For erection of a or 80 scholars, for the East Riding of Mr. J. Bickersteth, Clerk of the East unty Hall, Beverley. Deposit £1 1s.

. — Cardiff. — RENOVATIONS. — For . &c., two children's homes at Penarth arry: (2) fixtures, renovations, &c., s homes at Cathays and Roath, Cardiff, r. R. Stephenson, Clerk, Union Offices, Cardiff.

-Edinburgh.—PAINTING.—For painter Clark School extension, for the E.C. Executive Officer, Education Offices.

-Edinburgh.—VARIOUS.—Various work .C. School, Portobello—mason, joiner, plumber, steel work. Mr. J. Stewart, e Officer, Education Offices.

-Lisburn.—HOUSES.—For the erection n a site in Low-road, for the U.D.C. on, Town Clerk, Town Clerk's Office,

-London, E.—DWELLINGS.—Erection ellings on the Whitemore Estate (Ware- preditch, for the L.C.C. Architect to e County Hall (Room No. 3), West- S.E.1. Deposit £2, payable to the

-London, S.E.18.—LAVATORY ACCOM- ction of additional lavatory accom- e Guardians' Offices, 394, High-street, 18, for the Guardians of the Poor of nion. Guardians' Offices, 394, High- n, S.E. Deposit £1 1s.

-Mexborough.—HOUSES.—For erection the Council's site in Harlington-road, Mr. G. F. Carter, Surveyor to the

-Newmarket.—HOUSES.—Erection of ted houses in five pairs, at Stamford- set. in the County of Suffolk, for the Council of Newmarket. Mr. W. H. Godolphin House, Newmarket.

-Salcombe.—ALTERATIONS.—For al- at the Salcombe Hotel, Salcombe. Barron, architect, 11, The Crescent,

.—St. Minver.—HOUSE.—For the iceman's house. Mr. L. D. Thompson, t, County Hall, Truro.

-Treherbert.—PAINTING.—For paint- ng Libanus Baptist Chapel. Mr. W. D. t, Pentre, Rhondda.

-Wallsend.—HALL.—For erection of te, Station-road, Wallsend-on-Tyne, Welfare Scheme. The Secretary, eet, Wallsend-on-Tyne.

.—Barking.—HOUSES.—Erection of on the Eastbury Estate, Ripple-road, e Barking Town U.D.C. Council's J. Dawson, F.R.I.B.A., Clock House street, Barking. Deposit £5.

—Basford, near Nottingham.—TELE- G.—Erection of a Telephone Exchange Nottingham, for the Commissioners of Office of Works. Contracts Branch, g Charles-street, London, S.W.1. neques payable to the Secretary).

-Castlemaine.—REBUILDING.—For re- emaine Station buildings, Co. Kerry, Southern & Western Railway. Mr. etary, Kingsbridge Terminus, Dublin.

-Glasgow.—PAINTING.—For painter connection with the Knightswood for the Corporation. Mr. J. Lindsay, Chambers.

-Nottingham.—PAINTING.—For inter- he City Mental Hospital, Mapperley. Town Clerk. Deposit, £1.

-Preston.—HOUSES.—For complete houses, Miller-road, for the County Howarth, Town Clerk. Deposit 10s.

-Thorpe.—ADDITIONS.—For erection n block at the Isolation Hospital, R.D.C. Mr. J. M. Longden, Clerk of cil Offices, Easington. Deposit, £1 1s.

—Windsor.—CONCRETE HOUSES.— houses in concrete, contractors to wn designs and estimates, for the . E. A. Stickland, Borough Surveyor, sor.

Dublin.—ALTERATIONS.—For altera- ments at the Riding School Buildings, ot, Phœnix Park, for the Commis- Works. Mr. J. J. Healy, Secretary, Works, Dublin.

OCTOBER 29.—**Gravesend.**—ALTERATIONS, &C.—Alterations to the Post Office and erection of a new telephone exchange at Gravesend, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 29.—**Greasbrough.**—BUNGALOWS.—For completion of eight bungalows, Croft-street, for the U.D.C. Mr. J. H. Jackson, Clerk to the Council, Council Office.

OCTOBER 29.—**Truro.**—STORE.—For the erection of a store at Malpas-road. Mr. W. Webber, The Western Counties Agricultural Co-operative Association, Plymouth.

OCTOBER 29.—**Tynemouth.**—SHELTER.—For erection of a shelter for male tubercular patients and for the enlargement of the existing shelter for female tubercular patients at Preston Hospital, North Shields, for the B.G. Mr. T. Percival, Clerk to the Guardians, Guardians' Hall, North Shields.

OCTOBER 30.—**Glasgow.**—VARIOUS.—For works required in connection with the proposed erection of 248 houses and 13 shops at Belvidere, viz., excavator, brick, and mason works, &c., for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers.

OCTOBER 30.—**Harwich.**—SUB-STATIONS.—For erection of 4 sub-stations, for the B.C. Mr. F. H. French, Borough Engineer and Surveyor, Borough Engineer and Surveyor's Office. Deposit, £1 1s.

OCTOBER 30.—**London, N.19.**—REPAIRS AND PAINTING TO SCHOOLS.—General repairs and painting to the exterior of the blocks of buildings, boundary walls, roofs, &c., at the schools in Andover-row, Hornsey-road, N., in accordance with the drawing and specification prepared by the Architect for the Guardians of the Poor of the Parish of St. Mary, Islington. Mr. Edmund J. Harrison, Lic.R.I.B.A., 23, Berkeley-road, Crouch End, N.8. Deposit £2.

OCTOBER 30.—**Rochdale.**—WALL.—For erection of parpoint boundary walls, with stone dressings, steps, &c. Mr. W. H. Hickson, Town Clerk, Town Hall.

OCTOBER 31.—**Allerton Bywater.**—SHELTER.—For erection of a public shelter and w.c.'s, &c., on the Recreation Ground, for the Parish Council. Mr. H. R. Clarke, Clerk to the Council, Council Offices.

OCTOBER 31.—**Bugle.**—SCHOOL.—For the erection of a school, for the Cornwall E.C. Mr. F. R. Pascoe, Secretary for Education, County Hall, Truro. Deposit, £1 1s.

OCTOBER 31.—**Depwade.**—COTTAGES.—For the erection of 4 cottages at Alburgh, Norfolk, for the R.D.C. Mr. A. E. Scarlett, Pulham Market, Diss. Deposit, £1 1s.

★OCTOBER 31.—**Hammersmith, W.6.**—BUILDING ADDITIONS: ALTERATION TO OFFICE BLOCK, ELECTRICITY WORKS, FULHAM PALACE-ROAD.—Work and materials required in providing additional accommodation for employees, comprising mess rooms, slipper and shower baths, lavatories, w.c.s, &c., for the Metropolitan Borough Council of Hammersmith. Mr. R. Hampton Clucas, M.Inst.C.E., M.S.A., Borough Engineer and Surveyor, Town Hall, Hammersmith, W.6. Deposit £3 3s.

OCTOBER 31.—**Kenilworth.**—HOUSES.—For the erection of 10 houses in Albion-street, for the U.D.C. Mr. Sholto Douglas, Architect and Surveyor to the Council, Council Offices, Kenilworth.

OCTOBER 31.—**Liverpool.**—ALTERATIONS.—Alterations to the Employment Exchange, Luce-street, Liverpool, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

OCTOBER 31.—**Newquay.**—HOUSE.—For erection of a residence at Porth Four Turnings, Newquay. Mr. A. J. Cornelius, architect and surveyor, Truro.

NOVEMBER 1.—**Chippenham.**—HOUSES.—For erection of 20 houses on the land at Crickett's-lane, for the B.C. Mr. A. Strand, Town Clerk. Deposit, £2.

NOVEMBER 3.—**Cornwall.**—FARMHOUSES.—For erection of eight new farmhouses at Trerice Farm, St. Newlyn East, for the C.C. The County Land Agent, County Hall, Truro. Deposit £1 1s.

NOVEMBER 3.—**Gateshead.**—PAINTING.—For painting works at the Poor Law Institution, for the B.G. Mr. G. Craighill, Union Clerk, Poor Law Union Offices.

★NOVEMBER 3.—**Gravesend.**—SCHOOL.—For the erection of a County School for 390 girls, for the Kent Education Committee. Mr. W. H. Robinson, F.S.Arc. County Education Architect, Room 69, Sessions House, Maidstone. Deposit £2 2s.

NOVEMBER 3.—**Hill Heads.**—HOUSES.—For erection of 24 houses, for the Whitley and Monkseaton U.D.C. Mr. A. Barker, Clerk to the Council, Council Offices, Whitley Bay. Deposit, £1 1s.

NOVEMBER 3.—**Portslade-by-Sea.**—PAINTING.—For repairs and painting of houses on the Council's Copperas Gap Housing Estate, for the U.D.C. Mr. E. H. Kempe, Clerk to the Council, Council Offices.

NOVEMBER 3. — **Surrey.** — MODERNISATION.—Modernisation of blocks "J" and "K" at the Banstead Mental Hospital, Surrey, for the L.C.C. The Architect to the Council, The County Hall, Westminster Bridge, S.E.1. Deposit £2, payable to the cashier.

★NOVEMBER 3.—**Yeovil.**—OFFICES AND LIBRARY.—For the erection of proposed new municipal offices and free library, for the B.C. Messrs. Petter & Warren, FF.R.I.B.A., architects, Old Sarum, Yeovil. Deposit £2 2s.

NOVEMBER 4.—**Dublin.**—RESTORATION.—For restoration of Bansha Civic Guard Station, Co. Tipperary, for the Commissioners of Works. Mr. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath.

NOVEMBER 4.—**Gillingham, Kent.**—POST OFFICE AND TELEPHONE EXCHANGE.—Erection of a post office and telephone exchange at Gillingham, Kent, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

★NOVEMBER 4.—**Watford, Herts.**—CHURCH EXTENSION.—For the erection of the proposed extensions to the Church of SS. Michael and All Angels. Mr. A. G. Bond, 115, Gower-street, W.C.1.

NOVEMBER 5.—**Diss.**—ADDITIONS.—For additions and alterations at the Secondary School, for the Norfolk E.C. Mr. J. S. Davis, Secretary, Shire Hall, Norwich. Deposit, £2 2s.

NOVEMBER 5.—**Greystones.**—BELFRY.—For building a belfry at the Parish Church. Hon. Secretary, Ard-na-Ree, Greystones.

NOVEMBER 5.—**Halesowen.**—HOUSES.—For erection and completion of 40 houses on the Hurst Green Hill, for the R.D.C. Mr. E. H. Grove, Church Steps House. Deposit £2 2s.

NOVEMBER 5.—**Penrith.**—VILLA.—For various work required in connection with the erection of a villa at Penrith. Mr. A. Knewstubb, P.A.S.I., architect and surveyor, St. Andrews Chambers.

NOVEMBER 6.— **London, E.14.**—TENEMENTS.—Erection of 24 tenements on a site at Lower North-street, for the Metropolitan Borough Council of Poplar, Mr. Harley Heckford, M.Inst.C.E., Borough Surveyor. Council Offices, Poplar. Deposit £3 3s.

NOVEMBER 6.—**Wanstead.**—CONVENIENCES.—For reconstruction of conveniences in George-lane, at the rear of the "George" Hotel, for the U.D.C. Mr. B. Blewitt, Clerk and Solicitor to the Council, Council Offices.

★NOVEMBER 7.—**London, E.C.4.**—BUILDING WORK.—Building work in construction of a lift shaft at the General Post Office South, Queen Victoria-street, E.C.4, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

★NOVEMBER 7.—**Surrey.**—COTTAGES.—Erection of 10 cottages on the High-lane building site, for the Haslemere U.D.C. The above will be built of concrete blocks which will be provided by the Council. Mr. C. A. Best, Surveyor to the Council, Council Offices, Haslemere, Surrey. Deposit £1 1s.

★NOVEMBER 8.—**Bexhill.**—HOUSES.—Erection of 10 houses in Church Hill-avenue, Little Common, for the Borough Council of Bexhill. Borough Surveyor, Mr. George Ball, Assoc.M.Inst.C.E., Town Hall, Bexhill. Deposit £1 1s.

★NOVEMBER 11.—**Plymouth.**—EMPLOYMENT EXCHANGE.—For the erection of Employment Exchange for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NOVEMBER 11.—**Wellington.**—CONVENIENCE.—For erection of a public convenience in the Market Yard, for the U.D.C. Mr. J. W. Littlewood, Clerk, Bank Chambers. Deposit £2 2s.

★NOVEMBER 12.—**London, S.W.7.**—WORKSHOPS.—For the erection of workshops at the Victoria and Albert Museum, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

NOVEMBER 12. **Pantynawel, Blackmill.**—HOUSES.—For erection of 20 houses, together with the construction of roads and sewers, for the Ogmore and Garw U.D.C. Mr. W. T. Ollivant Jones, Engineer and Surveyor, Council Offices, Brynmenyn. Deposit £2 2s.

★NOVEMBER 13.—**London, N.1.**—REMEDYING DAMPNESS.—For remedying dampness in Flats Nos. 2 and 3, Park House, Holly Park, Crouch Hill, N., for the Metropolitan Borough Council of Islington. Mr E. C. P. Monson, F.R.I.B.A., 192, Finsbury Pavement House, 120, Moorgate, London, E.C.2. Deposit £1.

★NOVEMBER 15 .— **Wallasey.** — EXTENSIONS TO SCHOOL.—Erection of the extensions to Oldershaw School, for the County Borough of Wallasey E.C. Architect's Office, Town Hall, Wallasey. Deposit £2 2s.

★NOVEMBER 19.—**Hornchurch, near Romford.**—FENCING.—For the supply and erection of about 494 ft. run of oak fencing at the Cottage Homes, for the Guardians of the Parish of Saint Leonard, Shoreditch. Mr. F. Danby Smith, F.R.I.B.A., Parliament Mansions Victoria-street, Westminster, S.W.1.

★NOVEMBER 21.—**Lewisham.**—HOSPITAL BUILDINGS.—Erection of buildings in connection with the extension of the Lewisham Hospital, consisting of two ward pavilions, each three stories high and containing 270 beds in all, operations department, and sick nurses' wards for eight beds, and the usual offices and sanitary annexes, &c., also additions of one story on the existing lunacy wards, and sundry alterations to the same; power station and chimney shaft, disinfecting pavilion, corridors, covered ways, subways, drains, roads and paths, for the Guardians of the Lewisham Union. Mr. Louis Jacob, F.S.I., quantity surveyor, 39, Bloomsbury-square, W.C.1. Deposit £3 3s.

NO DATE.—**Harrogate.**—HOUSE.—For the erection of a clubhouse, for the Oakdale Golf Club, Ltd. Mr. T. E. Marshall, 73, Station-parade, or Mr. H. Linley Bown, 6, Princes-square.

NO DATE.—**St. Albans.**—HOUSES.—For erection of 28 houses at London Colney, 12 at Colney-street, 12 at Tyttenhanger, for the R.D.C. Mr. E. F. W. Hicatt, Clerk to the Council, Union Offices, Chequer-street.

FURNITURE, MATERIALS, etc.

OCTOBER 25.—**Dartford.**—GRANITE.—For supply and delivery of 500 tons of 2½ in. hand-broken granite, for the U.D.C. Mr. J. James Hurtley, Clerk to the Council, Council Offices.

OCTOBER 27.—**Broadstairs.**—GRANITE.—For various road materials: 565 tons of granite macadam; 4,600 ft. of 6 in. by 12 in. granite kerbing; 700 cub. yds. of hard core; 170 tons of tarred slag; 1,930 ft. of concrete channelling, for the Broadstairs U.D.C. Mr. L. A. Skinner, Clerk to the Council, Pierremont Hall, Broadstairs.

OCTOBER 28.—**Barking Town.**—WIDENING.—For materials to be supplied in connection with the widening and reconstruction of Longbridge-road with approximately 13,600 sq. yds. of creosoted deal block paving on concrete foundation, for the U.D.C. Mr. H. Hargreaves, Clerk to the Council, Public Offices.

OCTOBER 28.—**London.**—STEEL.—For supply of 246 tons of steel girders and other iron and steel work, for the G.W.R. Engineer, Paddington Station, W.2.

OCTOBER 31.—**Singapore.**—PIPES.—For the supply of about six miles of welded steel pipe 33 in. internal diameter, about six miles of welded steel pipe 36 in. internal diameter, about six miles of welded steel pipe 39 in. internal diameter, &c., for the Municipality. Messrs. C. C. Lindsay & Peirce, 180, Hope-street, Glasgow. Deposit £5.

NOVEMBER 4.—**North Cornwall.**—PIPES.—For supply of about 2,500 tons of cast-iron pipes, and for delivery of the same at stations on the Southern Railway, between Camelford and Wadebridge, for the Joint Water Board. Mr. J. Pethybridge, Clerk to the Joint Board, Mount Filly, Bodmin. Deposit £2.

NOVEMBER 10.—**Dublin.**—STEELWORK.—For supply of steelwork for bridges, for the Midland Great Western Railway of Ireland Co. Mr. E. H. Taylor, Acting Secretary, Broadstone Terminus. Charge 4s.

ENGINEERING, IRON AND STEEL.

OCTOBER 27.—**Berwick.**—BRIDGE.—For construction of a ferro-concrete bridge over the Tweed, consisting of approaches, and arches up to 360 ft. in span. Messrs. L. G. Mouchel & Partners, Ltd., Civil Engineers, Trinity Buildings, 25, New Bridge-street, Newcastle-on-Tyne. Deposit £100.

OCTOBER 27.—**Bristol.**—BRIDGE.—For the reconstruction of the swing bridge over the Junction Lock-Cumberland Basin, for the Port of Bristol. Mr. T. A. Peace, Chief Engineer, Chief Engineer's Office, Avonmouth Dock. Deposit £5.

OCTOBER 27.—**Bristol.**—HOT WATER HEATING.—Provision and fixing of a low-pressure acclerated hot water heating apparatus at Eastville Institution, in accordance with revised plans and specification, for the Guardians of the Poor, City and County of Bristol. Mr. Thos. S. Lamb, Clerk to the Guardians, St. Peter's Hospital, Bristol.

OCTOBER 27.—**Findochty.**—EXTENSION.—For the extension of the harbour, comprising the excavation of the harbour bed and the construction of a mass concrete jetty, mass and reinforced concrete quay walls, and relative works, for the Burgh. Mr. W. Smith, solicitor, 12, East Church-street, Buckie.

OCTOBER 28.—**Aberdeen.**—RECONSTRUCTION.—For reconstruction of the public road bridge over the River Ythan at Waterside of Slains, near Newburgh, for the C.C. Messrs. Tawse & Allan, civil engineers, 10, Bon-Accord-square, Aberdeen. Deposit £2 2s.

OCTOBER 28.—**Wellington, N.Z.**—BRIDGE SPANS.—For plate girder spans for Wairoa, Rangitaiki and Awakeri bridges, for N.Z. Public Works Board. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 29.—**Glasgow.**—ENGINEERING.—For (1) tile work, and (2) engineering work, required in connection with the proposed baths and washhouses, Dobbie's Loan, for the Corporation. Mr. J. Lindsay, Town Clerk, City Chambers.

OCTOBER 31.—**Beaufort West (Cape Province).**—POWER STATION.—Electric power station plant, for the T.C. Department of Overseas Trade (Room 52).

NOVEMBER 3.—**Sydney, N.S.W.**—BRIDGE SPANS.—For metal work for superstructure of bridge at Tom Ugly's Point, for Department of Public Works, Sydney. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.

NOVEMBER 5.—**Kingston-on-Thames.**—TANKS.—For construction of two concrete humus tanks and the necessary concrete channels, timber sluice gates, &c., and a small pump house at their sewage works, for the T.C. Mr. H. A. Winser, Town Clerk, Municipal Offices. Deposit £1 1s.

✱NOVEMBER 5.—**Tooting.**—BRIDGES.—For erecting steel fire escape bridges and incidental works at Tooting Bec Mental Hospital Extensions, Church-lane, Tooting, for the Metropolitan Asylums Board. Mr. G. A. Powell, Clerk to the Board. Deposit £1 1s.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—**For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.**

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

OCTOBER 25.—**Plygyrhiw.**—ROAD.—For the construction of two sections of new road at Plygyrhiw and Penlan, near Llandyssul, for the Carmarthenshire C.C. Mr. R. W. Jones, County Surveyor, County Offices, Carmarthen. Deposit £3 3s.

OCTOBER 27.—**Bolton-upon-Dearne.**—SEWERAGE.—For construction of two humus beds, for the U.D.C. Mr. J. Ledger Hawksworth, Clerk of the Council, Council Offices. Deposit £1 1s.

OCTOBER 27.—**Conisbrough, near Rotherham.**—DRAINAGE, ROADS, AND ERECTION OF CARETAKER'S HOUSE.—(A) Works: For the execution of all the works, including subsoil drainage, surface water drainage, excavation works, and the laying of reinforced concrete roads and footpaths *in situ*. The tender to be based on the specification and quantities. (B) Works: The erection of a caretaker's house. The tender to be a lump sum tender, based on the specification and drawings, for the Conisbrough and Conisbrough Parks Joint Burial Committee, New Burial Ground, Denaby Main. Mr. H. Thirlwall, M.I.M. & C.E., Surveyor, Council Offices, Conisbrough. Deposit £1 1s.

OCTOBER 27.—**Coulsdon.**—ROADS.—For making-up of Kendall-avenue South and Penwortham-road, Sanderstead, for the U.D.C. Mr. E. C. King, Clerk to the Council, Council Offices. Deposit £2 2s.

OCTOBER 27.—**Saltburn-by-the-Sea.**—SEWER.—For the new sewerage works consisting of the laying of a new outfall sewer and other sewers, for the U.D.C. Mr. R. Wood, Clerk to the Council, Council Offices. Deposit £5 5s.

OCTOBER 27.—**Thornaby-on-Tees.**—MAKING-UP.—For making-up Cambridge-road, Grange-road and Lanehouse-road, for the T.C. Mr. T. K. Dobson, Town Clerk, Town Hall.

OCTOBER 28.—**Guildford.**—WIDENING.—For widening an existing highway and other work, for the Borough. Mr. A. D. Jenkins, Town Clerk, Town Clerk's Office. Deposit £2 2s.

OCTOBER 28.—**Manchester.**—ROADS.—For the (*a*) Construction of town-planning road from Mauldeth-road West to Princess-road South; (*b*) construction of town-planning road from Princess-road South to Barlow Moor-road, Chorlton-cum-Hardy, for the Corporation. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £3 3s.

OCTOBER 29.—**Birmingham.**—SEWERS.—For construction of about 1,860 yards of brick and concrete sewers, 350 yards of stoneware pipe sewers, &c., for the City Council. Mr. H. H. Humphries, City Engineer and Surveyor, Council House. Deposit £2.

OCTOBER 30.—**Pinner.**—MAKING-UP.—For making-up Althorpe-road, Beresford-road, Chandos-road, and part of Pinner View, for the Hendon R.D.C. Mr. J. B. Willis, Clerk of the Council, Union Offices, Edgware. Deposit £3 3s.

OCTOBER 31.—**Blackpool.**—MAINS.—For laying cast-iron mains between Stocks Reservoir, in the West Riding, and Westby Reservoir, near Blackpool, in the County of Lancaster: (1) 12,919 yds. of 27 in. main; (2) 12,518 yds. of 27 in. main; (3) 12,346 yds. of 25 in. main; (4) 12,240 yds. of 25 in. main. Mr. G. F. Atkinson, Engineer, The Fylde Water Board, Seftonstreet. Deposit £5.

OCTOBER 31.—**Disley.**—SEWER.—For laying and jointing about 140 yds. of 9 in. cast-iron sewer, on reinforced concrete piers, and the construction of tanks in reinforced concrete, filters, &c., for sewage purification, for the R.D.C. Mr. John L. Lowe, Clerk to the Council, Council Office. Deposit £2 2s.

OCTOBER 31.—**Morden.**—STREETS.—For making-up Morton-road and Seddon-road, for the Merton and Morden U.D.C. Mr. C. J. Mountifield, Clerk of the Council, Council Offices, Kingston-road, Merton. Deposit £2.

OCTOBER 31.—**Skegness.**—KERBING.—For kerbing and pavement works at the North Parade, for the U.D.C. Mr. R. H. Jenkins, Engineer and Surveyor, Council Offices. Deposit £1 1s.

NOVEMBER 1.—**Chapel-en-le-Frith.**—PIPES.—For providing, laying and jointing about 863 lin. yds. of 4 in. and about 967 lin. yds. of 6 in. earthenware and about 116 lin. yds. of 3 in. cast-iron pipes, together with the construction of the necessary inspection chambers, manholes and other works, for the R.D.C. Mr. L. Jagger, Clerk to the Council, Council Offices. Deposit, £3.

NOVEMBER 1.—**Hunslet.**—FOOTPATH.—For works required in the construction of a kerbed and flagged footpath on the Leeds and Selby main road, between Halton and Whitkirk, for the West Riding C.C. Clerk of the C.C., County Hall, Wakefield. Deposit, £1.

NOVEMBER 3.—**Mytholmroyd.**—IMPROVEMENT.—For works required in the widening of Todmorden and Halifax main road at Hawksclough, for the West Riding C.C. Clerk of the C.C., County Hall, Wakefield. Deposit, £1.

NOVEMBER 3.—**Settle.**—WIDENING.—For works required in the widening of Lancaster and Richmond main road at Burton-in-Lonsdale, for the West Riding C.C. Clerk of the C.C., County Hall, Wakefield. Deposit, £1.

NOVEMBER 4.—**Corringham.**—WIDENING.—For widening and reconstructing with reinforced concrete Lampitts-road, for the Orsett R.D.C. Mr. H. Wright, Clerk to the Council, Council Offices, Grays.

NOVEMBER 4.—**Ealing.**—PAVING.—For laying artificial stone paving on various footpaths, for the B.C. Mr. Geo. E. Brydges, Town Clerk. Deposit, £1, 1s,

NOVEMBER 4.—**Rochester.**—SEWERS.—For construction of stoneware pipe sewers and other relative works, for the City Council. Mr. A. Kennette, Town Clerk, Guildhall. Deposit, £5 5s.

NOVEMBER 5.—**Birmingham.**—WIDENING.—For the reconstruction and widening of Bristol-road between Pebble Mill-road and Edgbaston Park-road, for the City Council. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2.

NOVEMBER 8.—**Hartshorne.**—WATER.—For fixing pumping machinery, erection of engine house, laying out site, provision, laying and fixing of 6 miles of cast-iron mains, including hydrants, valves, &c., for the R.D.C. Mr. G. Farmer, Clerk to the Council, Ashby-de-la-Zouch. Deposit £5 5s.

NOVEMBER 8.—**Neath.**—SEWER.—For the construction of storm water sewers, &c., for the R.D.C. Mr. L. J. Kempthorne, Clerk, Dyffryn Chambers. Deposit £2 2s.

NOVEMBER 8.—**Newmarket.**—PIPES.—about 6½ miles of 5 in., 4 in. and 3 in. c erection of water tower, and all other works, for the R.D.C. Mr. S. J. Ennion Council, Deva Chambers. Deposit, £2 2

NOVEMBER 8.—**Newmarket.**—PIPES.— and delivery at Dullingham of about 215 4 in. and 3 in. cast-iron pipes, specials fittings, for the R.D.C. Mr. S. J. Chambers. Deposit £2 2s.

NOVEMBER 18.—**Rochester.**—SEWER.— tion of about 6,390 yds. lin. of concrete for the Rochester & Chatham Joint Se Mr. E. B. Lee, Clerk to the Board, Town H Deposit £5 5s.

Competitions.

(See Competition News, page

Auction Sales, Tende

✱OCTOBER 31.—**Sittingbourne, Kent** Turner will sell by auction two timber a tiles, slates and bricks. Auctioneer, Tin Sittingbourne.

✱NOVEMBER 4, 5, AND 6.—**London,** Street & Lewis will include in the sale, b of the Commissioners of H.M. Works and ings, on the premises at the Government Factory, Ailsa Craig Works, Thames-r W., a large quantity of builders' an benches, hand tools, equipment, and requ condition. Auctioneers, 21, North Audle

NOVEMBER 5.—**London, E.C.2.**— Quintin, Son, & Stanley will let, by building leases for 99 years, at Winc Old Broad-street, E.C.2, building sites London and City of Westminster. Au Clement's-lane, Lombard-street, E.C.4.

NOVEMBER 11.—**London, S.W.1.**—Mes & Sons will sell, in the St. James's Estat St. James's-square, S.W.1, Lot 1, country house, just off Brockley Hill, Edg about 2½ acres. Lot 2, a high-laying ma 2¾ acres, part of which has a potential at Edgware; vacant possession of tioneers, 20, St. James's-square, S.W.1.

✱NOVEMBER 11.—**London, W.2.**—M Butcher & Co. will sell, by order of t Mr. Alfred Smart, *re* Messrs. Clements Ltd., on the premises in Macklin-street W.C., the engineers' plant, machinery, to Auctioneers, 63 and 64, Chancery-lane.

NOVEMBER 18.—**London, E.C.2.**—Mes Cooper & Co. will sell, by order of the ow longer require this section of their ex (unless previously disposed of private more lots, the valuable freehold proper Brifco, Ltd., at Ashtead, on an enclosu 17 acres of land, mainly walled in, and e extensive modern blocks of buildings machinery. Auctioneers, 35, Old Jew E.C.2.

NOVEMBER 18.—**London, S.W.1.**—Mes & Sons will sell, at the St. James's Estat St. James's-square, S.W.1, freehold buildi as No. 70, Drayton-gardens, South Kens a frontage of about 64 ft., and containi about 6,600 sq. ft. Auctioneers, 20, St. J S.W.1.

Public Appointme

OCTOBER 31.—**Lewes.**—Architectur required by the East Sussex County C temporary staff. Mr. F. J. Wood, A.M. County Surveyor, County Hall, Lewes.

✱OCTOBER 31.—**Wakefield.**—Assistan the City Surveyor's Department by the the City of Wakefield—(1) Engineering Engineering and Surveying Assistant, Assistant. Mr. A. E. Allibone, Town Cle Wakefield.

NOVEMBER 3.—**Wilts.**—Architectur required in the County Architect's Offic County Council. Mr. W. L. Bown, County Council, County Offices, Trowb

NOVEMBER 4.—**London, N.15.**—C required in connection with the Tott scheme, by the Tottenham District Reginald C. Graves, Clerk and Solicitor Town Hall, Tottenham, N.15.

✱NOVEMBER 4.—**Walsall.**—Clerk of for housing schemes by the County Bor Walsall. Mr. J. Taylor, M.Inst.C.E., Bo and Surveyor, Council House, Walsall.

✱NOVEMBER 4.—**Walsall.**—Tempora Assistant required in the Borough En veyor's Department by the County Bor Walsall. Mr. J. Taylor, M.Inst.C.E., B and Surveyor, Council House, Walsall.

✱NO DATE.—**Cardington.**—Civil E for Government Department in connec shed and mooring mast at Cardingto tution Board, Montagu House, Whitel

✱NO DATE.—**Gold Coast.**—Foremen quired by the Government of the Go Public Works Department, for two to months' service. Apply at once, stati ence, to the Crown Agents for the Colo London, S.W.1, quoting M/12880.

✱NO DATE.—**London, N.6.**—Clerk immediately, experienced in general Borough Engineer, Town Hall, High

✱NO DATE.—**London, S.W.1.**—Ass Surveyors (unestablished) required f Department. Joint Substitution Boa Ministry of Labour), Montagu House.

✱NO DATE.—**London, S.W.1.**—Qu wanted immediately for temporary Royal Engineers. Under Secretary of (F.W.4), London, S.W.1.

SED NEW BUILDINGS & OTHER WORKS *

sts care is taken to ensure the accuracy of the information given, but it may occa- n that, owing to building owners taking the responsibility of commencing work re finally approved by the local authorities, "proposed" works at the time of ve been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. trict Council; R.D.C. for Rural District Council; E.C. for Education Committee; l of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for alth; M.T. for Ministry of Transport; and B.E. for Board of Education.

he T.C. are making application for r £50,000 for the purposes of erecting and pavilion on the south side of the e Beach.

—The Northern Main Roads Com- reported that plans had been made f Treecfel Bridge to replace the old were made in accordance with the ts. The work was estimated to cost Sanction has been granted to the stry of Health to the borrowing of ction of a shelter and lavatory accom- g 46, Marine-terrace. An additional type has been sanctioned, estimated

ans are in preparation for the R.C. Church on a site at the upper aux. adjoining the Convent of Mercy of the site has commenced.

U.D.C. approved plans for Mr. Mr. and Mrs. Edgar to build houses; loore, house, near Shepherd's Rest. he T.C. has appointed a committee ay-out and development of the Cali- ate, comprising 100 acres. The T.C. oceed with the erection of 64 houses her than the 1924 Housing Act. The e estimates of the cost of a public g room.

osed extension of the esplanade, at an £11,000. has been approved by the rants Committee.

R.D.C. passed plans for a house d, Adderbury, for Mr. F. B. Owen. passed by the U.D.C.: New road. o be known as "Sunbury-avenue"; ry-avenue, by Messrs. Goodhew & ouses, Gerard-road, by Mr. R. B. all, Elm Bank-gardens, by Mr. W. remises, Stanley-road, by Messrs. tton; detached house, Nassau-road, ghton.

ns passed by the T.C.: Mr. G. s, Harbro' Hill-road; Mrs. J. Vorn- Smithies-lane; Mr. F. Gosling, oam-lane, Monk Bretton; Mr. F. Field-lane, Stairfoot; Mr. D. R. ages, Upper Sheffield-road; Mr. W. alows, Westbourne-grove; Mr. W. Carlton-road, Smithies; Mr. H. M. lton-road, Smithies; Mr. W. Storrs, rsfield-road.

y Council approved the erection of on that portion of the Institution longs to the Corporation, and Mr. o prepare block plans.—The City l a plan showing a new convenience which was approved, and the City n instructed to obtain tenders.— ted that it was necessary to construct n at Combe Down.

s passed by the T.C.: Mr. W. Park-road North; Mr. R. W. L. icity Committee, extensions, Elec- H. Bowler, four houses, Tennyson-

Council decided to proceed with s, and plans for 10 dwellings were

West Riding C.C. has intimated to tion to erect a new "Middle" School ren between 11 and 16 years of age, cost of £20,000.

ns passed by U.D.C.: House, se, for T. Dibbs; house, Moorfield- rittain; house, Hill Top, for E.

-Plans passed by T.C.: House, . A. Barnes; house, Albemarle- ewey; house, The Avenue, Messrs. Dale; bungalow, Clarkson-road, house, King George-avenue, Mr. C. ueen Mary-avenue, Mr. L. Gardiner; ur-road, Messrs. J. Drewitt & Son; d, Rev. Sharp; nine houses, Norton- is; house, Browning-avenue, Mr. nton; house, Methuen-road, Messrs. Dale; house, Fenton-road, Mr. J. es, Belle Vue-road, Messrs. Bunning ow, Delhi-road, Mrs. M. J. Burgess; d, Mr. A. H. Jackson; house, Mr. R. Brown; two houses, St. A. Barnes; house, Methuen-road, house, Watcombe-road, Messrs. n: six houses, Harewood-avenue, Hardy, Ltd.; three houses, Comley- bgood; house, 20, Firs Glen-road, ; four houses, Maclaren-road, Mr. houses, Irving and Boreham-roads, ungalow, Queen Mary-avenue and E. E. Hiscock; 12 houses, Oates Messrs. Rowley & Co.; two houses. Mr. W. Annereau; bungalow, cliff-drive, Messrs. Whiting & Rowena-road, Mr. A. J. Webb; Mr. T. Lay; two houses, Bloom- Bowen; pair of houses, Muscliffe- Hutchinson; house, Dingle-road,

t of Contracts, Competitions, etc.

Mr. J. Newbury; house, Cranleigh-road, Mr. H. Smith; motor house, "Kia-Ora," St. Alban's-avenue, Dr. Quayle; house, Queen Mary-avenue, Mr. A. Vine; house, Browning-avenue, Mr. W. H. Pownall; two houses, De Lisle-road, Mr. W. Marks; four houses, Norton-road, Messrs. C. A. Barnes & Co.; house, Shirley-road, Mr. W. Wright; joinery works, Deans-road, Messrs. H. G. Mills & Son; house, Mavis-road, Mr. S. G. Ward; store, Christchurch-road, Mr. G. Rogers; house, Bethia-road, Mr. J. F. Ellen; 10 houses, Elmes-road. The Bournemouth Land Society; six houses, 23-31, Alexandra-road, and 21, Herberton-road, Mr. P. F. Tanner; house, Talbot-avenue, Mrs. Donovan; bungalow, Lascelles-road, Messrs. Midgley & Hardy; house, Iddesleigh-road, Mr. M. O. A. Beer; house, Namu-road, Mr. W. G. Stark; house, Christchurch-road, Mr. E. Saunders.—The T.C. are making application to the M.H. for provisional approval of the erection by the Council of 42 houses on South-hill Estate. It is proposed to use a field at the north end of Charminster-road for the erection of approximately 50 houses.—Application is also to be made to the M.H. for sanction to the borrowing of £9,800, for the erection of 20 flats on the South-hill Estate at Winton.

BRIDGEND.—The U.D.C. has passed plan for a bungalow at White Rock, for Mr. W. M. Rowe.

BRIGHTON.—Plans passed by the T.C.: Four houses, Mafeking-road, for G. Ayling; house, Hangleton-road, for W. Poiney; premises, 86, Western-road, for Westminster Bank, Ltd.; shop and house, Franklin-road, for R. Mitchell; 10 shops and houses, Ditchling-road, for A. Hurst; 19 houses, Mafeking-road, for G. Ayling; house, Retreat Estate, Dyke-road, for E. Howarth; three houses, Lowther-road, for J. Lewis; women's lavatory and alterations to men's lavatory, "The Regent," Queen's-road, for the Provincial Cinematograph Theatres, Ltd.

BROMLEY.—The T.C. has approved plans: Mr. F. Haysman's house, Bird-in-Hand-lane; W. T. Champion & Son, three houses, London-lane; C. Tyler, four houses, Haywood-road.

BURNLEY.—The Corporation has decided to replace the old stone bridge carrying the Leeds and Liverpool Canal over Yorkshire-street with a steel bridge.

CALVERLEY.—The West Riding C.C. are to spend a sum of £1,381 5s. in acquiring from the Trustees of the Stanhope Estates an area of approximately 13·50 acres of land in the Calverley and Horsforth Urban Districts.

CARDIGANSHIRE.—The County Police Committee is to erect a new police station at Felinfach, and to effect repairs at Pontrhydygroes Police Station. Tenders for these works will shortly be invited.—The Aberayron R.D.C. is to erect new bridges at Rhydyceir and Cribyn.

CARLTON.—The West Riding C.C. are to spend a sum of £6,500, in addition to the sum of £58,157 previously approved, for the construction of a steel bridge, together with the necessary ferro-concrete viaducts, earthen embankments, road works, &c., to carry the Bawtry and Selby main road over the River Aire.

CHADDERTON.—A scheme is to be prepared for the erection of eight houses as a first instalment to replace houses which will be demolished in Hamilton-street to complete the arterial road scheme.

CHELMSFORD.—Plans approved by the T.C.: Pair of houses, Victoria-road, for Mr. F. Cousins; house, Finchley-avenue, for Messrs. W. Fincham & Son; 12 houses, Bishop's-road, for Messrs. Golding & Hadler; three pairs of houses, Oaklands Estate, Moulsham-street, for Mr. Thomas Letheren; house, Galleywood-road, for Miss A. M. Lewis; 3 houses, Sandford-road, for Messrs. Wray & Fuller.

CHINGFORD.—Plans passed: 5 houses in Pole Hill-road; 12 in Hampton-road; 3 in Crescent-road; 2 in Connaught-avenue; 1 in Eglington-road; 20 in Mayfield-road; 1 in Forest View extension; 2 in Hall-lane; 9 in Buxton-road; 2 in Whitehall-road; bungalow in The Avenue.

CLITHEROE.—The members of the Conservative Club are raising £2,000 towards a fund which is being raised for the erection of new premises in Castle-street.

CRICKHOWELL.—The B.G. is to purchase premises for conversion to a children's home.

CROMPTON.—As a scheme is under consideration by the D.C. to acquire "Sandycroft" for use as a maternity and child welfare centre, £2,000 is to be expended on the development of land behind the Memorial for a rest garden and band park.

DARLINGTON.—The R.D.C. approved plans for 4 houses in Houghton Back-lane.

DARTON.—The Darton Main Colliery Co., Ltd., propose to erect 250 houses for their employees. The plans have been prepared by the Architectural Town Planning Association, Ltd.

DORCHESTER.—The T.C. passed plans: Four semi-detached houses, Edward-road, for Rev. F. W. Brandreth.

DURHAM.—The R.D.C. approved plans: N.E.R. Cottage Homes and Benefit Fund, houses, Neville's Cross; A. V. Yockney, house, Neville's Cross; Durham Colleges, houses, Charley Field; W. Thurkettle, slaughter-house, Gilesgate Moor.

EAST HAM.—Plans approved by the T.C.: 46 houses, Lathom and Burges-roads, for J. W. Lohden; 6 houses, Burges-road, for J. W. Lohden; 20 houses, Clements-road, for W. Robinson; 47 houses, Sandford-road and Lonsdale-avenue, for Suburban Developments, Ltd; 7 houses in Southchurch-road and 15 in Flanders-road, for H. Stokes; 14 houses in Caulfield-road and 16 in Clements-road, for T. B. Goodwin.

GOLBORNE.—The D.C. approved plans: Sub-station in Silcock-street, for the Lancashire Electric Power Co.—It is proposed to erect 20 houses.

GOLDTHORPE (S. YORKS).—Tenders for the erection of a new cinema are about to be invited from plans prepared by Mr. P. A. Hinchliffe, architect, Barnsley. The site is that of the old Hippodrome.

GOSPORT.—Plans passed by T.C.: Four houses, Gordon-road, Messrs. White & Sons: house, Testcombe-road, Mrs. L. Pepler; house, Fareham-road, Mr. J. Roech; house, Grove-road, Mr. H. Phillips: bungalow, Grove-road, Mr. E. A. Johns.—The B.S. has prepared the following schemes: Widening Elson-road, £3,300; lay-out of King's Bottom as a recreation ground, £3,000; lay-out of the esplanade adjoining the landing-stage £2,300; erection of public conveniences on the esplanade, £1,200.—The Board of Education has passed preliminary plans for the proposed central school.

HARROGATE.—The L.N.E.Rly. are carrying out extensive alterations at Harrogate Station.

HAVERFORDWEST.—The B.G. has called for estimates of the cost of concreting the grounds of the Children's Homes, and for erection of play shelters.—The Standing Joint Committee is to effect the repair of the Castle.

HAZEL GROVE.—The Building and Housing Committee passed plans: Bungalow, Bramhall Moor-lane, for Mr. F. A. Blackburn; six houses, Kitts Moss-lane, for Mr. G. Corrie; two houses, Offerton-road, for Mr. T. Shaw.

HORNSEY.—A new elementary school is to be erected at Coppett's-road. The land, comprising of about 8 acres, is to be purchased by the T.C. at a cost of £5,500, to which has to be added the cost of erecting a fence, £550.

HOVE.—The Works Committee of the T.C. recommend that a strip of land about one-third of an acre in extent be purchased for the extension of the buildings at the house refuse works. The price suggested is £300.

HOYLAND.—The U.D.C. has acquired 13 acres of land, at £200 per acre, in Cobcar-lane, Elsecar, for housing purposes. It was decided to arrange for the erection of 80 houses.

JARROW.—The T.C. has decided, in order to provide suitable school medical services accommodation, to entirely reconstruct an establishment at the juncture of Walter-street and Grange-road, at an estimated expenditure of £1,360.

LEEDS.—A site has been secured in Hall-lane, Armley, by the R.C. congregation for the erection of a new school for the Holy Family Church.

LITTLEBOROUGH.—Application is to be made by the D.C. for sanction to borrow £8,260 in connection with the erection of 16 houses on Calderbrook-road housing site.

LLANDUDNO.—The U.D.C. proposes further improvements at the Happy Valley, at a cost of £500. Instead of erecting a new golf house, it is now proposed to extend and alter the present building. Plans passed: New bank premises, Hestyn-avenue, for Lloyds Bank, Ltd.; 22 houses, Howard-road, for Messrs. Hughes, Savage, and others. The Surveyor is to prepare a scheme for the utilisation of the brickfield site for the erection of small working-class houses.

LONDON (BERMONDSEY).—The L.C.C. recommend the borrowing by the B.C. of an amount not exceeding £6,060 for housing purposes.

LONDON (DEPTFORD).—The L.C.C. recommend the borrowing by the B.C. of an amount not exceeding £701 for housing.

LONDON (GREENWICH).—The L.C.C. approve the borrowing by the B.C. of an amount not exceeding £2,400 for the construction of a retaining wall and embankment in connection with a depot.

LONDON (HACKNEY).—The recommendation has been received by the B.C. for borrowing £2,700 for housing purposes from the L.C.C.

LONDON (LAMBETH).—Houses, 69 and 71, Effra-road, for E. Evans & Sons; rebuilding of 170, Newington Butts, for Newington Electric Theatre, Ltd.; buildings, 126, Norwood-road, for G. Spencer & Co.

LONDON (WANDSWORTH).—The L.C.C. approve the borrowing by the B.C. of an amount not exceeding £925 for the acquisition of a site for housing purposes.

LONDON (WOOLWICH).—The B.C. recommend that the public urinal opposite "The Kent Arms," Albert-road, be re-erected in a new position as shown on the plan submitted by the Borough Engineer, at an estimated cost of £110.—The Borough Engineer has been asked to submit detailed plans for the erection of a branch library at New Eltham, with estimates to include fittings and furniture, in order that building operations can be proceeded with at the earliest moment, after the acquisition of the site; and further extension to the present building on the ground at the rear of the Plumstead Library, to provide a Juvenile Department.—The L.C.C. have approved the borrowing by the B.C. of £52,200 for housing purposes.

MANCHESTER.—The Watch Committee of the City Council has agreed to grant a loan of £2,000 to the Managers of the Holmes Chapel Training School for proposed improvements and extensions to their buildings. Improvements are to be made to the Female wash baths at the Osborne-street Baths, including the provision of six extra wash baths by alterations of a disused room, estimated to cost £1,750. At the Cheetham Town Hall repairs and alterations, £610, and new heating apparatus installation, £500, is to be carried out. Plans have been submitted for the erection of public elementary schools at Gorton Mount, Wilbraham-road and Claremont-road, and have been forwarded to the B.E. for approval.

MANSFIELD.—T.C. passed plans: W. A. Taylor bungalow, Robert-avenue; L. L. Bright, five houses, Mill-street; H. James, Junr., two houses, Bottle-lane; J. P. Smith, 12 houses, Warwick-drive; F. Bowskill, house, Intake-avenue; H. Ashley, house, Chesterfield-road; A. Farnsworth, four houses, Southwell-road. Rainworth; J. J. Anderson, house, Lichfield-lane; Thos. Simpson, bungalow, Frank-avenue; G. Pritchard,

bungalow, Intake-avenue; F. Boole, house, Intake-avenue; J. W. Kitchen, house, Frank-avenue; R. Hall, house, Frank-avenue; Jenny Darby, bungalow, Sutton-road; Intake Freehold Land Society, new streets and sewers on Intake Freehold Estate, Sutton-road.

METHLEY.—The West Riding C.C. are authorised to expend a sum of £932 15s. 6d. in carrying out repairs to Methley Bridge.

MILTON.—The R.D.C. passed plans: Two bungalows, Marshall-road, Rainham; two bungalows, Borden-lane.

NEWPORT (MON).—The Council propose spending between £100,000 and £200,000 in remodelling the town market.

NORTHFLEET.—Plans passed by U.D.C.: Ten houses, Park-avenue, for Messrs. Thomas, Ltd.

OTLEY.—The Commissioners of H.M.O.W. propose to erect a new telephone exchange and post office at Otley. Plans and specifications have been prepared by the Architect's Department, King Charles-street, London, and tenders are shortly to be invited.

PONTEFRACT.—Plans passed: Shop at Fryston-road, Airedale, for Mr. F. Harper; and outbuildings and garages at hotel in Fryston-road, Airedale, for Messrs. John Smith & Sons, Ltd., Tadcaster Brewery.

PURLEY. Plans passed by U.D.C.: Four houses, Roke Lodge-road, and two in Silverdale-road, for Mr. J. Oldaker; two bungalows, Brighton-road, for Mr. R. Berry; two houses, Northwood-avenue, for Messrs. Cleaver & Co., Ltd.; two houses, Bencombe-road, for Messrs. Roe & Son; house, Silver-lane, for Mr. S. Dussek; house, Woodcote-avenue, for Messrs. Morgan, Baines & Clark; four houses, Woodcote Valley-road, for Mr. D. Taylor; house, Northwood-avenue, for Mr. T. Parker; house, Downlands-road, for Mr. J. G. Cooper; extension to sub-station, for County of London Electricity Co.; house, Purley Bury-avenue, for Mr. H. Thomas; two new streets on Selsden Estate, for Percy Harvey Estates, Ltd.; two houses, Downland-road, for Mr. G. Cooper.

PUTNEY.—The B.C. has asked a sub-committee to report as to the provision of an open-air swimming-bath. Plans passed: Three houses, Dover Estate, for Messrs. William Willett, Ltd.; house, Crestway, for Messrs. Willett, Ltd.; petrol station, Kingston-road, for Mr. F. Salmon.

RADCLIFFE.—Details of the proposed new bridge over the river Irwell have been submitted to the D.C. by the County Borough of Bury, and are now under consideration.

SELKIRK.—The T.C. has accepted tenders in connection with the erection of five blocks of four three-apartment houses under the Burgh housing scheme. The tenders amount to £9,964 9s. 10d.

SHELF.—The D.C. passed plans for three houses for Mr. A. Walker at the Garden City.

SKEGNESS.—The T.C. has approved a scheme, estimated to cost £25,000, comprising the development of the central portion of the Marine Gardens, together with the construction of a new bandstand. A huge open-air bathing pool, with large café and terraces, is also to be constructed as part of the scheme. Another scheme which is about to be commenced is the erection of a boathouse shelter with accommodation for 1,500 persons, and the reconstruction of a large section of the North Parade, at an estimated cost of £5,000.

SMETHWICK.—The T.C. recommend that applications be made to the M.H. for sanction to borrow £5,000 to cover advances towards the erection of houses.—Plans passed by the T.C.: 7 houses, Devonshire-road, for Mr. G. Sorrill; 2 houses, Holly-lane, for Messrs. Strong Bros.; house, Beakes-road, for Mr. F. E. Minton.

STAINFORTH.—Plans have been prepared for a new Wesleyan church, at an estimated cost of about £9,000. Tenders are about to be invited.

STAMFORD.—A new police station is to be erected, together with quarters for the inspector of the station, at a cost estimated between £12,000 to £15,000.

STANDISH.—The U.D.C. approved plans: Two bungalows, Arbour-lane, for Mr. Harry Baxter.

STOCKTON.—The R.D.C. has approved a plan for the erection of a detached bungalow at Urlay Nook-road, Eaglescliffe, for Mr. E. Bell.

SUNDERLAND.—The T.C. approved the old Barclay-street district police station being taken over by the E.C. for use as a domestic science centre for pupils attending schools on the north side of the river, and it will be fitted up for use as a cookery, laundry, and housewifery establishment, at an estimated cost of £195.—Plans approved: Mr. M. McGlynn, 48 houses adjoining Reginald-street.

TADCASTER.—Plans passed by R.D.C.: Bungalow in Newthorpe-road, Barwick, for Mr. A. Higgins; layout of a new street at the rear of Carlton-road, Allerton-Bywater, for Mr. J. W. Booker; two houses in Milton-drive, Scholes, for Messrs. Fryer & Fairburn.

TEWKESBURY.—A scheme is to be prepared for housing on the Priors Estate.

TORQUAY.—The T.C. passed plans: House, Torbay Hall Estate, for Mrs. Williams; bungalow, Blindwylle-road, Sherwell Valley, for Mr. Crispin; bungalow, Warberry Vale Estate, for Mrs. E. Taylor; four houses, Sherwell-lane, for Messrs. Chelston Building and Decorating Co.; bungalow, Warberry Vale Estate, for Mrs. L. E. Foster; two houses, Coombe-lane, St. Marychurch, for Messrs. Torquay Building Company; bungalow, Hatfield-road, for Miss Hart; villa, Lydwell-road, for Miss D. Bonyon; new parish hall, St. Marychurch, for St. Marychurch Church Council; bungalow, Wellswood Hall Estate, for Mr. G. L. Windsor; house, Haytor-road, for Messrs. Turner & Bowden; pair of villas, Kent's-road, for Mr. J. F. Bennett; bungalow, plot No. 15, Blindwylle-road, Sherwell Valley, for Mr. H. Blackburn; four houses, Hampton Estate, St. Marychurch, for Mr. L. G. Wiltshire; house, Lydwell-road, for Mr. F. B. O. Hawes; pair of houses, Blindwylle-road, Sherwell Valley, for Messrs. Hooper & Roberts; bungalow, Steps-lane, Watcombe, for Mr. W. H. Kerslake; house, Wheatridge-lane, for Mr. F. R. Ball; 36 houses, Barton, for Messrs. Ball & Wilkinson; house, Sherwell-lane, for Mr. Hampson; house, Barton, for Mr. W. Hole; two houses, Black's Hill, for Messrs. Tolcher & Thurnell; Mr. H. C. Goss, 10 houses, Warberry Vale Estate.

TOW LAW.—The R.D.C. has passed plans for the erection of a new slaughter-house in High-street.

TRURO.—The B.S. has prepared plans for the erection of 89 houses on the Hendra site.

WAKEFIELD.—The architect is to discuss with the M.H. plans for the erection of 12 houses. The erection of a bandstand in the park is proposed. The Yorkshire (West Riding) Tramways Co. proposes the erection of houses for employees. Plans submitted by Messrs. Bell & Kay for the development of land between Thornes-road and Horbury-road have been approved. Plans passed: Warehouse, Denby-road, for Messrs. Newbald & Hartley; two houses, Thornes-road, for Messrs. J. W. Easter and B. Buckland; bungalow, Woodthorpe-lane, for Mr. H. C. Summers; house, Chevet-lane, for Messrs. A. Francis and J. Holdsworth; three houses, Oakleigh-avenue, for Mr. J. Caton; two houses, Thornes-road, for Mr. A. E. Lockwood; house, Thornes-road, for Mr. A. Gawthorpe; Welfare canteen and house, Denby Dale-road, for Patons & Baldwins, Ltd.—West Riding C.C. proposes to erect a building at the corner of Wood-street and Bond-terrace for the medical officer's staff, at a cost of £23,500, and buildings for the stores department at the depot, at a cost of £30,000.—Plans passed by R.D.C.: shop at Sharlston Common, for Mr. R. Wallace; two houses at Denby Dale-road, Crigglestone, for Mr. J. Dilks; sixteen houses at Upper Netherton, for the R.D.C.

WARRENPOINT.—The U.D.C. has decided to apply for a loan of £3,800 for the erection of 10 working-class houses.

WATFORD.—Funds are being raised for the repair to the old free schools.

WEST BRIDGFORD.—Plans passed by U.D.C.: Eight houses, Violet-road, Mr. Pepper; two houses, Pierrepont-road, Mr. C. Rogers; three houses, Dovedale-road, Mr. A. Goodchild; house, Melton-road, Mr. E. Tomlinson; two shops, Melton-road, Mr. H. Smith; house, Blake-road, Mr. R. D. C. Tanner; house, Rutland-road, Mr. Hopewell; four houses, Loughborough-road, Mr. Simons.

WESTON-SUPER-MARE.—The T.C. propose erecting a marine lake by converting Glentworth Bay; the scheme is estimated at £28,000; this also covers for a retaining wall. The lake will consist of 7 acres.

WEYMOUTH.—The B.S. has been asked to prepare plans for the construction of a jetty on the Weymouth side of the harbour.—Plans passed: House, Belle Vue-road, for Messrs. S. Board & Son; house, Little George-street, for Mr. J. H. Fields; bungalow, Bent Path-avenue, for Messrs. Jenkins, Ltd.; house, Alexandra-road, for Messrs. S. Jackson & Son; two houses, Southland-road, for Mr. Openshaw; house, Alexandra-road, for Mr. F. Greenaway; house, Claremont-road, for Messrs. Jesty & Baker.—The T.C. has decided to build 42 houses on the Westham site.—Conveniences on the Esplanade are to be carried out, at a cost of £2,250.—A waterway is to be constructed, at a cost of £978, from the River Wey to Radipole lake.

WILTHORPE.—Notice is given by the Barnsley E.C. of intention to erect an elementary school for about 500 children.

WOLVERHAMPTON.—The E.C. approved a proposal to extend the Municipal Secondary School at a cost of about £10,000 by the provision of a laboratory, a gymnasium, and extra classrooms. By these extensions the accommodation will be increased from 385 to 500.

WORCESTERSHIRE.—The Highways Committee of the C.C. proposes the construction of a ferro-concrete bridge and viaduct across the river Avon at Evesham, at a cost of £40,000.—Application to the Ministry to sanction loans of £14,328 for the further 36 houses, and £24,676 for the 62 houses, is being sought by the T.C.

FIRE.

BARRHEAD.—A fire broke out at the works of Messrs. Cochrane, Ltd., boilermakers. The damage is estimated at £50,000.

The Post Office Buff Book.

The October issue of the "Buff Book," the Trade and Commercial Directory for London, is now ready. It contains a list of practically all the principal firms engaged in trade and commerce in London, and classified under their trade heading, giving the telephone number and postal address. Publishers: Business Telephone Directories, Ltd., 25, Lawrence-lane, E.C.2.

Portsmouth War Memorial.

The Portsmouth naval war memorial was unveiled recently at Southsea by the Duke of York. It was the last to be unveiled of the three set up by the Imperial War Graves Commission to commemorate the naval ranks who fell in the War. Sir Robert Lorimer was the architect for the memorial, and Mr. Henry Poole, A.R.A., the sculptor. The memorial takes the form of a stone obelisk, crowned by a globe of copper, which is supported by four winged figures representing the wind.

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* "Payment by Results." By
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COMPANIES

ars quoted below have been Messrs. Jordan & Sons, Ltd., tration Agents, of 116 & 119, W.C.2, from the documents Companies' Registry.

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& SONS (BRIGHTON), LTD. stered August 27. Builders, s and contractors. Nominal

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OORINGS AND DECORATIONS), Registered August 27. To business of manufacturers, rs and contractors in all ding, furnishing and allied capital, £500

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(200,124). Registered Wicklow-street, King's Cross, rs, contractors, engineers, ng manufacturers and con- inal capital, £500.

ATE, LTD. (200,136). Regis- Builders. Nominal capital,

ING Co., LTD. (200,173). ber 1. 36, Spring Gardens, lers, architects, contractors, tal, £2,000.

BUILDERS), LTD. (200,188). ber 2. Builders, decorators ominal capital, £3,500.

ST. ANNES), LTD. (200,332). ber 10. Joiners, builders, rs. Nominal capital, £2,000.

Y & Co., LTD. (200,383). ber 12. 3, Tyson-street, nchester. Builders and con- nerchants. Nominal capital,

YCOMBE), LTD. (200,405). er 13. Builders' merchants, &c. Nominal capital, £100.

PATENTS

APPLICATIONS PUBLISHED.*

220,665.—A. E. White (F. Heath): Wall Construction.

220,666.—F. W. Buckley, A. Taylor and Mather & Platt, Ltd.: Fireproof doors, partitions, shutters, and the like.

220,669.—D. Moir and H. Buchanan: Means for the lining or manufacture, centrifugally, of pipes, columns, and other hollow articles.

220,677.—J. R. Garrow, G. O. Case and Novocretes, Ltd.: Treatment of wood or similar bodies to be used as an aggregate with, or as a reinforcement for, calcareous cement.

220,679.—G. O. Case and Novocretes, Ltd.: Methods of road and pavement construction and road block manufacture, in which the surface is formed of rubber.

220,683.—Berliner Akt.-Ges. für Eisengiesserei und Maschinenfabrikation and Dr. H. Zimmermann: Means for operating hinged bridges.

220,694.—J. Creasey and C. W. Bunn: Operating device for sliding windows.

220,703.—F. W. W. Pickance: Apparatus suitable for ventilating buildings and humidifying air.

220,717.—F. Emperger and A. Umlauf: Concrete or the like pipes.

220,769.—D. W. Wood: Cutters for woodworking machines.

220,789.—A. E. White (Lock Joint Pipe Co.): Method of and apparatus for making centrifugally moulded concrete pipes.

220,860.—J. Fowler & Co. (Leeds), Ltd., and L. R. Vinall-Moon: Stone-crushing machines.

220,862.—R. J. Tugwood (Jeffrey Manufacturing Co.): Crushing machines.

220,884.—M. Herrera: Construction of staircases.

220,888.—E. J. Farrell and B. M. Callender & Co., Ltd.: Concrete and like roadways.

211,504.—R. Navet: Presses for the manufacture of bricks, tiles, slabs and similar products.

220,892.—T. Furniss: Roof glazing.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

NEW BUILDINGS IN SCOTLAND

Edinburgh.—VARIOUS.—Plans granted: Bungalow at Milton-road, Joppa, for John Banks and others (architects, Messrs. Lyle & Constable, 3, Hill-street); house, Braid Hills-road, Liberton, for Alex. Mackenzie (architect, Mr. W. B. Wylie, 10, St. Andrew's-square); bungalow, Barnton East-avenue, Davidson's Mains, for Alex. Chisholm (architect, Mr. E. E. Pearson, 27, Rutland-street); bungalow, Barnton-avenue East, Davidson's Mains, for Jas. H. Moodie (architect, Mr. E. E. Pearson). The following plans are continued: Halls, &c., Duke-street, Leith, for Evangelical Union Congregational Church; cottage, Parkhead, Juniper Green, for John Stewart.

Motherwell.—COTTAGES.—Plans passed by the Dean of Guild Court: Cottage, Hamilton-road, for Archibald Ferguson; cottage, Jerviston-road, for G. Johnstone.

Port Glasgow.—ALTERATIONS.—The T.C. and the Burkmyre Bowling Club have arranged for the renovation and extension of the bowl-house at the Public Park. It is proposed to spend £800 on the alterations, &c.

Jersey Housing.

Sir Jesse Boot recently undertook to spend a sum of not less than £40,000 for the erection of artisan dwellings at St. Helier.

New Premises, Liverpool.

Mr. J. R. Sharman, of 6, Queen Anne's Gate, S.W.1, has been appointed as consulting engineer in connection with the new building in Water-street, Liverpool, to be erected for Messrs. Alfred Holt & Co., at an estimated cost of £900,000. Demolition of the old buildings on half of the site is now completed by Messrs. Wm. Moss & Son, Ltd., of Roscoe-street, Liverpool, and a contract for the excavations and foundations will be shortly placed. Tenders for steelwork will probably be sought in about two months' time.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plas-terers' Masons' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/6½	1/6½	1/6½	1/7	1/6	1/6½	1/6	1/2	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6-1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/4½	1/4½	1/3½	1/4	1/4½	1/4	1/3	1/0	
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 654

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inq

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Pjettons, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick:— 2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends	32 10 0
Headers	22 10 0	Two Sides and one End	33 10 0
Quoins. Bullnose and 4½ in. Flats	29 10 0	Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
¾ in. Shingle for Ferro-Concrete	14 0	delivered 2 miles radius Paddington.
½ in. "	15 0	" "
¾ in. Broken Brick "	10 6	" "
Pan Breeze	7 6	" "

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4

Do. do. delivered on road wagons at above stations, per ft. cube 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.	
Scappled random blocks. Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
	6 1½
6 in. rubbed two sides ditto "	2 10
4 in. sawn two sides slabs (random sizes) "	2 1½
3 in. ditto. ditto "	9 0
2 in. self-faced random flags. Per Yard Super	

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	26 0	3 × 9	26 0
3 × 8	24 0	2½ × 9	26 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	23 0	3 × 4	24 0

PLANED BOARDS.

1 × 11	£34 10	1 × 9	£32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅜	21/-	1¼	32/6
½	23/-	1½	37/3
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
⅜	16/6
½	20/-
1	25/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle			0 2 6
Dry Wainscot Oak. per ft. super, as inch	0 2 0	to	0 2 6
¾ in. do. do.	0 1 6	to	0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6
Cuba Mahogany	0 3 0	to	0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0	to	—
American Whitewood planks, per ft. cube	0 12 0	to	0 14 0
Best Scotch Glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in.	13 10 0
⅛ in.	14 10 0	⅝ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ½" &up.	Fittings. ⅜" to ½" inclusive.	Flanges ½" &up.	Flanges ⅜" to ½" inclusive
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0¾	3½d.
4 in.	1/4	1/1¾	3½d.
4½ in.	1/5¾	1/4	4d.
5 in.	1/7¾	1/5¾	5d.

O.G. GUTTERS.

3 in.	1/6¾	1/2¾	3½d.
3½ in.	1/6¾	1/2¾	3½d.
4 in.	1/7¾	1/4	3½d.
4½ in.	1/9¾	1/6¾	4d.
5 in.	2/1¾	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0		15 10 0
Staffordshire "Marked Bars"	17 0 0		18 0 0
Mild Steel Bars	12 0 0		13 0 0

METALS (*Continued*).

	£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	12 10 0
Hoop iron, basis price	16 10 0
" Galvanised	31 0 0
Soft Steel Sheets, Black—Ordinary sizes to 20 g.	14 10 0
" " " 24 g.	15 10 0
" " " 26 g.	17 10 0
Sheets Flat Best Soft Steel, C.R. & C.A. Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0
Flat and Galvanised Corrugated Sheet Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0
Best Soft Steel Sheets, 26 g.	26 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0

METAL WINDOWS—Standard sizes suit plete houses, including all fittings, coats, and delivery to job, average p to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	
NOTE—Country delivery, 30s. per ton ar 3 cwt., 2s. per cwt. extra and over 3 cwt., 1s. 6d. per cwt. extra. Cut to size.	
Old lead, ex London area, at Mills per ton	32 0 0
Do., ex country, carriage forward per ton	33 0 0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
29/-	45/-	76/-	153/-	246/-

NEW RIVER PATTERN SCREW DOWN STO UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
41/6	62/-	92/-	174/-	300/-	58

NEW RIVER PATTERN SCREW DOWN MA

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREW

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	61/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 i
10/-	12/-	20/-	24/-	31/-

NEW RIVER PATTERN CROYDON BALL V

½ in.	¾ in.	1 in.	1¼ in.
35/-	56/-	98/-	162/-

DRAWN LEAD P. & S. TRAPS WITH BR SCREW.

	1¼ in.	1½ in.	2 in.
8 lbs. P. traps	33/-	41/-	56/-
8 lbs. S. traps	35/-	45/-	66/-

COPPER—	£ s. d.
Strong Sheet per lb.	0 2 3
Thin " "	0 2 4
Copper nails "	0 2 3
Copper wire "	0 2 4
TIN—English Ingots "	0 2 6
SOLDER—Plumbers' "	0 1 2
Tinmen's "	0 1 4
Blowpipe "	0 1 5

PAINTS, &c.

Raw Linseed Oil, in pipes per gal	
" " " in barrels	"
" " " in drums	"
Boiled " in barrels	"
" " " in drums	"
Turpentine in barrels	"
" in drums (10 gall.)	"
Genuine Ground English White Lead, pe (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine El "Park," "Supremus," "St. Pa "Spedol" and other best brand 14 lb. tins) not less than 5 cwt. lots per ton deli	
Red Lead, Dry (packages extra) per	
Best Linseed Oil Putty per	
Filocol per	
Size. XD Quality	

[*Continued on next pa*

* The information given on this page h compiled for THE BUILDER and is copyr this list is to give, as far as possible, t of materials, not necessarily the highest and quantity obviously affect prices—a f be remembered by those who make use of

URRENT OF MATERIALS *(contd.)*

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
..	3½d.	32 oz. fourths	8½d.
....	4½d.	32 „ thirds 10½d	
..	5d.	Obscured Sheet, 15 oz.	4d
....	6½d.	„ 21 „	5½d.
..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
....	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

cording to size and substance for squares ock.

OLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
ze	4½d.
ed	5½d.
ed	5½d.
lled, Oxford Rolled, Baltic, Oceanic, Stippolyte, and small and large white	6½d.
tinted	9d.
et	6d.
ed Cathedral	5½d.
do.	7½d.

te is same price as rough rolled.

VARNISHES, &c.

	Per gallon. £ s. d.
..... Outside	0 14 0
..... ditto	0 16 0
..... ditto	0 18 0
..... ditto	1 0 0
riage ..... ditto	1 4 0
..... ditto	1 12 0
..... Inside	0 18 0
er ..... ditto	0 18 0
oinet ..... ditto	1 2 6
tting ..... ditto	1 0 6
Oak ..... ditto	0 18 0
ing Oak ..... ditto	0 19 0
rnish ..... ditto	1 0 0
..... ditto	1 2 0
..... ditto	1 12 0
ld Size	0 10 0
oan	0 10 6
any Stain (water).....	0 12 0
k.....	0 7 6
.....	0 14 6
at)	1 5 0
ish Polish	0 17 0
n Terebine.....	0 9 0
uamel.....	0 7 0

Obituary.

ccurred recently, in his 77th year, High West Jesmond, Newcastle, nder Pringle, builder and con- neside.

ook place recently, at Burton-on- Albert Edward Thorpe, builder , at the age of 44 years.

r Women's Housing Council.

of the Westminster Women's cil was held recently at 5, St. when Miss Picton-Turberville, ke of the bad state of the h a great number of the people were forced to live, owing to f houses. It was uneconomic he said, and no one ought to be nder such conditions, but the o could do anything were the resolution which desired to the Westminster City Council of improved housing conditions, hat in the selection of the new of Health special consideration to his qualifications and experi- with housing problems, was usly.

SANITATION*

This well-known book has been re-written by Mr. John H. Clarke, the senior sanitary inspector of Chiswick. It is intended not only as a text-book for examination candidates, but also as a handbook for sanitary inspectors in office. Their duties are so multifarious that few can do without occasional reference to a reliable handbook. Time was when the sanitary inspector referred everything he was doubtful about to the M.O.H.; now he is expected to be able to carry out all his duties without specific and special instructions. The book opens with some useful hints to students, and then starts upon the general subject. The first chapter gives an account of the acts and regulations under which sanitary inspectors are appointed, the qualifications for an inspector, and the regulations and syllabuses of the various sanitary examining bodies. The next chapter explains when and how general inspections should be made, and complete forms of notices, and a very useful description of the standards of fitness in the inspection of dwelling houses. Chapter III deals with housing and town planning so far as the sanitary inspector is concerned, cellar dwellings and lodging houses, and the definition of terms used in the Public Health Acts. Chapter IV on "Nuisances," is one of the most important. It describes in detail all the various statutory nuisances, how to proceed to procure their abatement, the various points to note in the general inspection of a district for the purpose of detecting nuisances, notices and forms of report. A short chapter on scavenging and cleaning follows, and we then come to the important subject of the disposal of excreta. After describing Moule's earth closet and the modern form of rural privy, the author deals with country house sewage purification, but so briefly that it might as well have been omitted; fortunately it does not come within the province of an inspector to devise such an installation, and very rarely has he anything at all to do with one. Chapter VII upon the subject of house drainage is particularly within the purview of the inspector, but the method of regulating the gradients is not described; in the table of stoneware pipes the column giving weight per foot would have been more useful if it gave instead the weight per pipe, including the socket; Dr. Angus Smith's preparation for iron pipes is wrongly described as tar heated to a temperature of 400 deg. F.; cast-iron pipes are recommended to be jointed with spun yarn or hemp and molten lead, whereas lead wool is infinitely superior. Some drainage by-laws are given, and then we have a chapter on water closets, following the usual lines and fairly well illustrated, although we miss the section of the ordinary wash-out and wash-down pedestals. Gullies and traps are taken next, followed by a rather general description of the examination of drains. Possibly the author expects the would-be inspector to get the whole of his practical training by actually assisting in the work, to which, of course, no objection can be raised. A useful feature of the book is that in every case in which the sanitary inspector is called upon to serve, the actual words of the Act or regulation or by-law are given in full. Infectious diseases and disinfection naturally receive rather full description, as a large portion of the inspectors' duties are there concerned. Inspection of meat and animals, dairies, cow-sheds, fish inspection, sampling under Food and Drugs Act come next. Then the rather complex matters relating to factories and workshops, canal boats, common lodging houses and Shop Acts, concluding with a reprint of the model by-laws of the L.G.B. under the P.H.(L.)A., 1891.

The book is admirably arranged, and gives a large amount of information especially upon what might be called the "red-tape" part of the work. This expression is not meant offensively, but those who are acquainted with the duties of an inspector know that he is surrounded by rules and regulations which he must be very careful to follow strictly, otherwise trouble may supervene. It would be impossible for anyone intending to become an inspector to find a better book than this to help him on his way; with six months' close study of this and three months of going the rounds with an inspector in office, he should be fully equipped for a certificate of fitness.

* "Taylor's Sanitary Inspectors' Handbook." A manual for Sanitary Inspectors, Inspectors of Meat and other Foods. Sixth edition, edited and re-written by John H. Clarke. With 116 illustrations. Cr. 8vo. 540 pp. (London: H. K. Lewis & Co., Ltd.) 1924. 12s. 6d. net.

New Buildings near London.

The Ministry of Health has given its approval to the proposal of the Hendon Board of Guardians to build a large new institution and hospital near Edgware, Middlesex. A large site at Redhill has been acquired and laid out for the reception of buildings to accommodate, when complete, 500 beds. The work will be carried out gradually, and the first section will include five wards, holding 175 beds, nurses' and matron's quarters, laundry, central heating block, &c. The plans have been prepared by Messrs. Paine & Hobday, of 45, Bedford-row, W.C.1; the quantity surveyors are Messrs. John Leaning & Sons, 28, John-street, Bedford-row, W.C.1, and the civil engineers are Messrs. Dolby & Williamson, of 8, Princes-street, S.W.1.

A new factory building is to be erected on a site in Victoria-road, Acton, for carrying on a light engineering trade. Covering an area of about 6,250 ft., the premises will be of four stories, and will be erected on a steel frame with brick filling and reinforced concrete floors. The roof will be flat, of concrete covered with asphalte. In order to give light, as much wall space as possible is being eliminated and large steel casement windows are to be inserted. Heating by a low-pressure hot water system is being adopted. The architect is Mr. R. F. Bargman, F.R.I.B.A., of South-street, Dorking.

The large property at the foot of Richmond Bridge, Surrey, known as the Tower House, and comprising six floors, with extensive mews, has been acquired by Messrs. Sam Isaacs, Ltd. The ground and first floors are to be converted into a large up-to-date restaurant, whilst the upper stories will be divided into self-contained flats, with separate entrances, &c. The architects are Messrs. North, Robin & Wilsdon, of 35–39, Maddox-street, London, W.1.

CHITECTURAL
OODWORK
AL FURNITURE
MANTELS
CARVING
CORATING
IS PLASTER WORK
INED GLASS
Elo

THE ALLIED ARTS & CRAFTS GUILD

REGISTERED OFFICE
No 4
BROOK STREET
SAINT PAUL'S
BIRMINGHAM
TELEPHONE:
CENTRAL. 3706
TELEGRAMS:
BEAUTIFY. B'HAM.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	35	0
Add if in underpinning in short lengths	„ „	7	6
Add if in floors 6 in. thick	„ „	3	6
Add if in beams	„ „	4	0
Add if aggregate 1 : 2 : 4	„ „	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	3	3

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	„	7	10	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	2	0	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	1	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	1	1
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	„ „	9	0
¾ inch on flats in two thicknesses	„ „	6	6
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	3

MASON.

York stone templates fixed	per foot cube	12	6
York stone sills fixed	„ „	21	6
Bath stone and all labour fixed	„ „	10	6
Portland stone fixed	„ „	19	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	„	80	9
Do. 24 in. × 12 in. Do. Do.	„	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	3
Do. joists	„ „	5	9
Do. roofs, floors and partitions	„ „	6	3
Do. trusses	„ „	8	3

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	„	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	„	1	6
Gutter boards and bearers	„	1	0

FLOORING.		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.		49/-	58/-	67/-
Do. tongued and grooved	„		54/-	65/-	72/-
Do. matchings	„	45/-	55/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	4
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	„ „	3	9

DOORS.		1½″	1¾″	2″
Two-panel square framed	per ft. sup	2/1	2/4	2/6
Four-panel Do.	„	2/5	2/8	2/11
Two-panel moulded both sides	„	2/8	2/11	3/2
Four-panel Do. Do.	„	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1″
Deal wrot moulded and rebated	per foot cube	1
Plain deal jamb linings framed	per ft. sup.	1/8
Deal shelves and bearers	„	1/5
Add if cross tongued	„	2d.

STAIRCASES.

		1″	1¼″	1½″
Deal treads and risers in and including rough brackets		2/1	2/4	2/9
Deal strings wrot on both sides and framed		1/8	2/-	2/2

Housings for steps and risers		e
Deal balusters, 1 in. × 1¼ in.		per ft. run
Mahogany handrail; average 3 in. × 3 in.		„ „
Add if ramped		„ „
Add if wreathed		„

FIXING ONLY IRONMONGERY (INCLUDING SCREW

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges letting in to floor	
Casement stays	1/2		
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	per
Plain compound girders	„
Do. stanchions	„
In roof work	„

RAIN-WATER GOODS.

			3″	4″
Half-round plain rebated joints		ft. run	1/11	2/4½
Ogee Do. Do.		„	2/4½	3/1
Rain-water pipes with ears		„	2/9	3/7
Extra for shoes and bends		each	4/4	5/11
Do. stopped ends		„	1/11	2/4½
Do. nozzles for inlets		„	2/2	2/7

PLUMBER.

Milled lead and laying in flashings and gutters	per cw
Do. Do. in flats	„
Extra labour and solder in coated cesspools	each
Welt joint	per ft
Soldered seam	„
Copper nailing	„

		½″	¾″	1″	1½″	
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4
Do. service	„	1/8	2/2	2/7	3/10	
Do. soil	„					
Bends in lead pipe	each					3
Soldered stop ends	„	1/2	1/8	2/1	2/10	3
Red lead joints	„	11d.	1/-	1/3	1/11	2
Wiped soldered joints	„	2/10	3/6	4/-	4/11	6
Lead traps and cleaning screws	„				14/7	19
Bib cocks and joints	„	6/4	9/7	15/4	41/-	
Stop cocks and joints	„	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard
Do. Do. Sirapite	„ „
Do. Do. Keen's	„ „
Add sawn lathing	„ „
Add metal lathing	„ „
Portland cement screed	„
Do. plain face	„
Mouldings in plaster	per l gi
One-and-a-half granolithic pavings	per yard

GLAZIER.

21 oz. sheet plain	per foot
26 oz. Do.	„
Obscured sheet	„
⅛ in. rolled plate	„
¼ in. rough rolled or cast plate	„
¼ in. wired cast plate	„

PAINTER.

Preparing and distempering, 2 coats	per yar
Knotting and priming	„
Plain painting 1 coat	„
Do. 2 coats	„
Do. 3 coats	„
Do. 4 coats	„
Graining	„
Varnishing twice	„
Sizing	„
Flatting	„
Enamel	„
Wax polishing	per foot
French polishing	„
Preparing for and hanging paper	per piec

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The

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TENDERS.

for insertion under this heading should "The Editor," and must reach him not ay evening.

ted. † Denotes *provisionally accepted.*
mended for acceptance.
ted subject to modifications.

or the erection of six labourers' R.C. :—
nus & Sons, Randalstown—
n block of two houses..... £770

—For erection of public conveniences, Mr. T. W. Newbold, architect, 70, effield :—
Baslow..... £800

AM.).—For extensions to the Barry rgical Hospital, for the U.D.C. :—
& Sons, Cadoxton £3,689

rection of bus shed in Breightmet-C. :—
& Sons.

or erection of houses :—
lgarkirk ..... per pair £803
well—Sutterton .. „ 794
Butterwick ..... „ 775
Leverton ..... „ 783
on—Amber Hill .. „ 810

UTH.– For construction, completion e of a land outfall sewer at South-rks in connection therewith, for the

s & Co. £19,904

–For alterations to the National Preston-circus, for the T.C. :—
& Sons, Worthing £1,217
Brighton 1,190
on, Brighton 1,134
Brighton 1,085
, Brighton 1,082
ons, Brighton 1,073
rett, Ltd., Brighton 1,050
es & Sons, Brighton 1,036

For the erection of new buildings for ge, in Cappaye Park :—
& Sons, Banbury.

D.—For erection of a new County or the Gloucestershire E.C. Mr. R. S. Education Architect, Shire Hall,

lls, Ltd., Gloucester..... £4,103

D.—For erection of Infirmary and Wood-street, for the B.G. Messrs. er, Council Offices, Buckhurst Hill, es by Mr. J. B. Lowe, Duke-street,

td., Grays	£35,529	18	2
Southend-on-Sea ..	29,481	10	3
Son, Westminster	29,397	6	9
on, Ltd., Norwich	27,625	0	0
botham, Birming-ham	27,431	0	0
Ltd., Hoddesdon..	26,394	0	0
Ltd., Cambridge ..	26,250	0	0
is, St. Albans	26,050	0	0
r, Chelmsford	25,725	6	7
Chelmsford	25,559	0	0
Chelmsford	25,269	0	0
helmsford	24,905	8	2
Chelmsford	24,830	4	4

D.—For erection of boundary wall the T.C. :—
rdon, Chelmsford £1,500 0
rris & Co., Chelmsford 1,452 9
Chelmsford 1,055 0
on, Ulting 972 0

For erection of 14 houses at Ushaw D.C. :—
Bishop Stortford.
of T. Hilton & Sons, Ltd.)

ONE.—For road construction and the U.D.C. :—
Horsforth £6,128 16 7

.—The tender of Messrs. Hammond s accepted for the extension of Good-sub-station.

.—For constructing the foundations tor No. 5 at their power station, for

annen & Cubitts,
..... £4,774 0 0
& Son, Ltd..... 4,620 0 0
ne, Ltd..... 4,301 0 0
er, Ltd..... 4,275 0 0
arnard Construc-td. 4,218 3 6
Co., Ltd..... 4,034 16 7
ige..... 3,894 0 0
..... 3,642 0 0
Son..... 3,492 0 0

s estimate, comparable with the to £3,560.
(All of London.)

GUILDFORD.—For improvements to the infirmary and nursery, for the B.G. :—

Chambers & Parsons	£1,860 0
Fry & Son	1,594 0
Grove & Sons	1,520 0
Tribe & Robinson	1,499 0
R. Smith & Sons	1,456 0
W. G. Sheppard	1,454 0
Stanley Ellis	1,413 0
*F. S. Billimore	1,371 10

All of Guildford. Subject to M.H. approval.

HEMSWORTH.—For the erection of 166 houses and the construction of roads and sewers at South Elmsall, for the R.D.C. :—
*Swift Bros. & Haslam £83,614

H.M. OFFICE OF WORKS (Accepted during September).—*Building Works*: Acton, Ministry of Pensions—Erection of lobbies, &c.: Leslie & Co., Ltd., London, W. Arkwright (Nottingham) Telephone Exchange—Erection: W. Maule & Co., Nottingham. Belvedere Post Office—Granolithic Paving, &c.: Malcolm Macleod & Co., London, E.C. Plastering: W. Heselden, Sidcup. Birmingham P.O. Telephones, Broad-street—Alterations: J. E. Harper & Son, Ltd., Birmingham. Burnley Employment Exchange—Erection: Smith Bros. (Burnley), Ltd., Burnley. Carlisle—Maintenance Work: J. & R. Bell, Carlisle. East Ham Telephone Exchange—Alterations, &c.: H. C. Horswill, London, E. Steelwork: Sanders & Foster, Ltd., London, E. Edinburgh, Holyrood Palace—Reconstruction of Stable Block: John Taylor, Clydebank. Gateshead P.O.—Extension of Sorting Office: Stanley Miller, Newcastle-on-Tyne. Leafield P.O. Wireless Station—Road Repairs: W. H. Rogers, Willenhall. Leeds Head P.O.—Stonework: George Armitage & Sons, Ltd., Robin Hood. Liverpool, Mossley Hill Hospital—Steelwork: Guy & Co., Liverpool. Llangefni P.O.—Plumbing: Griffith Williams, Bangor. Morriston, Glam, P.O., &c.—Erection: W. F. Drew, Ltd., Stroud. Newcastle-on-Tyne Telephone Repeater Station—Erection: John Milne, Gateshead-on-Tyne. Shrewsbury Telephone Exchange—Painting: Hyett Bros., Gloucester. Sloane Telephone Exchange—Plastering: The Calime Co., Ltd., London, S.W. Walworth Telephone Exchange—Erection: Patman & Fotheringham, Ltd., London, N. Western Telephone Exchange—Asphalte Damp Course Work: Wm. Salter, Edwards & Co., Ltd., London, W. Granolithic Work: Veronese, London, S.W. Stonework: The Nine Elms Stone Masonry Works, London, S.W. Wimbledon Employment Exchange—Glazing: James Clark & Son, Ltd., London, S.E.—*Painting*: W. A. Campbell & Sons, Edinburgh; Campbell, Smith & Co., Ltd., London, W.; M. Greenwood & Son, Ltd., London, W.; E. D. Winn & Co., Ltd., London, S.W.

H.M. WAR OFFICE (Accepted during September).—*Building Works*: Colchester—Erection of Married Soldiers' Quarters: W. Chambers & Son, Colchester. Larkhill Camp—Erection of Married Officers' Quarters: W. E. Chivers & Sons, Ltd., Devizes. Sling Camp, Bulford—Erection of Married Officers' Quarters: W. E. Chivers & Sons, Ltd., Devizes. Windsor Victoria Barracks—Supplying and Erecting two iron staircases: Clark, Hunt & Co., London, E. Halifax (Drill Shed): T. W. Dodgson & Sons, Halifax. Bordon—Bath rooms to W.O.'s Quarters: E. C. Hughes, Wokingham. Fort Brockhurst, Gosport—Erection of Troop Stables: J. Hunt, Ltd., Gosport. Stanhope Lines, Maida, Corunna, Albuhera and Barrosa Barracks—Bath Houses: T. Jones, S. Farnborough. Stanhope Lines: Geo. Kemp, Stroud & Co., Ltd., Aldershot. Colchester—Renewal of floors: G. A. Kenney & Sons, Ipswich. Regent's Park Barracks: F. McNeill & Co., Ltd., London, E.C. Winchester—Pointing brickwork: Playfair, Toole, Ltd., Southampton. Okehampton—Rebuilding of stables: Woodman & Sons, Exeter.—*Painting*: Exeter: Bagnall & Sons, Ltd., Shipley, Yorks. Portland, Verne Citadel: Frank Firth, Shipley, Yorks.

HUNSLET (YORKS.).—For erection of a new store at the Halton Sewage Works, for the R.D.C. :—
**Builder*—J. Pawson.
**Joiner*—W. Briggs.
**Plumber*—W. Stevens.

KNARESBOROUGH.—For the erection of 24 houses for the U.D.C. :—
*Pearson & Blackwell, of Doncaster.. £11,552

LONDON.—For reconstructing a portion of the roof of the underground public conveniences at Trafalgar-square, for the Westminster City Council :—

F. G. Minter	£1,674
Patman & Fotheringham	1,477
Townsends (Builders), Ltd.	1,394
*Sims & Russell	1,340

LONDON (ISLINGTON).—For conversion of "The Beehive" public house, Eden-grove, into garage, &c., for the Electricity Department of the B.C. :—
‡G. Bennett £1,737

LONDON (ISLINGTON).—Erection of 132 flats at Laycock-street, for the B.C. :—

Robert Young's Construction Co., Ltd., Islington.....	£79,000
T. Shillitoe, Islington.....	77,500
Bovis, Ltd., London	75,367
C. P. Roberts & Co., Ltd., Dalston..	74,450
Chessums, Ltd., Tottenham	73,197
J. E. Billings & Co., Ltd., Westminster	72,273
Rice & Son, Stockwell	71,918
Patman & Fotheringham, Ltd., Islington	71,317
‡Allen Fairhead & Sons, Ltd., Enfield	69,996

LONDON (ISLINGTON).—For construction of high tension chamber and operating room at the Electricity Station, for the B.C. :—

Hooper & Hooper	£2,650
Geo. Bollom	1,648
H. J. Goodman	1,497
R. Woollaston & Co.....	1,224
R. J. Truscott.....	1,199
‡G. Bennett	1,165

(All of London.)

L.C.C.—For provision of additional cloak-room accommodation for the kitchen staff at the County Hall :—

J. C. Mather	£308
W. J. Dixon & Son.....	205
Whitbys, Ltd.	196
‡J. Marsland & Sons, Ltd.	156

The architect's comparable estimate is £197.

L.C.C.—For painting various schools :—

Balham High-road—			
*The Sycamore Works Co.....	£728	15	0
Birley House, Lewisham—			
*J. Hocking & Co.....	371	0	0
Buckingham Gate Central—			
*C. Berger	793	6	0
Camberwell School of Arts and Crafts—			
*Ward, Saul & Co.	919	0	0
Cayley-street, Limehouse—			
*R. Woollaston & Co.	944	0	0
The Chaucer, Southwark—			
*W. Bickerton	989	15	0
Fair-street, Rotherhithe—			
*W. J. Dixon & Son.....	981	12	9
Halley-street, Limehouse —			
*C. P. Kitchen & Co.	750	0	0
Hillbrook-road, Balham—			
*Triggs & Co.....	966	0	0
Linden Lodge Residential, Battersea—			
*A. Soden	648	19	0
Marlborough-road, Camberwell—			
*W. Standing	388	15	0
Oliver Goldsmith, Camberwell—			
*A. Logan	887	0	0
Westmoreland-road, Southwark—			
*W. Smith & Son.....	667	2	0
Mayford Industrial, Woking—			
*A. E. Jones	337	0	0
Putney School of Art, Putney—			
*F. J. Rashbrook, Ltd.	602	0	0

L.C.C.—The following tenders have been accepted :—

Battersea Park-road School—Repairs to floors and ceilings—	
*Triggs & Co.....	£356
Station-road School, Islington—Rebuilding of boundary wall—	
*J. Groves & Son.....	239
Jessop-road School—Provision of temporary hall—	
*T. Brown & Son.....	630
Kilburn-lane School—Alterations in connection with the provision of a new central school—	
*J. Marsland & Sons, Ltd.....	926

LONDON (WESTMINSTER).—For erection of an above-ground four-stall public urinal on the south side of Hay's-mews, John-street, W.1 :—
*Davis, Bennett & Co., Ltd. £320

NELSON.—For erection of 50 houses, for the T.C. Mr. W. Shackleton, Borough Surveyor :—
**Masons' work*—
Morphet & Sons, Earby.
T. Lovett & Sons, Nelson.
D. Flory & Son, Burnley
**Joiners' work*—
John Hanson, Burnley.
**Slaters' work*—
W. Stanworth & Sons, Burnley.
**Plumbers' work*—
T. Rycroft, Nelson.
**Painters' work*—
T. Rycroft, Nelson.
**Electricians' work*—
Carter & Co., Nelson.
**Plasterers' work*—
Whittle & Sons, Nelson.
P. Hartley & Son, Nelson.
H. Lockwood, Nelson.

NORWICH.—For foundation works for shoe factory, for Messrs. S. L. Witton, Ltd., Norwich. Mr. J. Owen Bond, Lic.R.I.B.A., architect, 29, Castle Meadow, Norwich :—

J. Anderson & Sons	£1,870
F. R. Hipperson	1,804
J. Youngs & Son, Ltd.	1,793
R. G. Carter	1,790
T. H. Yelf	1,713
*R. J. May	1,633

NORWICH.—For construction and erection of steel frame for factory, for Messrs. S. L. Witton, Ltd., Norwich. Mr. J. Owen Bond, Lic.R.I.B.A., architect, Norwich. Messrs. E. P. Wells, Cocking & Meston, consulting engineers, 10, New-square, Lincoln's Inn, London, W.C.2 :—

Redpath Brown & Co., Ltd. ..	£9,123	2	9
A. D. Dawnay & Sons, Ltd. ..	9,055	17	6
Boulton & Paul, Ltd.	8,495	0	0
Powers & Dean Ransomes, Ltd.	7,756	13	7
*Aston Construction Co., Ltd. ..	7,749	0	0

PAIGNTON.– For the erection of house at Barcombe Heights, Paignton, for Mr. P. Maltby. Mr. Ernest H. Ladbury, architect, 10 and 12, Victoria-street Paignton. Quantities by Messrs. Harris & Hills, Paignton and Torquay :—

S. Batten	£1,550 0 0
J. Webber	1,386 15 10
F. & A. C. Drew	1,333 0 0
W. Jury	1,248 18 0

RUGELEY.—For erection of 30 houses on Sandy-lane building site, for the U.D.C. :—

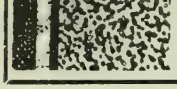
*J. Hudson £12,810

STAINES.—For additions to the Infirmary, for the B.G. :—

*Hedges, Ashford £125

STAMFORD.—For alterations to the new Centra Fire Station, for the T.C. :—

*J. Askew..... £141



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SOUTHAMPTON.—For work in connection with the Children's Hospital. Messrs. Gutteridge & Gutteridge, architects :—

	Tender No. 2.	Tender No. 1.
Doggrell & Son	£3,270 0 0..	£3,220
Wm. Ward	3,169 4 3..	3,130
Geo. Tryhorn	3,148 0 0..	3,109
Wise & Lansdell	3,047 0 0..	2,984
H. Cowte	2,999 0 0..	2,964
Beech & Son	2,982 10 9..	2,934
Jukes & Son, Ltd.	2,973 0 0..	2,921
Jenkins & Sons	2,981 0 0..	2,915
Saunders & Son	2,889 0 0..	2,847
*Bates & Son	2,856 10 0..	2,810

SUNDERLAND.—For painting the outside of Harrison Buildings, for the Corporation. Mr. H. Craven, Town Clerk, Town Hall :—

*F. H. Robson, Sunderland..... £144 12

WALSALL.—For the erection of 100 houses on Palfrey Park Estate, for the T.C. :—

*Eadie, Towers & Co., Wolverhampton £39,250

WANDSWORTH.—For construction of foundations and ground work for the first five blocks of dwellings to be erected on the East hill Estate, for the L.C.C. :—

A. Roberts & Co., Ltd., London	£8,025
Prestige & Co., Ltd., London	7,866
John Garrett & Son, London	7,760
Walter Lawrence & Son, Ltd., London	7,535
Rowley Bros., West Green	7,245
James Carmichael (Contractors), Ltd., Wandsworth	7,231
G. E. Wallis & Sons, Ltd., Maidstone	7,182
Fred & T. Thorne, London	7,107
J. & C. Bowyer, Ltd., Upper Norwood	7,094
Albert Monk, Lower Edmonton	7,007
Holliday & Greenwood, Ltd., Battersea	6,998
Douglass, Halse & Co., Ltd., Woolwich	6,772
Allen Fairhead & Sons, Ltd., Enfield	6,686
Higgs & Hill, Ltd., London	6,569
Geo. Bell & Sons, Ltd., Tottenham	6,377
*J. E. Billings & Co., Ltd., London	6,374

WARRINGTON.—For erection of three firemen's dwellings in Cambria-place, for the T.C. Mr. A. M. Ker, Borough Engineer and Surveyor, Town Hall :—

*F. Berry, Warrington.

WOKING.—For erecting a brick boundary wall in connection with the widening of Boundary-road, for the U.D.C. :—

*R. Pain & Sons, Ltd. £230 12

WORTLEY.—For the erection of 20 houses at Oughtibridge, for the U.D.C. :—

*J. W. & J. Bailey, Tinsley, near Sheffield £9,100

YORK.—For provision of assembly hall at Nunthorpe Secondary School, for the T.C. :—

*H. Colman & Sons £1,388 9 6

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YORK.—For provision of (*a*) lava dation; and (*b*) verandah at Nunth School, for the T.C. :—

*W. Fairweather & Son .... (*a*) £1 (*b*)

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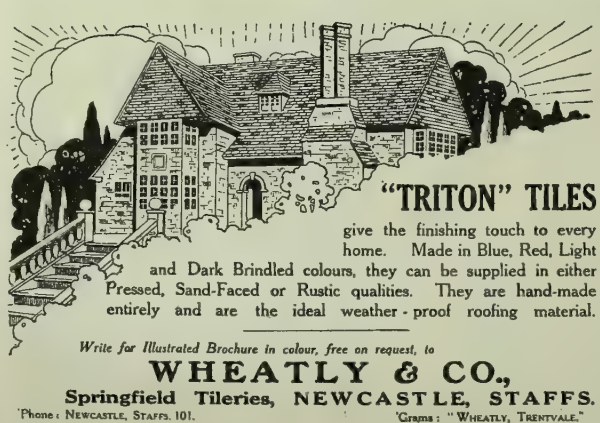
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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

No. 4265. OCTOBER 31, 1924.

THE NEW SESSION

not without significance that the opening of the new sion and with it the commencement of a new era in hitectural affairs, which makes the R.I.B.A. the focal nt of interest and endeavour, corresponds with dawn of a new hope in the affairs of Western a move forward from the negative position to a lute attempt to settle the questions of reparations, re the maintenance of peace and goodwill between nd, we hope, the advent of a stable government at it that, at last, architecture is in closer touch with al life? And, if so, may we not hope that this awaken- esult in much good, not only to the profession itself, o the nation as a whole?

ient times it was customary, on such occasions, for s to be consulted, both in order that the past and rents should be correctly interpreted as a guide to licy, and also that some inspired forecast or vision ure could be obtained. We do not know, at the f writing, whether the address to be delivered by the at the inaugural meeting of the R.I.B.A. session in any detailed exposition of policy, or whether it the tradition of recent years; but the present moment portune for such a survey in order that the s for the future may be studied and an indication ay be attempted and perhaps—given the new unity hitectural profession—achieved by wise direction and counsels.

ear has been noteworthy for more than one event have a permanent influence on the future of the in our Empire. First in importance is the cessation dissensions or party politics within the Institute he adoption of an agreed scheme for the unification fession, with the possibility of statutory registration future. In itself, we do not attach that measure of to registration (as an unfailing panacea for most of the architectural practitioner) which seems to be d. But there can be no doubt that the spirit of and co-operation which is now (it may reasonably the driving force behind the Institute, as the repre- of a united profession, opens an entirely new era, which the results to be obtained by a courageous ssive policy will justify the sacrifices made in the nity. That such a spirit exists was shown at the nnual conference at Oxford; it only remains to see will be used with foresight and courage, or allowed te in sterile discussions.

event of the past session, the importance of which ciently appreciated, was the International Congress tural Education. This will, we believe, have a con- fect on the important question of the training of the ot only in the schools of our own Empire but in her countries. We understand that, on the advice ch delegates and with the approval of the Minister nstruction and Fine Arts, a full translation of the of the congress will shortly be published in Paris, at centre will no doubt find its way to most of the Europe. And among the more recent happenings be noticed in connection with the work of the Insti- associated societies, we note that the Franco-British rchitects has appointed a special joint committee and British architects to investigate the whole estion of the regulation of international compe-

dications of the way in which the Institute and the ies are working for the good of the profession are show it does not neglect its opportunities. But more could be done? We would like to see the the Empire, as represented by the Institute, taking place in those questions of the national life which are too often settled without any reference to the one body competent to give advice and to direct policy in such matters.

We should like, for instance, to see the Institute initiate (in agreement with the employers and operatives in the building trades) a non-party scheme for the solution of the urgent and menacing problem of national housing. There is little doubt that practically all the present labour disputes and troubles can be traced back to the legitimate dissatisfaction of the majority of the population with the conditions of existence as contrasted with those of the more fortunate minority. This dissatisfaction has, no doubt, been intensified rather than diminished by the co-operation of the architects themselves in housing schemes, whereby an enormous "uplift" to the public taste has been given. The nation will no longer tolerate the miserable dwellings of nineteenth-century industrial centres, but demands houses which have character, light, air and convenience. Is it not therefore evident that there is a reasonably greater chance of success for a national housing scheme worked out by men who are experts, rather than those made by politicians, who must necessarily be influenced by party or other interests?

We should like to see, as we have recently suggested, some endeavour made to restore stable conditions in the building trade, and we believe that an impartial investigation of the causes of dispute would result in the creation of a board of arbitration, acceptable to all parties, to which any matters in dispute might be referred, without recourse to strikes and constant dislocation in the industry.

And we should like to see a closer co-operation between architects, engineers, painters, sculptors and builders, with a broader programme for the R.I.B.A. sessional meetings, with papers from distinguished representatives of the allied arts and professions—joint meetings where subjects of interest to the various arts or professions could be debated on equal terms—and have no doubt that this would result in an increase of public interest and establish a mutual appreciation and respect between the various arts, professions and trades concerned. It would also have the great advantage of demonstrating to the average citizen the intimate connection of architecture with the ordinary life of a civilised community.

We should like to see, in the best interests of the profession and of the Institute itself, some more intelligent use of publicity and the creation of a special committee composed of representatives of the Council, the standing committees, and the various journals of the technical press. It is unnecessary to describe in detail the manifest advantages of such a scheme in organising propaganda work on matters of public interest, such, for example, as the Charing Cross Bridge scheme, as we believe the advantages of such co-operation are sufficiently obvious.

And finally, we should like to see a larger proportion of the younger generation of architects taking part in the work of the Institute. We are, of course, aware of the difficulties which exist, of which the chief is that a young architect who has given proof of ability, and is, in consequence, nominated for election to the Council, may not be sufficiently well known to the general body of members to secure the requisite number of votes for election. We would suggest that this might be overcome, in part, at any rate, if a certain proportion of the vacancies on the standing committees were reserved for special nominees of the Council or the schools; in this way the younger men would be able to acquire some experience of Institute affairs before, in due course, being called upon to share the responsibility of representing their fellow-members on the R.I.B.A. Council.

There are other matters, some of which may be of minor importance and others not expedient; but we have endeavoured to show what might be attempted and even achieved under the new conditions, given courage, initiative, and self-sacrificing devotion on behalf of the great cause of architecture as the first and last of the arts of civilisation.

NOTES.

Unemployment and the Building Trade.

THE true state of affairs as regards unemployment was pertinently shown in a letter by Mr. Baillie Scott to which we referred last week. A large amount of unemployment could be set right by the employment of unskilled men in the building trade. The position is both serious and ludicrous, and is dealt with in a letter to the *Times* by Mr. Arthur Keen which pointedly suggests that the trade unions are not free of responsibility. The protection of trades in all their just rights is a laudable enough object, but is this a time to be standing on the letter of the law when some measure of relief from the serious evil of unemployment could be remedied by a loosening of the restrictions which appear to hamper members of the unions? Some little time since we asked a builder how he was getting on, and he said he was in no trouble, for hardly any of his men were members of the trade union. Mr. Keen says it is his belief that before long the best of the men will throw over their unions and apply themselves to getting all the money they can earn by their utmost individual effort. There are times when it is advisable to take a broad view of life and sacrifice individual or class benefits for the general good. Is not this such a time? What a pity it is that all of us do not try to take the broader view and realise more clearly the importance of the general good. We do not take sides in politics, but we do think that in the heat of party arguments there is not enough credit allowed for the general and urgent desire to maintain and improve the conditions of the poorer classes. The first main instinct of humanity may be purely selfish, but we know little of the true philosophy of life until we learn that even our own well-being is largely bound up with the well-being of others. At the present moment there are numerous possibilities awaiting the building trade. Given fair conditions for all and a confidence in the spirit of fair dealing, these possibilities would quickly turn into realities, and the building trade would enter on an unexampled period of activity and prosperity. What is it that bars the way? Nothing whatever but the lack of confidence in each other's sense of fairness and goodwill.

The A.A.

THE President, Mr. H. S. Goodhart-Rendel, selecting "Yesterday and To-morrow" as the title of his inaugural paper at the Architectural Association, indulged in some straight —a form of medicine badly need architecture of to-day. We abstract of his address on p. 67 course of which he said that the ture of Regent-street, far from architecture of to-morrow, is representative of to-day, but generically to yesterday. In sp the public, he asserted that the cares nothing about the appeara building is a godsend to the ar comparison with the man who kn he wants and whose views are opposed to the present-day arc trend of thought; he probably ins "Period" rooms and even upon houses, thus seriously hindering lopment of a real modern arc We can only obtain that when has been trained to want the ri

Concrete Churches.

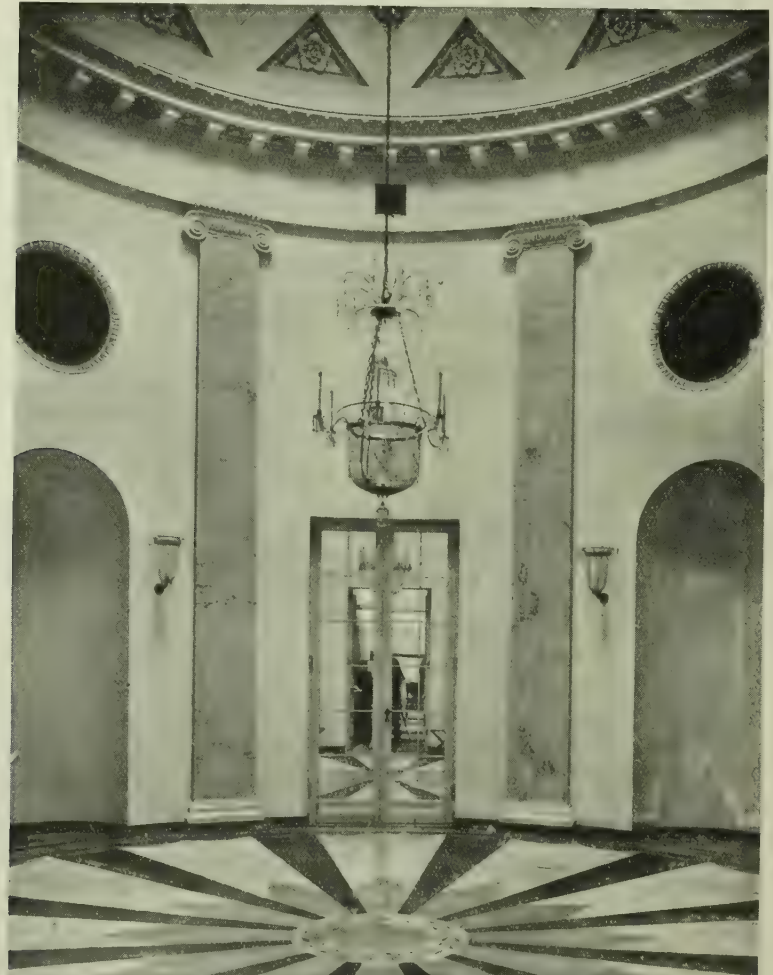
THE subsequent d centred principally possibilities of concrete as a ma church building in suitable Mr. H. M. Fletcher's descripti Paris church built with "birdcag stimulated the imagination, au readily be believed that reinfo crete is capable of achieving be freedom of line and lends itself forms of illumination. The diff this country is to get the opport experiment in such a material for tical purposes. The President when he said that the innate cons of the British public will amply prevent us from making "as ourselves in the experimental although we are, of course, perfe to do so on established lines.

The A.A. Sketches.

THE exhibition o tectural Associatio sketches always high level, but this general average is of conspicuo While architecture naturally large s are of space, yet the sub selected with commendable Most of the sketches are the wo Architectural Association st students, or of those intimately with the school; they reveal kinship which, while allowin opportunity for individuality, freakishly modern nor conventio exhibition includes some remarka ings and photographs and is w a visit.

The New Chenil Galleries, King-street, Chelsea.

ON Saturday Augustus John, A. the first stone of Chenil Galleries. tical start of an necessarily destined to exert a w influence upon every phase endeavour, will, doubtless, be h enthusiasm not only in Chels every quarter where the advan art is regarded as of import



Interior of a Pre-War Russian Mansion. MR. A. E. FOMIN, Architect. (*See p.* 672.)



for Proletarian Monument, Russia.

By G. Yakuloff.

ce lies in the fact that for the in England the sister arts of erature, painting, sculpture, and, the mistress art of architecture, sembled in one home for common inspiration. Many, doubtless, n speculated upon the possibility n ideal institution, but it is now become a reality, and it is that by May next the scheme fficiently advanced to enable an exhibition to be held. It is at the old Chenil Galleries, the oint in the career of many rtists, and the adjoining pre- e original home of the Chelsea , should have been chosen as the new and greater home for the e intentions of the promoters ehensive. There are to be large galleries for paintings, drawings, l sculpture, a musical society, club, a school of arts, a large private studios, a first-class , a café, a library and a hall for chamber-music, dancing and ial gatherings. The architects s. Kennedy & Nightingale.

---

ide We know how often our churches suffer through donors who with the best t. intentions present to them gifts of very defective artis- he same time, there is natural n refusing them, though in the st of the church it is necessary We think the same difficulty is d by the Trustees of our Collections, and the letter of hrey Ward, in *The Times*, in o the refusal by the Trustees of nal Galleries of the pictures nation by the late Sir Claude a case in point. The writer uggestion which might well be nind by donors contemplating o the nation, pointing out how r it would be to leave a power o the Trustees. The National Gallery is already crowded with many more pictures than it can show, and it is only where examples are of an almost unique value that they should be accepted for the nation. In the case of the recent Mond bequest there were those who felt that the nation was saddled with a good many pictures which, though of respectable origin and character, were of no such outstanding merit as would justify adding all of them to a collection so well represented by pictures of similar character. It would be a pity if the "old master" were to become a burden rather than a delight.

The Wertheimer Bequest.

This is an equal or greater danger in the case of bequests of modern work, and, as so well stated by Mr. Humphrey Ward, "How much more grateful we should be to the memory of the late Asher Wertheimer if he had left it to the Trustees to select the three best of his Sargents, instead of forcing his whole family upon the country." If we are to keep up the character of our national collections a greater restraint will have to be imposed. The Tate Gallery suffers from the presence of some very poor artistry in the collection, through its too ready yielding to popular reputation, which has led to the inclusion of examples which a little later it will appear absurd to have ever included. No doubt it is difficult for the Trustees to preserve that detachment from popular influences which is so important in such a charge, and which to us appears to make it desirable that no modern work should be accepted for a national collection for a period of ten years from the date of its production.

The Indian Art Renaissance.

The proposal of Sir G. Lloyd, of the Indian Society, for permanent representation in our art galleries of modern Indian art is not without interest, but the contribution made through present-day developments of art training in India may be open to more question. When we are told of "Indian Art Renaissance," we are inclined to inquire more particularly what this means. We are far from saying there is no advance, and are inclined to regard favourably present-day developments of art training in India which have the support of so thoughtful an administrator as Lord Ronaldshay. The question cannot, however, be regarded in the abstract, but on what use we are going to make of this advance in training, in what way will it be applied? If the training of the Bombay School of Art is to be of value it will be alive to the dangers of its absorption into the industrialism of the West. Is there no danger of recreating Indian art on Occidental methods which replaces the native craftsman and the workshop by the "studio" artist on one side, and the operative on the other? Is Indian art even needing any such renaissance? Is not native traditional work so much better? We cannot develop here all the considerations so manifold and far-reaching which challenge the complacency of those who regard the art training in vogue as the best means of fostering beauty. But the kind of results achieved suggest to us that the whole subject is in need of reconsideration.



A Pre-War Russian Mansion: Entrance to Winter Garden. (*See. p.* 672.)

GENERAL NEWS

Professional Announcement.

Mr. Harold Lansdown, F.S.I., having relinquished his position as Quantity Surveyor to the Ministry of Health (Housing), has resumed private practice at 9, Regent-street, S.W., and Hampton Wick.

The Painters' Company.

Mr. Octavius Satchell has been elected Master of the Painters' Company.

Architect's Estate.

Mr. William John Middleton, of Belsize-road, South Hampstead, N.W., £12,318.

Royal College of Art.

Mr. Ernest Cole has been appointed Professor of Sculpture at the Royal College of Art, in succession to Mr. F. Derwent Wood, R.A.

Obituary.

The death took place recently of Mr. John Robert Hall, a well-known Sheffield architect. Mr. Hall, who was 60 years of age, was the son of the late Mr. James Hall, who was also an architect, and who erected among other prominent buildings, the Firvale Workhouse. He was articled to his father, and, on the death of the latter, was joined in partnership by Alderman W. C. Fenton. Mr. Hall was a member of the Sheffield Society of Architects, and on the council of that body.

The death occurred recently, at South Shields, of Mr. Frederic Dalzeil Hayton, who had for many years been a member of the firm of Messrs. J. H. Morton & Son, architects, of that town.

New Thames Bridge.

The Albert Bridge over the Thames, near Datchet, is to be demolished and a new bridge built in its place. The work will be begun in the course of the next few days. The new bridge will be made of reinforced concrete, and is the third bridge of this material to be built over the Thames. It will be in the Renaissance style, but with squared rubble towers, to obviate conflict with the Norman architectural surroundings. The design has been prepared by the County Surveyors of Berkshire and Buckinghamshire, Lieut.-Colonel J. F. Hawkins and Mr. E. Winfield, respectively. The bridge will consist of two unequal span arches, that on the Berks side 75 ft., and that on the Bucks side 110 ft., with a centre outwater pier 15 ft. wide, and is designed to carry all classes of modern traffic. The bridge will be built on the system of the Trussed Concrete Steel Co., Ltd., 22, Cranley-gardens, South Kensington, S.W.7, by Messrs. A. Jackaman & Sons, of Slough, Bucks.

County Architectural Training.

At a recent meeting of the West Riding Education Committee the appointment of three pupils under the West Riding Education Architect was discussed. Sir James P. Hinchliffe (Chairman of the West Riding County Council), in the course of his remarks said it was an important departure, and, he thought, a wise one, in that it gave youths in the county an opportunity of serving an apprenticeship to a profession which was really specialised, because local government architecture as regards schools was a specialised business. The pupils would enter into a five years' apprenticeship, without payment of premium, and at a salary of 10s. a week during the period of apprenticeship. The practice of heads of departments of the County Council having articled pupils was discontinued about twenty years ago, but it seemed a pity that a large authority like the County Council did not take its share of responsibility in training reliable officials. He hoped that would be only the beginning of a wider movement in the departments of the County Council to give encouragement as far as possible to the youth of the county in architectural education.

CORRESPONDENCE

On the Choice of a Limestone and its Preservation.

SIR,—Architects and builders are much puzzled to know which of the various limestones on the market to choose, especially when it has to be used in a modern city and subjected to the attack of sulphur acids in the air. I have been making experiments on this with a view to classifying limestones and have come to the following conclusions :—

In the first place, the limestone should be subjected to a test to determine the rate at which it yields to acid attack. Limestones vary widely in their susceptibility, some resisting remarkably while others quickly crumble.

In the next place, its porosity and rate of evaporation and absorption should be measured. The destruction of the limestone is principally due to the formation within the pores of crystals of sulphate of lime. The rain while bringing acid in solution and so doing harm, also preserves by dissolving out the sulphate of lime and so preventing too much crystallisation.

A stone, therefore, which rapidly absorbs and evaporates stands better because of the washing out of the sulphate of lime. The durability of limestones can be very much increased by treatment with silicon ester. This binds together and protects the particles without closing the pores.

Limestone buildings should be washed down with the fire hose, especially under cornices and mouldings in the summer, being allowed to dry out, and then be washed again some two or three times.

A. P. LAURIE, Principal.

Heriot-Watt College,
Edinburgh.

The Imperial Institute.

Our attention has been called to the fact that in the obituary notice of the late Mr. T. E. Colcutt, by Professor Beresford Pite, in our issue of October 18, the writer referred to "The Imperial Institute building—temporarily, if not for good, the home of the University of London." The statement is perfectly true as it stands, since the University does occupy a large part of the main building and a small part of the extensive galleries behind it. But, we are informed, "it conveys the false impression that the University is in sole occupation and that the Imperial Institute is either elsewhere or defunct; whereas nearly half of the main building and by far the greater part of the galleries are, and will doubtless remain, in the occupation of the Imperial Institute, for whom they were built, and whose work of investigating, introducing to commerce and exhibiting the raw and partly-manufactured products of the Empire is of no less importance than that of the University."

BOOKS RECEIVED.

SMALL FAMILY HOUSES. By R. Randal Phillips. (London: Office of *Country Life*.) Price 10s. 6d.

WEST MIDDLESEX: Final Report upon the Regional Planning Scheme. By Thomas Adams and Longstreth Thompson. Price 10s. 6d.

EVERYDAY LIFE IN ROMAN BRITAIN. By Marjorie and C. H. B. Quennell. (London: B. T. Batsford, Ltd.) Price 5s.

L.C.C. REGULATIONS RELATING TO REINFORCED CONCRETE AND STEEL FRAME BUILDINGS. With explanatory notes by Ewart S. Andrews. (London: B. T. Batsford, Ltd.) Price 4s.

STRUCTURAL DESIGN IN STEEL FRAME BUILDINGS. By Percy J. Waldram. (London: B. T. Batsford, Ltd.) Price 12s. 6d.

COLOUR AND COMFORT. By John Gloag. (London: Duckworth & Co.) Price 7s. 6d.

EXAMPLES OF MODERN ARCHITECTURE, No. 9. By G. H. Fellowes Prynne. (London: Ed. J. Burrow & Co., Ltd.) Price 2s.

MODERN PRACTICAL JOINERY. By George Ellis. (London: B. T. Batsford.) Price £2 5s.

COMPETITION N

Newton-in-Makerfield Baths

The award in this competition has made by the assessor, Mr. Arnold F.R.I.B.A. The first premium of been awarded Mr. C. Cowles-Voysey, of London; second premium (£50), Quiggin & Gee, F. & A.R.I.B.A., of and the third premium (£25), to Messr & Thrasher, of Bristol. The design is illustrated this week.

Modern Methods of Ventilati

For an essay on "The Ventilation Court," a silver medal will be awar Worshipful Company of Fan Ma assessors are: Messrs. J. W. Cool A. E. Munby, F.R.I.B.A., and H. Wood, F.R.I.B.A. Particulars from P. Francis, M.A., The Worshipful C Fan Makers, 62, London Wall, E advertisement this week.)

Valletta Lay-out Competitio

Designs are invited for the lay- open spaces and fortifications betwe and Floriana and those encircling Applications for particulars, with a £5, to be made to the Minister of Pub Public Works Office, Valletta, Malta than December 1. Premiums of £1,00 are offered to the first and second c respectively. An indemnity of £1 awarded to three other designs sho spicuous merit. Sending-in day, Jun Conditions can be seen at this of assessors in this competition are Warren, F.S.A., F.R.I.B.A., and Patrick Abercrombie, M.A., A.R.I.B.

Christian Science Church, South

Designs are invited for a new c Sunday school at the First Church Scientist, Southport. Premiums of and £30 are offered respectively. Th are Messrs. J. E. Sanders & Son, 219A, Lord-street, Southport, to who tion should be made, accompanied by of 10s., returnable only to those wh designs.

Jugo-Slav Competition for Landscape

The Department of the Board of received from the Legation of the K the Serbs, Croats, and Slovenes pa an international competition open to architects, &c., for the submission designed for the elaboration of the g of the Toptchider Park, near Belgr

The prizes for the best plans sub as follows :—1st prize, £400; 2nd p 3rd prize, £200; 4th prize, £150; £100.

In addition, the sum of £250 is se the purchase of designs failing to se

Plans must be submitted to the Agriculture and Water, rue Prole Belgrade, by December 31, 1924. the competition and plans of the p may be obtained from the office of t at that address.

Barrow Hill Memorial Clu

Designs are invited for the extens club. The total expenditure for and additions is not to be more th No payment will be made by the drawings or plans (which will b submitted, but the accepted archit engaged to carry out the work. day, November 10. Particulars Secretary, 10, Station-road, Barrow

Other Competitions.

Other competitions still open i following (the dates given are, first th date, and second the issue of *The* which full particulars were given) Hall (May 1). Manchester Art Galle Aug. 22). Concrete Cottages (Oct. 3



A Pre-War Russian Mansion now used as a Rest-house for the Working-class. A. E. FOMIN, Architect.



A Room in the Mansion. A. E. FOMIN, Architect. (*See p.* 672.)

THE ARCHITECTURAL ASSOCIATION

ON Monday evening, Mr. H. S. GOODHART-RENDEL (President) occupied the chair at the inaugural meeting of the 1924-5 session of the Architectural Association, at 35, Bedford-square, W.C.

In opening the meeting, the PRESIDENT referred to the recent death of Mr. A. H. Belcher, and it was agreed that a letter of condolence be sent to Mr. Belcher's relatives by the Association.

It was announced that there were 69 nominations for membership, and Miss M. Sauer and Mr. R. D. Manning were elected to the membership. Mr. P. M. Fraser was re-instated as a member.

Architecture of the Past and Future.

The PRESIDENT then gave an address entitled "Yesterday and To-morrow," in the course of which he said his lecture could not contain any just judgment or certain prophecy; what yesterday had done was done too lately for them to see it dispassionately; what to-morrow would do they could not see at all.

Very few people who employed an architect expected or desired from him a work of art, or indeed had any conception of what a work of art in architecture was. They thought they knew what they wanted already, and would like best to obtain it directly from a builder, afterwards ordering the decorative features *à la carte* from a furnishing firm. They employed an architect only to guarantee the safety of the structure and of the drains, and to see that the builder did not charge too much. They bowed to the necessity of his employment, but regretted it. It was to such unwilling patrons as those that most architects owed three-quarters of their chances of doing anything at all.

A great number of the buildings of the last half century that they now believed to be the best ones had been paid for by people entirely indifferent to architectural appearances. Besides those, a few of the very best of all had been built by people of exceptional artistic perception and had been profitably imitated by others. But there were still to-day among those who built—and Heaven be thanked for it!—many people who had no taste whatever, and who did not care two straws what their building looked like provided it served its purpose. For them the architect could do his best work, stimulated by his employer in his pursuit of efficiency and unhampered by him in his pursuit of beauty. The practice of many successful architects of deputing the designing of their buildings to subordinates, whether in or outside their offices, had made it often impossible for laymen or for anyone else to distinguish between the work of one firm and that of another. He feared, also, that architects had deserved heavy censure for a conventionality of outlook which only now showed slight signs of dissipating. In nothing was that more blameworthy than in their habit of spending their employer's money upon ornament which there was no chance of anybody ever looking at. He thought he could undertake to remove twenty thousand pounds' worth of architectural carving from the new Regent-street alone without any man, woman, or child noticing that anything had been done. The eye of the average Londoner was so glutted by architectural carving wrongly placed that even when such carving was properly called for he had come not to notice whether it was there or not.

He wished to speak of a most serious fault on the other side, of a defect in public taste which, if it grew rather than diminished, might paralyse their art altogether. That was the sentimental devotion felt by people of to-day for the arts of the day before yesterday—the cult of the "antique," the creed of the "period" designer. In that really beautiful thing, the Queen's Doll's House, they were leaving to posterity a record, cruelly true, that when they wished to offer their best in architecture, they offered architecture that was not theirs at all. He did not suggest for a moment that that was avoidable; the Doll's House was intended to represent the most educated taste of to-day, and did so exactly; but he did suggest that the most educated taste of to-day wanted a dose of something. Perhaps they could not stop people enjoining skilful craftsmen to make over and over again the mistakes which Kent or Chippendale or Sheraton made, but he thought they should try. Not only did that injunction sterilise any creative power the craftsman might possess, but it removed from his patrons the necessity of ever learning any artistic discrimination or indep taste. What was bad in decoration ture was worse in buildings; a "per was only a vulgarity, but a "peri was a grave misdemeanour.

Whatever its faults there was no was imitation antique about the ne street; nothing exactly like it had seen before, and it was to be hoped th like it would ever be seen again. That fare seemed to him, in spite of its to be peculiarly representative of thos yesterday upon which they must try that to-morrow turned its back. among them, he put its utter insinc believed that very few of the build were residential, yet the façades of of them were strongly domestic in above the level of the shop-fronts. really no excuse for that, since the on which his statement did not cover admirable building, on the west side below Conduit-street, which had be several years when the present activ That building was a fragment of a Mr. Verity for the general rebuildi part of the street in which it stood. design been carried out, then ten have been housed as well as or bette were housed to-day, and London gained a beauty. It would seem did they not see it to be true, tha publication of Mr. Verity's design the building of Selfridge's, of Wl Burberry's, and of the addition to Jo premises, the designers of Regent-s' return to the formulas which gave th Nicholl's and Harrod's Stores.

The one consoling feature in that failure of street building was the e many of the shop fronts. Even t them was not positively bad, a pleasant task to compare them v pleasant memory of those in the which they replaced. The shop fr future would probably be even s they had already become, since traffi were leading and would lead more their being recessed rather thar The great change, however, which would effect in the design of r shops would be the final disappear illogical distinction between sho super-structure which gave to su as that of Messrs. Dickins & Jones



Figure at the Entrance to the Theatre at Leningrad. (See



Figure at the Entrance to the Open-Air Theatre at Leningrad.
Designed by A. E. FOMIN, Architect.

f a block of municipal offices with the
l floor rented off.
he design of London office buildings, he
d if to-morrow would see any great
e in essentials beyond the point reached
best of the blocks in Kingsway. Portland
ad so many recommendations as a facing
al in London that it was unlikely to be
lly superseded even by faience. As time
n it would probably come to be treated
rankly as a mere facing than it was at
t; perhaps it might be allowed to appear
s affixed to the wall without bond, and
and decorated with metal. However
ight be, they could be sure that a great
f the customary bulk of stonework in
rcial buildings would disappear. Street-
could not be treated much longer as walls
oles in them, when in reality they had
e a series of holes divided by a structural
ork. If convenience alone were con-
, few, if any, of the holes would be
l with stone; glass or metal would be
ligible. At present they were in tran-
to-morrow they might hope to have
ccepted the consequences of modern
ction.
probability that a good many churches
have to be built before long would excuse
r saying what he believed to be an un-
t home truth. This was that there were
w men in England at the present time
ere capable of designing a tolerable
In the last century, the routine church
average architect might have been what
nsidered ugly, but it was competently
d of its kind and free from glaring
ulous faults. The routine churches, such
e were of them, which had been built
first quarter of this century, seldom
evidence of any knowledge or experi-
hatever on the part of their designers.
bt their faults were largely caused by the
stically supported convention that
es must be Gothic, a style which most
architects had either forgotten or never
; but putting style apart, the new
es were still bad—bad in proportion,
l in construction, and inconvenient in
ement. There was, of course, no archi-
l reason why a church should be Gothic,
ere were a great many why it should not
hat style had disappeared from contem-
secular architecture. He did not con-
here was any ecclesiastical reason why a
should be Gothic, either; but there were
many people who felt strongly that it
It might well happen that the archi-
f many of to-morrow's churches would be
nded to design in Gothic. They would
o choose between two alternatives—that
ing for safety in the "Earliest" style
ble, or covering their blunders in developed
by proposing a "free treatment" of
hichever course they embarked upon,
to be hoped they would remember that
ramount need of modern congregations
be able to see the altar without the use
of a periscope. Mediæval styles might be eligible for modern conditions, but most mediæval plans were not. It was true that mediæval plans had been constantly reproduced and that the accustomed docility of church-goers had saved them from rebellion, but he did not think there was any excuse for an architect, even with the acquiescence of his employers, building a church which it was hoped would be filled with worshippers at the chief offices in the form of an ancient church which was always too big for the worshippers at any one office, and in which, therefore, everybody had a large choice of where he would stand or kneel. Be its style Gothic, or Classic, or Romanesque, or nondescript, a modern church should take the form wherever possible of a large hall with or without passage aisles. Transepts were an expensive luxury, since they were seldom of any use, save as chapels, and for that purpose they were unnecessarily high. Whether there be added to this hall a full chancel or a mere sanctuary would depend upon whether there was to be a surpliced choir or whether the music was to be provided for from a western gallery. It could not be denied that that hall-like form was not a cheap one, unless they were to forego their normal notions of fit architectural proportion and make it very low. With modern facilities of ventilation, there was no practical compulsion to make such a hall of more than an average height of 20 ft., or even a little less; and it would be difficult to be content with that height for a space of about 40 ft. span. He suggested, therefore, that the really cheap church of to-morrow would probably be roofed by two or three parallel spans, and be divided accordingly by posts on their pillars on the ground plan. In some circumstances, wooden posts would do very well; in others, there might be an especial suitability in slender arcades of stone after the old model. Where the material was reinforced concrete there would be stanchions, which perhaps might be faced with mosaic, faience, or even marble. Where the material was reinforced concrete another new possibility in church architecture would arise—it would no longer be necessary to distribute the lighting area of glass into definite windows, but it would be open to the architect to pierce the walls and roof of his structure with glazed holes grouped and arranged in patterns however he chose. Before leaving the subject of church architecture, he must lay his tribute before that magnificent design which Sir Giles Scott had now partially realised at Liverpool.

In proposing a vote of thanks to the lecturer, Mr. H. M. Fletcher said he was very much interested in the reference to the concrete church at Le Raincy, which he had visited just previously, and which he thought a very fine piece of pioneer work, impressive in a way but still groping. The plan of that church was a traditional church plan of nave and aisles, but the aisles were only separated from the nave by thin reinforced concrete posts. The effect of the church might be likened to a bird-cage, for three of the sides were formed of very light



Part of proposed Spa at Leningrad, as built.

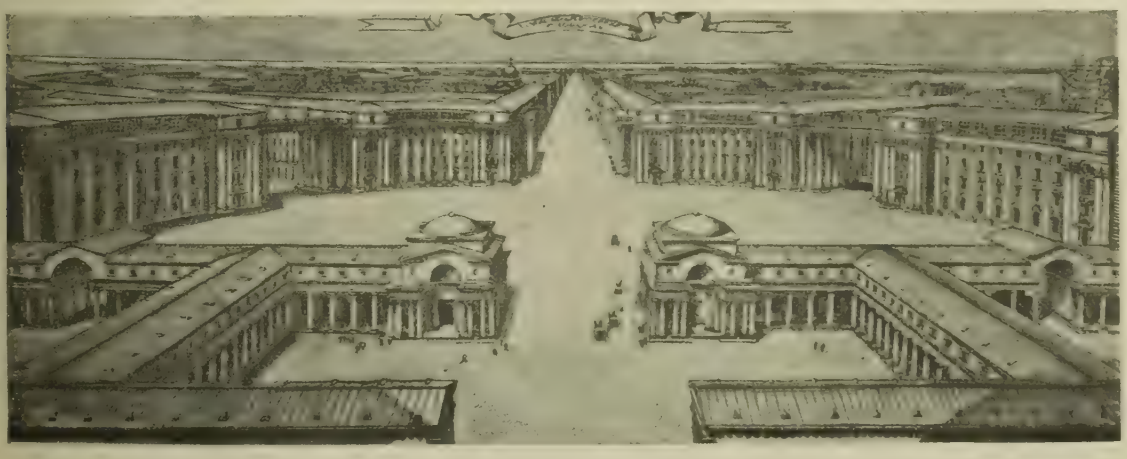
tracery in concrete filled in with glass; that seemed to be what Gothic builders tried to do but could not because the stone had not sufficient tensile strength, and they were obliged to use great buttresses outside. The external walls were simply a series of articulations with glass between, and with no projections on them at all. The interior of the church was very impressive. The coloured glass, of which the walls were chiefly composed, made the interior a blaze of colour. After referring to another concrete church in France, Mr. Fletcher said he thought everybody who cared for the to-day and to-morrow of architecture should keep their eyes on France.

Mr. Matthew Dawson said he did not think the architects of the concrete churches in France came from the Ecole des Beaux Arts, but from the school of Viollet le Duc.

Mr. Manning Robertson said that in dealing with concrete churches or other buildings they got much the same type of structure as with steel, if they properly followed and properly used the material. He thought the Palm House at Kew a very fine building, but he did not admire Cannon-street station as architecture; both these were built of steel, and in the same way reinforced concrete structures could be beautiful if the material were properly handled.

Mr. Stanley Hamp said he thought a feeling of simplicity would have a large influence in the architecture of to-morrow, and ornament would be reduced to a minimum.

In replying to the discussion, Mr. Goodhart-Rendel said he quite appreciated that the architecture of Regent-street was the architecture of yesterday, and that most of the architects who had anything to do with it did so very unwillingly; the whole fault lay with those who imposed the design on the street. But the fact remained that Regent-street was about fifty years behind Kingsway, and in Kingsway there were some accidents!



The New Petrograd: Plan for a Spa at Leningrad. Designed by A. E. Fomin. (*See p.* 672.)

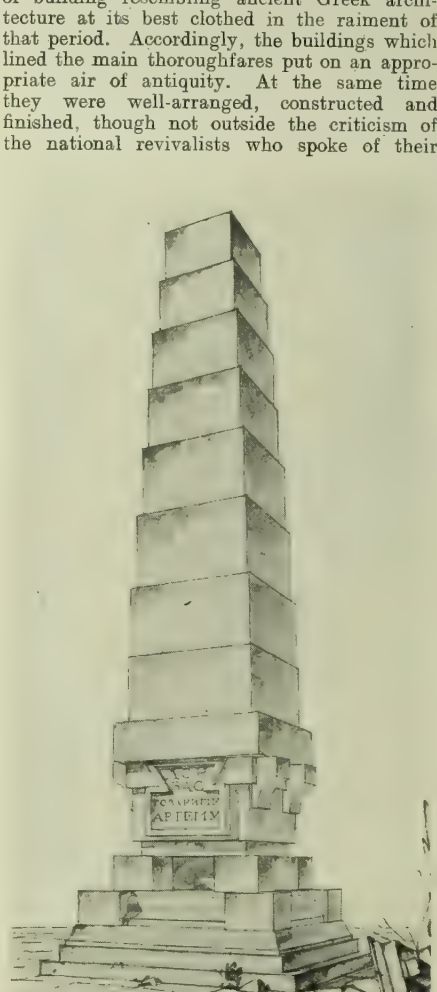
RECONSTRUCTION CONTRASTS IN RUSSIA

By HUNTLY CARTER.

When the war began much housing and town-planning and other civic work was being projected and carried out in Moscow and St. Petersburg (now Leningrad). At that period new building exhibited two tendencies, one towards a national revival, the other towards a classical revival. The first aimed at the re-introduction of a pure Russian style of architecture as a means of counteracting foreign styles which had crept into Russia since Peter the Great's time and promised eventually to turn Russian cities and towns into architectural museums containing a variety of styles outrivalling those even of Reval or Prague. The second aimed to rebuild Leningrad in "the triumph of the classical style."

The revival of the old spirit which represents the ethnic and ethic tradition in Russian architecture, and embodies those elements of racial experience which differentiate old Russian architecture from other national styles, found a very active and able supporter in the architect Alexander Schoussev. The ambitious new Kazan station at Moscow (see p. 674), which he planned and began to erect in 1913, and which is now, after a delay of nine years, being completed, is an example of an attempt to build a modern station in an ancient style. It is, in fact, an attempt to construct a great terminus, covering an area of half a kilometre and estimated to cost, in 1913, 12 million gold roubles, suitable for the purpose for which it is to be used, namely, a very heavy passenger traffic, and, at the same time, to reproduce a style that predominated from the fifteenth to the seventeenth century, in which there is a very considerable Tartar influence. In the latter respect the architect has been very successful. The building strongly expresses the old Tartar spirit in pathetic contrast to the new Western European "mammonised" spirit expressed by the numerous surrounding buildings. But the antique form hardly suggests the stern business of the building. Indeed, the exterior, of which the most prominent feature is the four-tiered tower revealing the typical old Russian motive, is pure decoration, and looks like an attractive toy. The interior, divided into a cavernous booking hall, waiting room, refreshment room, etc., is going to be ornamented in Byzantine style with a very lavish scheme of colour and, when completed, will strongly resemble the interior of a richly decorated Byzantine church. The Kazan station is an interesting expression of the union of ancient form and modern purpose. Whether the two agree is open to doubt. Woolwich Arsenal built in the style of the Kremlin might seem ironical and unserviceable. But Russia lies between Europe and Asia, between civilisation and barbarism, and perhaps to it will fall the task of synthesising the styles of the two.

A different result was attained in the case of the buildings erected in Leningrad. The latter city is of much more recent origin than Moscow, and, indeed, exhibits some of the best features of modern town-planning, including very wide boulevards and generous open spaces. The aim of its pre-war builders seems to have been to provide it with a body of building resembling ancient Greek architecture at its best clothed in the raiment of that period. Accordingly, the buildings which lined the main thoroughfares put on an appropriate air of antiquity. At the same time they were well-arranged, constructed and finished, though not outside the criticism of the national revivalists who spoke of their



A Worker's Monument.
Designed by A. E. Fomin.

"sham classical dressings." Perhaps the real fault of the Greek style was that of the national style. It was not altogether suited to modern purposes. Indeed, in some instances it seemed as though the main form of the building was not determined by purpose but by trimmings. An example occurs in the cinema theatres. Just before the war something gave a great impulse to cinema theatre building in Leningrad. Nevski Prospect became dotte picture palaces. There were both the t with large auditoriums, and the small more intimate theatres. These buildi not demonstrate throughout that certa ments governed the development and the cinema theatre. Whilst the seat commodation showed an appreciation latest requirements in the matters of comfort, convenience and sight line, the tectural treatment of the building show of appreciation of the ideas and ideal expressed. For one thing, there was deal of fussiness about the general For another, the exterior did not inv spectator into a cinema but into a And the interior decorations failed to the frame of mind necessary to the c enjoyment of the entertainment. As ample, take the Piccadilly Cinema. worthy of note that each of these new received a name, the "Piccadilly, "Soleil," etc., imported from bourgeois New York, and London. These names unchanged to-day, although the stree theatres and certain Government offic been rechristened with brand-new nam memorating the events of the Revolutio Piccadilly has a portico like a Greek It is enclosed by Ionic columns, and mented with Isador Duncan dancing The vestibule is richly decorated Greek and has a frieze ornamented with F medallions on a vivid blue ground. throughout the interior. The interior Soleil resembles that of an ancient bath. The red and black stuccoed wa ornamented with quite a lot of fancy work. With palace and domestic archi it is different. Examples of fit and n architecture are not uncommon. In par the buildings designed by the architect succeed in lifting themselves from th of too much embroidery and too little p

The work of this architect is well illu by the pre-war project for the build New Petrograd. The object was to spa or health suburb resembling F Buxton in plan and in severely classica tectural style. An extensive site was on the delta about a mile from the ma The surface was drained and raised feet, the two horns of the crescent were and other preparations for a real sta made. Then came the war. When revisited the place early this year eve was standing as the builders had le 1914. There were the two skeleton b buildings, and roads and avenues par structed, from which the wood blocks h removed by people in need of firewood. was the thickly rusted narrow-gauge with trucks loaded with building mater as the workmen had left them. A finished fountain in the central arc which radiated the main roads, here a cemented foundations waiting for bu uncemented foundations filled with water, completed this picture of moder prise upon which a plague had descen swept away the human element. nothing but debris and desolation beh



Entrance.



The Arena and Seating Accommodation.

Open-Air Theatre built at Leningrad in 1920. Designed by A. E. Fomin.



Palace of Labour (Greek). Designed by A. E. Fomin.

ffect of the war and the first year or he Revolution was to produce an un- l picture of crumbling cities, and to top to town-planning and building. h the disappearance of the worst ex- f the Revolution came a return of both in town-planning and housing. as much adaptation of existing build- blic and quasi-public and private, to ient and working-class requirements. were used as offices, millionaires' s as theatres, and so on. Along with t numerous projects and some build- t not in the old spirit. A new popu- ith a new ideal had come into being. th everything must express this ideal. as the ideal? Briefly stated, it was er of the Proletariat, or, in Lenin's Power to the Soviets."

e now know, the conquest of the sie and the intelligentsia, or the old ial part of the population, was one of cts of the Revolution. The working l into revolutionary groups, the old asses were suppressed, dispersed and , and the proletariat became the y active class, demanding that Russia conditions of life should be fashioned suit their mental and physical re- ts. Hence arose a movement in ure expressing two tendencies, one a ial or psychological one, the other a tic one. The first aimed to embody national aspiration, namely, romantic power; the second was directed more national purpose or service. The latter efinite attempt to find architectural for the problems in connection with lding of Russia on a great Power plan, as an up-to-date electrically indus- country. And it was undertaken by g insurgent experimentalists.

st tendency found an embodiment in or, and the actual erection of public . monuments, etc.—a work in which ssional architects of the old *régime* accepted the new one were able to . Strangely enough, the new spirit roletariat favoured ancient forms. h forms the old intellectuals were miliar. But in place of a classical le, or an ancient Russian style, the t asked for a barbaric style coming y Rome and containing modifications y wanted to be used to help to express individuality. In the conception of uildings the first consideration must —the power of modern gladiators or a new existence and a new world. cular gladiatorial element has entered ly into the new architecture and and to-day evidences of it are to be Moscow and Leningrad, principally and busts of communist leaders— gles, Lassalle, Lenin, Trotsky, and nd monuments commemorating the ternational and fallen communists. ike a note of realism, solidity and us classicism of the Roman forum . Among the numerous projects for ldings are palaces of labour designed ding architects, including Fomin and ey are obviously inspired by the -Roman ideal and planned to take the place of the mediæval cathedral and town hall as the centralising buildings of Russian cities and towns. There are also designs for people's theatres, soviet municipal buildings, street decorations and embellishment. All alike exhibit a certain barbaric strength, simplicity and dignity which express the mechanical logic and orderliness, yet lack of refinement of the modern industrial worker. There is a permanent exhibition of these designs at Leningrad under the charge of the architect Ilien.

The buildings erected do not call for much comment. Probably the most important is the open-air theatre at Leningrad, built in 1920 from the designs of Fomin. It seats between 2,000 and 2,500 spectators, and was originally designed to seat 5,000, but lack of money compelled modification. A colossal statue of Labour guards the main entrance, which marks a definite departure in the direction of the ancient heroic ideal. The sculptor has sought to invest solid matter with the physical and emotional significance of the heroic or romantic labourer, and has avoided turning out the greasy-bloused mechanic and accessories on a pedestal.

The second and in some ways more interesting tendency in architecture occupies the attention of the young insurgents. They appear to be actuated solely by the modern idea of Service, and seek to design buildings suited for the highest efficiency of industry and State activities. They differ from the other architects in the following respect. While the first continue to exploit history and habit and tradition with up-to-date modification, the second accept only facts of a new creation and a new form which they seek to extend and develop to perfection. The first are producing, largely under the compulsion of the Government and public opinion, a new-old architecture subject to new social and industrial requirements, but the second are producing, encouraged by the Government, a new architecture to serve the new ends and purposes of the State, commerce, industry, traffic and transportation. That is, the latter want to reject, as far as possible, the basic forms and construction principles of antiquity and to realise the new possibilities of form and construction in new materials. These materials they have reduced to two—iron and glass—unlike the German insurgents, in particular Eric Mendelsohn, who is testing the possibilities of three materials—glass, steel and concrete—as illustrated by his book of "Structures and Sketches." The leader of the Russian experimentalists is Tatlin. The facts of his monument to the Third International nicely describe those of other projected buildings. In 1919 the Art Department of the People's Commission for Education requested Tatlin to make designs for a monument to the Third International. Eighteen months later he submitted a model and sketches to the eighth All-Russia Soviet Congress. He fully explained his project to the various Soviet representatives drawn from all parts of Russia. According to this explanation his project unites architecture, sculpture, painting and iron art-structure. It is to be built of iron and glass, the materials characteristic of our times. These materials have produced a change in the principles and use of architecture. Iron, for instance, although durable, can be put in any form. This makes the solidity and durability of a building independent of the conditions of the weight and support, which are transferred from stone and wood in the construction. Also, clever use of glass changes the problem of illumination and ventilation. Tatlin's monument was evidently designed with a full knowledge of the meaning and significance of the change in construction principles. It is 400 ft. high. It rises in the form of a spiral. It has an angle of 45 degrees, and it is divided into three stories, the walls of which are of glass. The first story is an immense square, which revolves round itself once a year. This is for International Congresses. The second story is smaller and pyramidal, and revolves once a month. It will serve for monthly meetings of the Soviets. The third story is in the form of a cylinder and revolves once a day. It is to be used for an information bureau. The revolutions and velocities are probably cosmic and romantic symbolism. They imitate those respectively of the earth round the sun, the moon round the earth, and the earth round itself. Another spiral building appears in G. Yakulov's project for a proletarian monument. The cylinder forms a radio station, below this is a beacon, below this again a library. Then comes a meeting-place, and the base forms a vast tomb. The latter is probably for some of the speakers and their victims.

In all this activity we see a desire on the part of young Russian architects to replace an individualist vision by a collectivist one. But the thing to note in the aforegoing, as well as in the new designs for peasants' huts exhibited at the Moscow Agricultural Exhibition last year, is the promise that Russia is about to form the subject of a great rebuilding scheme. The official plan adopted is to electrify the country from end to end. Villages are to be electrified and linked to each other and to the great cities by copper cables. Cities and towns will be brought into the general scheme and buildings supplied to suit the people and their needs. It will be interesting to watch Russia develop under the new architectural conditions. Not long ago there appeared in Moscow a design of the new Moscow rebuilt in a manner that made it look like ancient Rome at its giddiest height. To complete the picture, there was Lenin in a Roman toga.



Palace of Labour (Roman). Designed by A. E. Belogrub.

THE PLEASURES OF ARCHITECTURE*

UNDER this fascinating title the authors attempt to analyse the pleasures offered by the "at present much neglected art of architecture." We assume that the pleasures of architecture are keenly enjoyed by the architect (despite the penalties and disappointments inseparable from architecture as a profession), and we also assume that the chief object conveyed by the title of this book is to make a direct appeal to the layman, in the belief that if he derives pleasure from good building he will in turn take pains to see that he gets it. No excuse is required for a book of this nature to those who prefer a work of art to the written word; on the contrary, we believe that no greater service can be rendered to architecture than to attempt to bring the public into closer touch with its pleasures and its troubles.

We hardly think the authors have made the most of their opportunity by failing to distinguish between the pleasures of architecture to the onlooker, and the pleasures (or penalties) of possessing and living in a house designed by an architect. This is probably an instance of cause and effect which we are supposed to take for granted. Mr. Lucas, we believe, attributed to Charles Kingsley the observation that the beauty of the house opposite was of more consequence than that of the house one lived in, and we rather fancy that this practical observation represents the popular conception of the pleasures of architecture. This is not to depreciate the value of a fascinating book, but rather to define it.

The authors have adopted several methods in their handling of the subject, and their speculations cover a wide range. Individual observation and technical criticism, and a certain amount of special pleading, are delicately blended with vigorous and refreshing comments upon the social state. The psychology of architecture receives the attention it deserves, and the imaginary "Cedar Lawn" is a merciless piece of satire which eloquently portrays both a phase of architecture and the social state which produced it. This example will confirm the opinion of many who have held that the effective weapon for vulgarity is ridicule. We have seen it adopted with advantage, both in literature and on the stage, to deal with social problems and humbug.

We agree with the authors when they say that artists working for an indifferent public become yet more devitalised and a blight of indifference and boredom settles down upon the whole subject. We do not think, however, that architecture suffers so much from the lack of intelligent criticism, or even fashionable criticism and canvassing so common in the other arts. Architecture has nothing to gain from the intellectual community, described by the authors as being innocently housed in the "jerry-builders' most hilarious efforts."

Before arriving at the pleasures of architecture it is necessary to suggest the architectural influences which have gone to make English towns and villages what we find them in 1924, and this the authors have attempted to do. Our immediate predecessors in England, they say, built more houses than any other generation. "They were no fools; yet somehow between utilitarian economics and romantic æsthetics the products of their activities were towns such as Wigan, the Potteries, Hull or Leeds." The authors are perfectly clear about the "nameless horrors perpetrated by speculative builders," and as this is an issue which really confuses the whole problem we wish that more space had been devoted to it. If the speculative builder was responsible for these miles and miles of vulgarity, it seems to us to be idle to discuss whether the public has lost its architectural sense, or to write in vague terms about utilitarian economics. How are we to reconcile utilitarian economics (whatever they mean) with the Victorian trait which demanded to be housed "comfortably and unostentatiously" when we know that the opposite result was often achieved? "Cedar Lawn" may be symbolic of many things but architecture, but we do not believe it was born of utilitarian economics. The new "Cedar Lawn" on the opposite page, designed by the authors, is altogether delightful, and we would warrant is much cheaper than its tawdry predecessor. The ugly monotonous houses were there provided for us by the enterprising speculative builder, and apparently they were considered to be good value, or some other reason must be found for the supply and the demand. Surely this human foible (which is probably wrong) supplies the answer which the authors are seeking, to account for the "single swallow which year after year in this epoch has to suffice for the architectural summer."

In chapters 4, 5, and 6, the authors develop a closely reasoned analysis of the qualities which the art of architecture offers to the public. In these chapters the architect will find the various theories of architectural criticism brought up to date and summed up in an excellent manner. It is safe to say that this portion is not likely to be superseded for a considerable time. In chapter 10, the authors submit several examples of architectural criticism, which in their freedom from the jargon of pedantry and special pleading, are models for architectural critics. There are many thoughtful and contentious passages in the book which will provoke discussion for a long time to come. Here is a fine example:

"It will always indeed remain a debatable question how much right an architect has to plead a client's wishes in extenuation of a bad building, or a beautiful building in extenuation of a ruined client."

It is possible, as the authors suggest, that we may indeed be at the beginning of an architectural revival and that there is a new and lively interest in architecture. We would like to believe that this is so, even if we may be mistaking the true significance of the amount of building interrupted by the war,

* "The Pleasures of Architecture." By C. and A. Williams-Ellis. (London: Jonathan Cape, Ltd.) 10s. 6d. net.



The Kazan Station undergo completion, 1924.

and the authors are to be commended fine effort to stimulate public ent They have certainly accounted for many of the dark places on the arc map.

MEETINGS

FRIDAY, *October* 31.

Glasgow Architectural Craftsmen's Mr. R. L. Bryden on "Some Vestiges o at Kelvingrove Meusum." At the Ro nical College. 7.45 p.m.

MONDAY, *November* 3.

Royal Institute of British Architect dential Address by Mr. J. A. Gotch a and Diploma for the best London street to be awarded to Mr. F. T. Verity. At 9 street, W. 1. 8.30 p.m.

Society of Engineers.—Captain W. J. on "Underground London." At B House, Piccadilly, W. 1. 5.30 p.m.

TUESDAY, *November* 4.

Liverpool Architectural Society.—Fi nary Meeting, 13, Harrington-street, Mr. E. Bertram Kirby, F.R.I.B.A., (P will give the opening address. 6 p.m.

WEDNESDAY, *November* 5.

Institution of Sanitary Engineers. Dinner. Holborn Restaurant, W.C p.m.

THURSDAY, *November* 6.

Architects' and Surveyors' Assista fessional Union.—Grand smoking co Carr's Restaurant, 264, Strand, W.C p.m.



The New Kazan Station, Moscow as Planned in 1912-13. ALEXANDER SCHOUSSEV, Architect.

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LLUSTRATIONS

ew General Hospital, Singapore.

rst portion of the nurses' quarters, e illustrate this week, comprise 45 bed- or sisters, nurses and probationers, with recreation rooms, sitting-rooms tory accommodation. Spacious veran- provided as required in the tropics. o illustrate this week a native women's be provided. Accommodation is pro- twenty beds in the large wards with two rds adjoining; the usual ward adminis- ooms are provided. Lavatory accom- is provided in towers with cut-off



Chigwell School War Memorial Chapel: Detail of Carving.
MESSRS. TOOLEY & FOSTER, FF.R.I.B.A., Architects.

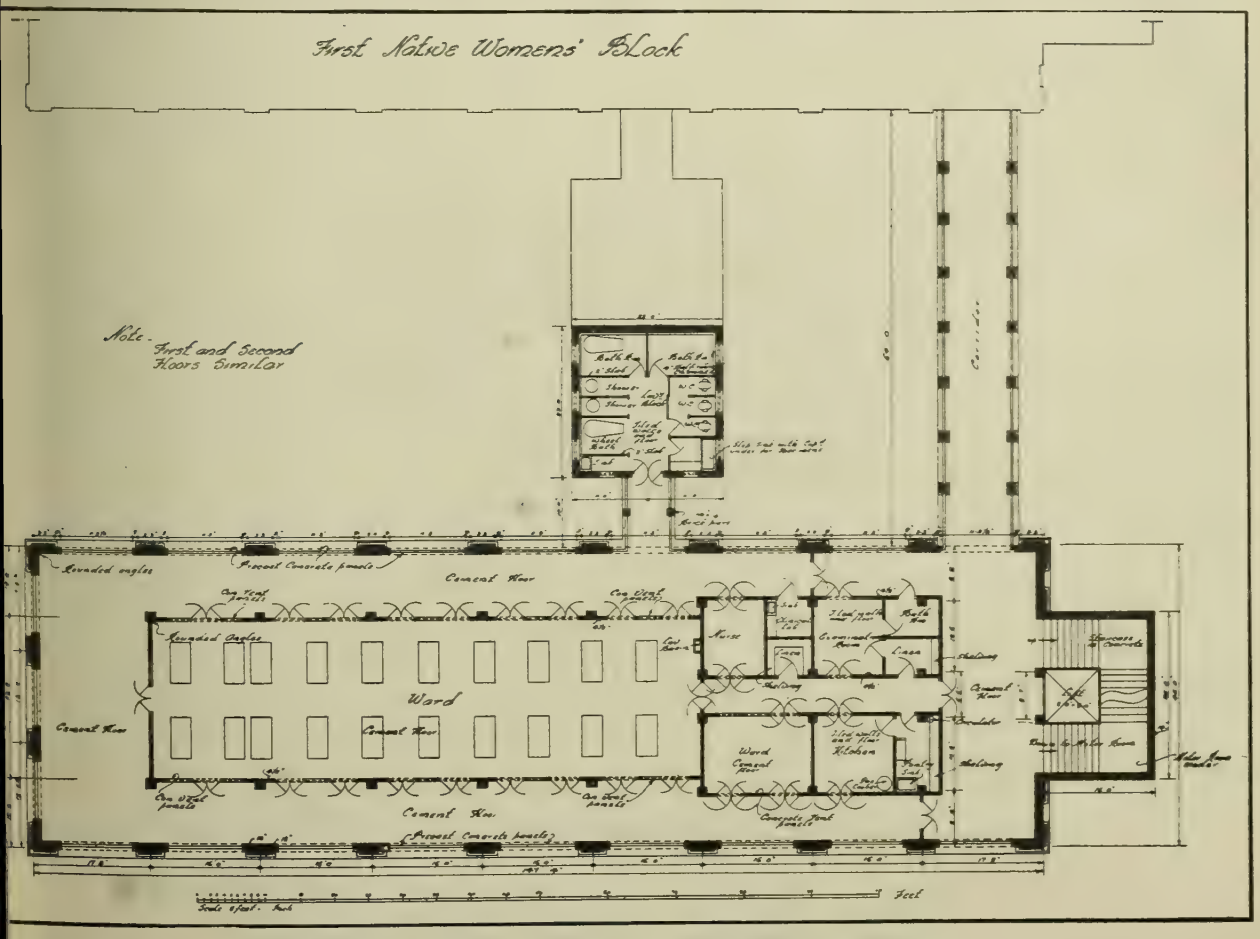
corridors. A lift connects to each floor. Spacious verandas surround the building. The architect is Major P. H. Keys, D.S.O., F.R.I.B.A.

Chigwell School, Essex.

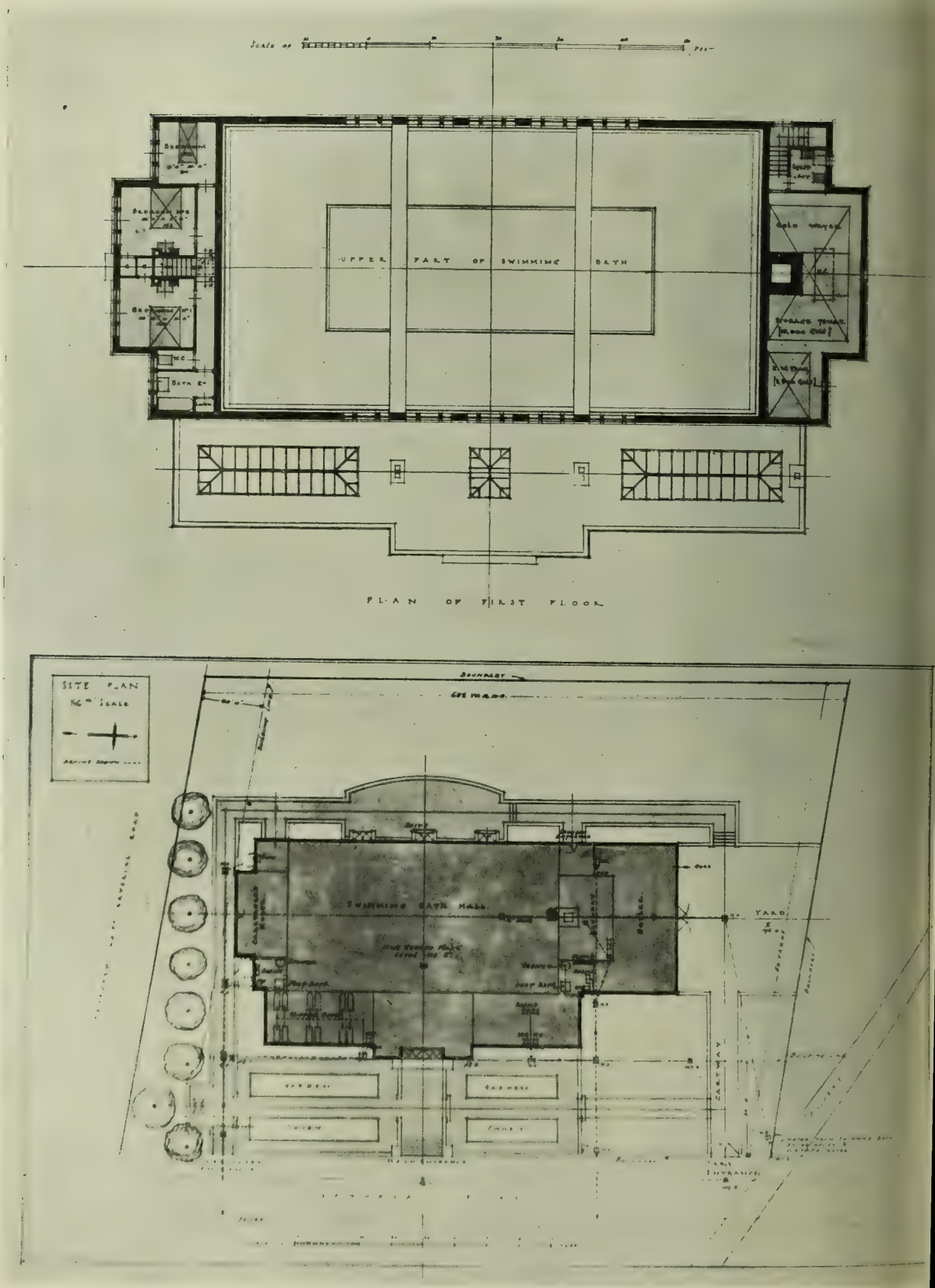
The new War Memorial Chapel at Chigwell School will accommodate about 220 boys, and has been designed to harmonise with the oldest part of the present school, which was founded by Archbishop Harsnett in 1629. The walls are faced with 2-in. multicoloured red hand-made bricks, and the whole of the roof and fittings are of English oak. The choir stalls, headmaster's and chaplain's stalls are enriched with carved work. The interior wall space is white with the brickwork in the surrounds of the windows left exposed. The general contractors were Messrs. J. Bentley & Sons, of Waltham Abbey, the choir stalls, etc., being executed by Messrs. J. Hatch & Sons, of Lancaster, from the architects' designs.

The new stained glass windows erected in the chancel are the work of Mr. Reginald Hallward, and the subjects are taken from Bunyan's "Pilgrim's Progress." Figures of the schoolboys, as Christian's sons, are introduced to bring home the meaning of the allegory. The treatment of the windows aims to unite the technical methods of the fourteenth century and those of the sixteenth and seventeenth in definite co-relation. the main features being executed in coloured glasses (pot metals) with the addition of stain and ordinary pigment. To this is added the use of enamels for background, distant figures, etc., the less positive colour of the enamels contrasting with the stronger colouring of the glasses, and combining different characteristics, whereas the shapes to be leaded in the pot metals are determined by their different colouring. The enamels are fired into white glasses, the leading is on more vertical lines. These methods, although but the combination of age-long sources of treatment, yield ever new interest and discovery if t studentship of the work is intimate enough and directs the craftsmanship, which otherwise tends to the use and wont of custom only and becomes challenged as mere survival.

The architects are Messrs. Tooley & Foster, FF.R.I.B.A., of Buckhurst Hill, Essex.

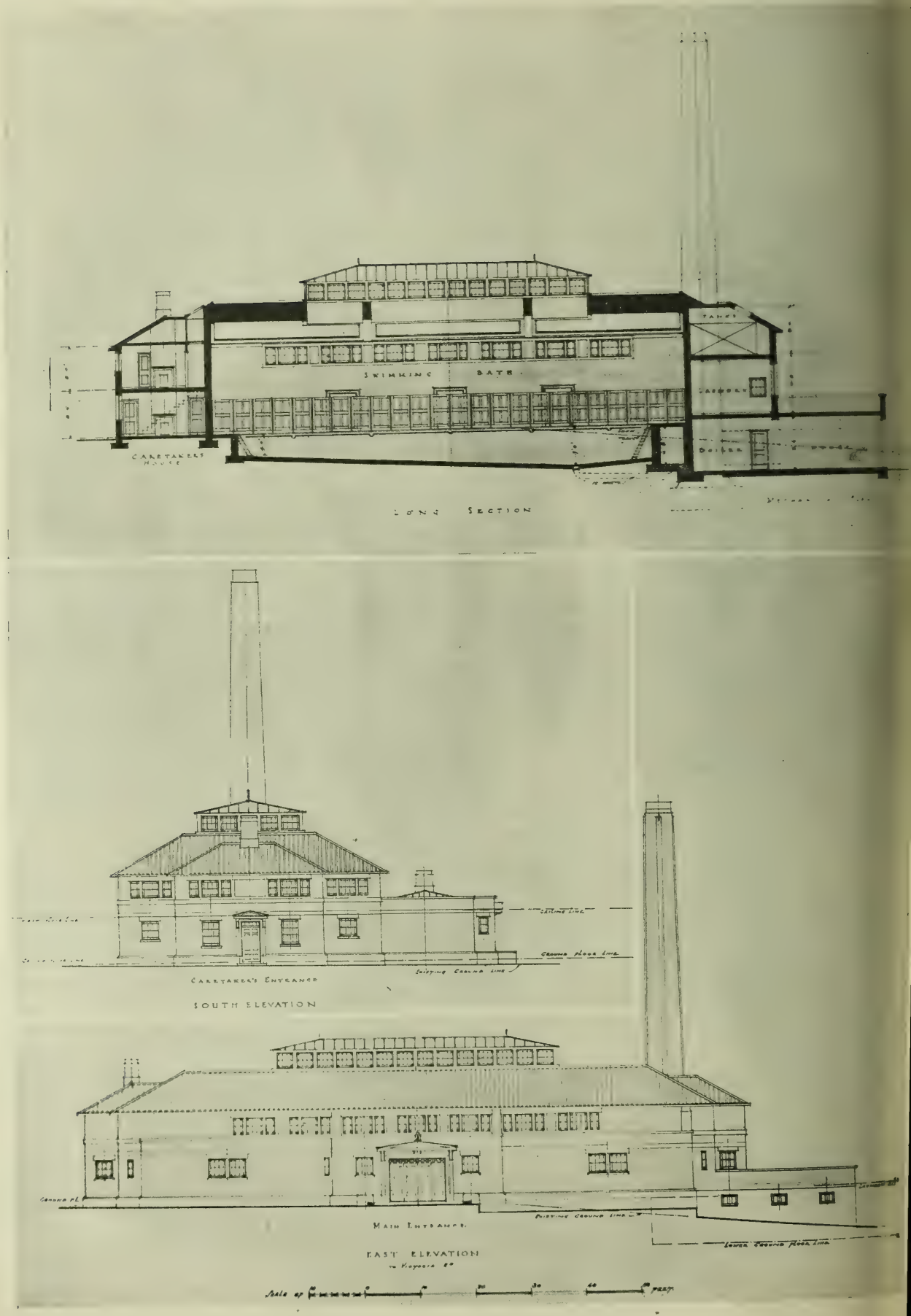


New General Hospital, Singapore: Native Women's Ward.
MAJOR P. H. KEYS, D.S.O., F.R.I.B.A., Architect.



Proposed Baths, Newton-in-Makerfield.

First Premiated Design: By Mr. C. Cowles-Voysey, A.R.I.B.A.



Proposed Baths, Newton-in-Makerfield.

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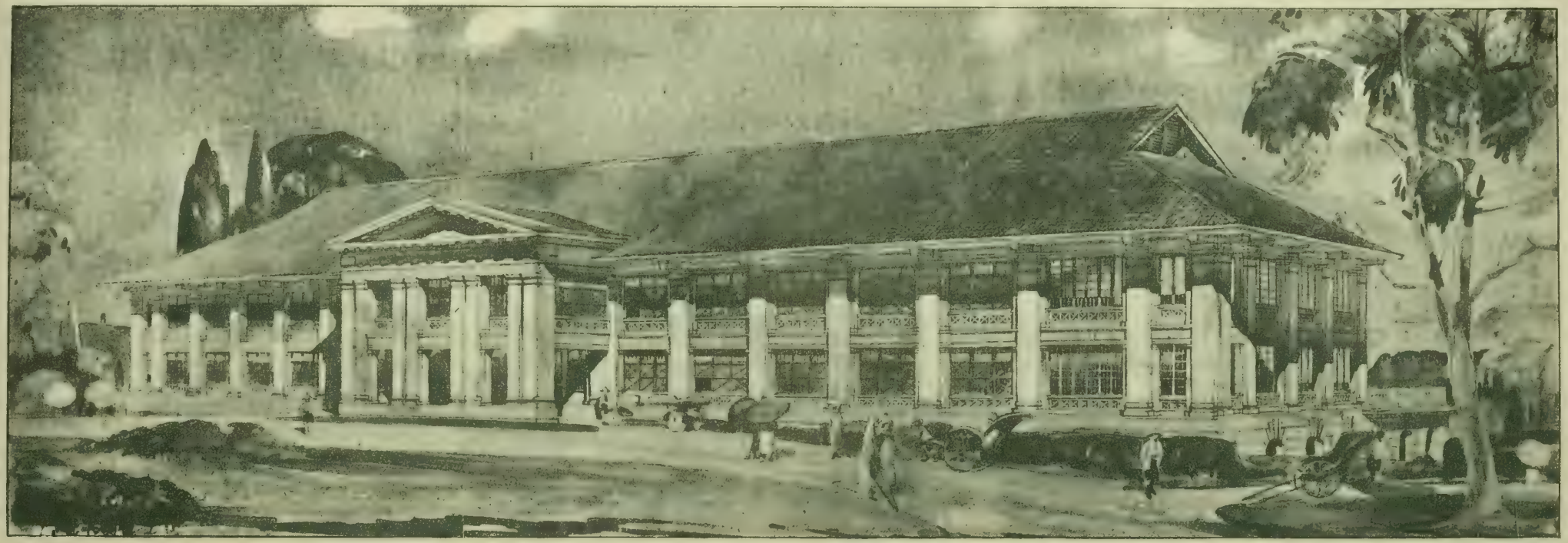


1 "CHRISTIAN'S ESCAPE."

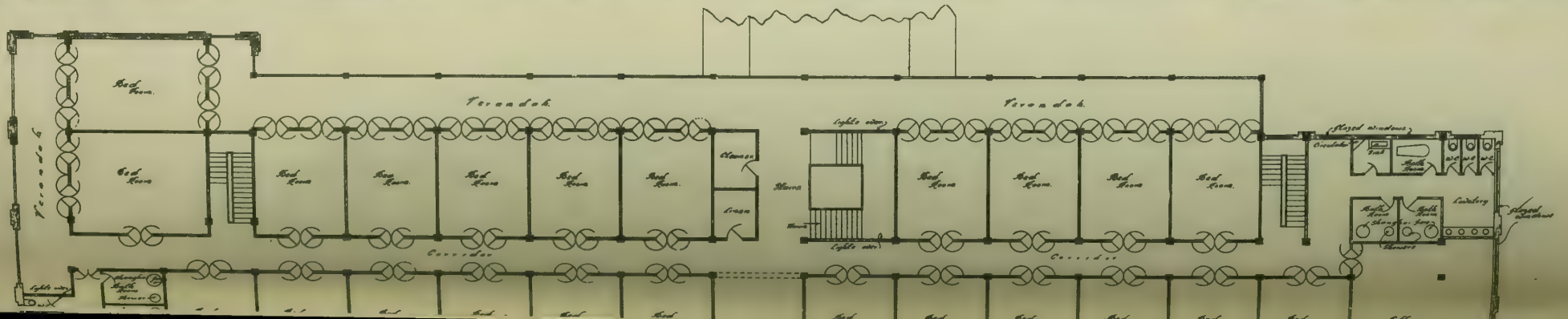


3 "MR. VALIANT FOR TRUTH" HANDS ON THE SWORD.

CHIGWELL WAR MEMORIAL CHAPEL: STAINED GLASS WINDOWS, BY MR. REGINALD HALLWARD.

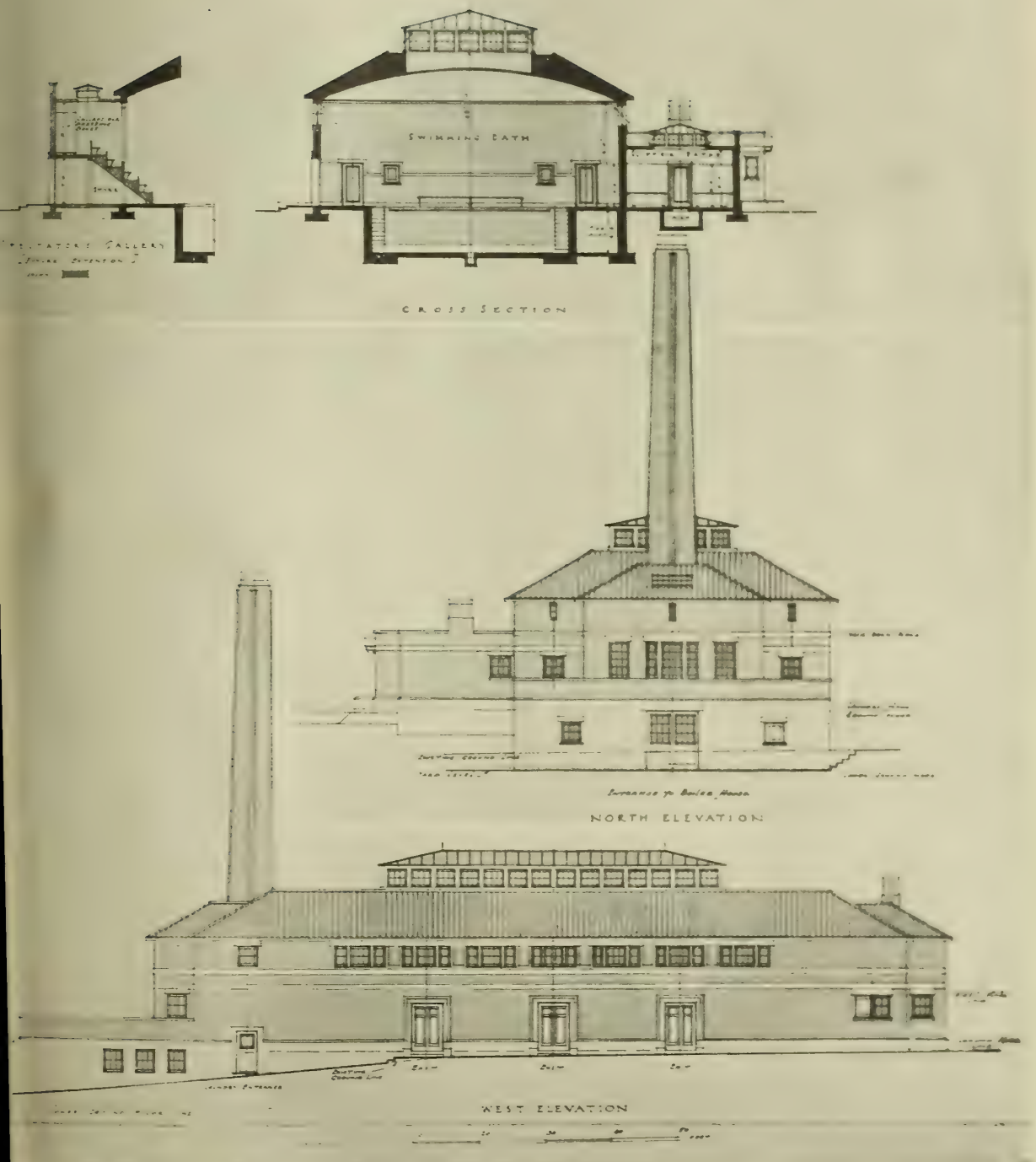


R.A. EXHIBITION 1924.


Bed Room.
Verandah
Bed Room
Bed Room.
Bed Room
Bed Room
Bed Room
Bed Room.
Bed Room
Bed Room
Bed Room
Bed Room

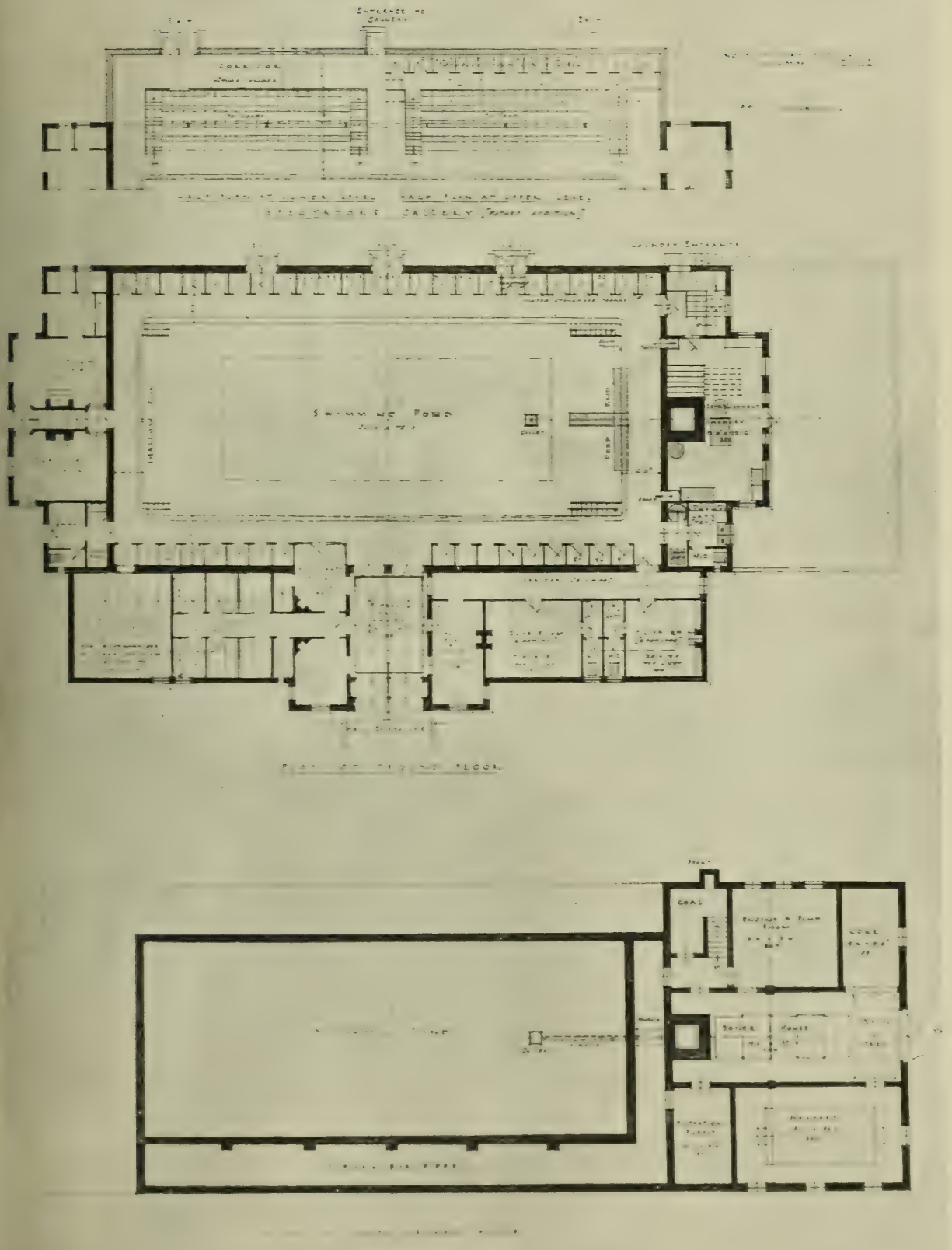


NEW GENERAL HOSPITAL, SINGAPORE: NURSES' QUARTERS. MAJOR P. H. KEYS, D.S.O., F.R.I.B.A., ARCHITECT.



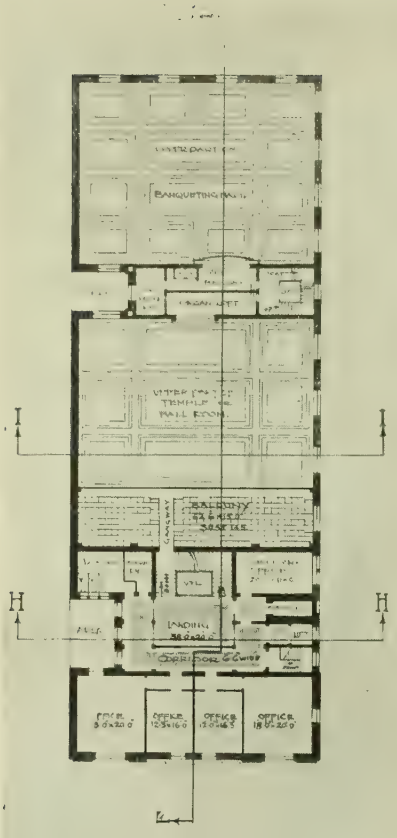
Proposed Baths, Newton-in-Makerfield.

First Premiated Design: By Mr. C. Cowles-Voysey, A.R.I.B.A.

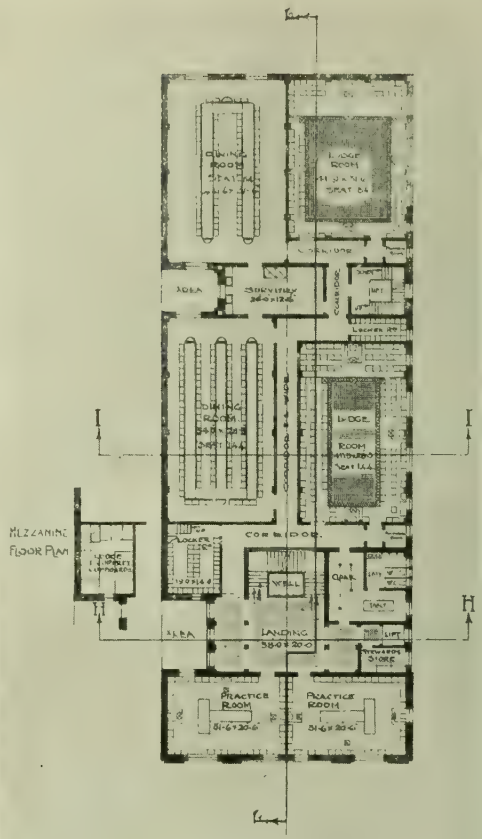


Proposed Baths, Newton-in-Makerfield.

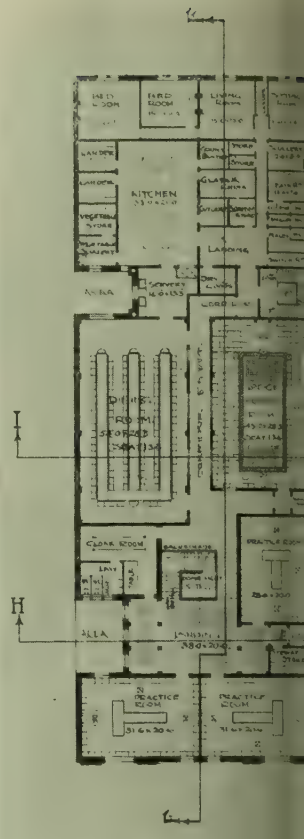
First Premiated Design: By Mr. C. Cowles-Voysey, A.R.I.B.A.



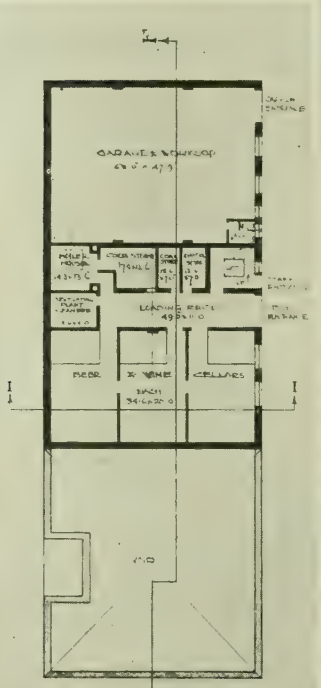
FIRST FLOOR PLAN.



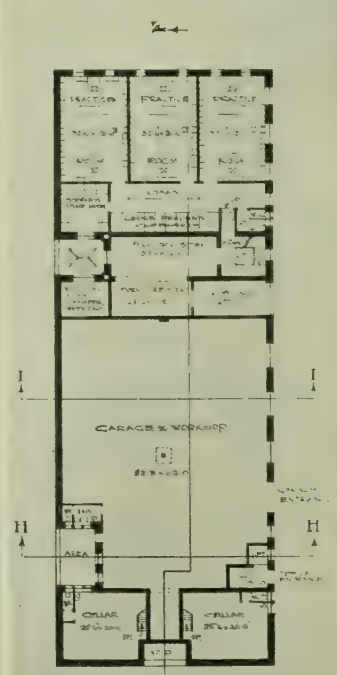
SECOND FLOOR PLAN.



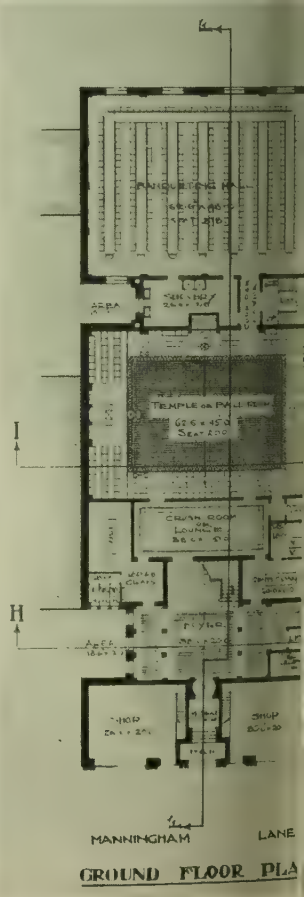
THIRD FLOOR PLA



SUB-BASEMENT PLAN.



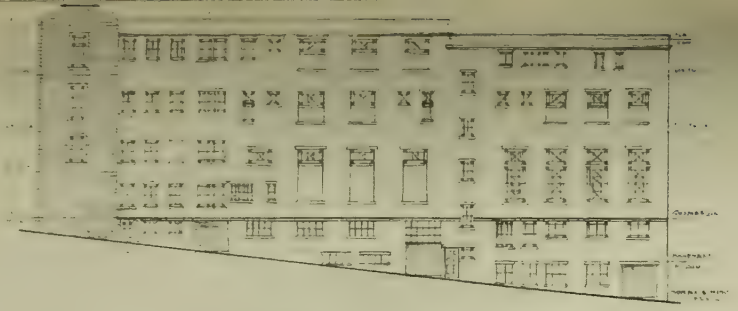
BASEMENT PLAN.



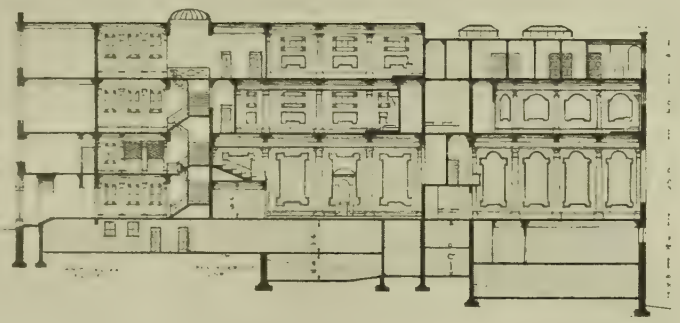
GROUND FLOOR PLA

Bradford Masonic Hall Competition.

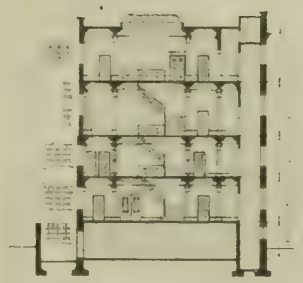
Design placed First: By Messrs. Ross & Briggs.



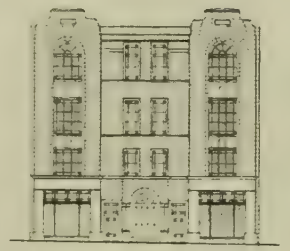
ELEVATION TO TRAFALGAR STREET.



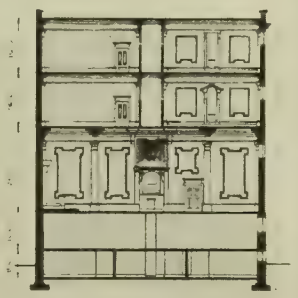
SECTION F-F.



SECTION H-H.



ELEVATION TO MANNINGHAM LANE.



SECTION I-I.



PART ELEVATION TO MANNINGHAM LANE. SCALE HALF INCH TO ONE FOOT. SECTION A-A.

Bradford Masonic Hall Competition, Design placed First; By Messrs. Ross & Briggs.





Top: CHANCEL AND SANCTUARY. *Below:* EXTERIOR, SHOWING WEST ENTRANCE AND PORCH

Chigwell School War Memorial Chapel. MESSRS. TOOLEY & FOSTER, FF.R.I.B.A., Architects. (*See p.* 675.)



DAVID INSTRUCTING SOLOMON.



BRINGING GIFTS FOR THE TEMPLE.



THE MINSTRELS AND SINGERS.

St. Matthew's Church, Ealing Common, W. A Memorial Stained Glass Window, Designed and executed by MR. REGINALD HALLWARD. (*See p.* 675.)

NOTE.—In order to fit the page, the scale of the centre light, which is higher and broader than the side lights, has been reduced, so altering the scale of the figures, which are really larger.



OMPETITION FOR PROPOSED PUBLIC BATHS, NEWTON-IN-MAKERFIELD

designs have been submitted in this tion, and the general standard of ex- is well above the average. In fact, ssessor (Mr. Arnold Thorne'y, .A.) has probably found some difficulty ing at a final decision, although his s been somewhat lightened—or so it —by having to overlook several excel- signs, because of the impossibility of them for anything approaching the ggested in the conditions, viz.: £15,000. e this amount was not made obligatory mpetitors as they were invited to give vn estimate of the probable cost, but cal planning has obviously influenced rd, and few will cavil at this important eing given serious consideration.

site is well adapted for its purpose, a fairly rapid fall from south to north, ictoria-road running parallel to its boundary. A possible new arterial s indicated on the southern side of the disposal, but competitors were asked ge for all entrances to face Victoria- d this proviso has naturally influenced nning. The conditions further sug- at six of the twelve slipper baths could, esired, be provided in the form of a xtension as well as the gallery in con- with the main bath hall. It is on these nts, and the probable cost, that many competitors have broken down. They ely separate the future slipper baths ose first provided with a consequent ion of lavatory and, in some instances, room accommodation. Moreover, such gement puts additional work upon the nt in charge, makes supervision diffi- even entails the engagement of two nts when one would probably suffice.

osition of the two club rooms asked for in proved a stumbling block. Their use as competitors' dressing rooms in ion with swimming galas or as platform rooms, when the bath hall is used lic meetings or entertainments, seems been entirely overlooked by many. h the caretaker's house have a large gone rather astray by providing it in n of a completely detached residence, thus making supervision difficult and enforcing its occupant to traverse the open to attend to his daily duties. Some of the foregoing items may, perhaps, be considered to represent minor details, but they have all been successfully overcome in the designs placed first and second, and the third only fails in so far as the club rooms are concerned.

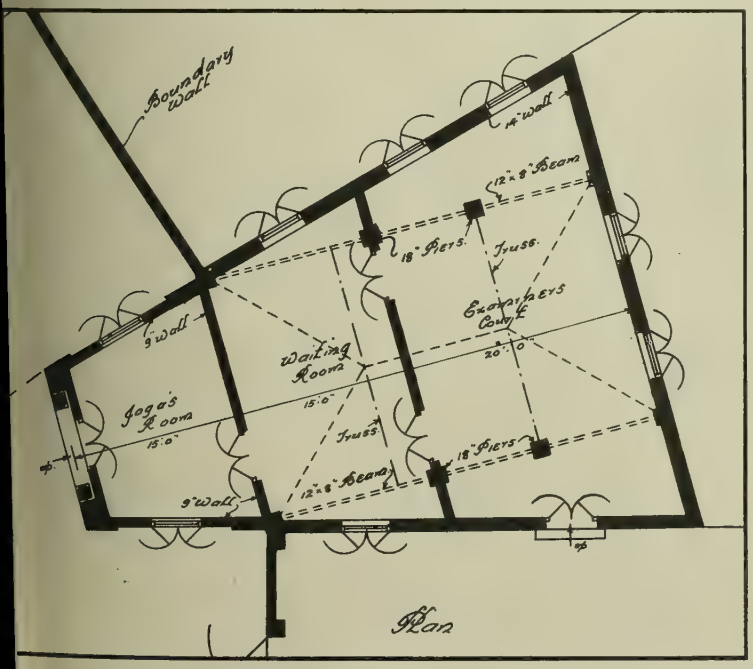
The prohibitive cost of many of the schemes has already been referred to; suffice it to suggest that prices varying, as in many instances they do, from between ninepence and one shilling per cube ft., and covering not only the buildings but all engineering work, are surely quite inadequate nowadays.

Taking the foregoing factors into consideration, there can be little doubt that the first premiated design (by Mr. C. Cowles-Voysey, A.R.I.B.A., of London) merits its position. The plan is simple, well-balanced, and straightforward. The central top-lighted entrance hall gives access to the swimming pond, which is placed with its length parallel to Victoria-road and the deep end to the north, thus taking full advantage of the natural fall of the site. Direct access from the entrance hall is also obtained to the slipper baths, waiting room, and attendant's room, as well as the office and club rooms. These apartments, one story in height, extend the full length of the bath hall, and are placed in front of it. They are most excellently arranged both as regards balance of parts and administrative convenience. The attendant's room is in direct touch with the entrance hall, the slipper baths and the swimming pond, thus allowing of most adequate control by one individual—an obvious advantage. The problem of future extension of the slipper baths is also satisfactorily solved, and the club rooms are conveniently placed for service as competitors' dressing rooms in connection with swimming galas or as platform retiring rooms when the bath hall is utilised for public meetings or entertainments. The caretaker's house, built against the southern wall of the main bath hall, and thus obtaining a sunny aspect for its principal rooms, has its own entrance and is also given direct and convenient communication with the main building. The laundry, placed at the northern end of the bath, with boiler-house, etc., under, and extending beyond it, is obviously rightly placed. The planning of this portion of the building can again be commended. The accommodation is adequate in every way, and convenient installation of the boiler or even its removal, if this should at any time be necessary, has not been lost sight of. This is more than can be claimed by a large number of the competitors. The swimming pond is surrounded by an adequate number of dressing boxes and its lavatory accommodation is satisfactory. The gallery, required by the conditions as a future extension, is provided outside the bath hall, and runs the full length of its northern side. To effect this, of course, necessitates the eventual removal of the external wall, but in order to facilitate the operation it is suggested that the steelwork required to carry the roof principals, etc., be at once built in position. Perhaps on the whole this constitutes the most convenient method, although it necessitates the removal of a number of the dressing boxes which the author proposes to replace behind the top tier of the gallery steps. It is just a question if they are not then rather out of touch with the swimming pond, and because of this a position under the gallery with access obtained from a corridor, thus allowing the boxes to be on the same level as the pond, seems a possible alternative.

The elevations are of exceptional merit. They are simple in character, the detail is refined, and the materials suggested, brick walls and stone dressings with a pantile roof, if sympathetically handled, should result in a most satisfactory building. This again, is one of the few designs submitted in which all four façades are of equal value, a factor which has probably influenced the award to a certain extent. A few minor points will doubtless receive further consideration when the final drawings are prepared. The caretaker's house lacks a secondary entrance, and difficulties with the ash and refuse bin are at once apparent, unless indeed this necessary commodity finds a resting-place outside the front entrance door. This defect is, however, to be found in all the designs where the house is placed on an upper floor. The roof principals and window openings to the bath hall will again require remodelling in order to bring them into line with the stanchions proposed to be built into the northern wall for the purpose of the future gallery. As now arranged, these stanchions bear no relation to the principals, and consequently the hall interior would suffer both from a constructional and æsthetic standpoint.

The bath subways may also require attention. These are only provided along one side and one end of the pond. This has probably been done for reasons of economy, but subways on all four sides certainly seem desirable, if not absolutely necessary. In fact, practically every other competitor has considered this arrangement to be essential. Neither again does the necessary aeration apparatus appear to have been provided. These, however, are all remediable items, and the assessor has certainly selected the best design submitted from an all-round standpoint of plan, elevation, and comparatively moderate cost.

The plan of the second premiated design (by Messrs. Quiggin and Gee, F. & A.R.I.B.A., of Liverpool) is conceived on very similar lines both as regards the disposition of the bath hall, slipper baths, club rooms and caretaker's house. The arrangement of the latter is, in fact, superior and represents the best solution submitted in the competition. The attendant's room is also very well placed, and so are the club rooms. The future extension of the slipper baths is again most ingeniously handled. The plan, however, suffers when compared with the first premiated design in the duplication of entrances, and the position of the laundry and boiler-house, etc. The second entrance becomes necessary to serve the club rooms, and although a reason is found for its introduction by utilising it for access to the future gallery staircase, it presents a some-



New General Hospital, Singapore: Examiners' Court.

MAJOR P. H. KEYS, D.S.O., F.R.I.B.A., Architect.

what extravagant feature. The boiler house again suffers from being placed at the south-west corner of the building, thus necessitating additional excavation, and it appears that the boiler would have to be placed in position before the chamber containing it was roofed in. Even if built up in sections, getting these sections inside the building would prove an arduous undertaking. The tank room again appears to have been quite overlooked. The bath hall is generally very well arranged, although the lavatories are rather on the small side, and the lighting and ventilating of one of them into the covered way of the caretaker's yard is not ideal. The future gallery is provided over the dressing boxes on three sides of the bath hall, a method favoured by many of the competitors. On the face of it this appears a simple arrangement, but the introduction of the necessary steel work would certainly involve a considerable amount of disturbance to the bath hall, and consequent expense. It would further necessitate closing the bath during the time the operations were in progress. For these reasons the arrangement suggested by the first premiated design appears on the whole to be preferable.

The elevations are quite interesting and represent a typical example of the restraint in design that is now so fashionable. What a change from the applied columns, pilasters and ornament of years ago! The eastern façade, in fact, consists entirely of blank wall with the exception of the two entrance doorways, one small window opening at the ground floor level and three small windows lighting the upper part of the bath hall, which would, moreover, be scarcely in evidence from the road. Such restraint is so refreshing that it might almost seem hypercritical to suggest that it has been carried to excess. At all events, the provision of this blank wall space has necessitated top lighting to the waiting room, club rooms and the w.c. and lavatory planned in connection with them. Windows could, in each instance, have been introduced, and by so doing the rooms in question would certainly have benefited, and perhaps the elevations also, although again this is admittedly a question of personal taste. The south elevation is an interesting composition, and so is the north, although dependent on future extensions for its balance. The materials proposed for use also duplicate the successful design. In fact, the three selected all favour pantile roofing, as do the majority of the competitors. May it be suggested that the assistance this material renders to the draughtsman in adding to the interest of his drawings influences its selection?

The third premiated design (by Messrs. Edwards and Thrasher, of Bristol) breaks away. The bath hall, again running from south to north, is in this instance exposed to view, and its eastern wall consequently forms a dominant feature in the design. The entrance hall, slipper baths, and club rooms are all placed at the southern end of the bath hall, with the caretaker's house over the main entrance hall, office, and attendant's room, and the laundry under the club rooms. The question of administration does not appear to have been given very careful thought. Three attendants' rooms have, for instance, been provided, one serving the slipper baths, one the swimming pond, and the third the entrance hall. The latter, in fact, seems quite unnecessary, and appears to have been introduced to find a purpose for a surplus room. The same criticism applies to the lavatory and cloak-room approached from the entrance hall. All 12 slipper baths are provided in the first instance and are arranged in an E-shaped block, the middle stroke of the letter forming the waiting room. The corridors, therefore, have right-angled turns, and adequate supervision is consequently made difficult. The club rooms, again, placed as they are at the shallow end of the swimming pond, are out of touch for use in connection with swimming galas or as platform retiring rooms. Access to the caretaker's house is only obtainable from the main entrance vestibule, and this is not quite as good an arrangement as an entirely separate approach. The laundry, also, suffers in its lighting and ventilation by being placed underground, and being at the opposite end of the building to the boiler-house, engineering problems are somewhat complicated.

This boiler-house, however, is rightly placed and its general arrangement and accessories are very good indeed. So also is the main bath hall. A diving annexe at the deep end forms a useful and interesting feature, and the lavatories are very well placed and planned. The gallery is not as satisfactory. As proposed it necessitates the temporary removal of the dressing boxes for the entire length of two sides of the bath and the fixing of two rows of raised seats. Such a method would entail a vast amount of labour and consequent expense. The bath hall is, however, of sufficient height to allow of a future gallery being introduced above the dressing boxes if and when required —on the face of it a preferable arrangement. The elevations are quite interesting, and the main entrance block, with the caretaker's house over, forms a very satisfactory group indeed. The bath hall, being such a prominent feature in the design, has prohibited a balanced façade, but this portion is very capably handled. Blank wall is again a dominant note, and again it may reasonably be asked if some attempt at fenestration would not have added interest to the design, to say nothing of natural ventilation to the bath hall. The elevations are beautifully drawn, and good draughtsmanship is, in fact, a feature of all the premiated designs. It has not gained them their high position, but it has certainly assisted to the extent of allowing their wares to be displayed to the best advantage.

Design No. 42 represents a very capable and interesting solution of the problem, and generally follows the lines of the three premiated designs. The author has taken a vast amount of thought and trouble as he submits additional plans showing the bath arranged for swimming entertainments and as a public hall; the club rooms being most ingeniously converted into cloak rooms for the public. Platform retiring rooms have, however, to take the form of an extension over the future slipper baths and a supper room and kitchen, etc., is also introduced as a possible addition although not asked for. The caretaker's house takes the form of a completely detached building, thus making supervision and cleaning duties difficult. The elevations are well drawn and would have come out well in execution.

Design No. 1 is, again, on similar lines, with a very satisfactory caretaker's house, excellent bath, lavatories, and the boiler-house at the lower end of the site. The club rooms require a separate entrance, and the author is again to be numbered with those who have failed to see the advantage of the attendant supervising both the bath hall and the slipper baths. The elevations are quite satisfactory, although they do not strike an original note.

The plan of No. 30 is again on similar lines to those already mentioned, but with the boiler house, etc., at the wrong end of the site, viz., the south. The attendant can not control the slipper baths and the main bath hall simultaneously, although this could have been obviated. Two separate entrances have had to be provided for the club rooms. The caretaker can only obtain access to his house from the bath entrance hall, and it is suggested that the general public use his staircase for access to the future gallery, which constitutes an unsatisfactory feature. The plan has, however, many good points, but the elevations are of rather an ordinary type.

In No. 8 the bath hall is placed at right angles to Victoria-road, the main entrance hall being at one end and flanked on each side by the office and one of the club rooms, the caretaker's house taking the form of a flat approached by a separate entrance and placed over them. The gallery is made part of the scheme and runs along the northern side of the bath hall, the laundry, lavatories, and remaining club room being plac The boiler-house is a detached bu is a very economical scheme with elevations, but it fails in a details.

No. 60 is another very well-dr satisfactory elevations. The clu however, much larger than asked design generally suffers from ov of its component parts. Because prices per cubic ft. are very low they do from 7d. to 1s. 2d. in or an estimate of £15,007. The many good points, but a total c of 300,500 ft. has probably prov handicap to its chance of success

No. 23 is another excellent set with really good elevations, bu have blemishes, by reason of u access to the gallery and somewha lavatories and footbath accommod nection with the bath hall.

The plan in No. 17 is of much than the elevations. The entra arranged, and this also applies taker's house, club rooms, lav slipper baths. The latter are, h as much too high as the bath hal In order to allow these slipp balance the two-story caretaker's are given an exactly identical hei the bath hall is only 8 ft. 6 in. h floor line to the springing line of is a very economical scheme, but i capacity is much helped by the height of the main hall.

No. 25 is a good all-round handicapped by its dual entrances sence of a ladies' lavatory, es mixed bathing is contemplated. F reason the grouping of all the foot baths together is not quite neither is the attendant very well elevations are, however, quite go

The elevations of No. 29 are higher standard than the plan, w from a rather extravagant main c slipper baths are, however, well ar this also applies to the lavatorie attendant is badly placed, a defect in many of the designs.

No. 35 is another capital plan slipper baths and club rooms, a attendant is not well placed, and is on the small side. The careta suffers from being detached, its l lighted, and a w.c. and space fo pears to have been forgotten. Th can also be highly commended cellently rendered, but this does the caretaker's house, which is character with the rest of the w describe it as a very mediocre ef criticism.

No. 44 is an original type of pl hall being placed on an axial lin right angles to Victoria-road and arterial road, and having two side ning parallel with these thorough arrangement, ingenious as it breaks down badly if this arterial developed.

The competition has undoubted success. A very large number of designs have been received, and fr them the assessor has certainly best all-round solution of the p sented.

Department of Overseas T

The Commercial Secretary at C (Colonel H. Woods) reports that sariat of Public Works is calling f be presented by November 22, f and erection of five metal bridges soun-Sivas line. Local representati United Kingdom firms in a positi British materials can obtain furth regarding this call for tenders on a the Department of Overseas Tr Queen-street, London, S.W.1, quoti

LEGAL SECTION

NOTES ON CURRENT CASES

Act Time Limit for Recovery of Rent.

ur issue April 18, 1924, we noted the n of a Divisional Court in three cases, . McKay, Algate *v.* Vugler, and Clark *v.* all of which turned upon the meaning of rd "recoverable" as used in section 8 ion (2) of the Rent Act, 1923, which into law July 31, 1923. The claims were which, it was alleged, was overpaid in e, we assume, that it was rent irrecover- the landlord, but the facts are not fully l. By section 14 subsection (1) of the ct. 1920, it is provided that "where any s, whether before or after the passing of , been paid on account of any rent which rtue of this Act, or any Act, repealed by . irrecoverable by the landlord the sum shall be recoverable from the landlord." section contained no time limit, but the ct. 1923, in section 8 subsection (2) a time limit for recovery of sums under 14 of the Act, of 1920, as it provides: ım paid by a tenant or mortgagor which ıbsection (1) of section 14 of the principal ecoverable by the tenant or mortgagor recoverable at any time within six from the date of payment but not after- r in the case of a payment made before ing of this Act, at any time within six from the passing of this Act but not ds." In the above three cases a al Court held that the word "recover- s used in the subsection did not mean gment must actually have been obtained t proceedings by writ or summons ıve been commenced within the six period prescribed.

case of Diment *v.* Roberts and Another *mes*, July 24), this same point was before the Court of Appeal, and the Appeal affirmed the judgment of the low, which had followed the decision in McKay and the other two cases, and they may now be taken to have the of the Court of Appeal. In this case the s were alleged to have been made before ng of the Act of 1923, and proceedings er them had been instituted by plaint ounty Court on January 24, 1924, but did not come on for hearing until 24, and then was adjourned until . The Court of Appeal intimated that possible to suppose that the legislature to leave the tenant's right to sue t upon the state of business in the d held that the word "recoverable" the initiation of proceedings within prescribed.

the method of calculating the time in ıg the period of six months, a point as as decided in another case, Truss *v.* *The Times*, April 17, 1924). In this ummons had been issued on January 31 risional Court held, following a decision urt of Appeal in Goldsmiths' Company Metropolitan Railway Company (1904,), that the proceedings were taken in he day the Act comes into operation is in the computation of time.

me limit, when a notice of increase has nded and made good under the Notices leal with this point in a note on the ams *v.* Britannic Merthyr Steam Coal (1924, 2 K.B. 324) on p. 686.

Rent for Furnished Room.

e Truss *v.* Olivier, in which this point d was a case which turned on section 9 of 1920, upon which there have been ons. The rent that was alleged to be was in respect of four furnished rooms the plaintiff had become tenant in 1921, at a rent of £1 a week. In June, plaintiff had taken an extra attic for 2s. 6d., and had continued to pay the weekly rent of £1 2s. 6d. until November 24, 1923, and then, apparently, had alleged that the rent was excessive, and on January, 1924, had issued the summons in this action. Section 9 of the Act of 1920 provides, "Where any person lets, or has, before the passing of this Act, let any dwelling-house to which this Act applies, or any part thereof, at a rent which includes payment in respect of use of furniture, and it is proved to the satisfaction of the County Court on the application of the lessee that the rent charged is yielding, or will yield, to the lessor a profit more than 25 per cent. in excess of the normal profit as hereinafter defined, the Court may order that the rent, so far as it exceeds such sum as would yield such normal profit and 25 per cent. shall be irrecoverable, and that the amount of any payment of rent in excess of such sum which may have been made in respect of any period after the passing of this Act shall be repaid to the lessee."

Then subsection (2) defines the "normal profit" as follows: "For the purposes of this section 'normal profit' means profit which might reasonably have been expected from a similar letting in the year ending on August 3, 1914. The County Court judge had fixed the proper rent to be paid under this section at 12s. 6d. a week and the Divisional Court had said that although it was not clear how this sum had been arrived at, the judge had not misdirected himself on principle, and as it was a question of fact for him to decide, the appeal must be dismissed, but the Court proceeded to explain the correct principle to apply which was to ascertain the normal profit produced from the furnished letting in 1914; then to estimate what rent would produce that profit when the case was heard, which would be considerably higher owing to the increased expenses which have to be incurred, and then to add 25 per cent. of this profit to the total.

Mortgagor and the Rent Acts.

A case, Jenkinson *v.* Wright (*The Times*, July 29) very shortly reported, appears to have raised a new point under the Rent Acts. The appellant held a lease of a house for 99 years, of which period 31 years remained to run, and the respondent held from him one room in the house. It appears that the appellant had obtained possession of the house, or was in possession at the time the Rent Restriction Act was passed in 1923, and under section 2 subsection (1) of that Act claimed that the house was decontrolled. The appellant had at some time, not stated in the report, mortgaged the lease and had attorned as tenant to the mortgagee, and the County Court judge appears to have held that this transaction had made the appellant a tenant, and therefore he could not claim that the premises were decontrolled under section 2 subsection (1) of the Act, 1923, because he was not a "landlord." The argument for the appellant seems to have been based on two separate grounds (1) that the mortgage did not render the appellant a tenant and (2) if it did that section 12 subsection (7) of the Act of 1920 applied and the premises were not protected.

The Divisional Court appears to have considered a third point whether a lease holder of a long lease could be called a "landlord."

The Divisional Court allowed the appeal, and Justice Rowlatt's judgment seems to dispose of the first point the most satisfactorily, as he held that the ground upon which the County Court judge had based his judgment was wholly unreal because the appellant was not in possession by reason of the attornment as tenant to the mortgagee, but because he was owner of the property, and both Lord Darling and he held that as the mortgage was a subdemise at a peppercorn rent there was no control under the Rent Act, 1920, by reason of section 12 subsection (7) as the rent was less than two-thirds of the rateable value. On the third point Lord Darling intimated that because the appellant only had a leasehold interest it could hardly be maintained that he was not a landlord, for the same argument would apply to a person who held a lease for 999 years, and the test could not be whether the owner held in fee simple or on a term of years. Mr. Justice Rowlatt left this point open, but said it might well be that section 12 subsection (7) excluded that point also.

Section 12 subsection (7) is rather obscure as it provides "Where the rent payable in respect of any tenancy of any dwelling house is less than two-thirds of the rateable value thereof this Act shall not apply to that rent or tenancy, nor to any mortgage by the landlord from whom the tenancy is held of his interest in the dwelling house, and this Act shall apply in respect of such dwelling house as if no such tenancy existed or ever had existed." It is to be observed the Act applies to the house but not to the tenancy, therefore the house appears to come within section 2 subsection (1) of the Act of 1923, and can be decontrolled. The case as the Court observed raised a troublesome and difficult point, and we hope it will be reported at greater length for it is difficult to follow. We must remind our readers that, as we pointed out in our article of September 5, the Prevention of Eviction Act has affected the right to obtainning possession and may affect the right to decontrol. The effect of that Act, section 1, briefly stated is that as regards pending as well as future proceedings the grounds for obtaining possession contained in section 4 subsection (1) paragraphs iv and v of the Act of 1923 have been tightened up, and where an order or judgment has been made under the law as it previously was, but not executed, it can be rescinded.

This Act is very difficult to interpret, and it has not yet been the subject of legal decision. For instance, the new paragraph which takes the place of paragraphs (iv) and (v) commences "where the dwelling house is reasonably required by the landlord (not being a landlord who has become landlord by purchasing the dwelling house or any interest therein after May 5, 1924). . . ." but the subsection applies to "future as well as pending proceedings," What, then, is the position of the landlord who purchases after May 5, 1924? As the new paragraph does not apply to him and the paragraphs now contained in section 4 of the Act of 1923, numbered (iv) and (v) are repealed if he requires possession he can only apply under paragraph (*d*), which contains much more stringent conditions as to alternative accommodation. Then, as we have before pointed out, a difficulty arises in connection with section 2 subsection (2) of the Prevention of Eviction Act. Subsection (1) gives the courts power to rescind an order or judgment made or given before the passing of the Act, but not executed, if in the opinion of the court it would not have been made or given if this Act had been in force at the time it was made or given, and subsection (2) provides "Where a landlord has on or after April 15 taken possession of a dwelling house under a judgment or order so rescinded as aforesaid, such possession shall not in any case exclude the dwelling house from the operation of the Rent and Mortgage Interest Restriction Acts, 1920 and 1923.

We referred to this subsection in our notice of the Act in our issue September 5, when we pointed out it was difficult to see how a landlord could take possession of a house under an unexecuted order or judgment which is the only order or judgment referred to in subsection (1), but there is a further difficulty for if he can take possession in such circumstances, then subsection (2) provides possession shall

not exclude the house from the operation of the Rent Acts, 1920 and 1923. We find it difficult to suggest any interpretation which will explain the effect of this subsection. Suppose the landlord can take possession under an unexecuted order or judgment it is to be assumed the legislature intended that in the case of a landlord doing so after April 15, 1924, his possession would not apply to take the house out of control under section 2 subsection (1) of the Act of 1923. But if so the subsection does not carry out such an intention as it merely provides "such possession shall not exclude the dwelling house from the operation of the Rent Acts, 1920 and 1923," but section 2 subsection (1) giving decontrol from possession is an integral portion of those Acts. This subsection affects all landlords taking possession after April 15, 1924, and we hope some judicial interpretation may soon be placed upon its provisions as it certainly affords a most extraordinary example of drafting even in an age of obscure drafting.

RENT RESTRICTION

Amended Notices. Arrears.

THE case Williams *v.* Britannic Merthyr Steam Coal Co., Ltd., which we referred to in our issue August 15, is now fully reported in the Law Reports (1924, 2 K.B. 334), but we still find the case very difficult to follow, and it certainly serves to illustrate the confusion which has been imported into Rent Restriction by a continuous stream of Statutes. We will endeavour to state the case as shortly as possible.

The plaintiff was the tenant of a dwelling-house the standard rent of which was 7s. a week, the landlords paying rates and taxes and doing all repairs. He was in the employ of his landlords and the rent was deducted each week from his wages. The plaintiff claimed in this action that amounts in excess of the standard rent had been deducted and that these amounts were, therefore, irrecoverable by the landlords and recoverable by him, and he claimed an account and repayment of the excess over the standard rent.

The manner in which this question arose was that the landlords had served four notices of increase of rent dated respectively February 4, 1920, September 29, 1920, July 11, 1921, and August 26, 1922, but these notices were all defective and except as to the last of them contained no notice to quit. Section 6 subsection (1) of the Act of 1923 gives the county court a discretion to amend notices of increase if satisfied an error or omission has been made by a bona-fide mistake, and acting under this subsection the county court judge amended all the notices except the first, the amendments to take effect from the date of the several notices. The question then arose who was entitled to the sums deducted since the first notice under the three notices as amended, and the county court judge had held that all monies paid under the notices made good could be retained by the landlords.

On the appeal to the Divisional Court the tenant contended that under section 8 subsection (1) of the Rent Act, 1923, the landlord could only retain payments made within six months of the date of the order, for that subsection provides "No increase of rent which becomes payable by reason of an amendment of a notice of increase made by order of the county court under this Act shall be recoverable in respect of any rental period which ended more than six months before the date of the order." The Divisional Court held that the powers of amendment conferred by section 6 subsection (1) of the Rent Act, 1923, extended to making the notices of increase notices to quit within the Notices Act of 1923, and that the effect of section 8 subsection (1) of the Rent Act, 1923, was to limit the period during which rent payable under an amended notice could be recovered to within six months of the order. Sums paid before that period were therefore "irrecoverable" by the landlord under section 1 of the Act of 1920, and "recoverable" by the tenant under section 14 subsection (1) of the same Act.

It is to be noted that the notices of increase in this case were defective in r spect of several errors and, therefore, were not good notices which under the Notices Act of 1923 would operate as a notice to quit (see Aston *v.* Smith, *The Builder*, August 22, 1924). If they had been good notices, then it appears from Landrigan *v.* Simons (*The Builder*, October 3, 1924) that the time limit in the proviso to section 1 subsection (1) of the Notices Act would have applied. Still, we find the case difficult to follow for the following reasons. In the first place, it is difficult to follow from the report why the court held subsection (2) of section 8 of the Act of 1923 to have no application to this case. That subsection provides, "Any sum paid by a tenant which under subsection (1) of section 14 of the principal Act is recoverable by the tenant shall be recoverable at any time within six months from the date of payment, but not afterwards or in the case of a payment made before the passing of this Act at any time within six months from the passing of this Act, but not afterwards." Subsection (1) of section 14 of the Act 1920, refers to sums "irrecoverable" by the landlord. These sums were not paid by the tenant but they had been deducted from his wages which would appear the same thing. Secondly, there is this further difficulty for subsection (3) of section 8 of the Act, 1923, enacts, "Nothing in this section shall affect the operation of the Rent Restriction (Notices of Increase) Act, 1923."

Now the Court acted under this section (8) as regards the time limit to be applied to an amended notice, which was a notice which could never have been held good but for the provisions of the Notices Act, for before that Act was passed a notice to increase was of no validity unless preceded by or accompanied with a notice to quit, and under the provisions of the Notices Act it is provided that "Nothing in this Act shall entitle a landlord after the passing of this Act to recover from a tenant in respect of any period before December 1, 1922, the increase of rent made valid by this Act, or any sums which have been recovered from the landlord before that date by means of deductions from rent or otherwise, or any rent due before that date which has not been paid by reason of such deductions having been made therefrom; but section 14 subsection (1) of the principal Act shall not apply to an increase of rent made valid by this Act, which was paid by or recovered from a tenant prior to December 1, 1922." It is section 14 subsection (1) of the principal Act that the Court acted upon as making the sums recoverable by the tenant under notices of increase which, though amended under section 6 of the Act of 1923, could have had no validity but for the provisions of the Notices Act, yet a time limit was applied under the Act of 1923, and not according to the provisions of the Notices Act. The intention of the Legislature when the Notices Act was passed was to crystallise the position from a certain date and to let neither landlord nor tenant go behind that date.

We are, of course, not questioning the decision of the Court, but the law has to be understood and acted upon by laymen, and our only intention has been to show the extreme difficulty there is in deriving from this decision as reported any certain guide to the intricacies that have been imported into Rent Restriction legislation.

New Kilburn-Hammersmith Sewer.

The preliminary work involved in the preparation of drawings and specification in connection with this scheme has been pressed on and tenders will be invited at the earliest possible moment. The estimated cost of the work, including expenditure not provided for in the contracts, amounts to £527,000. The work will occupy about two and a-half years and the expenditure will, it is anticipated, be incurred as follows:—Financial year 1924–5, £30,000; 1925–6, £200,000; 1926–7, £200,000; 1927–8, £97,000.

FRANCO-BRITISH UNI OF ARCHITECTS

WE gave last week an account of the annual meeting of the Franco-British of Architects at the rooms of the Soci Architectes Diplômés, Paris, on Octob

At the official banquet in the evenin sieur Godefroy, President, after propos loyal toasts, gave an address of welc the British delegates. In the course remarks he said the British Amba although not able to be present with had demonstrated the interest whi British Government continued to tak Union which would do much to promo dial relations between the two cou Their own Minister of Foreign Affai Premier, also regretted his inability with them. They had no doubt he wa acquainted with the aims of the F British Union of Architects, more parti as they knew his personal interest " rapprochement des intellectuels " nations. They would, therefore, have particularly happy to have welcomed there that night, and he asked his repr tive, Monsieur Roussel le Roy, to con Monsieur Herriot their thanks and gre Their chairman, Monsieur Paul Leon represented the Minister of Fine Arts, d strated by his presence his lively inter their Union.

Although the Franco-British Unio Architects was only officially formed in it was hardly necessary to remind them the Union existed in fact in 1913 as a of the manifestations which then took in London and Paris, and which serv establish cordial relations between F and French architects. Rarely, he th had there been a time when it had been essential that they should continue t together. Thus their Franco-British should be, for both countries, an inexha well of friendship. He would like to the future others coming into existen similar lines between the artists and w of both countries. Unfortunately, as were well aware, there were other all springing into existence, the alliance o and gain, of which neither their heart their minds could approve. If, therefore were successful as the leaders of su movement they would only be acting i cordance with the objects of their society

Were they not, indeed, as architects, at the beginning of all civilised existence first care of man was ever the improv of his home, and, in point of fact, all tions of interior or foreign policy cou traced back to this primitive instinct.

What did every citizen demand security for the peaceful enjoyment o home? It was to defend this that h willing to fight. It was to charm the that the poet sang and the musician p He did not speak of the painter and the tor who, in all great periods of art, ha laborated with the architect when not selves architects. There was no fi human activity up to the latest scientif covery which did not finally lead to the It was quite natural, therefore, that whose art thus stood at the beginn things should also be the architects forces of the spirit.

After expressing regret at the abse Mr. Paul Waterhouse, M. Godefroy s would like their British friends to tak with them a message to the President R.I.B.A. of cordial good wishes and for the continued assistance which the comed from the distinguished body over he presided.

In conclusion, after expressing tha Sir John Simpson and Sir Reginald Blo who were, he said, largely responsit their entente, M. Godefroy wished cor prosperity to the Union.

RCHITECTURE AND STAINED GLASS

: Charles Nicholson, M.A., F.R.I.B.A., ed recently on this subject to the British y of Glass Painters at the Art Workers' Hall. In the course of his remarks he the two arts of Gothic architecture and painting had had a more or less continuous y in this country during the last seven ries, neither of which entirely died out even g the eighteenth century, and both these ad been revived with more or less success g the nineteenth century. It was fashionable e present day to sneer at the achievements torian art; the nineteenth century was too to their own age for critics to be able e it in proper perspective; they had just ed at the stage where they had begun dmire Georgian art, and he had no that a succeeding generation would d the work accomplished during the eenth century with great veneration, pro- they did not destroy it all before it became nable to admire it again. Certainly, one admit that nineteenth-century art was erfully fertile and enterprising, and that rtists of the period were giants in their and that a century which produced build- ike Waterloo Bridge, the Houses of Parlia- Truro Cathedral, and All Saints' (Mar- street); paintings, such as those of Turner, re-Raphaelites, and Millais; sculptures Wellington's tomb, could not be passed as a dull period of artistic effort.

the beginning of the nineteenth century, the ey practised was by no means fashionable rishing, but it had never entirely died out, in this country or in France. Here, in nd, they had Wyatt, the fashionable archi- tinkering at their cathedrals, and glass rs like Eggington making enamel trans- cies to replace the rubbishy old thirteenth- y windows of Salisbury Cathedral, and to rtalise with bogus heraldry the imaginary tors of Beckford at Fonthill. The unfortu- Joshua Reynolds window at New College, e similar production designed by Benjamin at Windsor were then fresh from the glass rs' hands. And Peckitt, of York, was busy g windows in which it was by no means sible to trace in a debased form the tra- s of the later school of mediæval glass ng. Almost contemporary with Peckitt flourished a glazier at Shrewsbury, Henry Bettinson, who did several ws in Lichfield Cathedral and in St. s, Shrewsbury, which were quite tra- l in design and of quite excellent colouring. d never been able to discover whether this was an amateur or a practical glass painter, appeared to him that he managed to get good work done at a very difficult

arious parts of the country one met with of early nineteenth-century glass, a good f which was heraldic work done mostly mel, and a few replicas were produced Reynolds' "virtues" at New College. Early Victorian period, they met with rk of Willement Wailes, Warrington and the latter doing his work through Wailes rdman.

as in the 'forties and 'fifties that they to observe a serious attempt on the part ern glass painters to work upon consistent ctural lines, and they saw this very well n works as the windows of the Temple and an early church of Scott's, at West in Hampshire, both glazed throughout attern glazing and heraldry executed ate thirteenth-century work. Wailes' lass was interesting, the drawing of the was grotesquely mock-mediæval, and ecution was coarse and bad, but there metimes a good bold colour scheme and nally, when working under Pugin's n, Wailes produced some very good 's, as, for instance, in St. George's ral, better, he thought, than the Pugin rdman glass in the Houses of Parlia- ment. The best piece of Pugin and Hardman glass was, he thought, in Munster-square Church, where the whole of the glazing of the east end fitted in most happily with the architecture. A quite interesting artist of the early Victorian period was Warrington, who struck out a line of his own and worked upon late Renaissance lines, producing crude imitations of a certain type of coarse Flemish glass; but he had a good sense of colour and sufficient independence of mind to work upon lines which were not popular. Probably the most successful piece of glass of the early Victorian school was the east window of Ely Cathedral, by Wailes, the general effect of which was exceedingly good.

The artists most in favour in the later Victorian period were Clayton and Bell, O'Connor, Hardman and Gibbs; a little later than these came the present firm of Powell's, the pre-Raphaelite glass painters, Burne Jones and Morris; and, later still, the schools of Burlison and Grylls, and Kempe. All these were too near their own time to permit of their forming a just opinion of the merits of their work, but it was permissible to say that, in many cases, this was marked by a distinct recognition that it was the glass painter's duty to study the amenities of the building he had to decorate.

Perhaps the least successful in this respect were some of the pre-Raphaelite artists. Led astray by the pronouncements of an irresponsible doctrinaire and intoxicated with the flattery of highbrow critics, many of these artists, despite their great ability, had introduced glass into their churches which was not only entirely discordant with its surroundings, but which challenged attention in a manner quite destructive of the effect of repose which was essential to a fine building. One never found this agressiveness in old glass, even if it realistically portrayed the Day of Judgment or Jonah being vomited up by the whale.

It is a pity that such capable artists as the pre-Raphaelites were so immodest; the drawings of their cartoons were sometimes so beautiful, as in the St. Frideswide window at Oxford, and sometimes they produced work beyond all criticism, as in the east windows at Waltham Abbey. The failures of this school in places like Oxford Cathedral were a warning against self-confidence on the part of any artist who was entrusted with decoration which should be an integral part of the architecture. Liberties which might safely be allowed within the four corners of a picture frame became licentious when indulged in in the middle of a range of windows glazed in an unobtrusive if commonplace style. And here they came to the first and, he thought, the chief desideratum in glass architecturally considered—the great importance of consistency with other glass in the neighbourhood. Personally he would always prefer a series of commonplace windows to a miscellaneous collection of glass of different scales and different colour schemes. The good effect of uniformity, even where the glass was not of the best, was seen in churches like Tournai Cathedral and St. Denys, near Paris. The bad effect of the opposite system might be observed at Manchester and Llandaff Cathedrals. The former church had been glazed at various times, and some of the earlier work was not at all good, but later windows were, many of them, of quite excellent design and colour. These, in all cases except one, were designed to go with the early Victorian glass; the effect which had thus been attained was quite restful and good. One did not notice the defects of the earlier glass until one looked for them. Into this otherwise harmonious interior there had been interpolated a window representing the late General Gordon with fez and pocket testament complete, howling dervishes in the foreground, palm trees and an eastern sky behind, with results which were wholly disastrous to the architectural amenities of the church.

At Llandaff the cathedral was mostly glazed with pre-Raphaelite glass of the best type, cleanly drawn, well coloured, and thoroughly restrained and architectural. There had, however, been interpolated an "art nouveau" crucifixion window, coarsely drawn and heavily coloured.

The nave of Ely Cathedral was said to be a museum of the works of the best glass painters of the nineteenth century, and this statement provoked an impudent critic to ask a dignitary of that cathedral why he did not make his waistcoat into a museum of the works of the best button makers of the period.

It was a pleasure to turn from criticism to appreciation of what good and consistent glass could do for a church. Not to speak of places like Chartres or Bourges, or some of the Rouen churches, or King's College or Fairford, they could point to buildings like Bath Abbey, Pendlebury church, and St. Agnes, Kennington, all of which had been glazed throughout on a single comprehensive scheme, the result in each case being perfectly restful and satisfactory. Without quoting the works of living artists, Sir Charles said it was easy to recall a number of interiors which had been consistently glazed from end to end. Of course, some of them would prefer one man's work to another's, but he thought any architect and any glass painter would agree that the best results were only to be obtained where consistency of treatment was rigidly insisted upon. Personally he considered that diversity of treatment might sometimes be allowed within well-defined limits; for instance, a chancel might be glazed in a different style to the nave, but even so the better plan was to preserve unity throughout the building—not, of course, uniformity—but such unity as existed at Fairford, where the small subject windows in the chancel harmonised in colour and drawing with the single figures in the aisle windows, and these again with the picture windows at the west end.

It was hardly necessary to warn present-day artists against this inconsistency, but the glaziers of the middle of the last century often put a caricature of thirteenth-century glass into a Hanoverian window, and recently no less a person than the late Sir W. Richmond did something of the same sort in no less a place than St. Paul's Cathedral. However much one tried one could not well repress a sense of incongruity when one saw primitive decoration applied to ultra-civilised architecture.

The early fourteenth-century canopy glass had much the same disadvantage as the thirteenth-century work; it did not look really well except in a large building, but the glass of the late fourteenth century and subsequent periods down as late as the seventeenth century looked well almost anywhere, and, probably the most successful modern glass resembled this later work in general style. By the term "style" he did not refer to such matters as the details of canopies or costume, but to the general technique—that was to say, the proportion of white to coloured glass, the disposition and balance of colour, the amount of realism in the treatment, and the methods of obtaining effect by the use of pot metals, trace line, leadwork, painting, stain, etching, enamel.

A few observations upon glass technique from an architect's point of view might, continued Sir Charles, be of some interest. In the first place, it was generally by the simplest and most direct methods that the most satisfactory results were obtained. Thus, those effects which required heavy painting, an excessive use of stain, complicated tricks produced by etching, or the use of enamels, should be as a general rule avoided. Still, there were cases where these devices were permissible. There might be reasons in some churches and still more in civil buildings, for distinctly pictorial treatment of glass, pictures which appealed to people of rather unformed taste, just as some of the mediæval paintings and sculptures were devised for the edification of those who could not read books. Where it was desired to make a church's windows into a glorified picture book, care should in the first place be taken to select the subjects carefully, avoiding the trivial, the comic, and the abstruse. In the second place,

such realistic pictures should, he thought, always be framed either with architectural column and canopy work or with plain glazing of a thoroughly conventional type. If this precaution were observed the windows would look like a series of pictures and not a series of peepshows, and a very great deal of realism might be obtained without offence. Again, it was a mistake to be afraid of leadwork or saddle-bars or stanchions in a realistic window. These never interfered with the realistic effect; in fact, the typical Flemish glass of the sixteenth century without any concealment of its technical construction, conveyed a far more true impression of nature than an elaborate 1850 Nuremburg window with its leadwork suppressed and with its many tricks of painting and enamels.

The secret of the whole matter seemed to be that the glass painter must never lose sight of the cardinal fact that his art should be essentially a decoration. He was bound to go wrong if he regarded the window as a hole in the wall through which one looked at some scene, however sacred and edifying that scene might be.

With regard to all modern glass, he felt that there should be no necessity to confine oneself to archaic draughtsmanship. There was nothing particularly convincing either in the stumpy figures drawn by the modern mediævalist or in the lachadaisical personage portrayed by the pre-Raphaelite school. On the other hand, there was no advantage in departing from tradition in such matters as costume or emblematic accessories; they possessed a generally understood tradition in these matters and it was mere wilfulness and conceit to discard it. Neither, in their anxiety to avoid archaism, were they justified in portraying the saints as wild fakirs or robust pugilists; the drawing should rather be as correct as possible, and also as simple and straightforward as possible. Drapery and other accessories should be carefully drawn and formally arranged; the effect aimed at should be intelligible, quiet and decorative, neither grotesque nor dramatic.

As for the detail, it should always be carefully drawn and any slapdash treatment should be avoided—at any rate in windows at all near the eye. But it was by no means always desirable to cover a window with elaborate ornament, very often an absolutely simple treatment like that of the Jesse window at Dorchester was the best, especially in a small or simple building. A great deal of modern glass was overburdened with detail and the effect of this was merely tiresome. It was far more satisfactory to discover fresh beauties in a leisurely examination of glass than to be struck at first sight with the profusion of the decoration, and afterwards to discover with Solomon that all was but vanity.

As regards colour arrangement, too, the modern glass painter was sometimes apt to err in over-profusion. Over and over again one saw windows containing all the colours of the rainbow and more. The old glass painters were far more restrained, whether by choice or not, he could not say.

He did not know how far the architect of a building should control the character of the glass. Theoretically, of course, the architect should control everything, but it was not always the case that he had sufficient knowledge of the technique of all the crafts employed in a building to make close personal supervision practicable; on the other hand, he thought the architect should always be consulted in the selection of a glass painter, as whatever be the said architect's deficiencies, he was at least able to judge what kind of work would best suit his building.

Finally, if he had wandered a little from his point and said too much about glass in general and too little about glass in relation to architecture, Sir Charles said his excuse would be that one could not lay down a hard-and-fast rule and say that only one particular style of glass must be used, to the exclusion of other styles. It was not even necessary that the glass in a building should be of corresponding style to the architecture. The only definite rules there could be laid down were that the glass should be consistent with itself, that it should be good of its kind, and that it should have those qualities of colour and translucency which accorded best with the architectural disposition of the building.

RENAISSANCE TOWN PLANNING

MR. WILLIAM HAYWOOD, F.R.I.B.A., in his third lecture on town planning at Birmingham University, said the renaissance of classical literature in the first years of the fifteenth century A.D. coincided with a loosening of feudal and Church control. New ideas were formed; old ideals were studied and imitated.

Literary reference to the structure of Ancient Rome led to archæological research, chiefly for the practical purpose of assisting fifteenth century architectural ambitions, which in Florence had advanced beyond the technical ability of the times. Brunelleschi (1377-1446) made first use of this new interest in Old Rome, and studied ancient vaults and domes in order to complete the cathedral of Florence.

The new social order expressed itself in great secular buildings, of which the Riccardi Palace (1430) and the Pitti Palace (1440) are early examples. Important buildings were planned in axial relation to their environment; in towns, as a climax to neighbouring streets or squares; in the country, associated with formal garden effects of a scale and character clearly prophetic of a new order in town planning.

Rome followed Florence in the new progress. Pope Sixtus V (1585-89) restored the water supply, and so made large areas of the upper town habitable which had laid waste since the destruction of the aqueducts. His architect Fontana planned new roads for the development of the abandoned areas; and his arrangement of the Piazza del Popolo was notable as the first example in history of a public place at the entrance to a city, so associated with diagonal routes as to facilitate the direction of traffic to and from widely separated sections of the town. This Piazza was essentially a traffic centre; and as such initiated a new use for public squares; which from this time onwards became less exclusive in character, until they lost all sense of enclosure, and became mere road widenings for the convenience of traffic distribution.

Fontana's planning for Rome in 1585 preceded Wren's plan for the rebuilding of London by 81 years, but although Fontana introduced a new factor into road design, and also conceived his roads and public buildings as parts of the same composition, yet his projects were never welded together as one scheme; and it was reserved for Sir Christopher Wren, with his design for the rebuilding of London in 1666, to conceive the first town plan of modern character, in which all sections were suitably co-ordinated.

Wren took no hint from Paris, for at this time Paris had taken no step forward in town planning; her present eminence in this respect being due to a long process of sectional improvement, with Haussmann's linking-up devices of the mid-nineteenth century to give cohesion to the whole. It was the more remarkable, therefore, that Wren should have so anticipated present practice, that his plan stands equal with the best town planning of to-day.

EXHIBITION NOTES

THE ROYAL WATER-COLOUR SOCIETY.

NONE who appreciate water colour art can fail to look with pleasurable thought at the exhibitions of the old Water-Colour Society. If there is nothing highly stimulating or fresh, we can always count on some who pursue the art with an outlook that is placid in expression and soundly concerned about composition and colour. Yet half-a-dozen drawings by Harry Rushbury have been welcomed on these walls, though atmosphere, composition, and graphic detail seem to provide all one needs in drawings which are almost sepia monochromes. The "S. Sauveur, La Rochelle," is one of the most delightful drawings of its kind we have seen. A fine sense of atmosphere and di conveyed in the drawing of "La Toque by the President, Sir H. Hughes Stant it has no strong colour value like t sketch of the Ferry, with its jewel-lik by Miss Alice Swan (54), or the dainty at Dawn," by R. Anning Bell (98). T many pleasant subjects, and there is amount of technical skill in the exhibit it is astonishing how little there is whic one's attention from a fine or telling colour. Such drawings as (171), (170) a do appeal to one for definite colour val note a fairly good show of sales for so the exhibition.

YORK AND EAST YO SHIRE ARCHITECTU SOCIETY

THE members of the York and East Y Architectural Society visited Kingsto Hull recently. The visitors assembled Royal Station Hotel at 2 p.m., where th welcomed and entertained by the Vice-P of the Society, Major J. M. Dosser, F.R Among those present were Messrs. H. J. Ferguson, F. J. Horth, Dudley H Llewllyn Kitchen, E. A. Pollard (Hon. Tre York Society), J. E. Reid (Hon. Secretary Society), T. Snowden, W. S. Walker, Watson, W. B. Wheatley.

The party proceeded to view the new G and Town Hall, which was designed by Russell and Cooper. After a tour extensive building—the council chamb the Lowgate elevation of the town hal particularly admired—the members received in the Mayor's parlour by the Hon. the Lord Mayor (Councillor E. E. Kei the Town Clerk (Mr. H. A. Learoyd), and

The Lord Mayor expressed his pleasu pride in the fine building which housed t poration. He indicated briefly the vas mercial importance of the city, expressi opinion that it would grow and extend future with greater strides even than it ha in the past.

On behalf of the Society, Major J. M. and Mr. J. E. Reid expressed the apprecia those present, and expressed the regret President (Mr. Stephen Wilkinson) inability to be present.

The Parish Church of Holy Trinity wa visited, where the history of the fabric account of its restoration were given W. S. Walker, York Diocesan Surveyor. tect for the restoration.

The members then proceeded to the House, originally instituted as a guild in of the Holy Trinity in the time of Edwa now incorporated for charitable and m purposes. The buildings are very ext and of great interest, the front to House-lane being a beautiful reserved c composition in the Tuscan manner, of st stucco, built in 1753, the carved worl executed by Jeremiah Hargrove. The cha built from designs by Sir William Cha the Court or Banqueting room decora Robert Adam; and the council c instead of being carpeted, has for it covering rushes thickly strewn—a custo has never been departed from in the Guil history.

The tour was concluded by a call at force House—the house in which Sir John entertained King Charles on his visit to 1639, and in which the city's most emin William Wilberforce, was born on Aug 1759. The house is now used as a muse taining the impedimenta of the emanci the slaves. The elevation to High-str fine example of brickwork, whilst the int its several parts is a well-preserved and c series of rooms, illustrating by their porary remains of fireplace, wall-treatme ceiling decoration, the successive phases tectural development of the English ho

D WESTMINSTER

RE on "Old Westminster and its Buildings, Past and Present," illus- h a large number of lantern slides, by Mr. Herbert A. Cox, F.C.A., to ts of the Department of Architecture, and Building, at the Northern Poly- stitute recently. *The Builder* model Westminster was exhibited, and the uded drawings by Hollar and the . Brewer, and many old views of the l its buildings.

ibing a drawing by Brewer of the n the east (the drawing from which er model was made), the lecturer y VIII was responsible for part of in the cloisters and oratory of the In the centre was the magnificent St. Stephen's. The Court of Re- ilt by William the Conqueror, was hall of his palace. The palace m the south, where was the resi- rtion. Edward the Confessor was he first monarch to settle down and nome in Westminster, and it was he or rebuilt, the Abbey, the great ster. in 1065. William the Con- pted the palace, and was crowned in . His successor, William II, built er Hall in 1097. Just 300 years it was rebuilt by Richard II, who walls a few feet higher and entirely ed the roof. In referring to a slide Hollar's view of New Palace-yard in lecturer said the north entrance of er Hall was very much as seen the coffee-stalls and shops that later nded it had been cleared away. In of the Yard was a conduit which on s ran with wine. The Yard was a place for the people. It was a blind it did not lead anywhere except to Henry VIII gave up the palace as residence and moved to Whitehall, Elizabeth still fancied some portion ace and used to reside there.

Drawing of the Painted Chamber was as more interesting than it looked, one of the most ancient of the Par- buildings. Tradition said that e Confessor built it and died there. e main feature of the Palace in he Conqueror's day, although he Hall called the Court of Requests, larger than the Painted Chamber. beautified this Chamber, the wall of which dated from 1237; they re- the battles of the Maccabees, and g the earliest specimens of purely . It was reported by visitors from ent that they were "painted beyond ": no portion has been preserved, re destroyed in the fire of 1834.

of the east end of St. Stephen's s next shown as at a date consider- than the time of Henry VIII. St. Chapel, said the lecturer, suffered at the hands of those who altered e to time. Its glory as a chapel hen it became a Parliament House. n was credited with having founded . dedicated to St. Stephen, but ought it was really the work of It was destroyed by fire in 1298. d I commenced a new St. Stephen's d. Edward III completed, so it was entury work. From a view of the the west side it was seen that there and that the upper floor was con- ove the ground. The entrance was to the south end of Westminster chapel had five bays, so it was big building, and when it came to by the Commons it gave a very ber indeed.

the pictures on the walls were re- of surviving originals in the British he whole chapel was covered with statuettes of kings. One of the kable things about the chapel was ere preserved in written form the nts of the building and the decora- tion of it, and these were the most interesting of their kind in existence. Everything, including the costly pictures painted on the walls, was paid for by day wages, except some of the statues; the names of the master masons and the masons and the stained-glass makers, and even the workmen, were recorded. When Sir Christopher Wren altered this Chapel he found some of the paintings and covered them up, but in the year 1790, when the House of Commons had to be made larger to admit the members representing Ireland, some of these paintings came to light. As a place of worship the chapel had a sanctuary within it; there was a great stone screen and an altar on each side of the entrance, while within were stalls facing one another.

At the conclusion of the lecture a hearty vote of thanks was accorded to the lecturer.

SOCIETY OF ARCHITECTS

Mr. Alfred John Taylor, the new President of the Society of Architects, was born at Bath in 1878. In 1902, after having been successfully pupil and assistant to the late Charles E. Davis, F.S.A., the City Architect, he set up in practice on his own account. During that time he assisted Major Davis in a comprehensive scheme of excavation, undertaken on behalf of the Corporation of Bath, to lay bare the Roman



Mr. Alfred John Taylor.

thermæ in that town. Since the death of Major Davis he has been entrusted by the Corporation with the care of the present remains. Recently he has uncovered further portions of the thermæ, hitherto unknown.

In addition to his antiquarian work Mr. Taylor has an architectural practice which is not confined to his native city. He is architect to the Baths Committee of the City of Bath, and has made the planning of hydropathic establishments a speciality, making numerous visits to most of the Continental spas. He is also responsible for the medical and swimming baths at Torquay and Leamington Spa, and is at present engaged on similar works at Malvern. Connected with this branch of his practice is the great number of hospitals which Mr. Taylor has designed, such as the series of buildings for the Forbes Fraser Hospital at Weston, Bath, recently opened by the Duke of Connaught. At the moment he is engaged on similar buildings in Wiltshire. Mr. Taylor is also the author of a number of industrial buildings, city halls, concert pavilions, cinemas, restaurants, hotels, &c., besides examples of domestic work in Somerset and the surrounding counties, and also in South Wales.

In addition to this he has been engaged in the planning of racecourses with their adjacent buildings, and among the works of this kind executed by him, those at Newbury, Bath, Salisbury, Bournemouth, and the projected scheme at Chepstow are the most important.

ARCHITECTURE AND CIVIC FORCES

Sir Banister Fletcher recently delivered a lecture at the Central School of Arts and Crafts on the Architecture of Central and Northern Italy in the Romanesque period. He said that the wonderful reawakening of mediæval civic life in Italy made it possible for little cities like Pisa to undertake grand works of architecture good and beautiful enough to go down to posterity. The architecture of Pisa drew like a magnet people from all parts of the world, and reflected through all the ages the varied enterprise of her citizens in that building art which touched human life at all points and involved questions of land and housing, of town planning and public works. Then, the craftsman had his recognised work and place in the scale of civic life. The world-famed Leaning Tower, the Cathedral, and the richly-adorned Baptistery constituted one of the best-known examples of collective planning of important buildings in the past. This group held a place in Italian fame like the Acropolis, Athens, in Greece, and the Roman Forum, and a rising spirit of civic independence, coupled with religious idealism, prompted this trio of splendid monuments, and the bells still rang out from the bell-tower or campanile to call the faithful to worship as they had done for centuries.

The next lecture will continue the study of Italian Mediæval Architecture.

DOMESTIC ARCHITECTURE IN ENGLAND

At a recent meeting of the Anglo-Swedish Society, held at the Swedish Hall, Harcourt-street, Marylebone, and attended by the Crown Prince and Crown Princess of Sweden, Sir Lawrence Weaver lectured on "Modern Domestic Architecture in England." In the course of his remarks he said, in his opinion, Sir Edwin Lutyens combined in his work the skill in design characteristic of the Norman-Shaw School and the right choice of materials which characterised the Philip Webb School. He was very proud of their domestic architecture, which had developed from many centuries of peace and wealth, influenced by such things as their garden backgrounds, which had no equal in any country in the world. They had drawn the materials for modern design from a rich mine, and as an imperial race had brought back ideas from all parts of the world. To-day they wanted what they could never get nationally in domestic architecture, but might have locally—a tradition. Their enormous variety of local traditions was due largely to the enormous variety of materials in English soil, giving them the delightful, vernacular character of their country buildings, which seemed to have grown out of the soil. Sir Edwin Lutyens was undoubtedly the great living master of English architecture. He had gone through the whole of its development in his own lifetime, and had done it all extremely well. He had arrived now at a sober, well-designed type of house, and as soon as people began to copy his old mannerisms he invariably invented new ones. He had given a new direction to garden design, and his art owed much to him and to Miss Jekyll for marrying together good architecture and good planting. Sir Lawrence further observed that one of the worst influences in modern architecture was the tendency to make exact copies. The worship of old styles was very offensive to the modern architect, and they were hypnotised too much by the idea of replicas of past work.

Royal Institute of British Architects.

The inaugural meeting, which will be opened by the President's Address, will be held at 9, Conduit-street, W.1, at 8.30 p.m. on Monday, November 3. The Medal for the year 1923, which was awarded to Mr. Frank T. Verity, F.R.I.B.A., for the Shepherd's Bush Pavilion, will be presented to Mr. Verity.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

*** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Soft Water.

[REPLY TO MR. J. A. GRICE, OCTOBER 24.]

SIR,—Many authorities recommend that a heating system should be filled up in the first instance with soft water in order to obviate the corrosion of pipes and the furring up of same, and this is in itself a reassurance upon the point raised by your correspondent. The pipes should, of course, be galvanised.

With regard to the cold supply, the effect of this upon various materials of piping in different districts varies in accordance with the composition of the water. The best information can be obtained from the local water authority, and in some districts the use of copper piping is now insisted upon.

"PLUMBING."

Cinder Tracks.

SIR,—I should be glad of any information that can be given me as to the laying of cinder running tracks, both as to the method of laying and the composition of the materials.

"SPRINT."

Communal Laundries.

SIR,—If any of your readers have had experience of the above I should be very grateful for any information that can be given. Are they popular with the tenants of housing schemes, and is it the general experience that they can be organised to run smoothly without friction among the tenants?

"SUDS."

Filter Beds.

SIR,—What is the best material with which to fill the filter beds of a small septic tank sewage disposal system? I have found coke breeze get foul very quickly and need continual renewal.

"SANITAS."

Rendering Accounts.

[REPLY TO "ARCHITECT," OCTOBER 17.]

SIR,—We have read with interest the letters that have appeared in your paper on this matter, but have been particularly interested in the remarks of "Architect" on the subject of establishment charges. He concludes by saying that a calculation of establishment charges on a percentage basis would be a useful index of the efficiency of a business.

We venture to suggest that some useful purpose would be served if "Architect," or some of your readers (writing anonymously) would state the usual percentage in this connection. It must, of course, differ to some degree from business to business, as the class of work performed and other circumstances necessarily cause fluctuations in the percentage. We should be very interested to know, comparing like with like, what percentage is an index of efficiency and what percentage of inefficiency. Confusion would be avoided if a statement of precisely what is included in establishment charges were afforded.

GARSUBIL, LTD.

Plastering.

SIR,—Can any of your readers inform me as to the nature of material used for plastering the walls of squash racquet courts?

J. C. HOUSTON,
Division Officer, R.E.

Traction Drive.

[REPLY TO "BERKS." OCTOBER 24].

SIR,—It is well to allow at least 40 ft. for turning space for large cars, but a carriage and pair can turn practically in its own length, and 18 ft.-20 ft. will be found to be ample for the purpose.

"QUADRANT."

SIR,—In response to the enquiry by "Berks" in last week's issue of *The Builder*.

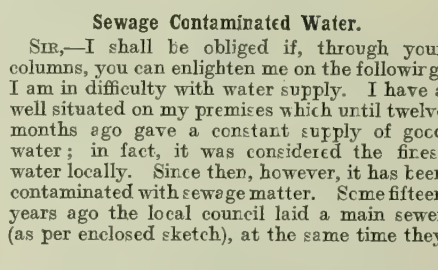
An open carriage and pair is about 18 ft. long by about 5 ft. wide, and requires a circle of from 22 ft. to 24 ft. diameter, in which to turn. Probably the same dimensions would suit a motor car as well.

Clapham.

ELFRIC H. SMITH.

Sewage Contaminated Water.

SIR,—I shall be obliged if, through your columns, you can enlighten me on the following. I am in difficulty with water supply. I have a well situated on my premises which until twelve months ago gave a constant supply of good water; in fact, it was considered the finest water locally. Since then, however, it has been contaminated with sewage matter. Some fifteen years ago the local council laid a main sewer (as per enclosed sketch), at the same time they



laid my branch drain, which is also shown, the cost of which was, of course, borne by the owner of that time. On unearthing this branch I found that thick black sewage matter oozed from almost every joint, which had never been properly made with cement. I had these enclosed with cement concrete, the well emptied and scoured; this has now been done three times in the last twelve months. After this I had the water analysed a third time, with the result that it showed no improvement, and is still quite unfit for drinking purposes. It contains a certain sewage matter for which, I am certain, my drain has never been used. There appears, therefore, only one way by which this matter could possibly contaminate the water. I believe there is a leakage in the main sewage and the fluid follows along the outside of my drain, which is practically dead level, and from thence to the well. I have already paid almost £20 in connection with this nuisance, and the cost of a new well is in the neighbourhood of £30. Can I claim any compensation from the council, the owners of the main drain? The sewage matter concerned is chiefly urine. I think the enclosed sketch will simplify matters.

I have marked my suggested reason, which I think quite feasible.

"YOUNG BUILDER."

"Eavesdropping."

SIR,—In regard to the point raised by "Bookworm" as to the origin of Eavesdropping, the quotation below is from Dr. Brewer's "Dictionary of Phrase and Fable":—

"Eavesdropper—One who listens stealthily to conversation. The derivation of the terms is not usually understood. The owners of private estates in Saxon times were not allowed to cultivate to the extremity of their possessions, but were obliged to leave a space This space was called the "yfes-dry drip). An eavesdropper is one himself in the eaves-drip to overh said in the adjacent house or field."

"Under our tents I'll play the eav
To hear if any mean to shrink
Shakespeare, "Richard

I have come across instances of na between buildings which are locall "ladder-ways." This looks like a the "eaves-drip."

Cromer. ERNEST EDWAR

Floor Coverings.

SIR,—As readers of *The Builder* w glad if you could give us any regarding the following:—

We are interested in some prem have now been in use for some time. of the balcony and floors are const ferro-concrete. The ground floor with rubber flooring laid over th The difficulty is that whatever ha down for this flooring to adhere to nothing has been successful. The sweating at the moment, the water it. The surface is always damp, c the rubber rises and ends of it are which makes it rather dangercus, bec might trip over it in the semi-dar have tried several methods of s without success. If you could advis alternative we should greatly appre this matter has been on hand a c time.

"FLO

Cement Wash.

[REPLY TO MR. A. S. JENNINGS, SEPT

SIR,—I should like to ask your cor Mr. A. S. Jennings, if he has tested wash he recommends over any exte of time, since experience has show considerable quantity of sulphates mately, a harmful action upon Portl The glue also strikes me as an unnec stituent in a material which depe setting upon the hydration of the water.

I have found a straight Portland c to be satisfactory, although an ac hydrated lime, not exceeding 1 in 3 the application, but reduces the strength of the material. If a sand required the proportions 4 : 2 : 1 of s and hydrated lime have been found

In applying, the existing surfac soaked with water to saturation poi sufficient of the wash mixed at one ti its all being applied within half an finished wash should be prevented drying out.

J. E. W

Bedale Church.

Mr. W. D. Caroe has recently s report with regard to the roof of Be In the course of it he states that th of the purlins in the south aisle way serious. The ravages of watch beetle," states Mr. Caroe, are The ends of the main principals had become rotten, and the timbe strengthened and enabled to co service by a system of encasing t It was important, however, to ascer insect was not concealed in the The whole of the timbers of all the be carefully examined, and "sappy tinues Mr. Caroe, "should in ev adzed away until hard, sound tim If the heart of any timber is fou or rotten, the decayed part should and if the timber be so far reduce as to be unable to fulfil its functio either replaced with new timber scarfed as occasion may require."

THE BUILDING TRADE

"THE WASTE OF CAPITALISM"

this title a Report of the Committee y into Production which was set up by ional Joint Council representing the Union Congress General Council, the Party Executive Committee, and the ntary Labour Party has been published let form with a foreword by Mr. A. A. Mr. Purcell, in this foreword, so reads rt: "The results are presented in the pages in a form which cannot fail to every reader with the fundamental nd the deficiencies of the capitalist of production. There is abundant in this volume to prove that responsi- the failure to reach maximum output n the employers."

nnot agree with Mr. Purcell in either statements; we may say that the an extremely interesting compilation n statistics, but it is a well-recognised different conclusions may be drawn by minds from the same set of statistics. ," using the word generally, is con- iat nationalisation or Socialism is the ll evils, and they draw that conclusion se statistics—we will not say fit the to support their theory. Other people, dmitting that our present system is by s perfect and has defects, do not draw stic conclusions from the defects, and in the latter view it has to be remembered perience is a support to the present whereas the advocates of Socialism oint to a single state where such a system been practised with success.

ery long ago the Labour party would nted to the little State of Georgia as a favourable example of a Socialist t now they are proposing to subsidise nist state that is over-running Georgia as they say to obtain trade for this from the former.

rcell says that the result of this inquiry ow the onus upon the employers of hat the "trouble lies with the workers," may be the case in respect to certain nd defined defects, but he goes much an this and speaks of the report in effect ictment of the whole capitalist system, we contend the onus lies on those who change a well-established and tried nd the present volume contains nothing the nation to take a leap in the dark. eword he states that this inquiry is to d further, and in a later volume the e will state their views as to the to be applied, and were this further ailable it would be easier to discuss the raised in this present volume, for at is only conjecture that the remedies will be nationalisation. As it is we confine our observations to certain ised in the present report.

ms of reference were: "(1) To consider es are impeding maximum production ies and services from the standpoint of sts of the community and what im- ts in organisation and direction can ted; and (2) to advise the National ncil on a labour policy for those to which nationalisation could not for t be applied, such a policy to have the efficiency of the industries, to the l welfare of the producer, and the ests of the consumers." The Com- pear to have stopped short halfway first paragraph and to have limited iry to the causes impeding production, from any suggestion as to improve- organisation and direction. The indictment is (1) that productive efficiency in British industry is considerably lower than it might and ought to be; (2) that the responsibility for this inefficiency must be borne by the present system of industrial organisation and by employers individually and collectively; (3) that the principal sources of waste and inefficiency are (*a*) workers' lack of status, responsibility, and control; (*b*) absence of incentive to work for profit-making industry; (*c*) insecurity of workers and periods of unemployment; (*d*) effects of the trade cycle; (*e*) inadequate, defective, out-of-date machinery, plant and equipment, defective lay-out of works, &c.; (*f*) lack of co-ordination between industries and parts of industries; (*g*) defective organisation of works; (*h*) defects in the transport system; (*i*) deliberate restriction of output to maintain prices; (*j*) long hours and unhealthy conditions of work.

We regret our space will not permit us to discuss this indictment in detail, and we must confine ourselves merely to noticing one or two points. Now, in dealing with statistics, it is always important to see the point of view with which they are quoted, and in the first place we find that the committee assert that when employers ask for "maximum production" they do not mean production to satisfy the desires of everyone at a price within the means of everyone, but their main interest is to make profits, and as to increase production does not necessarily mean to increase profits, therefore what they really desire is not "maximum production" but lowest possible labour costs or the maximum production per employee. Then follows this very illuminating pronouncement, "For the sake of clearness it has been agreed that, from the labour point of view, 'maximum production' is that which is reached at prices which cover the minimum cost of production by the most economical methods consistent with the maintenance of a proper and progressive standard of life for the producers." But this is elaborated at page 16, where four classifications of output are given (1) that we have just quoted; (2) output at a level at which the price obtained by each producer just covers his particular costs of production; (3) output at a level at which the price obtained covers each producer's costs and yields him a fair remuneration in profit for his services; and (4) output at a level at which the price obtained covers all costs and yields an unreasonable or unfair profit to the producer. The report then states that (1) represents the definition of the committee of ideal maximum production which, under a different system of industry, would be obtained, whilst the present system compels the normal restriction of output to at least the level of (3). If the case against employers for restriction of output is based on these classifications, they have not much weight in them. No. 1 is the labour ideal apparently; production per employee is not to be regarded in the first place, and, secondly, no profit is allowed at all, but only "a proper and progressive standard of living for the worker." This, surely, is depriving the "worker" of initiative, and if there are no profits at all, how is the future State to be maintained? The contention is that output would be increased, but industry is deprived of incentive and no provision is made for that milch cow of the Socialist—the State. Profits are taxed and provide revenue for the State, but this statement considers the standard of living for the worker, but omits the State by which apparently he is to be maintained in a state of semi-lethargy in comfort. With regard to restriction on output by combines, the report states it is practically impossible to obtain evidence. We are not in favour of large combines, either of employers or employees, as they destroy personal relations, but it is important to observe that, even in combines, the committee has no affirmative evidence for the conclusion it draws.

Our space only permits us to glance at one other subject—the method employed by the committee in its reference to strikes and lock-outs. In the first place, the report fails to grasp the serious indirect consequences of trade disputes.

The report states, "There is the direct loss measured by the loss of working days during which the disputes have lasted; and there is a further loss as yet undetermined in magnitude, owing to the fact that after a stoppage the former level of output is not reached until the lapse of a certain time after work has been resumed," and then the committee refer to the psychological atmosphere after disputes, saying, if the workers have been successful, there is a probability of increase of output for a time, whereas defeat has an opposite effect. The loss of market, the flight of trade abroad, the deterioration of works and plant, are all ignored, and the worker is alone considered; and, finally, as an apologia, the loss of time from trade disputes is compared with the loss of time from unemployment. Unemployment is put down entirely to the present industrial system and as causing a loss of time far exceeding that lost in trade disputes. The two elements—trade disputes and unemployment—are not comparable at all, and we are surprised trade unionists should compare the inactivity of the most highly skilled and capable men in the country whose services are in demand with the lack of employment of the whole body of insured persons unemployed, who must include in their numbers a vast number of varying ability.

There are tables in the report which elaborate this theme. The working population is taken as 12,000,000, and in the record year 1921 the loss of time owing to disputes is shown to be 7.15 days per head of this population; or, on an average taken over a number of years, 2.11 working days. The number of insured persons unemployed are also averaged, and the number of days they might work is computed, and the two results are compared. Is it necessary to say more than to explain the method adopted in this chapter? The "employable" of the highest capacity are compared with the unemployed, their capacity for output is placed on the same level and, apparently, under the new State, they are all to be paid alike out of funds provided by no one at a progressive standard of living. The high standard of trade union wages is standing in the way of those of low ability being employed. These figures, however, do serve a useful purpose. Take the record year in which employed persons stood idle through disputes for 7.15 days a head, the number being as stated 12 millions, and take those wages at the ridiculously low average of 30s. per head, and the direct money loss in wages alone would be over £18,000,000, which would have been a welcome contribution to the unemployed, but which, with countless other sums, was lost to the nation altogether by lack of conciliatory measures in industrial matters. We notice that the word "conciliation" does not even occur in the index to this interesting volume.

Waste of Capitalism." Foreword by A. A. , (Chairman of the Trade Union Congress). Labour Joint Publications Department. .)

Portsmouth War Memorial.

Mr. Samuel Salter, Southsea, was the contractor for the foundations of this memorial. They support a total weight of approximately 1,100 tons. The area covered by the base measures 55 ft. square, into which have been driven 73 reinforced concrete piles. These piles, which weigh about 30 cwts. each, are each a foot square, 20 ft. in length, and pointed with hardened steel.

Sir Robert Lorimer, A.R.A., was the architect and Mr. Henry Poole, A.R.A., the sculptor.

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A., Assoc. Surveyors' Institution, F.R.San.Inst. (Barrister-at-Law).

XVI.—LIABILITY FOR DAMAGE TO PERSONS, PROPERTY, OR THINGS, ETC.

THE contractor, or the owner, or in some cases the architect, or any two, or all three of them, may be liable for damage, or injury, to any person, or to adjoining property, or to things, or animals, by reason of the carrying out of any building contract. Sometimes, however, they may all be exonerated if the damage, or nuisance, is an unavoidable result of the conscientious exercise of their legal rights, and where there is no wantonness.

Indemnity Clause.

Most contracts now contain a clause, whereby the contractor indemnifies the owner from all liability for damage or injury resulting from negligence on the part of the contractor, or his workmen, or agents, in executing the work. This clause is not an attempt on the part of the employer to contract out of his liabilities, for it does not include damage caused by the nature of the work, for which, in general, he is liable. The clause only covers that caused by the methods of execution, or other means, adopted by and under the control or management of the contractor, or where he does not follow instructions given. Where the work is such as can lawfully be done, and without injury to others, and the employer has given over the control of the work, and there is no negligence on his part, then, in general, the contractor is solely responsible for any injuries to others, due to the works, or caused by the negligence of his workmen.

The employer must, however, take all precautions where injury may be expected to arise from carrying on lawful works. His responsibilities are much greater when he has employed a contractor to do anything that is unlawful in the work.

Contractor's Liability.

The contractor is liable under the terms of the indemnity clause, and any sub-contractor is liable to him similarly, if the work is a lawful undertaking.

If a workman let fall a brick from a scaffold, and the building owner is sued for the damage or injury caused to any person below, the contractor is liable; and the owner may seek indemnity from him in respect of what he is ordered to pay (see Pearson *v.* Cox (1887), 2 C.P.D. 369).

If an employer lends men to a contractor, or a contractor to a sub-contractor, the person under whose direct control any workman causing damage was, at the instant of his default, is liable. So, if a person accepts the loan of a workman of another, and does not pay any consideration for the loan of him, he is liable for damage, because the employer of the workman has *pro. tem.* handed over his control (see Donovan *v.* Laing Construction Syndicate (1893), 1 Q.B. 629, and Perkins *v.* Stead (1907), 23 T.L.R. 433).

Employer's Liability.

If the employer retains any control over the work, or if it is shown he has interfered materially with the contractor's control, then he will become liable for his own negligence and that of the contractor, sub-contractor and all workmen, losing his rights under the indemnity clause (see Bennett *v.* Castle (1898), 14 T.L.R. 288).

Employer and Contractor may Both be Liable.

In some cases the employer and contractor are both liable, jointly and severally, and where this is so, and the aggrieved party sues one of them only, and obtains damages, he has no "right of contribution" against the other. Also, if the aggrieved has already sued one of them, he cannot sue the other separately (see Merryweather *v.* Nixon (1799), 8 T.R. 186).

Implied Contract of Indemnity.

It would appear that where damage is traced to some default of the architect, and he becomes, therefore, a joint tort-feasor with the employer, if the architect can prove that he acted as the agent only of the employer, and without any knowledge or foresight of possible damage, he (the architect) could claim an implied contract of indemnity (see Sheffield Corporation *v.* Barclay (1905), A.C. 392).

Where Neither Contractor nor Employer is Liable.

If damage results from the exercise of the legitimate rights of the employer, the aggrieved has no remedy.

A person may erect a wall at the extreme boundary of his property; he has, however, no remedy against the owner of the adjoining land, if the latter makes excavations within his rights, which cause the wall to fall down; unless he has acquired the right of support for his wall, by express or implied grant, or by prescription. He has only the right to the support of his soil, not, therefore, the building thereon (see Dalton *v.* Angus (1887), 6 A.C. 740).

The aggrieved has no remedy where the damage results from the act of God or *vis major*, or where he is a sufferer only in common with the general public. If, however, he can prove any special suffering on his own part over and above that of the public, he may take action. For instance, if a contractor by any obstruction of the highway prevents access to neighbouring premises and causes loss to the occupier, the occupier may sue independently in respect of his particular suffering.

SATELLITE TOWNS

SIR THEODORE CHAMBERS, Fellow of the Surveyors' Institution, and Chairman of the Welwyn Garden City, lectured to the London Society on this subject some time back. Sir W. Joynson-Hicks, Minister of Health, presided.

The Chairman said the question of satellite towns appealed to him from two points of view, both of which related to the positions and conditions of great cities to-day. First, there was the question of transportation, and even of locomotion, in great cities, which had become a grave problem. It was only necessary to look at the conditions of the London streets to realise that something would have to be done to relieve them before many years were passed, for those conditions made it almost impossible for men and women to get to their work in reasonable comfort. Again, there was the question of public health. From that point of view he was convinced that there was no cause more detrimental to the health of the people than overcrowding or slum conditions. Disease, vice, and misery were all aggravated, if not actually promoted, by slum conditions in their great cities.

Part of his duty consisted in trying to get rid of all the conditions which made for evil in the life of the community. The slums formed one of those conditions. He had in mind a London slum where 1,600 people lived. It had been scheduled as a slum area and arrangements had been made to get rid of it. But it could not be got rid of until means were provided for rehousing the people who were turned out. If the area were cleared without first providing some place for the dwellers to go to, the only effect would be to increase the congestion of the surrounding streets. He thought the congestion had its limit and more than its limit, and to the satellite town as the real soluti difficulty.

He had made many speeches on the necessity of spreading the populatio country. The people must be got o existing enormous cities. It was not merely to get them into adjoining because the expansion of the subu added, after a very little time, to the c of the city. What was wanted was towns, complete new entities planted c country districts where people would to live far better, far happier, and far lives than they could possible live to-d existing conditions in the cities.

Sir T. Chambers, in the cours remarks, said the garden city m arose as a protest against the ove and congested condition of many old cities. The garden city must not be with the garden suburb, nor with town as such. The garden city was an ind town with its own industry, its own its own town centre and industrial dential areas carefully planned a connected with roads.

Town planning was a science which applied to old towns as well as n Garden suburbs were well planned residential areas, and acted as dorm the city to which they were adjacent s ubmitted that the new town built o area in a suitable place and under conditions could expeditiously provid expansion of population and industry also submitted that an existing overg overcrowded and congested city c provide for its own expansion by the of the garden city policy, encoura development of garden cities at a co distance from its periphery, to wh industries, which need not be centre city, should be encouraged to move.

It was submitted that the adoptio policy would enable improvements in t city itself to be more easily and exp carried out. When the pressure of p was taken out of the parent city by the the polity of slum clearances, the pr open spaces, and parks, and the wi thoroughfares would be made easier. these things could not be carried ou owing to high land values and he pensations which became payable.

The policy was peculiarly appl London. The congestion of popu London was very great. Within 4 miles there was a population of 6¾ 30 persons to the acre. The traffic London was, he thought, insoluble. and motor traction had given Londo extended lease of life which was nearl It was submitted that the only pos if the population were further incre would be inevitably, was to adopt of satellite towns, to which many which need not be situated in Lond be encouraged to migrate. Within Counties the rural areas with an a 4,000 square miles, had a populati .3 per acre. Within this territory were available and suitable for sate The policy would not be as detrime countryside as the indiscriminate development of which they now The concentration of developmen areas under well considered sche leave the intervening country u That the policy was financially prac shown by the success of Letchworth a Gardens Cities—both of which had experimental stage. The policy of p factories in new towns was being adopted by manufacturers in the U They would not erect new factories congested towns. It was probabl policy would be followed in this c it was submitted it would not be d city like London to encourage with exodus of many factories to satell the Home Counties.

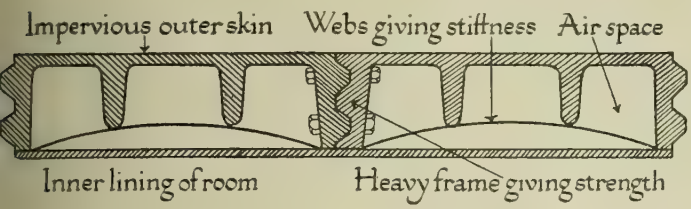
EW INVENTION

Burney" Unit System of House Construction.

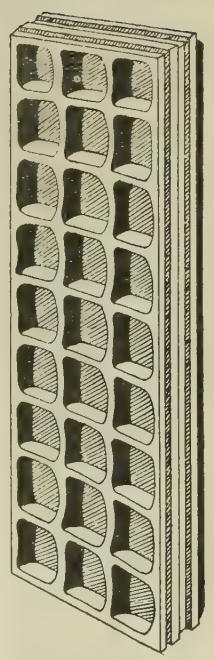
informed that it is proposed to erect Crayford six experimental houses system put forward by Commander t is also proposed, during the course few months, to equip a factory for e of their manufacture. The details em, taken from material supplied us, ws :—

rete," the new material of which the " house is constructed, is manufac- a certain waste product which is first emically, turning it into a hornlike called " parakerasite," and after- orporated with cement under great While of somewhat greater strength, impervious quality is used approximating more nearly in its properties to stone. For the floors, walls, and ceilings, use is made of a somewhat softer, more resilient variety, with a warm surface resembling that of wood. It is readily produced in many different colours and shades.

The " Prefacto " house is built up of individual units, moulded under pressure at a central factory, transported to the site, and there erected in position. One unit forms a standard wall section, a second contains a window, a third a door, another is a floor section, and so on. The system has been so developed by standardising dimensions that by varying the relative positions of the different sections a very large number of arrangements and shapes becomes possible. By a slight variation of the dimensions to suit these standards it should be possible to adapt any design of house to the system. The various units are arranged with



Section of Walling.



Standard Wall Section : Lining Removed

wo-thirds the weight of concrete, and, aterial, can be moulded to any desired ke wood, it can be drilled, sawn, and d surface finish, but it does not warp urable as stone. By altering the pro- the ingredients, the actual properties crete " can be varied between some- limits. For the outer walls and roof ts in contact with the outer air, a hard ridges and projections which lock into adjacent members.

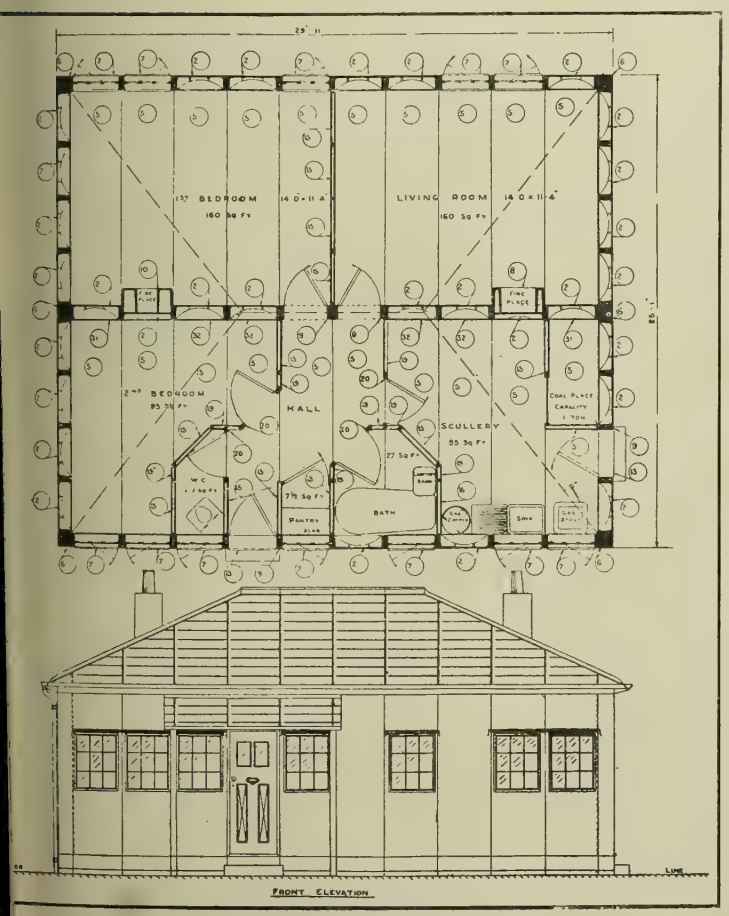
The outer frame of the standard units is of some thickness. When in position each portion of this frame abuts against, and is bolted to, the corresponding portion of the frame of the adjacent floor or wall unit. Each pair of such parts of the frames together form a post or joist measuring 9 in. by 4 in. in cross section, and each is able to take a compression load of some 60 tons before failure. These heavy members, formed at the abutment of each pair of adjacent sections, are spaced apart a distance equal to the width of a standard section, *i.e.*, less than 3 ft., and all run into one another and rigidly connected. By moulding heavy parts under windows and over doors, and by attaching internal fittings to these members, it is possible to avoid local weakness.

The possibility of condensation is avoided by the nature of the construction. The wall units forming the outer shell are of hard stone-like " Factocrete," impervious to moisture ; the inner lining forming the walls of the rooms is of the softer, warmer variety, and between the two is an air space over 8 in. thick.

" Factocrete " floor units are generally similar in construction to the wall units, except that they are reinforced with steel bars incorporated into the material, the lining in the base forming the ceiling of the room below. As designed for the ordinary small type of house these floors are sufficiently strong to withstand a loading, spaced uniformly over the floor, of 3 cwt. per sq. ft. over the whole area. The inner linings to walls and ceilings are put on in flat sheets, the junctions being covered by the picture rails, cornice, &c. The internal partitions are generally similar to the external walls, but of somewhat lighter construction. The stairs are also of " Factocrete " and are built up of a framework of posts and beams rigidly fixed to the heavy portions of the external wall units. The roof is built up of a framework of joists with a covering of impervious " Factocrete."

As the total weight of the " Factocrete " house is considerably less than that of a brick house, the foundation work is more simple.

The methods proposed are expected substantially to reduce the cost as compared with similar houses built of alternative materials. For a semi-detached house following the type approved by the Ministry of Health for use in housing schemes, and having a total floor area of 950 sq. ft., with three bedrooms, living room, parlour, kitchen, and usual offices, the selling price, including all internal fittings, should we are informed, be approximately £470. For a detached single story bungalow type of house, as illustrated, the price, complete with all fittings, should be approximately £350. These prices are exclusive of land, roadmaking, and drains, but include all fittings usually provided for houses of this class. The address of the Burney Unit System is 6, Broadway, S.W.1.



Lay-out of Bungalow (668 ft. super).

The " Burney " System of Construction.

NEW BUILDINGS IN LONDON

Old Broad-street.—Demolition work is practically complete in connection with the rebuilding of the premises in Old Broad-street, E.C.2, of Messrs. Lazard Bros. & Co., Ltd., bankers. Excavation work, preparatory to the construction of foundations, will commence next month. The new building will have a frontage to Old Broad-street of about 55 ft., the site, of irregular shape, extending back about 140 ft. Adams-court, a small passage on the left of the site, will be incorporated and built over. The premises will provide a large basement, accommodating several strong rooms, heating chamber, &c., whilst on the ground floor will be a banking hall, with a separate entrance. Another entrance will give access to five upper floors, which will be used as offices. A lift will be installed to serve all floors. The building will be erected on a steel framework with a front of Portland stone. The ground floor, retaining walls and foundations will be constructed of reinforced concrete, whilst the remaining floors will also be of fireproof materials. The windows will be of steel and bronze. The general contractors are Messrs. Trollope & Colls, Ltd., of 5, Coleman-street, London, E.C.2. The demolition is being carried out by Messrs. B. Goodman, Ltd., 33, Haggerston-road. The plans have been prepared by joint architects, Messrs. Gunton & Gunton, Finsbury House, Blomfield-street, London, E.C.2, and Messrs. Creed & Heal, 11, Gray's Inn-square, London, W.C.1.

Gresham-street.—The corner site at the junction of Lawrence-lane and Gresham-street, E.C.2 is to be covered with a new office building. The plans show a building comprising a basement of 12 ft., ground, and five upper floors. The elevations will be in best quality facing brick, relieved by stone dressings, the floors being supported by a steel framework. The ground area is about 850 sq. ft. The general contractors are Messrs. Y. J. Lovell & Son, of Marsham-lane, Gerrards Cross, Bucks, and 6, Bathurst-street, Paddington, W. The architect is Mr. Gervais Bailey, of King's House, Smith-square, S.W.1.

Willesden.—A new block of offices is being erected at the Edinburgh Biscuit Works, of Messrs. McVitie & Price, Ltd., at Willesden, N.W.10. A large block of three stories, costing about £30,000, is planned to be erected in brick, with stone dressings. The roof will be of slates, whilst the window casements will be of steel. Central heating plant will be installed, whilst electricity will be used for lighting. The general contractor is Mr. Thomas Rowbotham, of Coventry-road, Birmingham. Plans have been prepared by Mr. T. Willard, of Market-place, Rugby.

Muswell Hill.—A new branch omnibus garage and depot is to be built at Muswell Hill, N.10, by the London General Omnibus Co., Ltd., of Electric Railway House, Broadway, London, S.W.1. A brick building, supported on a steel framework, with a slated roof with extensive lantern lights and glazing, is to be erected, capable of holding about fifty 'buses. The floors will be of concrete, asphalted over, whilst there will also be tanks for storage of petrol, oil, &c. An inspector's office and lavatory accommodation will be provided, whilst large sliding doors will be fitted to the main entrance. The Company's architect is Mr. Stanley A. Heaps, of 17, Palmer-street, Westminster, S.W.1.

Whitefriars-street.—About two years ago the Associated Newspapers, Ltd., purchased the large site at the corner of Whitefriars-street and Tudor-street, E.C.4, formerly occupied by the Whitefriars Glass Works. It is now proposed to proceed with the building plans in contemplation, and to erect a large printing works and paper warehouse. The premises will comprise a large basement, ground floor and four upper floors. Steel framework will support the loads, and the walls will be of brick with stone facings. The floors will be of reinforced concrete, constructed so as to bear heavy dead loads, such as plant and paper stocks. The joinery, doors, &c., will be of mahogany and other hard woods, whilst the window casements will be of steel. Sprinkler installations and other fire prevention apparatus will be installed, also central heating plant, electric lighting and passenger and goods lifts. The architects are Messrs. Herbert O. Ellis & Clarke, of 3, Old Queen-street, S.W.1.

Threadneedle-street.—Actual construction and demolition work on the rebuilding of the Bank of England in Threadneedle-street, E.C.2, will not commence until November or December. It is proposed to divide the work, in view of its size, into three or four sections, and the portion to be dealt with will be the buildings now being vacated by the Bank Stock Office, Colonial Office, Power of Attorney Office, and Register Office situated on the left of the Bank's entrance in Lothbury. The Departments relating to War Bonds, Public Securities, &c., are now cleared, and this area will be taken in hand as soon as the remaining offices are emptied. The new buildings will be of six stories with, probably, further accommodation in a Mansard roof. The familiar outside wall of the bank will remain, and the new premises will appear above it. The plans have been prepared by Messrs. Herbert Baker, A.R.A., of 14, Barton-street, Westminster, S.W.1, and Francis W. Troup, F.R.I.B.A., of 14, Gray's Inn-square, W.C.1. The consulting engineer is Dr. Oscar Faber, D.Sc., of 5, South-street, Finsbury-pavement, E.C.2. The quantity surveyors are Messrs. Horder & Wells, of 40, Catherine-street, Westminster, S.W.1, and Mr. Hugh Watkins, of 13, Gray's Inn-square, W.C.1. The general contractors are Messrs. Holloway Bros. (London), Ltd., of Bridge Wharf, Grosvenor-road, S.W.1.

Regent-street.—Work has now started on the site at Nos. 252–260, Regent-street, W.1, where it is proposed to build the "Regent Arcade" of shops and showrooms. The new arcade will extend from Regent-street to Argyll-street, a length of about 150 ft., and will contain sixteen shops, provided with extensive window space, ground floor and basement accommodation. The arcade will have as a central feature a large domed glass roof. Above the ground floor, which will also have frontages to Argyll-street and Little Argyll-street, will be six stories of office accommodation, arranged for letting in suites. There will be four lifts installed. The building will be supported on a steel framework, the principal elevations being in Portland stone, and brick, with stone dressings, to Argyll-street and Little Argyll-street. The floors will be of fireproof materials, whilst the roof will be flat and asphalted. The contract for the foundations will be carried out by Messrs. Perry & Co. (Bow), Ltd., 56, Victoria-street, S.W.1, at a cost of about £20,000, whilst the superstructure will be erected by Messrs. Kirk & Randall, Ltd., of 146, Grosvenor-road, Westminster, S.W.1. The architect is Mr. S. Gordon Jeeves, 4, George-street, London, W.1, whilst the quantity surveyor is Mr. W. H. Webber, of 33, Furnival-street, E.C.4.

Tufton-street.—The National Library for the Blind propose to extend their premises in Tufton-street, Westminster, S.W., and have, for this purpose, acquired an adjoining area of some 5,000 sq. ft. A building of four stories is proposed to give accommodation for a library of 100,000 books. There will also be reading rooms, rest rooms, &c., and the premises, including their equipment, are expected to cost about £40,000. The plans have been prepared by Mr. Sidney Tatchell, of Messrs. Bourchier, Tatchell & Galsworthy, Bank Chambers, 32, Strand, London, W.C.2.

Barking.—A new warehouse is to be built at West Bank by the River Roden Co., Ltd., wharfingers. A one-story structure, of brick construction, with a roof of steel trusses covered with asbestos, is proposed. The floor will be of concrete. The plans have been prepared by Messrs. C. J. Dawson, Son, & Allardyce, of Clock House Chambers, Barking, Essex.

LAW REPORT

Shoreditch County Court.

A PAINTER who was wilfully pus steps by a drunken man, who was s charged, was the applicant in a Compensation Act claim, in the County Court recently, before Ju The applicant was Albert Simper, of road, Bow, a painter, aged sixty-e and the respondents were Messrs Gates & Son, of 12, Albion-squar painting and decorating contracto peared from the pleadings that th was at work on a pair of steps Pitfield-street, Hoxton, on May 15t steps were pulled away, with the re fell some 4 ft. to the ground, caus to his ribs and back. He was said t earning £3 15s. a week, and to be capacitated.

The defence was that the accide arise out of the applicant's emplo alternatively, that the injury was ca circumstances creating a legal liat third person to pay damages.

Mr. W. H. Duckworth, in openi for the applicant, said that while th was painting the steps were pulled underneath him by a drunken man, a were caused, which it was admitte tated him. The amount of the co had been agreed if the respondents liable, but they did not admit the There were three points taken in the the claim: the first was that there no accident; the second was that arising out of the employment; an was that, under Section 6, the man h compensation under circumstances w disentitle him to compensation from dents. Mr. Duckworth then went on the applicant never had a word to reference to a suggested compensat drunken man responsible, and did n suggestion one way or the other as to t of £20. What he did do was to refer to his solicitors, and they said he h to do with the £20, and, as a fact, h received a penny. Counsel subm when a man was carrying out hi a painter and someone came along away the steps, then it was an accide during his employment.

Mr. Justice Cluer said if the could have got the £20, he thought have lost his remedy under the Compensation Act. Of course, i to give him £100 out of charity nothing as it was from a stranger took it from the person who inju put himself outside the Act.

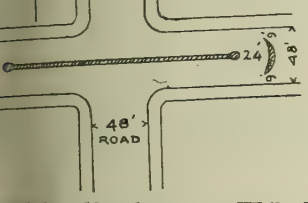
Counsel for the respondents sub the only acceptance he could point applicant was the tacit acceptance of suggestion of £20. He must have intimated an acceptance of some s

Mr. Justice Cluer said that h whatever to do with it. There we cases where the magistrate suggest sation, and the prosecutor had no or say in the matter. Continuing, said the only compensation it w the man was to get was that sugge Chairman of the Sessions. The therefore, was entitled to say whe was put before him that he did n contract, nor did he agree to tak pensation from the culprit. Th point must fail. As to the other p the injury arose out of his em not, he considered a painter w suffer from the acts of mischi that would be a cause arising employment. The mischief, or would be the removal of the pi and in the case before the Cou cause was the man seizing the l was the risk which he considered a out of doors was bound to run. F to find that this was an accident the man's employment. He un

tion had been agreed upon at 30s. per
n the date of the accident, and he
er an award for the applicant on those
th costs.

ROAD TRAFFIC

tention has been drawn to a proposal
lief of congestion in road traffic which
d in *Modern Road Transport* of October
proposal emanates from Mr. J. N.
hyay, and consists in providing long
ands to secure uniformity of direction
affic at cross-roads. The proposal
pon the alleged fact that "while it is
lly true that two lines of traffic can
y-side within 18 ft of roadway, this
rs in practice unless continuous lines
maintain abnormally slow speed. . . .
nes of traffic, therefore, can only be
d where the road is actually suffi-
ide to accommodate three lines of
extra width being necessary to enable
mount of flexibility." The appended
trates broadly the general lines of the



and is self-explanatory. While Mr.
hyay may be right in theory that to
roadway from an effective width of
wing for a 4 ft. island) to two effective
of 9 ft. each would not slow down the
et practical experience in London
daily that the least block on the road
causes delay. We do not understand
e moving from north to south in our
can fail to be impeded by the long
because the amount of turning and
in" involved would be worse than the
" we suffer from at present. We
d that the proposal is shortly to be
before the new London Traffic Com-
consideration, and we shall be inte-
hear the opinion expressed upon it.

Builders' Estates.

nes Murrell, of Pembroke-road, Seven
ssex (net personalty £8,679), £9,438.
ert Watt, (83), of Clifton-avenue, West
l (net personalty £16,422), £18,913.
illiam Molyneux, of Park-road, St.
ances (net personalty nil), £7,554.
T. Ward, of 14, Honywood-road,
r, £15,546.

Southsea Institute.

Institute, built at a cost of £11,000,
ed at Southsea recently by Major-
Sir John Daniell, K.C.M.G., The
is Mr. A. E. Tutte, of Portsmouth, and
ers are Messrs. John Lay & Co., of
treet, Portsmouth.

Liverpool's Concrete Houses.

verpool Housing Committee, after a
Amsterdam with the city engineer to
utch systems of house building, recently
ded the City Council to build 500
houses on the principles now in exist-
olland. The Council has agreed to the
dation (subject to the sanction of the
of Health) and, it is stated, has fixed
mum cost at £525 per house. The
Committee is now engaged with details
amme for building approximately 5,000
ouses. Ten systems of concrete con-
were experimented with in Amsterdam,
vere adopted. One system makes use
f reinforced concrete, measuring up to
14 ft., with a thickness of 6 in., which
d in position by a crane. The second
hich is similar to systems now used in
try, has a number of special features,
flooring with concrete slightly rein-

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/-
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/-
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/-
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/-
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/-
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/9	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London :—								
Within 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
From 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/-
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/-
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/2½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/1½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/3½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/3½
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 696.

THE SCOTTISH BUILDER

SCOTTISH MUNICIPAL HOUSING

THE Housing Committee of Glasgow Corporation has recently been considering the question of the occupancy of dwellings in housing schemes by people who are able to afford houses of higher rent built by private owners. It is proposed to issue, prior to the reletting of houses at Whitsunday, a schedule to tenants reported to them as being in a better financial position than warrants their continued occupation of Corporation houses, asking them for particulars of their circumstances with a view to the sub-committee on letting considering whether the houses should be relet to them. This proposal was contained in the minutes prepared for the consideration of the Corporation at a recent meeting. The convener of the Housing Committee (Councillor Morton) recently stated that among the tenants of Corporation houses were 172 municipal employees, 11 Town Councillors, and three members of Parliament, and that 179 persons residing at Mosspark held licences to drive motor cars, while permission had been granted for the erection of 16 motor sheds and 11 for motor cycles. It was eventually decided to close the list of applications for houses in Corporation housing schemes and to issue a schedule to those already on the list requiring them to renew their request. The chief object of this action was to ascertain the number of citizens whose needs were most urgent. With regard to the new scheme Councillor Morton said there were so many stories of people with £1,000 or £1,500 a year having got Corporation houses that they want to ascertain the facts. People of that description, he said, could look after themselves, and should never have got houses. If any had done so by giving wrong information in their schedules the department would not relet. They did not build the houses for millionaires, but for the better artisan class.

SYNTHETIC STONE BUILDING MATERIAL

THE Fyfe-Stone Co. recently opened their new works which have been erected at Coltmuir Quarry, Bishopbriggs, Glasgow, for the production of building materials. It is proposed to produce a synthetic stone which will market at a price equal to the price of brickwork. It has the appearance of stone and is stated to be more permanent and less porous. The company will manufacture all forms of concrete building products from breeze partition slabs to ornamental pre-cast stone. A party of over a hundred connected with the building trade attended the opening ceremony, which was performed by Mr. G. D. Morton, who, in declaring the works open, set the machinery in motion. Mr. Peter Fyfe, in explaining the aims of the new company, said Glasgow required at least 52,000 new houses now, and she had little hope of obtaining anything like that number during the next seven years. Meantime the population was growing at the rate of 10,000 per annum, so that any system which would give houses quickly, and at a more moderate cost than at present, would be welcomed. Fyfe-stone could be built up in one-half of the time required for brickwork and, he estimated, would cost less. A 24 in. block could be put in its place very rapidly, and being sand or granite-faced, did not require any roughcasting to keep out the damp. By manufacturing 2,400 such blocks per day, as they would be able to do with their five special heavy pressure machines, they would be in a position materially to assist in solving the nation's housing problem. They were ready to turn out standard building units by the million. By building with these slabs or blocks upkeep charges were reduced to a minimum, building costs were reduced, and construction was speeded up.

NEW BUILDINGS IN SCOTLAND

Renfrew.—VARIOUS.—Bungalow, Ladysmith-avenue, for D. Fulton (plans by J. Y. Jeanie, Ltd., Johnstone); Bridge of Weir, bungalow, Stanley-drive, Brookfield, for J. Y. Jeanie, Ltd.; villa, Greenock-road, Bishopton, for Henry Wilson & Sons, Bishopton; house, Old Greenock-road, Bishopton, for R. A. McKaren.

Maybole.—ACADEMY.—The Dean of Guild Court passed plans of Mr. Williamson, architect, for the proposed new Carrick Academy and janitor's house, for the Ayrshire E.C.

Paisley.—VARIOUS.—The Dean of Guild Court has passed plans submitted by R. Cochran & Sons, Ltd., Smithhills, for the erection of a substantial addition to their establishment in Gauze-street, to consist of three flats; an arcade will prove a feature of the building and a tea-room will be provided.—Plans were also passed for the erection of halls for the Deacons of Sherwood Church; the plans show two halls and side rooms to be erected in Glasgow-road.—The Renfrewshire E.C. has received permission to erect sheds and cloak-room accommodation at Camphill Higher Grade School.—Plans passed: Cottage, Stonefield-avenue, for Mr. J. Steel Maitland, architect.

Edinburgh.—VARIOUS.—Plans passed by the Dean of Guild Court: Electricity sub-station, Thieves-road, Colinton (plans by City Architect); cottage, Roull-road, Corstorphine, for R. A. Craig; bungalow, Hillview-road, Blackhall, for T. S. Henderson (plans by Alex. McWilliam); boundary wall, Powderhall-grounds, for F. A. Lumbey (plans by C. Smith); house, Queensferry-road, for R. Wheatle (plans by Dick Peddie & Walker Todd); villa, Queensferry-road, for Mrs. M. Donald (architect, T. Aikman Swan).

Upper Renfrew.—VARIOUS.—Electrical sub-station, Renfrewshire Combination Hospital; villa, Busby-road, Giffnock, for Southern Building Co. (A. McGregor, Mitchell, Coatbridge, architect); villa, Linwood-avenue, Clarkston, for J. P. Campbell; villa, Williamwood, Cathcart, for A. Mitchell; bungalow, drive, Clarkston, for D. Maben (pl McNab).

Aberdeen. — BUNGALOWS. — Five Gray-street, for Mrs. Kate Third (pla Sutherland).

Glasgow.—VARIOUS.—Plans have b with the Dean of Guild Court for Demolish existing buildings and erect in place, Cathedral-street and Weaver Watson's Heritable Properties, Ltd. McWhannell & Smellie); houses at hill, for Glasgow Corporation Housi power station, Knightswood Housing for Clyde Valley Electrical Power Co. low, Courthill-avenue, Cathcart, for A public convenience, Dalveen-street, S for Corporation of Glasgow Statut Dept.; house, Hatfield-drive, Kelvi Wm. B. Inglis; 15 houses, Crompto Cathcart, for Southern Building C houses, Fernleigh-road, Newlands, Lyle (Wilson & McGill, architects); ground pavilion, Aitkenhead-road, James Gray, M.A.; house, Boulevard, wood, for Glasgow Corporation Housi house, Mossgiel-road, for J. Findlay (architect).

Housing Progress in Scotland

The following figures show the prog has been made in State-aided housing in Scotland to September 30th, 1924

	Completed.	*Cons*
1919 Act	22,785	2
Private Subsidy Schemes	2,324	
Slum Clearance Schemes	669	
1923 Act	726	
	26,504	

Of the total number of houses comp under construction under the 1923 A are by the local authorities, and 3,616 enterprise.

BUILDING TRADE WAGES IN SCOTLA

THE following are the present rates of wages in the building trade in the principal t Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible f that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Bric Masons' lay Labou
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d.
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/
Galashiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Kirkwall	1/5	1/4½	1/4	1/4	1/4½	1/4	1/3	1/
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/

* The information given in this table is copyright. The rates of wages in the various towns in En Wales are given on page 695

CONTRACTS, COMPETITIONS, &c.

ne contracts still open, but not included in this List, see previous issues. Those with an asterisk rtised in this number. Certain conditions beyond those given in the following information ed in some cases, such as that advertisers do not bind themselves to accept the lowest or any that a fair wages clause shall be observed; that no allowance will be made for tenders; and sits are returned on receipt of a bona-fide tender unless stated to the contrary.

e given at the commencement of each paragraph is the latest date when the tender, or the names illing to submit tenders, may be sent in; the name and address at the end is the person from whom here quantities, forms of tender, &c., may be obtained.

ILDING AND PAINTING.

ER 1.—**Chippenham.**—HOUSES.—For erec- houses on the land at Crickett's-lane, for Mr. A. Strand, Town Clerk. Deposit, £2.

ER 3.—**Cornwall.**—FARMHOUSES.—For erec- ght new farmhouses at Trerice Farm, St. st, for the C.C. The County Land Agent, ll, Truro. Deposit £1 1s.

ER 3.—**Gateshead.**—PAINTING.—For paint- at the Poor Law Institution, for the B.G. ghill, Union Clerk, Poor Law Union Offices.

ER 3.—**Gravesend.**—SCHOOL.—For the a County School for 390 girls, for the Kent Committee. Mr. W. H. Robinson, F.S.Arc. ucation Architect, Room 69, Sessions House, Deposit £2 2s.

ER 3.—**Hendon.**—PAINTING.—For painting tion of the interior and exterior of certain he Brent Hill Estate, for the U.D.C. Mr. ris, Clerk to the Council.

ER 3.—**Hill Heads.**—HOUSES.—For erection s, for the Whitley and Monkseaton U.D.C. ker, Clerk to the Council, Council Offices, ay. Deposit, £1 1s.

ER 3.—**Lichfield.**—ALTERATIONS.—For and improvements to the Guildhall and Offices, for the T.C. Mr. W. Brockson, , Municipal Offices. Deposit £2 2s.

ER 3.—**Portslade-by-Sea.**—PAINTING.—For painting of houses on the Council's Copperas g Estate, for the U.D.C. Mr. E. H. Kempe, e Council, Council Offices.

ER 3.—**Surrey.**—MODERNISATION.— ion of blocks "J" and "K" at the Ban- al Hospital, Surrey, for the L.C.C. The o the Council, The County Hall, West- idge, S.E.1. Deposit £2, payable to the

ER 3.—**Tirbach.**—OUTBUILDINGS.—For erec- buildings at Tirbach, Aberaman, for the Agricultural Committee. Mr. W. E. R. ity Clerk of the C.C., Glamorgan County ff.

ER 3.—**Wallasey.**—REPAIRS.—For pointing at the Infectious Diseases Hospital, Mill- he B.C. Mr. Geo. Livsey, Town Clerk, Deposit £1 1s.

ER 3.—**Yeovil.**—OFFICES AND LIBRARY.— ction of proposed new municipal offices and , for the B.C. Messrs. Petter & Warren, , architects, Old Sarum, Yeovil. Deposit

ER 4.—**Dublin.**—RESTORATION.—For res- Bansha Civic Guard Station, Co. Tipperary, mmissioners of Works. Mr. J. J. Healy, Office of Public Works, Baile Atha Cliath.

ER 4.—**Gillingham, Kent.**—POST OFFICE HONE EXCHANGE.—Erection of a post office ne exchange at Gillingham, Kent, for the ers of His Majesty's Office of Works. Branch, H.M.O.W., King Charles-street, W.1. Deposit £1 1s. (cheques payable to ry).

ER 4.—**Mapperley.**—HOME.—For erection home and doctor's residence at the City pital, for the Nottingham T.C. Mr. W. J. n Clerk. Deposit £2 2s.

ER 4.—**Watford, Herts.**—CHURCH EXTEN- the erection of the proposed extensions to of SS. Michael and All Angels. Mr. A. G. Gower-street, W.C.1.

ER 5.—**Aberystwyth.**—HOUSE.—Erection of Mr. T. Davies at Caerog, Aberystwyth. Mr. t, architect, Aberystwyth.

ER 5.—**Diss.**—ADDITIONS.—For additions ions at the Secondary School, for the . Mr. J. S. Davis, Secretary, Shire Hall, Deposit, £2 2s.

ER 5.—**Easington.**—REPAIRS.—For builders' rising sundry additions and alterations at w Institution, Easington, and painting of of the Union Offices. Mr. J. M. Longden, Guardians, Union Offices, Easington, Co.

ER 5.—**Greystones.**—BELFRY.—For building he Parish Church. Hon. Secretary, Ard-na- ones.

ER 5.—**Halesowen.**—HOUSES.—For erection ion of 40 houses on the Hurst Green Hill, C. Mr. E. H. Grove, Church Steps House. 2s.

ER 5.—**London.**—REPAIRS.—For certain re- rbel-street, for the Southwark B.C. Mr. Town Clerk, Town Hall, Walworth-road,

ER 5.—**Penrith.**—VILLA.—For various work connection with the erection of a villa at r. A. Knewstubb, P.A.S.I., architect and Andrews Chambers.

ER 5.—**Stoke.**—REPAIRS.—For (*a*) interior f Hospitals No. 5 and 6 at the London- tion, near Newcastle, Staffs; (*b*) minor airs and interior and exterior decoration ces, Clayton-street, Longton; (*c*) interior decoration of relief offices, Charles-street, builders' work in connection with altera- chen range, plumbers' work and minor irs at relief offices, Charles-street, Hanley; uilding repairs at relief office and house, Raglan-street, Fenton, for the Stoke and Wolstanton B.G. Mr. T. Wood, Clerk to the Guardians, Union Offices, Stoke-on-Trent.

NOVEMBER 6.—**Blean.**—REPAIRS.—For minor repairs at the Institution, Herne Common, near Herne Bay, for the B.G. Mr. W. T. Brooks, Clerk, 4, Tower-parade, Whitstable.

NOVEMBER 6.—**Bridgend.**—ALTERATIONS.—For alterations and additions to the Workingmen's Progressive Club and Institute, 151 and 152, Caerau-road, Caerau, near Bridgend. Mr. D. Pritchard, Secretary. Deposit £2 2s.

NOVEMBER 6.—**London, E.14.**—TENEMENTS.—Erection of 24 tenements on a site at Lower North-street, for the Metropolitan Borough Council of Poplar, Mr. Harley Heckford, M.Inst.C.E., Borough Surveyor. Council Offices, Poplar. Deposit £3 3s.

NOVEMBER 6.—**Wanstead.**—CONVENIENCES.—For reconstruction of conveniences in George-lane, at the rear of the "George" Hotel, for the U.D.C. Mr. B. Blewitt, Clerk and Solicitor to the Council, Council Offices.

NOVEMBER 7.—**Eythorne.**—HOUSES.—For erection of a pair of police houses, for the Kent C.C. Mr. A. W. Hart, Clerk, Standing Joint Committee, Sessions House, Maidstone. Deposit £1 1s.

NOVEMBER 7.—**London, E.C.4.**—BUILDING WORK.—Building work in construction of a lift shaft at the General Post Office South, Queen Victoria-street, E.C.4, for the Commissioners of His Majesty's Office of Works, Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

NOVEMBER 7.—**Merthyr Tydfil.**—HOUSES.—For erection of 56 houses at Gellifaelog, also roads and sewers for the B.C. Mr. T. Aneuryn Rees, Town Clerk. Deposit £1.

NOVEMBER 7.—**Surrey.**—COTTAGES.—Erection of 10 cottages on the High-lane building site, for the Haslemere U.D.C. The above will be built of concrete blocks which will be provided by the Council. Mr. C. A. Best, Surveyor to the Council, Council Offices, Haslemere, Surrey. Deposit £1 1s.

NOVEMBER 8.—**Bexhill.**—HOUSES.—Erection of 10 houses in Church Hill-avenue, Little Common, for the Borough Council of Bexhill. Borough Surveyor, Mr. George Ball, Assoc.M.Inst.C.E., Town Hall, Bexhill. Deposit £1 1s.

NOVEMBER 8.—**Forres.**—SCHOOL.—For mason, carpenter, slater, plumber, plaster, painter, and heating work for new school, for the Moray E.C. Mr. D. C. M'Intosh, Executive Officer, Education Offices, Elgin. Deposit £1 1s.

NOVEMBER 8.—**Hull.**—HOUSES.—For erection of 200 houses on the East Hull site, Southcoates-avenue, for the Corporation. Town Clerk.

NOVEMBER 10.—**Auckland.**—HOUSES.—For erection of 10 houses at St. Helen's, Auckland, 16 at West Auckland, 10 at Fir Tree, 8 at Middlestone Moor, and 10 at Helmington-row, for the R.D.C. Mr. W. T. Foster, Clerk to the Council, Union Offices, Bishop Auckland. Deposit £2 2s.

NOVEMBER 10.—**Crediton.**—DWELLINGS.—For erection of three blocks of artisan dwellings in Belle Field, for the U.D.C. Mr. Inon J. Leach, Masonic Hall. Deposit £1 1s.

NOVEMBER 10.—**Frinton-on-Sea.**—SHELTER.—For erection of a public shelter on the Greensward, at Frinton, for the U.D.C. Mr. P. O. Macdonald, Clerk to the Council, The Council House.

✱NOVEMBER 10.—**Peterborough.**—HOSPITAL BUILDINGS.—The Peterborough and District War Memorial New Infirmary Committee require to select a limited number of building contractors to tender for the new buildings for 123 patients' beds. Mr. Joseph Stephenson, Hon. Sec., Queen-street Chambers, Peterborough.

NOVEMBER 11.—**Glasgow.**—OFFICES.—For works required in connection with the proposed erection of offices and billiard room and extension to Newlands Depot, &c.—digger, brick, and mason works; carpenter, joiner, and glazier works; steel works; plumber work; slater and rough cast works; and plaster and terrazzo works, for the Corporation. Mr. J. Lindsay, Town Clerk, City Chambers.

NOVEMBER 11.—**North Shields.**—BUILDING.—For construction of police station, &c., at Albert Edward Dock, for the Tyne Improvement Commission. Mr. A. Blacklock, Secretary, Tyne Improvement Commission Offices, Bewick-street, Newcastle-upon-Tyne. Deposit £2 2s.

NOVEMBER 11.—**Plymouth.**—EMPLOYMENT EXCHANGE.—For the erection of Employment Exchange for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NOVEMBER 11.—**Rathmines.**—PAINTING.—For external painting at Mountpleasant buildings, Hollyfield buildings, and Gulistan cottages, for the U.D.C. Mr. Seacome Mason, Clerk to the Council, Town Hall, Rathmines.

NOVEMBER 11.—**Wellington.**—CONVENIENCE.—For erection of a public convenience in the Market Yard, for the U.D.C. Mr. J. W. Littlewood, Clerk, Bank Chambers. Deposit £2 2s.

✱NOVEMBER 12.—**Eccles.**—FLOORING, FENCING, AND GATES.—(1) Providing and laying composition flooring; (2) supplying and fixing fencing and gates to 176 houses in course of erection on the Peel Green estate, for the Borough of Eccles. Mr. T. Elce, Borough Engineer and Surveyor, Town Hall, Eccles. Deposit, £1 1s.

NOVEMBER 12.—**London, S.W.7.**—WORKSHOPS.—For the erection of workshops at the Victoria and Albert Museum, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

NOVEMBER 12. **Pantynawel, Blackmill.**—HOUSES.—For erection of 20 houses, together with the construction of roads and sewers, for the Ogmore and Garw U.D.C. Mr. W. T. Ollivant Jones, Engineer and Surveyor, Council Offices, Brynmenyn. Deposit £2 2s.

NOVEMBER 13.—**Cleethorpes.**—SCHOOL.—For erection of a secondary school for girls for the Lindsey C.C. Mr. S. Maudson Grant, Director of Education, Education Offices, Lincoln. Deposit £2 2s.

NOVEMBER 13.—**Dewsbury.**—EXTENSIONS.—For extension of kitchen at Staincliffe Institution, for the B.G. Mr. E. T. Tunnicliffe, Clerk to the Guardians, Union Offices, Wellington-street.

NOVEMBER 13.—**London, N.1.**—REMEDYING DAMPNESS.—For remedying dampness in Flats Nos. 2 and 3, Park House, Holly Park, Crouch Hill, N., for the Metropolitan Borough Council of Islington. Mr E. C. P. Monson, F.R.I.B.A., 192, Finsbury Pavement House, 120, Moorgate, London, E.C.2. Deposit £1.

NOVEMBER 13.—**Scunthorpe.**—SCHOOL.—For erection of a secondary school for boys and girls, for the Lindsey C.C. Mr. S. Maudson Grant, Director of Education, Education Offices, Lincoln. Deposit £2 2s.

✱NOVEMBER 14.—**Horncastle (Lincs.).**—POST OFFICE AND TELEPHONE EXCHANGE.—Erection of a post office and telephone exchange at Horncastle, Lincs., for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles street, London, S.W.1. Deposit, £1 1s. (cheques payable to the Secretary).

✱NOVEMBER 15.—**Congleton.**—HOUSES.—Erection of 40 non-parlour type houses on the west end site, for the Borough Council of Congleton. The Borough Surveyor's Office, Congleton. Deposi £2 2s.

NOVEMBER 15.—**Hertford.**—HOUSES.—For erection of 24 houses, in four blocks, situated in Stanstead-road, Hertford, for the B.C. Mr. A. Baker, Town Clerk, The Castle. Deposit £3 3s.

NOVEMBER 15.—**Wallasey.**—EXTENSIONS TO SCHOOL.—Erection of the extensions to Oldershaw School, for the County Borough of Wallasey E.C. Architect's Office, Town Hall, Wallasey. Deposit £2 2s.

✱NOVEMBER 17.—**Whitehaven.**—HOUSES.—Erection of 50 houses on the Moesby Park site and 50 houses on the Thornhill site, for the B.D.C. of Whitehaven. Mr. Wilfrid J. Good, M.Inst.M.C.E., Engineer and Surveyor to the Council, Union Hall, Whitehaven. Deposit £2 2s.

NOVEMBER 18.—**West Riding.**—ADDITIONS.—(1) For erection of additional class rooms, &c., at Adwick-le-Street Park Council school; and (2) fittings required in the adaptation of Burley-in-Wharfedale Town school as a domestic subjects centre, for the E.C. Education Department, County Hall, Wakefield.

NOVEMBER 19.—**Bushey.**—BATHS.—For construction of an open-air swimming bath and contingent works at the King George Recreation grounds, for the U.D.C. Mr. Sydney C. Payne, Clerk to the Council, Council Offices. Deposit £2 2s.

NOVEMBER 19.—**Hornchurch, near Romford.**—FENCING.—For the supply and erection of about 494 ft. run of oak fencing at the Cottage Homes, for the Guardians of the Parish of Saint Leonard, Shoreditch. Mr. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, Westminster, S.W.1.

NOVEMBER 21.—**Lewisham.**—HOSPITAL BUILDINGS.—Erection of buildings in connection with the extension of the Lewisham Hospital, consisting of two ward pavilions, each three stories high and containing 270 beds in all, operations department, and sick nurses' wards for eight beds, and the usual offices and sanitary annexes, &c., also additions of one story on the existing lunacy wards, and sundry alterations to the same; power station and chimney shaft, disinfecting pavilion, corridors, covered ways, subways, drains, roads and paths, for the Guardians of the Lewisham Union. Mr. Louis Jacob, F.S.I., quantity surveyor, 39, Bloomsbury-square, W.C.1. Deposit £3 3s.

NOVEMBER 24.—**London.**—HOUSES.—For erection of 217 houses and administrative buildings, together with fencing, open spaces and other incidental work, and the erection of 205 houses, including fencing, open spaces, and other incidental work, with roads and sewers, at Roehampton housing estates, for the L.C.C. Mr. J. Bird, Clerk of the L.C.C. Deposit £3.

✱NOVEMBER 24.—**London, S.W.15.**—HOUSES.—Completion of sections IV and V of the Roehampton Estate, Putney, S.W.15, as follows:—Section IV: Comprising the erection of 217 houses and administrative buildings, together with fencing, open spaces and other incidental work in connection therewith. Section V: Comprising the erection of 205 houses, including fencing, open spaces and other incidental work, together with roads and sewers, for the London County Council. Architect to the Council, The County Hall, (Room No. 3), Westminster Bridge, S.E.1. Deposit £3 (payment to the Cashier).

NO DATE.—**Buckhaven.**—HOUSES.—For the excavator and brick work, joiner, plumber, slater, plaster, and painter works of 20 houses to be erected, for the T.C. Mr. Robert Leslie, Town Clerk, Municipal Buildings. Deposit £1 1s.

✱NO DATE.—**Halifax.**—TRAMWAY OFFICES.—Proposed offices, Powell-street. The building is to be five-storied, covering about 250 square yards, with an ashlar front. Tenders will be invited in the following trades:—Excavator and mason, slater and plasterer, carpenter and joiner, steelwork, plumber and glazier. The Borough Engineer, County Borough of Halifax, Crossley-street, Halifax. Apply without delay. Deposit £2 2s. (cheques payable to the "Halifax Corporation").

NO DATE.—**Hockley Heath.**—HOUSES.—For erection of eight houses for the R.D.C. Mr. Chas. H. Cook Clerk to the Council, Council Offices, Solihull.

NO DATE.—**Northumberland.**—BUILDINGS.— For erection of a house and farm buildings at Broomley, and two sets of farm buildings near Woodhorn Church, Newbiggin-by-the-Sea, for the Small Holdings and Allotments Committee. Office of the County Land Agent, 17, Claremont-place, Newcastle-on-Tyne.

FURNITURE, MATERIALS, etc.

NOVEMBER 3.—**Bexley.**—PAVING.—For supply of about 3,000 super yds. of 2 in. artificial stone paving, natural colour, and also tinted red, for the U.D.C. Mr. T. G. Baynes, Clerk to the Council, Council Offices, Bexley Heath. Deposit £2.

NOVEMBER 3.— **Edinburgh.**— MAINS.— For supply and delivery of 2,000 yds. of 6 in. spigot and socket solid drawn weldless steel mains, for the T.C. Mr. A. Grierson, Town Clerk, City Chambers.

NOVEMBER 3.— **Llandrindod Wells.**— PIPES.— For supply of pipes for water-mains, for the U.D.C. Mr. D. C. Davies, Clerk to the Council, Town Hall.

NOVEMBER 4.— **North Cornwall.**—PIPES.—For supply of about 2,500 tons of cast-iron pipes, and for delivery of the same at stations on the Southern Railway, between Camelford and Wadebridge, for the Joint Water Board. Mr. J. Pethybridge, Clerk to the Joint Board, Mount Filly, Bodmin. Deposit £2.

NOVEMEER 5. — **Southend-on-Sea.** — PIPES. — For supply of approximately 150 tons of 18 in. cast-iron pipes and special pipes, for the T.C. Mr. H. J. Worwood, Town Clerk, Municipal Buildings, Clarence-road. Deposit £2.

NOVEMBER 6.— **Waterfoot.**— WIDENING.—For materials required in the widening of a bridge at Edgeside-road, Waterfoot, for the Rawtenstall B.C. Mr. James Whalley, Town Clerk, Town Hall, Rawtenstall. Deposit £1.

NOVEMBER 10.—**Blackpool.**—CEMENT.—For supply and delivery of 4,500 tons of Portland cement, for the Fylde Water Board. Mr. Geo. F. Atkinson, Engineer, Sefton-street, Blackpool.

NOVEMBER 10.—**Dublin.**—STEELWORK.—For supply of steelwork for bridges, for the Midland Great Western Railway of Ireland Co. Mr. E. H. Taylor, Acting Secretary, Broadstone Terminus. Charge 4s.

NOVEMBER 11.—**Dundee.**—PIPES.—For supply of approximately 70 tons of 4 in. internal diameter and 90 tons of 6 in. internal diameter cast-iron pipes, with turned and bored joints, for the Water Commissioners. Mr. George Baxter, Jun., A.M.I.C.E., Engineer and Manager, Waterworks Engineer's Office.

NOVEMBER 15.—**East Sussex C.C.**—GRANITE.—For the supply of materials: (1) granite: (2) granite, binding gravel and sand. Mr. F. J. Wood, Assoc.M.Inst.C.E., County Surveyor, County Hall, Lewes.

ENGINEERING, IRON AND STEEL.

NOVEMBER 3.—**Sydney, N.S.W.**—BRIDGE SPANS.—**For metal work for superstructure of bridge at Tom Ugly's Point, for Department of Public Works, Sydney. Dept. of Overseas Trade, 35, Old Queen-street, S.W.1.**

NOVEMBER 5.—**Kingston-on-Thames.**—TANKS.—For construction of two concrete humus tanks and the necessary concrete channels, timber sluice gates, &c., and a small pump house at their sewage works, for the T.C. Mr. H. A. Winser, Town Clerk, Municipal Offices. Deposit £1 1s.

NOVEMBER 5.—**Salford.**—STEELWORK.—For structural steelwork and steel casement windows required in the Old People's Homes, Stott-lane, Hope, for the B.G. Mr. E. H. Inchley, Clerk to the Guardians, Poor Law Offices, Eccles New-road.

NOVEMBER 5.—**Tooting.**—BRIDGES.—For erecting steel fire escape bridges and incidental works at Tooting Bec Mental Hospital Extensions, Church-lane, Tooting, for the Metropolitan Asylums Board. Mr. G. A. Powell, Clerk to the Board. Deposit £1 1s.

NOVEMBER 6. — **Darlington.** — STEELWORK. — For supplying and erecting the steelwork required in the construction of a filter house at the Darlington Waterworks, Tees Cottage, for the B.C. Mr. Hy. G. Steavenson, Town Clerk, Houndgate, Darlington.

NOVEMBER 6.—**Dunsfold.**—BRIDGE.—For erection of a steel girder bridge, for the Hambledon R.D.C. Mr. Hugh A. Merriman, Clerk, 138, High-street, Guildford. Deposit £1 1s.

NOVEMBER 10.—**Eston.**—BRIDGE.—For construction of bridge over the L.N.E.R., Eston Branch, Middlesbrough to Redcar trunk road, for the U.D.C. Mr. T. Belk, Clerk to the Council, Council Offices, Cleveland House, Grangetown, S.O., Yorks. Deposit £1 1s.

NOVEMBER 20.—Chile.—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W. 1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

NOVEMBER 1.—**Chapel-en-le-Frith.**—PIPES.—For providing, laying and jointing about 863 lin. yds. of 4 in. and about 967 lin. yds. of 6 in. earthenware and about 116 lin. yds. of 3 in. cast-iron pipes, together with the construction of the necessary inspection chambers, manholes and other works, for the R.D.C. Mr. L. Jagger, Clerk to the Council, Council Offices. Deposit, £3.

NOVEMBER 1.—**Hunslet.**—FOOTPATH.—For works required in the construction of a kerbed and flagged footpath on the Leeds and Selby main road, between Halton and Whitkirk, for the West Riding C.C. Clerk of the C.C., County Hall, Wakefield. Deposit, £1.

NOVEMBER 3.—**Blaydon.**—ROADS.—For the making up of 600 lineal yds. of roads at Bleach Green, Winlaton, for the U.D.C. Mr. J. H. Mulcahy, Clerk to the Council, Council Offices.

NOVEMBER 3.—**Bournemouth.** — MAKING-UP. — For making-up Vicarage-road, Moordown, for the B.C. Mr. F. P. Dolamore, Borough Engineer and Surveyor, Town Hall. Deposit £1 1s.

NOVEMBER 3.—**Mytholmroyd.**—IMPROVEMENT.—For works required in the widening of Todmorden and Halifax main road at Hawksclough, for the West Riding C.C. Clerk of the C.C., County Hall, Wakefield. Deposit, £1.

NOVEMBER 3.—**Settle.**—WIDENING.—For works required in the widening of Lancaster and Richmond main road at Burton-in-Lonsdale, for the West Riding C.C. Clerk of the C.C., County Hall, Wakefield. Deposit, £1.

NOVEMBER 4. — **Corringham.** — WIDENING. — For widening and reconstructing with reinforced concrete Lampitts-road, for the Orsett R.D.C. Mr. H. Wright, Clerk to the Council, Council Offices, Grays.

NOVEMBER 4.—**Ealing.**—PAVING.—For laying artificial stone paving on various footpaths, for the B.C. Mr. Geo. E. Brydges, Town Clerk. Deposit, £1 1s.

NOVEMBER 4.—**Rochester.**—SEWERS.—For construction of stoneware pipe sewers and other relative works, for the City Council. Mr. A. Kennette, Town Clerk, Guildhall. Deposit, £5 5s.

NOVEMBER 5.—**Birmingham.**—WIDENING.—For the reconstruction and widening of Bristol-road between Pebble Mill-road and Edgbaston Park-road, for the City Council. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2.

NOVEMBER 5.—**Cardiff.**—REPAIRS.—For street improvement works in Ferndale-terrace, Rhoose, in the parish of Porthkerry, for the R.D.C. Mr. M. Warren, Clerk, Park House. Cardiff.

NOVEMBER 5.—**Houghton-le-Spring.**—ROADS.—For making-up of certain streets at New Herrington and Herrington Burn, for the R.D.C. Mr. W. W. Plews, Clerk to the Council, Council Offices, William-street, Houghton-le-Spring, Co. Durham. Deposit £2 2s.

NOVEMBER 5.—**Wembley.**—ROADS.—For making-up of Jesmond-avenue, Clifton-avenue and Stanley-road, for the U.D.C. Mr. C. R. W. Chapman, Engineer and Surveyor, Council Offices. Deposit £1 1s. each road.

NOVEMBER 6.—**Arnold.**—SEWER.—For construction of about 450 yards 9 in. stoneware foul sewer and 9 in. surface water sewer, with all necessary manholes, &c., in Thackeray's-lane and Arnot Hill-road, for the U.D.C. Mr. A. E. Morton, Clerk to the Council, Public Offices, Arnot Hill House.

NOVEMBER 8.—**Cowbridge (Glam.)**—STREET IMPROVEMENTS.—For street works and improvements at Croft-terrace, Eastgate-street, Cowbridge, for the R.D.C. Mr. W. T. Gwyn, Clerk.

NOVEMBER 8.—**Hartshorne.**—WATER.—For fixing pumping machinery, erection of engine house, laying out site, provision, laying and fixing of 6 miles of cast-iron mains, including hydrants, valves, &c., for the R.D.C. Mr. G. Farmer, Clerk to the Council, Ashby-de-la-Zouch. Deposit £5 5s.

NOVEMBER 8.—**Neath.**—SEWER.—For the construction of storm water sewers, &c., for the R.D.C. Mr. L. J. Kempthorne, Clerk, Dyffryn Chambers. Deposit £2 2s.

NOVEMBER 8.—**Newmarket.**—PIPES.—For laying about 6½ miles of 5 in., 4 in. and 3 in. cast-iron pipes, erection of water tower, and all other appurtenant works, for the R.D.C. Mr. S. J. Ennion, Clerk to the Council, Deva Chambers. Deposit, £2 2s.

NOVEMBER 8.—**Newmarket.**—PIPES.—For the supply and delivery at Dullingham of about 215 tons of 5 in., 4 in. and 3 in. cast-iron pipes, specials, valves, and fittings, for the R.D.C. Mr. S. J. Ennion, Deva Chambers. Deposit £2 2s.

NOVEMBER 11.—**Barking Town.**—SEWERS.—For work to be done and the materials to be supplied in connection with the laying of about 970 lineal yds. of 12 in. diameter and 18 in. diameter glazed ware pipe intercepting sewers, &c., for the U.D.C. Mr. H. Hargreaves, Clerk to the Council, Public Offices.

NOVEMBER 11.—**Southgate.**—SEWER.—For construction of a foul sewer, consisting of about 390 lin. yds. of 18 in. diameter stoneware pipes, with all necessary manholes, &c., in Oakthorpe-road, Palmers Green, for the U.D.C. Mr. A. E. Lauder, Clerk and Solicitor of the Council, Town Hall, Palmers Green, N.13.

NOVEMBER 11.—**Witham.**—SEWER.—For laying about 1,040 ft. of 9 in. sewer, and about 1,000 ft. of 3 in. cast-iron water mains, for the U.D.C. Mr. F. H. Bright, Clerk to the Council, Witham, Essex.

✱NOVEMBER 18.—**Hampton Court.**—ROADWAY AND PATHS.—Re-surfacing of roadway and paths at Tennis Court-lane, Hampton Court, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works. King Charles-street, London, S.W.1. Deposit, £1 1s. (cheques payable to the Secretary).

NOVEMBER 18.—**Prestwich.**— ROADS.—For making-up Albert-avenue, approximately 500 yds., and Back George-street, approximately 250 yds. Mr. F. H. Ashton, Clerk to the Council, Town Hall. Deposit £1 1s.

NOVEMBER 18.—**Rochester.**—SEWER.—For construction of about 6,390 yds. lin. of concrete sewer culvert, for the Rochester & Chatham Joint Sewerage Board. Mr. E. B. Lee, Clerk to the Board, Town Hall, Chatham. Deposit £5 5s.

✱NOVEMBER 22.—**Deal, Kent.** — EARTHENWARE PIPES.—Renewing 2 ft. diameter earthenware pipes and extending two 18 in. cast-iron storm relief outfalls, all work practically above ordinary low-water mark, for the Borough Council of Deal, Kent. Borough Engineer and Surveyor's Office, 18, Queen-street, Deal.

Competitions.

(*See Competition News, page* 668.)

Auction Sales, Tenders, etc.

✱NOVEMBER 3.—**Edenbridge (Kent).**—Messrs. C. E. Clark will sell at the Cattle Market, Edenbridge, Kent, prime new timbers and effects. Auctioneers, Beddington House, Beddington, near Croydon.

✱NOVEMBER 4.—**Brixton-hill, Lond** Messrs. Veryard & Yates will sell, wit (in rear of Calder's-row, opposite New useful building materials. Auctioneers, 3 road, S.E.27.

✱NOVEMBER 4.—**Southend-on-Sea.**—M & Pasfield will sell, at 206, London-road, Sea, the stock-in-trade of a general comprising brass foundry, japanned shelf nails, screws, &c., large quantity of e 25 standards of timber. Auctioneers, street, Oxford-street, London, W.1.

NOVEMBER 4, 5, AND 6.—**London,** Street & Lewis will include in the sale, by of the Commissioners of H.M. Works and ings, on the premises at the Government Factory, Ailsa Craig Works, Thames-ro W., a large quantity of builders' an benches, hand tools, equipment, and requ condition. Auctioneers, 21, North Audle

✱NOVEMBER 4, 5, AND 6.—**Yorkshire.**— Tindall & Co. will sell, by order of Mes & Sons, contractors for H.M. Governm reconstruction of the Catterick Camp building materials, structural steelwork, &c., huts, boilers, kitchen ranges, Auctioneers, Catterick Camp, or Melton H Yorks.

✱NOVEMBER 5.—**Beddington (near** Messrs. C. E. Clark will sell at Beddin Bridge's-lane, Beddington, near Croydo timbers and builders' effects. Auctioneer House, near Croydon.

NOVEMBER 5.— **London, E.C.2.** — Quintin, Son, & Stanley will let, by building leases for 99 years, at Winch Old Broad-street, E.C.2, building sites in London and City of Westminster. Auc Clement's-lane, Lombard-street, E.C.4.

✱NOVEMBER 6.—**Merton (Surrey).**—M ard & Yates will sell, without reserve (adjoining Wandle Bridge, opposite Hotel), useful building materials from d commodious buildings. Auctioneers,

✱NOVEMBER 10.—**Wembley** (Mid Richard J. Steel will sell, upon the premise Manor Farm (close Wembley station 200 lots of new and secondhand timber, l hut. Auctioneer, 2, Plough-terrace, So W. 5.

NOVEMBER 11.—**London, S.W.1.**—Messrs & Sons will sell, in the St. James's Estate St. James's-square, S.W.1, Lot 1, "Th country house, just off Brockley Hill, Edgw about 2½ acres. Lot 2, a high-laying mead 2¾ acres, part of which has a potential bu at Edgware; vacant possession of each tioneers, 20, St. James's-square, S.W.1.

✱NOVEMBER 12.—**London, W.2.**—Me Butcher & Co. will sell, by order of th Mr. Alfred Smart, *re* Messrs. Clements, J Ltd., on the premises in Macklin-street, W.C., the engineers' plant, machinery, tool Auctioneers, 63 and 64, Chancery-lane, Lo

✱NOVEMBER 12 & 13.—**Lower Edmon** Stanley Parkes & Brown will sell buildir at Messrs. Carter Paterson's Yard, Ball twelve o'clock each day. Auctioneers, 81(Tottenham, N. 17.

NOVEMBER 18.—**London, E.C.2.**—Mes Cooper & Co. will sell, by order of the ow longer require this section of their ext (unless previously disposed of privately more lots, the valuable freehold propert Brifco, Ltd., at Ashtead, on an enclosu 17 acres of land, mainly walled in, and co extensive modern blocks of buildings, machinery. Auctioneers, 35, Old Jew E.C.2.

NOVEMBER 18.—**London, S.W.1.**—Mes & Sons will sell, at the St. James's Estat St. James's-square, S.W.1, freehold buildi as No. 70, Drayton-gardens, South Kensi a frontage of about 64 ft., and containin about 6,600 sq. ft. Auctioneers, 20, St. Ja S.W.1.

✱NOVEMBER 18 and 19.—**Middlesex.**— G. Gulliver will sell, by order of Messrs who are retiring from business at the prem End, Middlesex, No. 259, High-street, t the valuable stock, plant, and machinery merchant and saw mills, stock of timber. 45, High-street, Ponders End, and 318, Edmonton, N.9.

Public Appointmer

NOVEMBER 3.—**Wilts.**—Architectural required in the County Architect's Office County Council. Mr. W. L. Bown, C County Council, County Offices, Trowbri

NOVEMBER 4.—**London, N.15.**—Clerk required in connection with the Totten scheme, by the Tottenham District Reginald C. Graves, Clerk and Solicitor t Town Hall, Tottenham, N.15.

NOVEMBER 4.—**Walsall.**—Clerk of W for housing schemes by the County Boro Walsall. Mr. J. Taylor, M.Inst.C.E., Boro and Surveyor, Council House, Walsall.

NOVEMBER 4.—**Walsall.**—Temporary Assistant required in the Borough Engi veyor's Department by the County Boro Walsall. Mr. J. Taylor, M.Inst.C.E., Boro and Surveyor, Council House, Walsall.

✱NOVEMBER 8. — **Burnley.** — DRA Draughtsman (temporary) required im building and constructional work (at lea employment), in the Borough Engineer by the County Borough Council of Burn Engineer and Surveyor, Burnley.

POSED NEW BUILDINGS & OTHER WORKS.*

ese lists care is taken to ensure the accuracy of the information given, but it may occa- happen that, owing to building owners taking the responsibility of commencing work ans are finally approved by the local authorities, "proposed" works at the time of n have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. District Council; R.D.C. for Rural District Council; E.C. for Education Committee; Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for f Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

N.—Plans passed by the T.C.:—Electric se, Rettie's-court, Broad-street, for the ewspapers, Ltd., per Mr. A. H. L. M'Kinnon, ungalow, Hilton-street, for J. Bisset & Sons, r. William E. Gauld, architect; two bunga- mar-place, for Mr. W. J. Anderson, per wse & Allan, architects; two bungalows, d and one in Woodstock-road, for Mr. D. nd Mr. W. M'Donald; two bungalows, oad, for Mr. Alfred A. Smith, Newlands, . Sutherland & George, architects; five Gray-street, for Mrs. Kate Third, per Mr. erland, architect.

Y EDGE.—Plans have been approved for to the Council offices, garage and stables, o cost £800.

ON.—The U.D.C. has approved plans for the 46 houses at Hirst.—The Council has accep- der of Mr. A. M. Jackson, of Newcastle, for n of 14 houses on the Milburn-road site, at £6,624.

NDER-LYNE.—A lay-out has been prepared n of houses by the Corporation on the West

SUTTON.—The West Riding E.C. proposes with the scheme for the erection of a school, mated cost of £12,500.

RY.—It is proposed to build a new institute lub in connection with Holy Trinity Church

Plans for a new building, to cost about cted in brick with a tiled roof, have been y Mr. W. Ernest Hazell, F.R.I.B.A., of 5, square, London, W.C.1.

—A £60 000 scheme for the provision of new or the Queen Elizabeth Grammar School is ideration. It is proposed by the Hertford- to erect a domestic handicraft centre.

RLE.—Croyde Bridge is to be widened at £370.

—The U.D.C. has received an application Barry Garden Suburb Building Society for in the erection of 108 houses.

ROKE.—Plans passed: Banking premises , Market-place, for Lloyds Bank, Ltd.; London-road, for Mr. W. Millar; bungalow, Estate, for Mr. W. Miller; bulk spirit depot, oods-yard, for Shell-Mex, Ltd.

:—The Middleton Estate & Colliery Co., lodged plans with Leeds T.C. showing the of the Company for railway siding and eas in connection with the development of ning Dewsbury-road.

EAM.—The U.D.C. has instructed its Committee to go into the question of the of hospital accommodation for infectious

HAM.—The Birmingham Public Works and ning Committee sanctioned contracts for houses at Shaftmoor Farm, Hall Green, and Estate, Washwood Heath.

OL.—The Corporation is seeking powers H. to borrow further sums of £182,226 for ction of sea defence works at Bispham and re, and £81,527 for the lay-out of the estate t side of the promenade at South Shore. ed: New streets off Lytham-road, for J. A. and others; new streets, Brierfield-avenue, nwood; two houses, Briercliffe-avenue, for ley; two bungalows, Alexandra-road, or Pilling France & Co.; two houses, Cleator- r C. Hodgson; six houses, Abbey-road, for ker; house and garage, Leamington-road, for bungalow, Burgate, for H. Walton; stables e, Boothby-road, Blackpool Co-operative d.; two houses, Harrise-avenue, for Nuttall three houses, Layton-lane, Threlfall, for Whiteside; seven houses, Warbrick Hill- Calder-road, for W. Yates; six houses, venue, for R. Lancaster & Sons, Ltd.; three spham-road, for R. E. Fogg; two houses, venue, for Mrs. W. Fletcher; bungalow, Lay or W. Carew; two houses off Whitegate-drive, Cardwell; two bungalows, Little Bispham- Dawson & Fielden; four houses, Crosland- Hogarth & Pollard; three houses, Phyllis- Seddon & Eckersley; house, Boothroyden, stanley; two houses, Sidney-avenue, for T. house, Preston New-road, for Potts & Pick- houses, Durley-road, for J. Hodgkinson; two . Romney-avenue, for J. Todd; four houses, -gardens, for J. A. Shepherd and others; four lifax-road, for E. R. Grimshaw; two houses, venue, for —. Metcalfe; four houses, Hawes Rider, six bungalows, Roseacre, for A. bungalow, Roseacre, for —. Ainsworth; six . Roseacre, for —. Harrison; 16 houses, May- e, J. W. Clarkson; four houses, Stopford- . Walton; additions of Gorse-road, Park tension 27, Cavendish-road, for W. Denton; Angers Hill-road, for —. Cartmell; six gar- Hawthorne-road, for A. E. Williams; four gar- nemouth-road, for G. Francis; new streets, ew-road, for Atherton & Kerfoot; new street gh-road, for Mrs. Robinson; house, St. road, for H. Hargel; house, New-road and e-road, J. Cocker, Ltd.; two bungalows off road, for Miller & Cockerham; six houses, rive and Collinwood-avenue, for E. Armitage.

—Fifty-nine plans for about 80 houses have been approved by the Building Plans Committee.

BLAYDON.—The U.D.C. are waiting sanction from the M.H. to commence with the erection of 46 houses at Highfield and 62 at Bleach Green.—Plans passed:— 78 houses for Consett Iron Co. at Tongue Burns Farm, Chopwell.

BOLTON.—Plans passed by the T.C.:—J. Edgar Paiton, two houses, Bromwich-street; W. Gornall & Sons, Ltd., 28 houses, Forton-avenue; Geo. Temperley & Son, for six houses, Rydal-road; A. S. Woods, house, Ainslie-road.

BOURNEMOUTH.—Commencement has now been made with the work of clearing the Belle Vue site, near the pier approach, for the £170,000 pavilion which is to be erected.

BRADFORD.—The architects for the reconstruction of the banking premises for The Bank of Liverpool & Martins, Ltd., at the junction of Manningham-lane and Marlborough-road, Bradford, are Messrs. B. D. Fairbanks & Son, Bradford.

BRIGHTON.—Important structural alterations, including the extension of the landing-stage, are shortly to be put in hand at the West Pier.—It is proposed to erect and equip a sugar beet factory, at a cost of £500,000. —A scheme for lighting and heating at the mental hospital, estimated to cost £17,500, has been prepared.—The Housing Committee is seeking the sanction of the M.H. to the erection of 210 houses on the Queen's Park site.— The Town Clerk is to inquire if the T.C. has power to purchase or establish brick-works, and if the Corporation may do so the B.S. is to report as to the practicability of the proposal.— The T.C. has now obtained Parliamentary powers for the acquisition of properties for the establishment of a market on the Marshal's-row site.—Plans passed: 23 houses, Mafeking-road, for Mr. G. Ayling; house, Hangleton-road, for Mr. A. E. Porter; new premises, Western-road, for Westminster Bank, Ltd.; house and shop, Franklin-road, for Mr. R. Mitchell; 10 houses and shops, Ditchling-road, for Mr. A. W. Parker; alterations, "Star and Garter" Hotel, for Messrs. Clayton & Black; alterations, Morton's Hotel, Queen's-road, for Messrs. Edlin Bros.; house, Retreat estate, for Mr. E. Howarth.

BRISTOL.—The T.C. proposes to acquire the Merchant Tailors' almshouses, in Merchant-street, for accommodation for the Weights and Measures Department.— It is proposed to proceed with the provision of additional shed accommodation at the docks, at a cost of £56,000.—It is proposed to acquire land for playing fields for schools in the St. George's district.—A site is being secured at Sea Mills for an elementary school for 1,000 children.

BURNLEY.—It is proposed to erect 56 houses on the Palace House Estate.

BUSHEY.—The U.D.C. approved plans:—Two houses, Melbourne-road, for Messrs. W. Henry & Sons, and a pair of semi-detached houses, Hillside-road, for Messrs. W. & A. Farren.

CAMBRIDGE.—T.C. passed plans:—Three pairs of houses, Milton-road, J. R. L. Bennett; house, Haig-road, C. W. Walker; house, Haig-road, C. W. Lamming; house, Milton-road, W. F. Layton; house, Millington-road, T. R. Parsons; house, Milton-road, P. D. Smith; house, Milton-road, J. J. Butterfield; two pairs of houses, Harvey Goodwin-avenue, W. Boyton; house, St. Andrew's-road, Edith M. Kirby.

CARLIFF.—The Buildings and Sites Committee resolved to make application for sanction to borrow a further £10,000 subject to the approval of the B.E. for building the Viriamu Jones School at Mynachdy. Sanction has already been obtained for £34,146.

CARNARVON.—The Aber swing bridge is to be strengthened at a cost of £1,220.

CHELMSFORD.—The B.S. has been asked to prepare plans for the extension of the library and museum buildings.—The scheme for a new health department building has been deferred at the request of the M.H. to prevent diversion of labour from housing.—Plans passed: Two houses, Victoria-street, for Mr. F. Cousins; house, Finchley-avenue, for Messrs. W. Fincham & Son; 18 houses, Bishop's-road, for Messrs. Golding & Hadler; six houses, Moulsham-street, for Mr. T. Letheren; house, Galleywood-lane, for Miss Lewis; three houses, Sandford-road, for Messrs. Wray & Fuller.

CHESTER.—The T.C. passed plans on the Curzon Park estate: House, Mr. Frankish; house, Mr. E. L. Jepson; house, Mr. J. W. Dickson; house, Mr. J. W. Dickson; house, Mr. G. Perry; house, Miss A. Jones; house, Mr. F. A. Owen; house, Mr. E. Fazey; house, Mr. L. Cook; house, Miss Totty; pair of houses, Mr. Evans.—The M.H. has given formal approval to the Council's preparing a town-planning scheme for an area of 84 acres situate within the Tarvin R.D.C.

CHORLEY.—The R.D.C. have decided to employ direct labour on the reconstruction of Staniforth-lane, Cuerden.—The B.G. have approved plans for a proposed new mortuary at the Eaves-lane Institution.

CHRISTCHURCH.—The T.C. agreed that application be made to the Public Works Loan Board for a further instalment of £3,000 in respect of the Barrack-road housing scheme. Plans passed:—Mr. Ponchard, two shops, Barrack-road; house and shop, Mr. Stacey, Stour-road; and Mr. S. Tizzard.

COLNE.—A site is to be acquired by the T.C. in Colne-lane for the erection of public sanitary conveniences, with the provision of a dwelling-house for the caretaker, estimated to cost £2,500.

COLWYN BAY.—The U.D.C. has decided to apply for powers to extend the construction of works on the promenades and foreshore, which includes the construction of boat jetties at Rhos-on-Sea and Old Colwyn; the lengthening of existing jetties; the construction of steps or landings off the promenade seawall; provision of open-air swimming pools or bathing lakes, and a canoe lake for children; laying out the railway embankment as ornamental gardens.

COULSDON.—The U.D.C. has asked the Recreation Ground Committee to consider the provision of an open-air swimming bath.—Plans passed: Twelve houses, Chipstead Valley-road, for Mr. W. Cottage; 10 shops, Chipstead Valley-road, for Mr. Cottage; four houses, Woodmansterne-road, for Mr. J. Hayward; house, Red Down-road, for Mr. S. Baxter; house, Starrock-road, for Mr. C. Stiles; house, The Drive, for Mr. W. Gower; house, Howard-road, for Messrs. Thomas & Son.

DARTFORD.—The U.D.C. is to obtain tenders for the erection of a further 28 houses.—Plans passed: Streets on Baldwyn's estate, for Mr. F. Stedman; dairy, Havelock-road, for Mr. C. Hunt; house, York-road, for Mr. J. Vallins; house, Watling-street, for Mr. Woodgate; house, Havelock-road, for Mr. C. Purnell; bungalow, Havelock-road, for Mr. H. Elliston.

DAWLISH.—The Devon E.C. is considering the reconstruction of the Council schools.

DUBLIN.—Plans approved by the Corporation: Seafield-road, house, Mr. J. J. Irwin; Wellington Quay, Temple Bar, new premises, Messrs. Castelloe, &c.; May-lane, cottage, Messrs. J. Jameson & Sons; Seafield-road, two houses, Messrs. Hallinan & White; Killester Park, shop, Mrs. Morgan.

DUKINFIELD.—The T.C. has been instructed to make inquiries of the Minister of Health as to constructing four- to six-room houses in rows on central plots in the town.

DUNGANNON.—The U.D.C. has decided to accept a tender of £2,480 for the erection of five dwellings in Park-road, and another tender of £1,660 for four houses in Milltown-street. The Ministry of Home Affairs have sanctioned a loan of £3,800.

EAST BARNET.—The U.D.C. approved plans: Four semi-detached houses, Cat Hill, for Messrs. W. C. Leak & Sons; five houses, Brookhill-road, for Mr. W. S. Jackson; bungalow, Crescent-road, for Mr. T. C. Powell; house, Cedar-avenue, for Mr. W. H. Palethorpe; four houses, Park-avenue, for Messrs. G. Daniels & Sons; and two semi-detached houses, Lyons-down-avenue, for Mr. F. A. Leak.—The Council approved the surveyor's plan of a public convenience proposed to be erected at Cat Hill. The cost will be £430.

EASTBOURNE.—Plans prepared by the B.S. for alterations and additions to the electricity works and office buildings have been passed.—The Compton Estate have approved the principle of turning the houses in Victoria-place into shops.—Messrs. Raper & Fovargue notify the intention of their client, Mr. J. T. Wenham, to develop St. Anthony Hill Estate by erection of houses.—In connection with the Victoria-drive site the Eastbourne Builders' Association is being invited to meet the Housing Committee to discuss the erection of houses.—Messrs. H. Boots & Sons, Ltd., have offered to erect 200 concrete houses at or near the Crumbles.—The T.C. adopted a scheme to improve the Grand Parade bandstand accommodation at an estimated cost of £30,000. The scheme comprises a semi-circular concrete structure built over the foreshore to accommodate 5,000 people.

EDINBURGH.—The Dean of Guild Court approved plans: Miss I. Cochrane, bungalow, Dreghorn-Loan, Colinton; A. Forbes, bungalows, Queen's-road, Blackhall; F. A. Kinnear, bungalow, Queensferry-road, Davidson's Mains; H. D. Swan, bungalow, Alnwick-hall-road, Liberton; and the City Corporation to erect an electricity sub-station in East Colinton.

FLINT.—The T.C. approved plans for offices and messrooms at the Castle Works for Messrs. Courtaulds, Ltd.; two houses on Brick Yard Ground for Messrs. Jones & Davies; three houses on Chester-road, for Messrs. Nicholson & Williams; two houses on Northop-road, for Messrs. Foulkes & Jones; house in Little London, for Mr. Benjamin Prescott.

FOOT'S CRAY.—Work will commence in the spring on a proposed new hall in main road for the local branch of the Independent Order of Oddfellows. A building of brick construction, with a roof, supported on steel principals, of asbestos-cement slates, is planned, to accommodate about 500 persons. There will be a large concert hall, with dressing-rooms, and a stage, fire-proof bioscope room, club and committee rooms, bar, kitchen, offices and lavatories. The architect is Mr. Stanley G. Pettman, of Eastview, Sidcup Hill, Kent.

GATESHEAD.—The T.C. has obtained the sanction of the M.H. to borrow £818 for the purchase of land for the re-housing of dispossessed tenants under the Canon-street improvement scheme.—The sanction of the M.H. has been secured to a loan of £5,310 for subsidy purposes in respect of 59 houses to be erected on the south side of Inskip-terrace.

GOLBORNE.—Application is to be made by the D.C to the M.H. for the provisional approval to the erection of 20 type A non-parlour houses by the Legh Estates (Lancashire), Ltd.—Plans approved: Sub-station in Silcock-street, for the Lancashire Electric Power Co.; workshop in Heath-street, for Mr. N. Eckersley.

GRAYS.—The U.D.C. on recommendation of the Housing and Town-Planning Committee, have decided to ask the M.H. for sanction to build 300 houses, including the 50 already sanctioned under a previous scheme. The Council also resolved, on the recommendation of a Special Committee, to purchase a section of land on the Grays Hall Estate for housing purposes.

GUILDFORD.—The B.S. has submitted alternative plans for the suggested lay-out of 34 acres being purchased at Farnham-road.

HARPENDEN.—The U.D.C. passed plans for two detached and two semi-detached houses, Park-hill, Mr. J. Catton.

HARWICH.—The Borough Engineer is to prepare a town-planning scheme.

*See our List of Contracts, Competitions, etc.

HAYDOCK.—Lancashire Higher Education Sub-Committee recommend the adoption of plans of a proposed new technical school to cost £13,702, subject to the Haydock War Memorial Committee providing £5,000.

HULL.—The M.H. has sanctioned a loan of £17,228 for the proposed new fire brigade station.—The City Architect has prepared plans for the provision of a colony to accommodate 200 mentally deficient persons.—Fresh tenders are to be invited for the erection of 200 houses.—A committee is to report as to a site for an open-air school.—A new elementary school is to be provided in the northern district.—The Education Committee is to confer with the Board of Education as to a site for a new secondary school for East Hull.—St. Paul's School is to be altered at a cost of £500.—Work at a cost of £500 is to be undertaken to remedy the flooding of the Heden-road subway.—Plans are in preparation for the pier and pontoon and of the North bridge.—A scheme has been prepared for a new street from Carr-lane to Osborne-street.—Estimates have been prepared for the scheme for widening Cholmley-street. The cost will be £32,500.

ILKESTON.—The B.S. has been instructed to prepare plans for the proposed slipper baths adjoining the Victoria swimming baths.—A committee has been appointed to consider the provision of more school accommodation.—The B.S. has prepared plans for a pavilion on the Rutland recreation ground.—Plans passed: Six houses, Corporation-road, for Mr. Cobb; house, Scarborough-avenue, for Mr. G. Walter.

INCE.—The Council intends to provide a new school at Higher Ince, to accommodate 900 children.

KINGSBRIDGE (DEVON).—The Grammar School Governors have under consideration the provision of laboratory accommodation.

KNUTSFORD.—The Bucklow B.G. are to apply to the M.H. for sanction for alterations to the women's ward at the hospital, including the provision of a verandah.

LEEDS.—Preparatory plans have been approved for the lay-out of Westwood Mount Estate.—Plans passed: Two houses, Cambridge Gardens Estate, for Messrs. Cuppleditch & Kelly: four houses, Toronto-place, for Messrs. Ford Bros.; two houses, Allerton Hall Estate, for Mr. H. Robinson; four houses, Ings-road, for Messrs. Ford Bros.; two houses, King George-avenue, for Messrs. F. Reddyhoff & Son; 34 houses, Chapel Allerton, for Messrs. Pickard & Co.; two houses, Aston-road, for Mr. William Price; two houses, Barwick-road, for Mr. F. B. Booth; eight houses, Sutherland-avenue, for Mr. John Fletcher.—The Housing Committee has approved alternative designs by Messrs. T. Morley & Sons for four blocks of two houses in Bentley-lane.—A scheme for the reorganisation and adaptation of the Kidacre-street destructor is to be carried out, at a cost of £26,500.—A committee is to report as to the need of library facilities at Beeston.—The Baths Committee has approved proposals for the erection of a gala bath in the city, and a site is to be secured for the purpose.

LETCHWORTH.—The U.D.C. passed plans. Houses in Willian-way for Building Co., for Town Planning and Garden City Estates, and Broadwater-avenue for D. C. Pearce.

LIVERPOOL.—New premises are to be erected in Church alley and School-lane, Liverpool, for the Athenæum Club, owing to their present building having been acquired for street widening. The new block will be erected on a steel framework, with a stone front, fire-proof floors, reinforced concrete foundations and staircases, landing, &c. The roof will be flat. The ground floor will provide for the principal entrance, shop and circulating library, connected with the basement. On the first floor will be the news room, 75 ft. long by 38 ft. On the second floor, library, writing and reading rooms; and on the third floor, dining room, lounge and kitchens. A passenger lift will serve all floors, whilst the premises will be heated by a central system and lighted by electricity. The architects are Messrs. Willink & Dod, of Cunard Building, Liverpool, whilst the consulting engineer is Mr. B. L. Hurst, of Craigs Court House, Whitehall, London, S.W.1.

LONDON.—The Metropolitan Water Board has approved the carrying out, at an estimated cost of £8,936, subject to the assent of the M.H., of the alterations, including the building of a new block, for the improvement of the staff accommodation at the North-Western Hospital, in accordance with the rough sketch plans prepared by the Engineer-in-Chief.—Approval has been given to the expenditure of an additional sum estimated by the Engineer-in-Chief at £250, on the erection of a new building to house the telephone exchange and battery equipment at Leavesden Mental Hospital.—The City Corporation are about to consider a scheme, involving an expenditure of nearly £20,000, for the improvement of the City of London School.—The Parish-street Workhouse (Bermondsey) is to be converted into flats.—The New-road School (Clapham) is to be rebuilt at a cost of £29,589, and a new elementary school is to be built on the Downham estate, Lewisham, at a cost of £29,543. These are recommendations of a sub-committee of the London E.C.—Application has been made to the Electricity Commissioners for sanction to the borrowing by the B.C. of £3,000 for the purchase of the freehold premises, 1 to 7, Beaufort-mews (Fulham), for the purpose of an electricity sub-station.—The City Corporation proposes to proceed with the widening of Houndsditch, at a cost of £192,000.—At a cost of £38,000 the L.C.C. Education Committee proposes to extend the Drapery Trade School premises, Marylebone.—Sixty-six houses, eight flats, and 12 houses are being erected by the Lambeth Council. The cost of the scheme is estimated at £64,400.—The Stoke Newington B.C. endorsed the appeal for an extension of the Central London Railway.—Extension of Leadenhall market is now being proposed.—A new girls' school at Tulse Hill is to be erected.

LONG EATON.—A near church for the Catholic congregation is to be erected by Father Hargreaves on a site at Ilkeston.

LOWESTOFT.—Plans passed by the B.C.: Mr. W. Breach, house, Yarmouth-road; Mr. J. W. Algar, house, Water-lane; Mr. A. M. Tunmore, house, Yarmouth-road, Oulton Broad.—Application has been made to the M.H. for sanction to borrow £930 10s. for the provision of additional accommodation at Church-road Council School.—The Borough Surveyor has been instructed to prepare a scheme for the erection of 50 houses on the Beccles-road site.

LYTHAM ST. ANNES.—To improve the Ashton Marine Park the Council is seeking to borrow £16,500.—A special committee of the T.C. is considering the provision of a maternity home.

MANCHESTER.—Plans passed by Corporation: Manchester Brewery, alterations to "Pomena Hotel," Reddish-lane, Gorton; A. Reed, alterations to 264, Viaduct-street, Ardwick; United Methodist, additions to church, Rowland-street, Beswick; W. Dyson, Ltd., additions to works, Howarths-street, Bradford; A. Large, alterations to 143, Hyde-road, Gorton; Clayton Aniline Dyes and Dyestuffs Works, Clayton-lane, Clayton; S. & J. Watts, alterations to warehouse, Portland-street; H. Playfair, Ltd., alterations to 126, Cross-street, Gorton; Stewart, Thompson & Co., warehouse, Aytown-street; J. Phillips, house, Chain Bar, Moston; F. Tranter, store and warehouse, Faulkner-street, Oldham-road, Miles Platting; R. Brawton, house, Charlestown-road, Blackley; Lloyd's Packing Warehouses, offices, Water-street, Manchester; Manchester Temperance Hotel Co., Ltd., alterations and additions to Deansgate Hotel, Deansgate; Car and General Insurance Co., Ltd., alterations to 36, John Dalton-street; Union Bank of Manchester, Ltd., alterations to 130, Oldham-road and Hulme Hall-lane, Miles Platting; E. J. Churchman, additions to workshop, Brampton-street, Newton Heath; Wright & Green, Ltd., alterations to warehouse, Cannon-street, Tipping street, Greenwood, and back Tipping-street; W. Major, three houses, Poolfield-road, Blackley; T. Fogarty & Co., six houses, Bennett-road, Polygon-road, and Eaton-road, Crumpsall; S. Wilson, four shops, and houses, and two houses, Waterloo-road and Barrow Hill-road, Cheetham; T. H. Crawshaw & Son, workshop, Longdon-road and Prestgage-street, Gorton; Davis Building, Ltd., alterations to 49, Booth-street East and Higher York-street, Chorlton-upon-Medlock; A. Morgan, alterations to 662, Stockport, Rusholme; E. Williams, house, Pine-road and Parkfield-road, Didsbury; Threlfall Brewery Co., Ltd., garages at Talbot Hotel, Mauldeth-road and Ladybarn-lane, Withington; C.P.A., Ltd., engraving shop, Printworks-lane, Levenshulme; W. A. Seaton, shop and garage, 68, Plymouth-grove, Nelson-street and Hyde-place, Chorlton-upon-Medlock; W. & H. Pownall, alterations to workrooms, Stockport-road, West Gorton; W. A. Muir, alterations to 45 and 57, Stockport-road, Ardwick; H. C. Law & Son, alterations to printing works, Rusholme-road and Boundary-street East, Chorlton-upon-Medlock; F. C. Hayes, two houses, Daisy Bank-road, Rusholme; R. G. Lambert and C. A. Walker, two houses, Annan-road, Withington; F. Stapleton, four houses, Wilmslow-road, Didsbury; H. Pimpblott, three houses, Barnham-avenue and Lindsay-road, Burnage; Western Engineering Disposal, Ltd., four shops and houses, Fog-lane, Didsbury; H. M. Henry, 15 houses, Levenshulme; H. M. Henry, 103 houses, Levenshulme; S. & E. Clough, 13 houses, Calverley-avenue, Burnage; F. J. Parsons, 20 houses, Rusholme; house, Morvale-road, Chorlton-cum-Hardy, C. Macintosh & Co.

MARGATE.—The T.C. approved preliminary site plan of a new church at the junction of Eastern Esplanade and Devonshire-gardens, received from Messrs. Reeve & Reeve.

MARKET HARBOROUGH.—The surveyor has been instructed to prepare plans for 25 houses of the parlour type, and 25 houses of the non-parlour type for the U.D.C.

MARSHLAND.—The R.D.C. has decided to ask the Ministry to sanction the erection of houses at Emneth, 10; Outwell, 10; Terrington St. Clement, 12; Terrington St. John's, 6; Tilney All Saints, 6; Tilney-cum-Islington, 6; Tilney St. Lawrence, 4; Upwell, 12; Walpole St. Peter, 16; West Walton, 12; Marshland Fen, 6.

MERSEY.—Messrs. Lever Bros. have entered into a contract with Messrs. Kirk & Randall, of Westminster, for the construction of a dock and reclamation walls.

MIDDLESBROUGH.—The Housing Committee has received offers from local builders to erect 50 houses, at £412 each.

MIDDLETON.—West Riding C.C. has prepared a scheme for altering the farm buildings at the Middleton-in-Wharfedale sanatorium, at a cost of £1,400.

MONKSEATON.—The Whitley and Monkseaton U.D.C. has passed the following plans: Lay-out of portion of West Farm, for Mr. R. J. Hogg; 12 houses, Caldwell-lane, for Mr. R. J. Hogg; four houses, West-road, for Mrs. Hodgson; two houses, Eastfield-avenue, for Mrs. Hodgson; six houses, Dene-crescent, for Mr. R. Oxnard; bungalow, Grange Park, for Mr. Lancaster; four houses, Queen's-road, for Mr. R. Oxnard; house, Holywell-avenue, for Mr. R. R. Tait; house, Uplands, for Mr. W. Wray; house, Grange Park, for Mr. W. J. Rex; house, Monks-road, for Mr. C. E. Hellaby; house, Uplands, for Mr. T. Chrisp.—The Surveyor is to negotiate regarding plans for reconstruction of the Priory ball-room and skating rink, for the Priory Cafe Co.

MONMOUTHSHIRE.—The Blackwood Miners' Welfare Council is to embark upon a scheme involving expenditure of £27,000. The scheme is divided into three parts, viz. (1) an institute and library, to cost approximately £9,500; (2) a public hall, estimated cost, £8,500; and (3) swimming baths, estimated cost, £9,500. Sites are being acquired.

MUSSELBURGH.—The Dean of Guild Court granted warrant for the conversion of the lower portion of a billiard saloon in Bridge-street into a picture house, to accommodate 400 persons.

NEW MALDEN.—Plans passed by Maldens and Coombe U.D.C.: Eight houses, Eton-avenue, for Mr. E. Hayes; six houses, Albany-road, for Messrs. Bailey & Dudley; 4 houses, South-lane, for Messrs. Robertson & Morgan; two houses, Elm-road, for Mr. Sheridan; house, Park-view, for Mr. B. Thomas.

NEWPORT (I.O.W.).—The B.S. is to repo erection of 16 houses on the Trafalgar Esta

NEWPORT (MON).—H.M. Office of Works take work to preserve the old Newport further work to the structure is to be by the Corporation.

NEW QUAY (CARDIGAN).—The U.D.C assented to the erection of such a building, has been made to the Electricity Commi Mr. T. Daniel, electrical engineer, Church-s Quay, for sanction to the erection of a station at New Quay, near to Francis-stre

NORTHFLEET.—Plans passed: Two hou avenue, for Messrs. Dagnall Bros.

NOTTINGHAM.—The Corporation has ma tion for powers to borrow £4,500 for the p a public washhouse on a site adjoining t swimming bath at Radford.

OKEHAMPTON.—The Devon County Arch revise plans for re-modelling the Council s

OLDHAM.—Plans approved by the T.C.: son, six houses, Vigo-street; Gartside & houses, Fleet-street; Hawthorne & W. & Ltd., 10 houses, Langham-road; R. 4 houses, Vicarage-street; The Corpora amended plan for new higher standard cem Ward-street.

OTLEY.—The Commissioners of His Office of Works propose to erect a new exchange and post office. Plans and spe have been prepared by the Architect's D London, and tenders are shortly to be inv contractors for the building construction

PETERBOROUGH.—The T.C. is considering t of 16 houses at the junction of Grange-roa

PLYMOUTH.—The T.C. have approved the Lady Astor's to purchase of ten acres of land Gould for the purposes of the Astor Trust. Lady Astor are to provide £20,000 to be u trust for the acquisition of ten acres of land Gould; the erection and maintenance of ho acquisition and upkeep of Batter-street C Social Centre and Institute.—Sanction of th borrow the sum of £1,600 for the conversion stone Barracks for housing purposes has been and also the borrowing of the sum of £90,4 erection of 200 houses by J. W. Spencer Prospect.

PORTSLADE-BY-SEA.—The Steyning East R prepared a town-planning scheme for a certa the district, including Hangleton and Port

PORTSMOUTH.—The T.C. propose erecting 100 houses.

PREESALL.—Plans passed by the Fylde Sir L. Parkinson & Co., brickworks, Poulton Carleton; Hogarth & Pollard, pair of house New-road, Marton; J. Taylor, two pairs of h one house and shop, Preston New-road and avenue, Marton.

PRESTON.—The war memorial of the Parish Samlebury, is to take the form of a lych gat J. A. Seward, architect, has been instructed t a plan.

PRESTWICH.—New stores for the Co-Society are to be erected in Bury New-ro transformer sub-station in Rectory-street enlarged by the Salford T.C.—Plans pass houses, Russell-street, for Mr. W. M'Gough; Polefield-road, for County Construction Co., cliffe; house, Scholes-lane, for Mr. W. Bell Nursery-road, for Mrs. M. Hyde; house, road, for Miss Lomas.

RAWTENSTALL.—The B.E. have approved posals of the E.C. for a central school at Edg

REIGATE.—The R.D.C. recommended the of the South Metropolitan Electric Tra Lighting Co., for erection of a sub-station triangular piece of ground adjoining Chur Walton-on-the-Hill. The Highways Committ mended the erection of a house for the lo foreman at the highway depot at Kingswoo approved: House, Outwood Common-road E. Illman; four houses, The Chase; house drive, for Messrs. R. Costain & Sons; Green-lane, for Mr. G. King; house, Waterh for Mrs. Wilkinson; bungalow, Green-lane, S. C. H. Kinge; four cottages, Nutfield-Mrs. Blatcher, Messrs. H. Cook, T. Farley. Pair of cottages, main road, for Mr. Luke Pa

ROTHERHAM.—The T.C. are about to invit for the reconstruction of the famous Chantr upon which the Chapel of Our Lady st conjunction with the reconstruction of the new river wall is to be built and street The total estimated cost is £90,000, towar the M.T. will contribute £40,000.

ROTHWELL.—The U.D.C. propose to accep for the erection of 36 houses. The M.H. tioned a loan of £13,684, which is the estim of the scheme. The surveyor to the R. been authorised to prepare lay-out plans erection of 262 houses at South Kirby.

ROWLEY REGIS.—The U.D.C. have received to proceed with the erection of a further 47 ho the sites at Tividale, Rowley, and Black He

ST. HELENS.—Plans of 96 houses to be private enterprise at Sutton, St. Helens, by th Housing Schemes Co., were approved by the Committee.

SEAFORD.—The surveyor to the U.D.C. pared a plan of the proposed new fire stati estimated cost is £1,435. Plans were appro

SELBY.—Further tenders are to be invite construction of the bridge across the cana

SHEFFIELD.—The Watch Committee ha a deputation, with the City Architect, to v towns, to inspect modern police stations.— Architect has been instructed to put in han at the Queen's-road car sheds.

SHENFIELD.—Mr. Frank Copeman has g

(*Continued on* p. 702.)

PRICES CURRENT OF MATERIALS

g to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

	£ s. d.
1,000 Alongside, in River Thames up to London Bridge.	
ks	4 3 6
rd Stocks	3 18 6
00. Delivered at London Goods Stations.	
t	£ s. d.
ross	2 13 3
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rbridge Fire brick :—	
.....	8 11 0
RICKS—	
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and	
Glazed	
rs ..	23 0 0
.....	22 10 0
Bull- 4½in.	
.....	29 10 0

Quality, £1 per 1,000 less than best. Cream £2 extra over white. Other colours, Harl 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

s. d.		s. d.
1. super	2 1	3 in. per yd. super 2 11
„	2 6	4 in. „ 3 6

	s. d.	
llast	10 6	per yard.
nd	14 9	„ „
el Sand	15 6	„ „ delivered 2 miles radius Paddington.
ngle for Ferro-	14 0	„ „
„	15 0	„ „
n Brick	10 6	„ „
.....	7 6	„ „

delivered in London area in full van loads.

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d Specification Test £2 18 0 to £3 3 6
ngside at Vauxhall in 80-ton lots.
per ton extra on above 0 10 0
ent 4 8 0
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nd Blue Lias Lime 2 4 6
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cks are charged 1s. 9d. each and credited t returned in good condition within three carr. pd.

e Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

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E—delivered in railway trucks at s. d.
rne Park, Paddington, G.W.R., or nbeth, G.W.R., per ft. cube 2 9½
elivered in railway trucks at Nine & S.W.R., per ft. cube 2 11½

STONE—
Whitbed, in random blocks of 20 ft.
e, delivered in railway trucks at Elms, L. & S.W.R., South Lambeth n, G.W.R., and Westbourne Park, ington, G.W.R., per ft. cube 4 4
delivered on road wagons at above s, per ft. cube 4 5
nsebed, 3d. per ft. cube extra.
ld. per ft. cube extra for every foot over *average*, and ½d. beyond 30 ft.
OOD STONE.
red at any Goods Station, London.
om blocks, up to 10 ft. cube. Per ft. cube 7/-
locks from 10 ft. and over „ 17/-
sides ..... „ 27/-
e or four sides ..... „ 32/-

NE, BLUE—*Robin Hood Quality.*

	s. d.
red at any Goods Station London.	
two sides landings to sizes under per.) ..... Per Ft. Super	5 6
d two sides, ditto ..... „	6 0
wo sides slabs (random sizes) „	2 3½
½ in. sawn one side slabs sizes) ..... „	1 6½
in. ditto, ditto ..... „	1 4
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andom blocks ..... Per Ft. Cube	6 3
two sides landing to sizes (under per.) ..... Per Ft. Super	5 1½
d two sides ditto ..... „	6 1½
wo sides slabs (random sizes) „	2 10
ditto. ditto „	2 1½
ced random flags .. Per Yard Super	9 0

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in London Area in full van loads, per ft.
m, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

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GOOD BUILDING DEAL.

per stan.	Inches.	per stan.
.... £32 0	3 × 6	£23 0
.... 28 0	3 × 11	28 0
.... 26 0	2 × 11	28 0
.... 26 0	3 × 9	25 0
.... 24 0	2½ × 9	26 0
.... 23 0	3 × 4½	24 0
.. 21 0	3 × 4	24 0

PLANED BOARDS.

.... £34 10	1 × 9	.... £32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
¾	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
¾	16/6
¾	20/-
1	25/-

Inches	BATTENS	s. d.
¾ × 2		2 6 per 100 ft.

SAWN LATHS.

Per bundle				0	2 6
Dry Wainscot Oak, per ft. super, as inch	0	2 0	to	0	2 6
¾ in. do. do.	0	1 6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1 9	to	0	2 6
Cuba Mahogany	0	3 0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per cube	0	14 0	to	—	
American Whitewood planks, per ft. cube ..	0	12 0	to	0	14 0
Best Scotch Glue, per cwt.	4	10 0	to	—	
Liquid Glue, per cwt. ..	4	7 0	to	5	10 0

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24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
Hip and valley tiles (per dozen) { Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
„ Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in...	13 10 0
⅜ in.	14 10 0	⅝ in. to 2½ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes. All sizes.	Fittings. ½"&up.	¾"to1" inclusive.	Flanges ½"&up.	1"to1" inclusive.
Black Gas....	50 %	47½%	60 %	57½%
Blue Water ..	45 %	42½%	55 %	52½%
Red Steam ..	40 %	37½%	50 %	47½%
Galv'd Gas ..	35 %	32½%	45 %	42½%
„ Water.	32½%	30 %	42½%	40 %
„ Steam	22½%	27½%	40 %	37½%

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. „	1/9½	1/4	2/0½
3 in. „	2/1½	1/8	2/5½
3½ in. „	2/6½	1/11½	2/10½
4 in. „	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. „	3 6½	2 5½	3 3½
3 in. „	4 2½	2 8	4 0½
3½ in. „	4 7	3 3½	4 8½
4 in. „	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. „ „	6 3	6 8	11 4
5 in. „ „	7 6	11 6	18 2
6 in. „ „	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..	13 10 0
Hoop iron, basis price	16 10 0	..	17 10 0
„ Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g....	14 10 0	..	15 10 0
„ „ „ 24 g....	15 10 0	..	16 10 0
„ „ „ 26 g....	17 10 0	..	18 10 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 0 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..	21 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..	22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..	24 0 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
	20 10 0	..	22 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)			

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	47 10 0
Pipe in coils	48 0 0
Soil Pipe	51 0 0
Compo pipe	54 0 0

NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 2s. per cwt. extra and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton	£34 10 0	.. —
Do., ex country, carriage forward ..... per ton	£35 10 0	.. —

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1½ in.	1¾ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1½ in.	1¾ in.	2 in.	3 in.
6 lbs. P. traps ..	33/-	41/-	56/-	101/- per doz.
6 lbs. S. traps ..	35/-	45/-	66/-	126/-

COPPER—	£ s. d.	
Strong Sheet ....per lb.	0 2 3	.. —
Thin „ .... „	0 2 4	.. —
Copper nails .... „	0 2 3	.. —
Copper wire .... „	0 2 4	.. —
TIN—English Ingots ..	0 2 6	.. —
SOLDER—Plumbers' ..	0 1 2	.. —
Tinmen's	0 1 4	.. —
Blowpipe	0 1 5	.. —

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes .....per gallon	0 4 2
„ „ „ in barrels .... „	0 4 4
„ „ „ in drums .... „	0 4 7
Boiled „ „ in barrels .... „	0 4 7
„ „ „ in drums .... „	0 4 10
Turpentine in barrels ..... „	0 5 7
„ „ in drums (10 gall.) .. „	0 5 10
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	57 0 0
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered	79 5 0
Red Lead, Dry (packages extra)....per ton	47 10 0
Best Linseed Oil Putty.....per cwt.	0 19 0
Filocol .....per cwt.	0 15 6
Size, XD Quality .....ton.	0 3 6

[*Continued on next page.*]

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds .....10½d.	
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d. 21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d.,21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Ocean c Arctic, Stippolyte and small and large Flemish white..	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak.....	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water).....		0 12 0
Brunswick Black.....		0 7 6
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine.....		0 9 0
Cuirass Black Enamel.....		0 7 0

PROPOSED NEW BUILDINGS

(*Continued from p.* 700).

Essex C.C. a site for the erection of a hostel for the County High School.

SHERINGHAM.—The U.D.C. approved plans: Two houses, The Rise, Messrs. Rice & Sons.

SLOUGH.—The U.D.C. has bought the Clock House and the Red Lion for the purpose of pulling them down and widening the west end of High-street, and ultimately erecting new offices.

SOLIHULL.—The R.D.C. proposes erecting houses as follows: Baddesley Clinton, 6; Balsall, 8; Barston, 4; Elmdon, 4; Lapworth, 12; Olton, 20; Shirley, 14; Tanworth, 32.

SUNDERLAND.—The E.C. recommended the T.C. to proceed with the building of the Bede Boys' School and the Bede Girls' School, each holding a minimum of 600 scholars, at a total cost of £132,000. The site for the schools is on the Durham-road.

THORNE.—A new secondary school is to be erected upon a site selected at the corner of St. Nicholas-road and Church-baulk, for the Doncaster E.C. Tenders for the building work are shortly to be invited.

THORNLEY.—The Miners' Welfare Committee has let the contract for the erection of a new Welfare Hall to Messrs. Cherry & Walsh, the total cost being about £7,000.

THROSTON.—A new school is being proposed. The Borough Engineer has been instructed to submit estimates.

ULVERSTON.—The R.D.C. passed plans: Seven dwellings, Bardsea, Mr. J. K. Casson.

UNDERHILL.—The Hertfordshire E.C. recommend that about 2 acres of land fronting Mays-lane as a site for a public elementary school.

WALTHAMSTOW.—Plans passed by the U.D.C.: Sheet warehouse, British Xylonite Works, Hale End, A. G. Barton; five houses, St. John's-road, C. W. Houchin.

WARRINGTON.—The T.C. approve plans: Three houses, Cambria-place, for the Fire Engine Committee. —A preliminary estate plan, prepared by Messrs. R. & S. Smith, for the laying out of land adjoining Alder-lane for the erection of approximately 500 houses, was approved, subject to certain minor alterations.

WARWICK.—The T.C. has had tenders for the erection of 41 houses on the Emscote site and recommends acceptance of the offer of Messrs. Standbridge & Parker to erect nine non-parlour type houses. Tenders for the further 32 are being considered.—Plans passed: Extensions to foundry, for Emscote Foundry Co., Ltd.; house, Beauchamp-road, for Mr. C. Gould.

WEST HARTLEPOOL.—The T.C. approved plans: W. Pearson & Son and C. V. Sutton, pair of bungalows, Eltringham-road; W. Manson, pair of semi-detached houses, Grantham-avenue.

WIGTON.—The R.D.C. approved plans: Bungalow Mr. Kilpatrick, at Hawkrigg House.

FIRE.

WALTHAM ABBEY.—Damage estimated at between £30,000 and £40,000 was caused by a fire to the premises known as the Waltham Abbey Flour Mills, occupied by Messrs. Stoddart & Hansford.

STAINED GLASS PAST AND PRESENT

AN account of an interesting window, the east window of Holy Trinity Church, Goodramgate, York, has been written by Mr. John A. Knowles, with all the knowledge and appreciation which we associate with his work; but more than this, the author includes a refreshing freedom from that almost superstitious worship of the past which so disguises its real value; this value depending not on any fortuitous and abstract considerations, but on the examination of the work and methods of the artists of that time. These we do not always find to have been perfect at all, nor is the work any the worse for that; on the contrary, it is only in this way that we can really give reasoned appreciations of the great qualities which their work included. When Mr. Knowles lays bare certain little peccadilloes in their methods of work, we begin to hope that the appreciation which we rightly bestow on their work may be estimated on the realities of its qualities as against those superstitiously bestowed. The account of this window includes very interesting particulars in regard to the subject matter, the heraldry, the technical approach, &c., and on all these different matters the writer contributes valuable information. In regard to the supply of glass at this date (*c.* 1470) we are told there was a serious shortage: "The reason for this state of things is probably to be found in the dependent position in which English glass painters were placed in having to import practically all their glass from overseas, and, in the case of York, to a large extent through the Hans factory at Hull."

While the particulars furnished about the subject matter of this window include particulars from which we learn about the life of the time, of the Guilds, of the derivation of subjects from foreign sources, and so on, they at the same time point to the necessity for amplifying pictorial representation with further subject matter. This renaissance of subject matter is a necessity in the recovery of a vital tradition for stained glass, which should grow out of our own life as well as that of the past. Nor are we prepared to accept the view that mediæval glass, in the twelfth, thirteenth and fourteenth centuries, reached a culmination beyond which it cannot go. The limits of any art are no less than those of the human mind, which ever renews itself in further interpretation where the creative impulse is free and healthily employed. Art grows out of the past, but does not live on it; on the contrary, in such ways only it droops and dies. Stained glass, like any other art, is always at the beginning in the hands of the true artist, and in this sense all the best things have yet to be done. The character of this renewal would seem to depend on the extrication of the art from its mere survival as tied to tradition, both in treatment and subject matter, f least part of art that can be learn hands of the artist it can never only we must look for the expansion of an so malleable and delightful from the which his own first-hand intimacies c will no doubt reveal to us. He will the past, but will not be its depend his own life, endowment and experie tribute as the finest flower of his wo

NEW LONDON SH ROOMS

WE illustrate on this page showing a portion of the Baths and Section of the new showrooms Nicholls & Clarke, Ltd., ma and merchants of building materia High-street, Shoreditch, E. 1. gressive firm has now added some 30 ficial feet of floor space to their al showrooms and warehouse, which no of the largest displays of builders' r central London, situated, as they are, Liverpool-street Station. We recen opportunity of looking over these pren it is difficult to think of any buildi which is not to be seen. There are l of fireplaces, baths, lavatories, ran closets, &c., in a variety of pleasing suit all purses and purposes; whil large assortment of door furnitur down-pipes, and similar items, sho that nobody would leave these without finding exactly what h A special feature is made of tile which are to be seen in many differe and shades; and of the "Marlow," fire-place and hearth, which Messrs. Clarke are shortly putting on the m addition to their own products, practi proprietary fire-place on the marke seen here. The completeness with extensions to the premises have be out will be realised when it is said th have their own workshops and fo

Such a large showroom must, of co adequate facilities for despatching customers, and for this reason a loa has been provided with a length o from which nine lorries or vans can simultaneously. A yard adjoining t has also been acquired for the storag of iron and stoneware pipes. With the for holding large stocks and rapid de firm claim that, when required, any be delivered within the London area day as ordered. Architects, builders, interested in building materials and invited to call and inspect these at any time.



A Corner of Messrs. Nicholls & Clarke's New Showrooms.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
ng and throwing or wheeling and filling carts, nd carting away to shoot—6 ft. deep	per yard cube	11	6
f in clay	" "	1	0
or every additional depth of 6 ft.	" "	0	6
ng and strutting to trenches	per foot super	0	5
to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
nd cement concrete in foundation 1 to 6 ..	per yard cube	35	0
f in underpinning in short lengths	" "	7	6
f in floors 6 in. thick	" "	3	6
f in beams	" "	4	0
f aggregate 1 : 2 : 4	" "	10	0
or hoisting not exceeding 10 ft. beyond the rst 10 ft.	" "	3	3

BRICKLAYER.

		£	s.	d.
ed brickwork in lime mortar and Fletton ricks	per rod	30	0	0
f in stocks	"	7	10	0
f in Staffordshire blues	"	22	0	0
f in Portland cement and sand	"	2	0	0

FACINGS.

		s.	d.
for facing in English or Flemish bond for very 10s. per 1,000 over the price of the com- on bricks	per ft. super	0	1¼

POINTING.

		s.	d.
flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
only to the price of ordinary brickwork :—			
xternal in half brick rings	" "	0	10
in stocks	" "	1	9
ed and gauged jointed in putty camber or gmental	" "	0	6

SUNDRIES.

		s.	d.
course in double course of slates breaking oint and bedded in Portland cement	" "	0	1
g ordinary register grates and stoves	each	1	0
g kitchener, including forming flues, &c., ith all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
nch horizontal damp course	per yard sup.	4	3
quarter-inch vertical damp course	" "	9	0
on flats in two thicknesses	" "	6	6
fillet	per foot run	0	3
g and fillet 6 in. high	" "	1	3

MASON.

		s.	d.
tone templates fixed	per foot cube	12	6
tone sills fixed	" "	21	6
tone and all labour fixed	" "	10	6
nd stone fixed	" "	19	6

SLATER.

		s.	d.
16 in. × 8 in. 3 in. lap, including nails....	per square	72	9
20 in. × 10 in. Do. Do.	"	80	9
24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
amed in plates	per foot cube	5	3
Do. joists	" "	5	9
Do. roofs, floors and partitions	" "	6	3
Do. trusses	" "	8	3

		¾"	1"	1¼"	2"
ough close boarding	per sq.	38/-	44/-	50/-	80/-

		s.	d.
entering for concrete floor, in- uding struts or hangers .. "		50	0
to beams	per ft. sup.	1	0
s for arches	"	1	6
boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
dges shot	per sq.		49/-	58/-	67/-
ongued and grooved	"		54/-	65/-	72/-
natchings	"	45/-	55/-		
ed skirting, including back- gs and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
d-a-half moulded sashes or casements	per foot super	1	10
Do. Do. Do.	" "	2	1
r fitting and fixing	" "	0	4
ased frames with 1 in. inner and outer inings, 1½ in. pulley stiles tongued to linings, rd wood sills with 2 in. moulded sashes in uares double hung, double hung with pul- ys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
anel square framed	per ft. sup.	2/1	2/4	2/6
anel Do.	"	2/5	2/8	2/11
anel moulded both sides	"	2/8	2/11	3/2
anel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/8	1/9	2/0
Deal shelves and bearers	"	1/5	1/7	1/10
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run.	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	"	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
6 in. barrel bolts	8½d.	Rim locks	2/4
Sash fasteners	11½d.	Mortice locks	5/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	17	0
Plain compound girders	"	20	0
Do. stanchions	"	23	0
In roof work	"	28	0

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints ..	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do. ..	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	63	0
Do. Do. in flats	"	61	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft run.	0	6
Soldered seam	" "	1	6
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/1	1/9	1/11	3/5	4/2	
Do. service	"	1/8	2/2	2/7	3/10		
Do. soil	"						7/6
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints ..	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15 4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	2
Do. Do. Sirapite	" "	2	4
Do. Do. Keen's	" "	3	3
Add sawn lathing	" "	1	5
Add metal lathing	" "	2	3
Portland cement screed	" "	1	10
Do. plain face	" "	3	0
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	5
26 oz. Do	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do 2 coats	" "	1	2
Do. 3 coats ..	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	"	1	2
Preparing for and hanging paper	per piece	2/- to 4/-	

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A ge of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the

information given on this page is copyright.

NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

PARTRIDGE & GUEST, LTD. (200,855). Registered October 6. Powke-lane, Old Hill, Staffordshire. Brick, tile, pipe and earthenware manufacturers. Nominal capital, £10,000.

G. POTTON & SONS, LTD. (200,862). Registered October 6. 46–50, Gainsford-street, Bermondsey, S.E. Builders and contractors, &c. Nominal capital, £10,000.

FRANK A. ELLIS, LTD. (200,592). Registered September 24. Stone mason and builders' merchant. Nominal capital, £4,000.

DORE, HARTELL & Co., LTD. (200,687). Registered September 26. 43, Richmond-road, Montpelier, Bristol. General contractors, builders, &c. Nominal capital, £600.

WM. PARRY & Co. (BANGOR), LTD. (200,664). Registered September 26. 23, Farrar-road, Bangor, North Wales. Builders and contractors, &c. Nominal capital, £500.

WAKEHAM BROTHERS, LTD. (200,764). Registered October 1. Builders and contractors. Nominal capital, £25,000.

CAMPBELL BROTHERS, LTD. (200,738). Registered October 1. 28, Albert Embankment, Lambeth, S.E. Builders, decorators, &c. Nominal capital, £2,500.

J. & T. RHODES, LTD. (200,873). Registered October 3. Builders, joiners, hauliers, builders' merchants, and contractors. Nominal capital, £2,000.

J. P. Y. BUILDERS' SUPPLY, LTD. (200,947). Registered October 11. 39, Whitehall Road, Gravesend, Kent. Builders, builders' merchants, &c. Nominal capital, £1,000.

PATENTS

APPLICATIONS PUBLISHED.*

221,001.—A. Fahim: Crushing-mills.

221,017.—Dr. O. Schmidt and Dr. M. Hahnle: Method of producing a hydraulic cement and artificial stones for bituminous shale-slag.

206,169.—J. A. Kammerdiner: Jars for use in rotary well drilling apparatus.

221,135.—E. Kjde: Grabs on the single-rope system.

221,144.—G. Bennet: School desks.

221,148.—J. Kenyon: Guard for domestic fire-places.

221,149.—J. Smith: Sliding window sashes

221,235.—L. G. Nicoll: Decorated or ornamented woodwork.

221,286.—J. M. Ambrose: Shuttering support for concrete floors.

221,288.—E. Pollard & Co., Ltd., and E. Pollard: Dust-excluding devices for sliding sashes and doors.

221,292.—Indented Bar and Concrete Engineering Co., Ltd., and R. L. Bendall: Construction of concrete roads, tracks, paths, buildings, tanks, and bridges.

221,293.—F. Reddaway & Co., Ltd., and W. C. Gardiner: Feed belts or aprons of machines for manufacturing asbestos-cement sheets.

221,295.—E. C. R. Marks (Deutsche Gluhfaden-Fabrik R. Kurtz und Dr. Ing. P. Schwarzkopf Ges): Method of producing plates from refractory metals.

221,309.—W. Wallbank: Sash window fastenings.

221,342.—A. P. Laurie: Preservation of stone.

221,348.—J. Reid: Hand-operated cranes.

221,355.—E. W. Simpson and Valentine & Sons, Ltd.: Process for producing decorative effects on surfaces.

221,441.—P. A. Schols: Doors for buildings.

221,477.—W. H. Baxter, Ltd., and W. H. Baxter: Machinery for granulating, crushing and screening stone and ore.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

TRADE NEWS

A very complete account of the growth of the asbestos industry from 1871 to 1924 is contained in a 28 page booklet issued by Messrs. Bell's United Asbestos Co., Ltd., of 59½, Southwark street, S.E. 1, manufacturers of "Poilite" and "Everite" asbestos-cement sheets, slates, tiles, &c.

The October issue of Messrs. C. Baker's (244, High Holborn, W.C.) list of second-hand scientific instruments is now to hand, and, as usual, contains particulars of many instruments used in the architectural and surveying professions.

A simple type of concrete brick-making machine, known as the "Econbric" machine, is illustrated and described in a pamphlet issued by Mr. R. Orsmond, of 6, Parham-road, Gosport. It is stated to be capable of producing from 2,000 to 4,000 bricks per eight-hour day.

Messrs. Hine, Ltd., have taken offices at 145, Cannon-street, and they inform us their stocks of timber, both carcassing and joinery, are such as to allow of competition prices being quoted. Telephone No.: City 9419.

We have received from Messrs. G. L. Wilson & Co., Ltd., Tottenham, N. 17, a catalogue which covers practically the whole field of everyday sanitary ware and plumbers' brass-foundry. It is so arranged that all who possess this useful publication can insert, from time to time, new pages of prices or designs—a valuable innovation. Also extra copies of any particular page will be sent on request to Messrs. G. L. Wilson & Co.

Scottish Master Carpenters' Association.

The North-East of Scotland Master Carpenters' and Joiners' Association recently held their half-yearly meeting at Aberdeen. Mr. John Buchan, in the course of an address on the housing situation, said that looking broadly at the situation the prospects for the coming winter were none too bright. After dealing with the method of erecting a duo-slab concrete house, Mr. Buchan said it was extraordinary to note the rapidity with which these houses could be erected. There was another new system of building on the market which claimed to be both cheap and expeditious, namely, steel houses. The chief objection, however, was the cost. No one, he said, had ever suggested that a trial should be given to wood and, seeing that cheapness was the deciding factor at this time, he did not see why it should not be given a trial.

The British Empire Gas Exhibit.

The Architects' and Surveyors' Assistants' Professional Union recently visited the British Empire Gas Exhibit at Wembley.

Mr. Goodenough, in proposing "Co-operation between Art and Industry," said co-operation was the greatest need of the world to-day. Architects, in common with the gas industry, were interested in the homes of the people, as well as in institutions and factories, and between them they could do useful service for the community by providing that which was efficient as well as artistic, and by abolishing the smoke nuisance. The gas industry took pride in its work, not only because it served the individual, but they also served the civic community by the purification of the atmosphere and the nation by the conservation of coal. There was also the fact that the gas industry was helping to solve the unemployment problem by employing more people than ever before.

Mr. C. Lachlan, chairman of the executive committee of the Architects' and Surveyors' Assistants' Professional Union, in responding, said to-day the real patron of art was industry, and it was a noble work for them to combine to bring about the elimination of fog.

After luncheon at the Great Central Hotel, Marylebone, the company visited the Gas Exhibition at Wembley.

TENDERS.

Communications for insertion under this he... be addressed to "The Editor," and must re... later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisional*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications*

ARLESEY (BEDS).—For new drainage... Arlesey Vicarage, for Mr. P. H. Every. ... Stonebridge, Diocesan Surveyor, Bedford:...
E. Smith & Son ..... £...
*F. C. Phillips, Arlesey .....

AYLESBURY.—Rebuilding of the Mark... Market-square, Aylesbury, in brick with ... slated roof, providing accommodation for 7... Mr. Fred Taylor, F.R.I.B.A., architect, 7,... street, Aylesbury:—
*Webster & Cannon, Cambridge-street, ...

BARNSLEY.—For erection of 30 hou... Carlton-lane site, for the T.C.:—
*Fairhurst Bros. ..... £420 per ...

BARNSLEY.—For erection of 90 hou... Ardsley site, for the T.C.:—
*Chas. Smith ..... £420 per ...

BEXHILL.—Painting London-road Cour... for T.C.:—
W. H. Sanders £488
Kemp Bros. & Bristow 467
E. R. Payne 460
Matthews & Co. 444
D. Miles & Sons 433
Geo. F. Farnfield 427
‡E. Godwin & Sons 252

BIRMINGHAM.—For erection of (1) a... the Pigott-street site, and (2) improving ... school in Stewart-street, for the T.C. Mr. H... land, architect; quantities by Mr. Anthony...
*H. H. Crump, Birmingham:—
(1) .....£...
(2) .....

BOOTHFERRY.—For erection of a steel... approaches, for the East and West Ridi... Councils:—
*The Cleveland Bridge and Engineering Co., Ltd. .....£1...

BRADFORD.—For erection of 700 concr... for the T.C.:—
†H. Boot & Son (London), Ltd.:—Parlour type, £515; non-parlour ty...

BROMHAM (BEDS).—For residence at ... Mr. W. B. Stonebridge, architect, Bedford...
S. Foster, Ltd. .....
W. T. Revitt (Olney).....

CARDIFF.—For erection of the Viria... School, for the T.C.:—
*E. A. Bond, Cardiff .....£...

CARLISLE.—Extension of slaughter-... T.C.:—
*Joseph Bell & Son .....

CARLISLE.—Erection of transformer ... in Fusehill-street, for T.C.:—
*John Laing & Son, Ltd.

CASTLEFORD.—For improvements at ... for the U.D.C. Surveyor, H. V. Slayton:—
*H. Robshaw, Castleford.

CHESTERFIELD.—For the erection ... baths, for the Corporation, for the Haslan... holme Districts. Messrs. Wilcockson & C... tects:—
*P. & W. Anderson, Ltd. .....

CLAPHAM.—Rebuilding New-road Sch... L.C.C. Education Committee:—
J. Carmichael (Contractors), Ltd.... ...
W. Akers & Co., Ltd. .....
Holliday & Greenwood, Ltd. .....
W. Downs, Ltd. .....
G. Parker & Sons, Ltd. .....
Prestige & Co., Ltd. .....
Garrett & Son.....
G. E. Wallis & Sons, Ltd. .....
A. Roberts & Co., Ltd. .....
J. & C. Bowyer, Ltd. .....
Thomas & Edge .....
Lole & Co. .....
Thomas D. Leng .....
‡W. J. Maddison, Ltd., 124, Minories, E.1 .....

CORK.—For reconstruction of offices, ... at the Miceal Barracks, for the Commissioners ... Works:—
*Denis O'Donoghue, Cork.

CORK.—For restoration of Union Qu... barrack, for the Commissioners of Public ...
*Denis O'Donoghue, Cork.

DEWSBURY.—For erection of bounda... Ravenshouse-road to Ravens Lodge, for t...
*Roger Laycock, Dewsbury.

DOVER.—Alteration at the Isolation ... T.C.:—
G. Lewis & Sons (Dover), Ltd. ...
‡C. E. Beaufoy & Co. .....

For extension to Inver National School, ssioner of Public Works :—
y, Belmullet, co. Mayor.

E.—For works and alterations to the for the Rev. G. C. Rolfe. Mr. W. B. Diocesan Surveyor, Bedford :—
..... £650 3 0
11 & Sons 512 1 6
Furlong 478 15 0

—For painting 34 houses, for the
..... £200

.—For erection of a bridge over the for the Metropolitan Water Board :—
& Sons, Ltd. £990

—Great North-road improvement and ern Watch Estate, for the U.D.C. :—
n & Co., Ltd. £29,873

—For various work in connection with f the Dalmarnock Power Station, for the

—W. Baird & Son.... £9,474 16 9
k—Cumming & Mac-
l, Ltd. 2,298 18 10
York—Hugh Twaddle &
..... 1,635 11 3
t—W. Graydon 248 11 8
recommended for acceptance.)

—For constructing new dog kennels,
..... £456 4 6

—For erection of new banking premises al Provincial Union Banking Co. Messrs. rsfall & Son, Architects, Lord-street lifax :—
Anderson, Ltd., 199, Piccadilly, W.

—For carrying out alterations to the the Aircraft Manufacturing Co., and to mises for use as a secondary school, for E.C. Plans prepared by Mr. H. G. I.B.A., County Architect :—
..... £11,480
..... 10,786
s. 10,610
re & Sons, Ltd. 10,574
& Sons, Ltd. 10,525
..... 10,270
& Son 9,785
Ltd. 9,774
& Son 9,594
dison, Ltd. 9,307
All of London.)

covering roof of market at Corporation :—
lge Construction Co., Ltd.,
..... £1,170

for extension to the Municipal Golf Club for the T.C. :—
s. (Leeds), Ltd. £1,657

for erection of garages and blacksmith's ford-street, Hunslet :—
iss, Hunslet.

for extensions at the head electricity shall-road, Leeds, for the Leeds Corpora- y Committee. Mr. G. W. Atkinson, archi- ane, Leeds :—
er—
nson & Sons, Ltd., Leeds.

Rock Asphalte Co., Ltd., Leeds.

For erection of new head offices and en at the Health Cocoa Works, for orne & Son, Ltd. Messrs. Kitson, Parish & tects, Leeds :—
n & Co., Ltd., Leeds.

Rock Asphalte Co., Ltd., Leeds.

LEICESTER.—For extensions to the Abbey pumping station, for the T.C. :—
‡J. J. Shardlow & Co. £22,204 12 4

LINCOLN.—(*a*) For erection of 19 parlour type houses, and (*b*) 20 houses on various, for the City Council :—
*S & R. Horton & Sons, Ltd.—
(*a*) £634 each
(*b*) 614 each

LIVERPOOL.—For excavation and foundation works of Edge-lane Tramway Works, for the T.C. :—
*J. & G. Chappell £63,990

LIVERPOOL.—For the erection of the infants' section of Springwood Council School, for the T.C. :—
*J. Jones & Sons £12,590

LIVERPOOL.—For re-covering the roof of dressing pavilion at Clubmoor Recreation Ground, for the T.C.:—
*Adams Bros. £211

LONDON.—For painting and repairs to the training ship *Exmouth*, for the Metropolitan Asylums Board :—
*F. E. Smith, Purfleet £547 12 6

LONDON.—For certain roofing work at the Eastern Ambulance Station, for the Metropolitan Asylums Board :—
*C. H. Boyd & Sons, London £628

LONDON.—For building single wards to Blocks "A," "B," "C" and "D," at Colindale Hospital, for the Metropolitan Asylums Board :—
*W. S. Sharpin, Bow £2,499

LONDON.—For structural work and alterations to the laundry at the Brook Hospital, for the Metropolitan Asylums Board :—
†D. C. Bowyer, Belvedere £187 15

LONDON.—For erection of a new ambulance station at Woolwich, for the L.C.C. :—
W. Harris, Ltd., North Woolwich.. £2,036 0
J. & C. Bowyer, Ltd., Upper Norwood 1,927 0
Hill & Gurr, Bromley, Kent 1,905 0
Fred. & T. Thorne, Isle of Dogs 1,849 0
Thomas D. Leng, Deptford 1,849 0
H. Groves & Son, Greenwich 1,810 0
Douglass, Halse & Co., Ltd., Woolwich 1,780 10
W. J. Dixon & Son, Bermondsey .. 1,714 0
W. Harbrow, Ltd., South Bermondsey 1,675 0
*H. Kent, Hither Green..... 1,599 0

LONDON.—For work at Cannon-street fire station, for the L.C.C. :—
*C. P. Roberts & Co., Dalston £517

LONDON.—For adaptation of Whitefriars fire station, for the L.C.C. :—
G. E. Wallis & Sons, Ltd.. Maidstone.. £2,649

LONDON.—For erection of flats in Wood-street, S.W. Mr. Matthew J. Dawson, architect, 9, New-square, Lincoln's-inn. W.C. 2 :—
John Mowlem & Co., Ltd. £41,965
W. Colley & Sons, Ltd. 40,628
Vigor & Co., Ltd. 39,660
Higgs & Hill, Ltd. 38,888
James Carmichael, Ltd. 38,000
Rice & Son 37,777
C. Miskin & Sons, Ltd. 37,500
Prestige & Co., Ltd..... 37,339
Allen Fairhead & Sons, Ltd. 37,223
*Ford & Walton, Ltd. 36,890

LONDON.—Retaining wall at River Lea at Tottenham, for Metropolitan Water Board :—
Wilson, Lovatt & Sons, Ltd. £6,649 18 0
W. & C. French 5,570 4 7
William Press & Son 4,992 7 1
John Mowlem & Co., Ltd... 4,951 3 9
‡R. Robinson & Co. 3,570 17 1

MALDON.—Re-erection of bridge over the Chelmer Navigation, for the Essex C.C. :—
‡A. J. Arnold, Chelmsford £4,176

MANCHESTER.—Erection of school at Peacock-street, for T.C. :—
*Tinker & Young, Ltd.
In lieu of a withdrawn and accepted tender.

NORTHWOOD.—For painting 102 houses, for the U.D.C. :—
*J. C. Rackman £612

OLDHAM.—For erection of a boundary wall at the Watersheddings Recreation Ground, for the T.C. :—
*J. Spencer & Bros., Ltd.

OTTERY ST. MARY.—Rebuilding schools at King's School, for Devon C.C. :—
‡N. Pratt & Sons, Ltd. £245

PLYMOUTH.—Provision, erection, taking down and removal of a temporary suspension bridge for the Burrator Reservoir, for T.C. :—
*Orr Watt & Co. £5,275

PLYMOUTH.—For external painting of the houses on the new estates at Mount Gold, for the T.C. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices :—
*W. J. Palmer, Plymouth—
Section (*e*) £506 10
„ (*f*) 445 14
*Langworthy, Plymouth—
Section (*b*) 635 10
„ (*c*) 418 10
*Harris & Sons, Plymouth—
Section (*d*) 460 10
„ (*g*) 490 10

PORTSMOUTH.—For construction of an underground convenience at Eastney Golf Course, for the T.C. The Borough Engineer, Town Hall :—
Light Bros. & Flowers, Ltd., Portsmouth £2,051 12
Leonard Hoad, Southsea 1,757 0
Tanner Bros., Southsea 1,666 0
E. A. Sprigings, Portsmouth 1,570 0
‡John Croad, Portsea, Portsmouth.. 1,550 0

RUISLIP.—For painting 59 houses, for the U.D.C.
*J. C. Rackham £354

RUSHDEN (HERTS).—For additions to the Vicarage House, for Rev. E. F. Circuit. Mr. W. B. Stonebridge, Diocesan Surveyor, Bedford :—
Baxter & Worboys £1,280
F. Newton 1,275
Raban & Son 1,230
W. French 1,228

SHEFFIELD.—Provision of sub-station switch-gear, for T.C. :—
*A. Peyrolle & Co., Ltd. £7,130

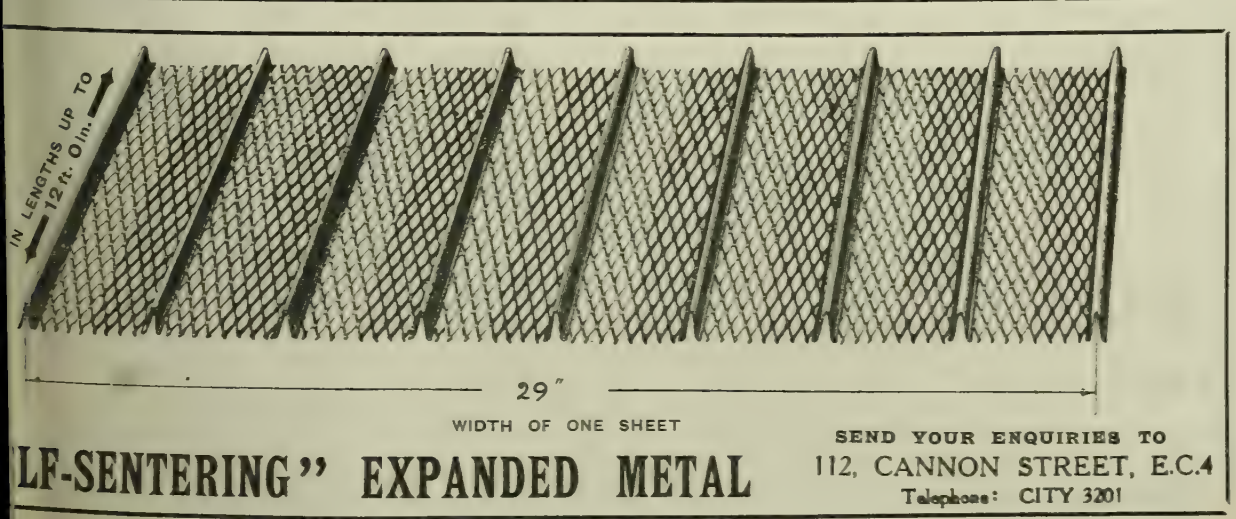
SHEFFIELD.—Erection of a screen chamber at Pond's Dam, and supplying and fixing cast-iron pipes, for T.C. :—
*T. Wilkinson & Son, Ltd. £918

SHEFFIELD.—For erection of 1,000 houses on the Manor Estate, for the T.C. :—
‡H. Boot & Son..... £461,000

STOKE-ON-TRENT.—Retaining wall for coal stores at gas works, for T.C. :—
*P. Pemberton, Tunstall..... £2,030

TAUNTON.—For the erection of a public convenience in Priory Bridge-road, for the Health Committee :—
*Spiller & Browne, Taunton £1,255

THIRSK.—For erection of a picture house :—
*Jackson & Oates, Goole



TOTTENHAM.—For alterations and additions at the high school for girls, for the E.C. of the Middlesex C.C. Plans prepared by Mr. H. G. Crothall, F.R.I.B.A., County Architect :—

Patman & Fotheringham, Ltd.	£16,821
W. Lawrence & Sons, Ltd.	16,116
G. Groves & Son	16,060
C. J. Newby & Bros.	16,050
Geo. Bollom	15,997
A. Fairhead & Son	15,993
Ferris Bros.	15,915
G. Godson & Sons, Ltd.	15,910
A. Porter, Ltd.	15,900
A. Monk	15,727
J. Stewart & Sons	15,620
W. Lacey	15,425
H. Knight & Son	15,200
‡W. J. Maddison, Ltd.	14,754

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TOTTENHAM.—For erection of new science laboratories, metal workshop and gymnasium at the County School, for the E.C. of the Middlesex C.C. Plans prepared by Mr. H. G. Crothall, F.R.I.B.A., County Architect :—

W. Lawrence & Sons, Ltd.	£5,500
Chessums, Ltd.	5,490
Geo. Bollom	5,459
G. Godson & Sons, Ltd.	5,410
A. Monk	5,282
J. Stewart & Sons	5,224
A. Porter, Ltd.	5,207
C. J. Newby & Bros.	5,198
H. Knight & Son	5,115
‡G. Groves & Sons	5,105

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TYNEMOUTH.—Further instalment of quay extension, for T.C. :—

*Sir William Arrol & Co., Ltd. .. £12,025

WARRINGTON.—For erection of three firemen's dwellings in Cambria-place, for the T.C. :—

*F. Berry

WARWICK.—For erection of nine non-parlour type houses, for the T.C. :—

*Standbridge & Parker.

WEST HAM.—For the erection of a secondary school for 250 students on a site at Cumberland-road, Plaistow, E., for the Education Committee of the County Borough of West Ham. Mr. John H. Jacques, Lic.R.I.B.A., of 61, West Ham-lane, Stratford, E.15, Architect to the Education Committee :—

Perry Bros., Ealing	£26,891
W. M. Brand, Stamford Hill	26,670
E. A. Russell, Leytonstone	26,439
A. E. Symes, Stratford	26,217
G. B. Farrar & Co., Whitechapel	26,097
Clements (Grays), Ltd., Grays	25,719
F. J. Coxhead, Leytonstone	25,026
H. Somerford & Son, Clapham	24,777
†H. C. Horswill, Forest Gate	24,720

WEST HAM.—For the erection of an open-air school for 60 children at Knox-road, Forest Gate, for the Education Committee of the County Borough of West Ham. Mr. John H. Jacques, Lic.R.I.B.A., of 61, West Ham-lane, E.15, Architect to the Education Committee :—

E. Beasley	£1,538
A. E. Symes	1,533
W. J. Clemens	1,515
J. T. Luton & Son	1,521
A. Webb	1,498
Chapman & Sturton	1,400
E. A. Russell	1,349
*H. C. Horswill, Forest Gate	1,290

WEST HARTLEPOOL.—For steel casements for 161 houses on Raby-road Estate, for the T.C. :—

*Williams & Williams, Chester £1,376 18

WHITLEY.—Completion of housing scheme for Whitley and Monkseaton U.D.C. :—

‡Calderwood, Chapman & Co., Ltd., Newcastle £11,233

WILLITON.—For repairs to roofs at the workhouses, for the B.G. :—

*J. Chibbett & Sons, Williton £557

J. J. ETRIDGE, Jr. Ltd

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

-No. 4263. NOVEMBER 7, 1924.

AD NAUSEAM

HE opinion has been expressed that everyone was tired of hearing about housing except those who wanted houses. The truth in this does not necessarily indicate the magnitude of the problem; it may merely indicate the permanent condition of ness which seems to be essential to any problem which nisfortune to develop into a political counter. Although nt election has again brought the subject prominently he public, it is difficult to believe that a sound tive policy can emerge from the ruck of political nda.

y political party has had an opportunity and none has remedy. Long ago the problem developed into a between economics and sentiment, and the claim of y to have built so many houses is merely childish when that the financial losses are only limited by the size of ing programmes. In the housing shortage lies the real , despite the fact that the politician has adroitly it with the ideas of the housing reformer. By this must be obvious that the simple problem of buildses regardless of cost is not so simple as it was appear. Cause and effect can sometimes be detected ll circle, but we deny responsibility by proving that tion is controlled within a larger circle. The truth of bvious, (and to be fair it is a reasonable excuse) when e that any political party which hazards a solution of ing problem inherits and accepts a first cause in the estriction Act. This humane Act, designed to avoid during the period of the war, has, without doubt, l results which can never have been contemplated. s from the State could have met the situation at the is certain that we have since paid a hundredfold. We at it is idle to recriminate, and we mention the matter s an excuse and partly because the remedy—or one at least—may be found in that direction. No political e are afraid, is likely to risk unpopularity by amending , even if it could be proved that the immediate hardould be worth the sacrifice for the ultimate gain. It d doubt that many people are avoiding their responsiy refusing to build, and spending their money in other s, but in fairness it must be said that a large share esponsibility must be placed upon any Government eeps up the cost of building by maintaining artificial conditions. In these matters it is almost impossible ot unfair) to make distinctions between those who are f houses and those who want them, and once embarked olic schemes of this nature it is difficult to see an end Under present conditions it seems to us that where no limit to the magnitude of the problem we might y expect our difficulties to increase.

act that the problem is so attractive to the politician ief reason that we have come to expect so little from nt. We think we are generous when we say that the nistakes which have been made in the past should be on in the light of inexperience, instead of attributing party failings or principles. We will not argue the here whether it is an economic fallacy to believe we anything from State funds, but we can at all events he principle of giving is too facile to be considered as atesmanship or to be the monopoly of any political n saying this we may appear to have contradicted since we have already stated that the simple problem and giving generously, has its complications. It is our misfortune that these complications are more serious than the problem we set out to solve.

A year or two ago the problem was clearly defined; we looked for either of two solutions. Private enterprise in building houses could not be expected unless rentals and costs of building reached an economic level. Either one went up or the other went down; and of the two it was generally expected that building costs would fall with other industries in the general deflation. And this is the crucial point in the whole problem: the costs of building would have fallen but for our housing schemes. No one, we think, disputes the fact that building costs are high, and beyond the reach of a great number of people, taking into consideration present monetary values. If we argue that rental values are not on an economic basis we can account for the scarcity of houses, but we do not explain away the high costs of building. On the contrary, the economist tells us that where there is no demand prices automatically fall and adjust themselves to the demand. No clearer instance of this can be given than the recent motor exhibition. Prices have fallen, and from all the reports we have read we gather that the demand this year constitutes a record. Arguing on these lines, we come face to face with the fact that in house building there is no general demand, but a very definite political demand which upsets the whole economic machinery. At the moment, the country is immersed in this apparently hopeless tangle, hopeless in the sense that many politicians are astute enough to see that the economic remedy follows the way of unpopularity.

The greatest burden we have inherited from the politicians is the long view which refuses to see the immediate problem, or that there is more than one method of settling it. The immediate problem is the shortage of houses, and we are given a Government housing programme extending over fifteen years, and subsidies for forty years! A policy of this nature inevitably leads to a hopeless economic condition, and the fact that costs of building have risen is as natural a result as that water should find its own level. Increases in building wages and materials are the direct results of our Government housing schemes, and the bigger the programme the more certain is the demand for higher wages. A definite building programme extending many years ahead is an economic temptation which has been proved to be irresistible.

We come to the conclusion, therefore, that so far as the politician is concerned we cannot look for any assistance where the economic remedy involves unpopularity. The most we can hope for is that he will not legislate for posterity, and will realise that the short view is the one which is potentially least dangerous. It is becoming more evident that the solution of the housing shortage and building costs is likely to depend on the adoption of substitute building materials.

We have been discussing the political view of the housing problem because it is of vital interest to the building industry, but the fact remains that we are spending hundreds of millions of public money, and the position is far from satisfactory. There is a social problem involved outside the scope of the building trade, and we believe that the workers have failed to see the chink in their armour. There is a housing shortage; there is a shortage of men in the building industry; and unemployment, generally, is rife. Costs of building are so high that only a small proportion of the nation will consent to build houses. The public has a right to be critical, and we may, therefore, take it as certain that it will support whole-heartedly any scheme which aims to supply houses quickly and cheaply.

NOTES.

Sir Aston Webb, P.R.A.

ALTHOUGH he was not present at the inaugural meeting of the new session of the Royal Institute of British Architects on Monday, as had been expected, we are glad to know that Sir Aston Webb, P.R.A., has so far recovered from the serious motor accident which he and two other eminent Academicians met with in the spring that he has been able to assume a gradual resumption of business activities. Sir Aston's distinguished career as an architect, and the many great and varied services he has rendered to the architectural profession and to the cause of architecture, called forth the widest expressions of sympathy for him in his unfortunate accident, and we are sure we are echoing the feelings of the profession in offering him hearty congratulations upon his recovery.

The President's Address.

THE form of the able address which Mr. J. A. Gotch, Hon. M.A. (Oxon), President of the Royal Institute of British Architects, delivered on Monday at the inaugural meeting of the new session, appeared to be in some measure the inevitable result of the unification controversy which finally resulted in the amalgamation of the Society of Architects with the Institute, and the determination of the Institute to promote a Bill in Parliament for the registration of architects. Mr. Gotch explained that though the Institute was founded some ninety years ago to promote the study and practice of architecture, and was a learned Society, "in the present day it is incumbent upon it to promote the interests of architects as well as those of architecture. This means a widening of its scope, an increase in the directions to which its energies may be guided: not so much a change of aim as an increase in the objects to be aimed at." This, we believe, to be a reasonable interpretation of the demand within the Institute for both unification and registration, and with the right guidance and co-operation of all members and parties there is no obvious reason why the interests of both architects and architecture should not be promoted by an increase in the activities and scope of the only society representing the profession. The Institute is pledged to promote a Bill in Parliament for the registration of architects, and the President stated that such a Committee is now engaged upon the work of preparing a Bill. The amalgamation is not yet legalised, and it has entailed a supplemental Charter, but the sanction of the Privy Council will in all probability be given within a short time.



From the Exhibition of the Royal Society of British Artists.

Windmill at Middelburg.

BY MR. HESKETH HUBBARD, R.O.I.



Head in Bronze.

MR. E. S. FRITH, Sculptor.

Council Elections.

WE give the address on p. 714, and it is unnecessary to discuss it in detail, but we cannot refrain from expressing our satisfaction, which we believe will be shared by most members of the Institute, with the changes proposed in the election of Council. "Instead of the whole body retiring every year, only one-third will do so, thereby ensuring on the whole a continuity of policy, but at the same time affording opportunity for a gradual yet complete change, should the Council endeavour to pursue a course opposed to the wishes of the general body." This, we agree, is a reform as wholesome as it is simple, and is, moreover, the method adopted by other professional bodies. The address strikes a hopeful and progressive n suggests that the Council is ful of their responsibilities and, wha have the will to face them.

Architects and Builders in Parliament.

VERY few repres of the architectu fession or the bui dustry have been to Parliament, a a few sought the honour, bu ever the cause the result is the s is to be deplored. We believe professions and industries sh directly represented in the ch lative body of the country. A when architects are proposing Parliament for registration, a Parliament has made itself, we think, responsible in the wa for the housing of the people, a and builders should take part lation vitally affecting their inte those of the nation, and it is unf that there appears to be a lack o spirited men in the profession industry able and willing to m inevitable sacrifice of time and n secure representation in Parliame such candidate, who has been is Sir Frederick Rice, and his su the Harwich division of Essex w been heard with much satisfactio many friends in the building indu elsewhere. Sir Frederick is the of Messrs. Rice & Son, building



R.A. EXHIBITION, 1924.

Head Carved in Stone.

MR. E. S. FRITH, Sculptor.

e is a past-President of the of Builders and of the London Builders' Association. He has n numerous bodies connected e building trade, and was of the 1st Cadet Battalion siliers from 1915 to 1920.

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es hi- e.

THE recent movement to interest the public in architecture has beyond doubt met with a good deal of and those who are sanguine believe that the general public day take as much interest in ire as they do in the drama encouraged by the stimulus s been given to public interest cal and modern architecture by .A., the Architecture Club, and of University Extension lectures. more might be done by means s we have little doubt, given the the lecturer to make the most bject, and the selection of the ns and districts. The indirect, direct, effect of successful public may be very great, and such to be encouraged in every way. narks are suggested by the fact rge attendance—an average of each lecture—at Sir Banister present course of University lectures on Mediæval Archi- the Central School of Arts and Perhaps the fact that the lec- had twenty-five years' experi- lecturer for the University of London may have something to do with this, but it is certainly a matter for congratulation that members of a public willing to pay fees to hear lectures on architecture are being turned away because of lack of accommodation.

Housing Policy.

WE deal in our leading article this week with the political aspect of the housing problem. No political party, we hold, has any monopoly of political idealism, but it requires great strength of character to risk a certain amount of unpopularity instead of following an unimaginative and stagnant policy with the idea of winning devotion from the masses. Every housing policy hitherto has been a hopeless mixture of economics and sentiment; they only vary in the mixture. To the economic purist a rent subsidy is of course anathema and there are undoubtedly many serious objections to a policy which only stern necessity can justify. Without a temporary measure of State assistance in some form there is not the slightest prospect of the necessary houses being built in the manner in which we have hitherto been building them. The familiar statement that "the high cost of construction is one of the fundamental causes of housing shortage" is generally accepted, but we believe that the statement would be much more accurate if cause and effect were inverted. When this point is realised by any Government we may reasonably hope to see the housing question settling itself.

An Interesting Competition.

PARTICULARS were advertised in our last issue of an interesting competition inaugurated by the Worshipful Company of Fanmakers with a view to promoting the study of modern methods of ventilation. The Company has decided to institute an annual competition, and to award its silver medal for an essay adjudged the best by the assessors, Mr. John W. Cooling, M.Sc.(Tech.), A.M.I. Mech.E., Mr. Alan E. Munby, M.A., F.R.I.B.A., and Mr. H. D. Searles-Wood, F.R.I.B.A., and have chosen as the subject for 1924–25 "The Ventilation of a Police Court." The subject is a good one of practical interest, and we hope there will be a keen competition, on inaugurating which we congratulate the Company. We are always glad to hear of cases in which the ancient Livery Companies are endeavouring to promote the art or science in connection with the industries which they represent.

The County Fire Office.

THE demolition which has just begun of the County Fire Office almost completes the destruction of the Quadrant associated with the work of John Nash. It is not much use distressing ourselves about such changes. It is another thing to assume that they are due to any architectural revival such as that of the Regency period when Nash set about to improve the metropolis. No such public spirited aim can easily be associated with the changes which are transforming Regent-street. The County Fire Office, we are told, was the only monument of the work of Robert Abraham and was possibly the best example of the revival of that time, and we can but regret its disappearance and hope that the building which is to take its place will worthily replace it. It is possible to exaggerate the merits of Regency work, which though not without attractive characteristics, cannot be said to include any very exceptional distinction when compared with other greater periods of development.

Two Heads.

THE illustrations which we give on page 708 represent two heads carved by Mr. E. S. Frith. The stone head was exhibited at the Royal Academy of 1924, and shows particularly fine and vigorous modelling, eminently suited to the material in which it is executed. The treatment of the hair is to be noted, as is also the handling of the planes of the face which, in spite of sound modelling in detail, retains considerable breadth and simplicity. The bronze head indicates a different technique, and one moreover which achieves distinction by execution in this material. The age of the old man is particularly well portrayed, and shows sound perception as well as ability.



From the Exhibition of the Royal Society of British Artists.

piperspoort, Middelburg. BY MR. HESKETH HUBBARD, R.O.I. (*See p.* 731)

GENERAL NEWS

Professional Announcement.

Mr. Alexander James Smith has taken offices at Embankment Chambers, 19, Villiers-street, W.C.2, as a constructive engineer and fireproof floor specialist.

Shrewsbury Castle.

Sir Charles Nicholson's work in connection with the ancient features of the Castle has made it possible for the main hall between the towers to be restored as in mediæval days. The hall is to be used as the Council Chamber for the borough.

Mill Hill School.

The science buildings of Mill Hill School were recently dedicated to the memory of students of the school who fell in the war. The buildings were designed by Mr. Stanley Hamp, and consist of laboratories for physics, chemistry, biology, and geography, large lecture theatres, a museum, handicraft workshops, and engineering and wireless rooms. The cost of the buildings was approximately £12,000.

South Wales Institute of Architects.

In the thirty-fourth annual report of the South Wales Institute of Architects, the President, Mr. Percy Thomas, F.R.I.B.A., states, with reference to the recent amalgamation, that the number of their members who have become corporate members of the R.I.B.A., has increased from 40 to 76. The report contains information of use to architects and others connected with the building industry in South Wales, and records the activities of the Institute during the past year.

University of London.

The Jarvis Scholarship given by the Royal Institute of British Architects has been awarded to Mr. M. A. Sission, a student in his fourth year, in the University of London School of Architecture. The Victory Scholarship of £100, given by the Society of Architects in connection with a competition for a design for a public school (illustrated in *The Builder*) has been awarded to Mr. C. H. Short, a student in his fifth year, of the University of London School of Architecture, and formerly Ronald Jones Scholar.

Booth Memorial.

It has recently been announced that the work in connection with the William Booth Memorial at Denmark-hill, London, has been entrusted to Sir Giles Gilbert Scott, R.A., and Mr. Alexander Gordon, F.S.I. Sir Giles, as consulting architect, will be responsible for the preparation of the plans, and all the necessary details relating to the architectural work will be carried out under his supervision and authority.

The scheme embraces the erection of a large training college at Denmark Hill, where the Salvation Army has acquired a large extent of land, comprising educational buildings and hostels and a large tower costing £10,000, surmounted by a beacon visible at night over a large area of South London. The approximate cost will be £200,000.

Town Planning Institute.

The ordinary general meetings for the Session 1924–5, which will be held on Fridays, at 6 p.m., are as follows:—November 14, Presidential Address, by Mr. W. T. Lancashire, M.Inst.C.E.; December 12, Bradford Town Planning Schemes, by Mr. F. Marsden, M.I.M & Cy.E.; 1925, February 13, Birmingham Town Planning Schemes, by Mr. H. H. Humphries, M.Inst.C.E.; March 13, Clayton Town Planning Scheme, by Mr. W. Carby Hall, C.B.E., F.R.I.B.A.; April 24, Bromley Rural District Town Planning Scheme, by Mr. E. G. Allen, F.R.I.B.A.; May 29, Croydon Town Planning Schemes, by Mr. G. F. Carter, M.Inst. C.E.; June (date to be fixed), Annual General Meeting.

CORRESPONDENCE

Concrete Blocks *v.* Brickwork.

Sir,—I am not financially interested in the making of bricks or concrete; but I am very much interested in the providing of the necessary thousands of dwellings for the people. Whatever may be the rival interests of brick and concrete, there is no doubt that even if everything else were plain sailing, and there were no industrial disputes, there is not a sufficiency of skilled bricklayers, work they never so hard for many years, to provide the necessary houses.

When I was in the United States I slowly and, I think, rather reluctantly became a convert to concrete. I do not believe the Americans build the special quality of house which would appeal to Englishmen, just as I am conscious that through non-scientific manufacture and a lack of the artistic sense concrete houses in England are sometimes unsatisfactory and unattractive. In such cases my opinion is that the cause is defective workmanship and limitation of knowledge of what can be done in making concrete dwellings not only useful but in a variety of colour tones which can be exceedingly pleasant to the eye.

It is a regrettable thing to say, but I am convinced that much of the objection to concrete, though happily lessening, is due to ignorance, to prejudice, and to our natural characteristic in being slow to adopt new ideas till they have been successful in other parts of the world.

In writing this I have no antagonism to bricks. All I am anxious about are the very necessary houses, whether brick or concrete. So it would not be a bad thing if the Government refused to allow great buildings, viaducts, railway stations, and such works, to use bricks, but found some other material, such as concrete, and so focus the supply of manufactured bricks in this country upon house building.

I believe the house of the future will be of concrete; but there is no reason why those who desire brick houses should be victimised because so many bricks are used in big undertakings when concrete could be used, and which has proved, for special work, to be more lasting and more efficacious than brick.

JOHN FOSTER FRASER.

11, Chelsea Embankment, S.W.3.

COMPETITION NEWS

New Offices, Nairobi.

Designs are invited for new railway offices to be erected in Nairobi, Kenya Colony. Premiums of £200 and £100 are offered respectively. Conditions can be obtained, not later than February, on the payment of One Guinea, from the Crown Agents for the Colonies, Millbank. The assessor is Mr. William Dunn, F.R.I.B.A. Sending-in day at the offices of the railway, Nairobi, February 28, 1925. (See advertisement this week.)

Barrow Hill Memorial Club.

Designs are invited for the extension of this club. The total expenditure for alterations and additions is not to be more than £4,000. No payment will be made by the trustees for drawings or plans (which will be returned) submitted, but the accepted architect will be engaged to carry out the work. Sending-in day, November 10. Particulars from the Secretary, 10, Station-road, Barrow Hill.

[Members of the R.I.B.A. are asked not to take part in this competition until the conditions have been revised.]

Jugo-Slav Competition for Landscape Architects.

The Department of the Board of Trade has received from the Legation of the Kingdom of the Serbs, Croats, and Slovenes particulars of an international competition open to landscape architects, &c., for the submission of plans designed for the elaboration of the general plan of the Toptchider Park, near Belgrade.

The prizes for the best plans submitted are as follows:—1st prize, £400; 2nd pr 3rd prize, £200; 4th prize, £150; £100.

In addition, the sum of £250 is se the purchase of designs failing to sec

Plans must be submitted to the M Agriculture and Water, rue Prole Belgrade, by December 31, 1924. the competition and plans of the pre may be obtained from the office of th at that address.

Christian Science Church, South

Designs are invited for a new ch Sunday school at the First Church Scientist, Southport. Premiums of and £30 are offered respectively. The are Messrs. J. E. Sanders & Son, A 219A, Lord-street, Southport, to whor tion should be made, accompanied by of 10s., returnable only to those wh designs.

Other Competitions.

Other competitions still open in following (the dates given are, first the date, and second the issue of *The* which full particulars were given):- Hall (May 1). Manchester Art Gallery Aug. 22). Essays on Ventilation (no in day announced; Oct. 31). Valh out (June 30, 1925; Oct. 31).

CONCRETE CHURCH

At the meeting of the Architectura tion last week (reported in our last reference was made in his paper by the Mr. H. S. Goodhart-Rendel, to a church at Le Raincy, and co interest in this building was evinced who took part in the discussion. Th which was designed by MM. Perret, is i in this issue. It is built entirely of concrete, and is notable for the larg of glass area in the walls, and the fac concrete is left as it came from the without being covered in any decoration consists of simple ornamer on the structure in the operation o the concrete by the design of the f none of the ornament was applied forms were removed, and the indent the reeded columns, &c., were fo inserting strips of wood of the requi inside the shuttering before the con poured. The church was built as a war and it was essential the cost should to a minimum, the total cost being It covers an area of 13,300 sq. ft.; th 143 ft. high. The interior columns high, and only 5 in. in diameter. walls consist almost wholly of moulding of geometric form, filled coloured glass.

The New Parliament.

Lord Balniel (U.), the elder son of t Crawford and Balcarres, was ret Lonsdale. Commander C. D. Bu whose novel method of house constr illustrated last week, was returned for Col. McDonnell (U.), of Messrs. S McDonnell, contractors, Westminste turned at Dartford. Sir Philip Pil who is the head of the firm of Pildi wick & Co., surveyors, won at S Sir Frederick Rice (U.) was returned fo Essex. Major Harry Barnes, V.-P.R. was defeated at Tynemouth. Mr. ((L.) was defeated at Salop. Mr. W pleton (U.), who is a wood-turner, wa for Banff. Col. J. Wedgwood (Lab.), of many books on archæology, was r Newcastle-under-Lyme.

Whitefriars-street New Buildi

Messrs. Allen Fairhead & Sons, Sy Enfield, Middlesex, are the builde printing works and paper warehouse to be erected at the corner of W street, for the Associated Newspap



Concrete Church at Le Raincy. MM. PERRET, Architects. (*See p.* 710.)

ADELAIDE HOUSE

By A. E. RICHARDSON.

It is not inopportune to call attention to the remarkable office building now approaching completion on the north side of London Bridge. In a few weeks it will be current news in the public press, but it is not too much to say that it has already taken its place in the scheme of the City as an outstanding example of monumental art. Here is a building reposeful in line and free from eccentricity that owes little to foreign inspiration; it is not even faintly reminiscent of anything that has gone before, either in the Old World or the New. When it is considered that copybook exactitude was attempted by the Victorians, and that during the past quarter of a century every effort has been centred on the revival of scholarship, such a novel departure from precedent cannot but have an exhilarating effect on contemporary work.

Sir John Burnet and his partners have in the new building accomplished much for civic architecture on the great scale, and have demonstrated how vital expression can be given to a building of commercial character.

Many new buildings in the City are being erected; they are mainly, so far as the public is concerned, street frontages, for it rarely falls to the lot of the average architect to deal with a block on an isolated site. When the scheme was first proposed it was thought to be a dangerous experiment to erect a building at one end of London Bridge which would dwarf Fishmongers' Hall, mask the Monument, and obscure the Church of St. Magnus. The result, as now familiar to Londoners who approach the city from the south side of the Thames more than justifies the work of the architect, whose judgment from the outset has been unerring. With two such buildings as the new Cathedral at Liverpool and Adelaide House, as well as the advance made in domestic work for the people, the signs are evident that building art in this country has a vigour and a purpose that challenge foreign competition. It would be lamentable to import the form of English buildings from Holland or Germany, or to continue to rely for inspiration obtained at second-hand.

In the past much fine work has been under the shadow of revivals, confusing both to the public and the practitioner, but it can be conceded that from the welter of conflicting opinions the desire for the new has had its birth and that to be "modern" in a legitimate sense is both sane and logical.

Viewed in the autumnal sunshine of the past few days, the new building, in its dazzling whiteness, has seemed to impart a new splendour of colour to this quarter of London. It is in marked contrast to the strong black of the granite arches of London Bridge, as it is to the silvery weatherings of Fishmongers' Hall and the towers of Wren's churches. It is a building to be seen from various points of view, first rising cliff-like from the water's edge, with the funnels and masts of steamers contrasting with the vertical striations of the stone, while mists of smoke and vapour paint the lower reaches of the Pool and add to the charm of the river perspective. It has its charm also when seen from the bridge level, to which its scale is in harmony, and from the narrow depths of Thames-street. Adelaide House owes much to its completeness and homogeneity. Whereas many London buildings are made up of small interesting parts, this new building in its expression symbolises a oneness that is its most convincing quality. It is a building of many windows, but these are contained within a series of vertical lines and form part of the general texture without loss of surface. The basement story is of granite, and the upper part, including the coved cornice, is built of dimensional stone, precisely shaped and fitted. Perhaps it is the reticence of the design combined with the subtle inclination of the main surface that aids in the effect of solidity and elegance characteristic of every part. It is a building that is neither unduly horizontal nor vertical, possessing an even balance and rhythm contrasted by the dominant cornice and the unusual width of the entrance. The work, as originally schemed, included an attic story with a secondary cornice of deep
the former set some distance from
wall. If, as it is feared, it is fou
sible under the existing building
to carry this feature into being,
will still retain its strength, and
suffer by the omission.

First impressions are generally
trustworthy. Thus it is that if the
the mass of a building makes on th
pleasing, the detail will be found cons
Adelaide House such secondary cons
as detail and ornament have a
exactly in sympathy with the ma
Every incident on this building has i
congruity. There are geometrical p
sober form to the panels between the
the cornice has scalloped flutings,
accents and terminals to the plain
are consonant with the general rhyt
work is free from abrupt contrasts
contrived as afterthoughts to the m
ment. There is also in evidence
colour sense obtained from grey gra
trasting with white stone, as well as
black polished pillars of the entry.
perhaps a little confused by the int
of a black granite inlay along the ed
the granite pillars, but this is a sm
seeming to call attention to the steel
within the solid structure of the wa
argument has been raised that the
in its lines more naturally suggest
forced concrete than a stone treatme
again, under the present system of
legislation, it is not possible to do o
obey the requirement of the civic a
for a steel structure with a facing
land stone and granite. What is mo
point is, that Adelaide House is a
example of the right handling of a co
building with due regard to monumen
which mere building without artist
ever scientifically contrived, could n
about. There is evidence, too, of sch
of rare knowledge, discrimination an
not the knowledge that is hampered
dent or passing fashion, but knowle
bined with surety of purpose and prec
ment. To the younger generation
tects, as to the public, Adelaide Ho
serve as a rallying point for the dev
of that hitherto much-despised and s
neglected branch of building designa
architecture.



Adelaide House: Entrance. Sir John Burnet, A.R.A., & Partners, Architects.

CLASS-ROOM ACOUSTICS

By HOPE BAGENAL, A.R.I.B.A.

MMON complaint in the modern hygienic om is the long reverberation arising ly from the use of hard patent floors sters. These materials, admirable for ess, present a hard smooth surface and owerful reflectors able to throw a sound rds and forwards between opposite sur- nany times before its energy is ex- . Hence syllables, the units of sound ch, are prolonged, and undesirable such as coughs or scrapes of the foot gnified. A strain is thus caused on the n of the children and irritation to the . A quiet room economises nerves. ration in a room of comparatively ize used for speech of a conversational more annoying than in a large hall, some prolonging of tones is expected owed for.

ge class-room in the nursery school of Children's House," in Eagling-road, esigned by Mr. C. Cowles-Voysey, pre- an interesting case. Cleanliness had e first and very necessary requirement, had been fulfilled. The room was bright and cheerful, and there were traps. The floor was covered with a attleship linoleum and the walls and in plaster had a hard finishing coat. e reverberation resulting from these ns caused trouble. A thick carpet on r would have absorbed the sound but also have collected dust. It was de- place an absorbent on the ceiling in m of Cabot's quilt, upon battens l by a good canvas stretched tight. It ided to make some rough practical tests and after the installation of the quilt ns of a portable bellows and three organ pipes of pitch C3 (256), C4 nd C5 (1024). These pipes gave a s less than the standard loudness on Sabine based his calculations and . The length of reverberation was d by ear upon a stop-watch, and the f a large number of readings was The tests were carried out at night, and only then in rare intervals of silence. The room in its initial state, windows closed, two persons and three articles of wood furniture present, gave on the pipes the following reverberation:—

C3, 6.6 seconds; C4, 5.6 seconds; C5, 4.4 seconds.

It was decided to place first one layer of the Cabot quilt on the ceiling, and if that was found, upon testing, to be insufficient, to add a second layer. The single layer reduced the reverberation to:—C3, 1.3 seconds; C4, 1.3 seconds; C5, 1.1 seconds.

The change was noticeable immediately on entering the room. Conversation which had been difficult was rendered easy, and it was decided that a second layer of the quilt was unnecessary. The reduction for C4 (ordinary speaking voice pitch) was from 5.6 seconds to 1.1 seconds. The canvas screen covering the quilt was distempered with a thin coat. An oil paint on the canvas would have caused it to act as a slight reflector for high notes and would thus have minimised the absorbing power of the quilt.

It is interesting to compare these results with the theoretical calculations based upon Sabine's formula, which were made from the drawings and from approximate coefficients of absorption. The volume of the room was 14,100 cu. ft., the plaster on the walls and ceiling was taken at 0.017 (or 1.7 per cent.) absorbing. The glass was taken in with the plaster; the linoleum floor was taken at 0.03 (or 3 per cent.) absorbing. Allowing for two persons present at 4.7 per person, Sabine's figure (two were required to make the practical tests and should therefore be allowed for), the reverberation for C4 from the formula $t = 0.05 \frac{V}{A}$ was found to be 7.4 seconds for the room in its initial state. This calculated figure, 7.4 seconds, is longer than that actually found on the pipes for C4 (namely, 5.6 seconds), but the pipes, as already noted, were less than the standard loudness, and the "threshold," or point of silence, was difficult to detect accurately in the practical experiment. With fifteen persons present—a normal class—the calculations showed 4.5 seconds. At the ordinary speed of sound this would mean that a noise of a scrape of the foot traversed the room backwards and forwards some eighty times before its energy was absorbed. But at the same time the room would be bright for choral music. Upon further calculations the result of introducing 1,116 sq. ft. of quilt sufficient to cover the ceiling was found to be a reduction from 7.4 seconds to 1 second. This was taking the quilt at a coefficient of 0.5 (or 50 per cent.) absorbing—a figure well on the safe side for a single layer of the material. The effect of this reduction on choral music would be to deaden and reduce tone.

An illustration is given of the ceiling completed. The quilt is more efficient if laid with an air space behind it. It consists of eel grass in a brown paper envelope, and has the advantage of being moth-proof. It is slightly resonant and appears to reinforce tones at certain pitches. This has advantages and disadvantages. There is an advantage in treating the ceiling instead of the floor owing to the fact that the ceiling presents the greatest surface at a wide angle to the speaker. This makes it more efficient either as a reflector to increase sound or as an absorber to reduce sound. In the case of the class-room the ceiling is not required as a reflector and may therefore be rendered absorbent. The following comments upon the room under the new conditions are given by some of the teachers in a letter from the secretary. "The nursery school superintendent tells me that previously the children could not hear her speaking to them a few yards away, and it was quite impossible to make anyone hear on the other side of the room. This is now all right. There is still a slight echo. The effect on singing is slightly deadening."

"Another worker who has a group of about fifty children in the schoolroom on Sundays tells me that there is no echo now. The singing is perhaps not quite so good . . . one cannot make the place ring as previously . . . but one cannot have things both ways."

The work was carried out by the May Construction Company.



View showing the treatment of the Ceiling.



ON Monday last the opening general meeting of the Royal Institute of British Architects for the 1924-5 session was held at 9, Conduit-street, Regent-street, W.

The Council Dinner.

Amongst the guests of the Council invited to dinner before the meeting were His Grace the Marquess of Northampton; The Very Rev. the Dean of Peterborough; The Earl of Crawford and Balcarres, K.T., P.C.; the Rt. Hon. Lord Charnwood; the Rt. Hon. Lord Sumner; Sir Edwin Savill (President of the Surveyors' Institution); Mr. A. J. Taylor (President of the Society of Architects); Councillor Edgar Horne (Mayor of Westminster); Sir Thomas Fermor-Hesketh, Bart.; Sir George Frampton, R.A.; Sir Ryland Adkins, K.C.; Mr. John Bond (Clerk, Kettering U.D.C.); Mr. F. T. Verity, F.R.I.B.A.; Mr. L. M. Gotch; Mr. H. G. Gotch; Mr. H. Hankinson; Mr. H. T. Bye; Mr. Basil Davis; Mr. E. J. Partridge; and Major A. F. Vigor.

Inaugural Address.

After the preliminary business of the meeting, the PRESIDENT (Mr. J. Alfred Gotch, F.S.A.), delivered his inaugural address, in the course of which he said several events of great importance to them as an Institute had happened in the world of architecture since they met at the opening of last session, and perhaps he might be allowed to refer to them in some detail, even to the exclusion of remarks upon architecture as an art. After all, architecture had to be practised by architects—in the main, at any rate—and matters which affected the well-being of architects must to a certain extent affect architecture also.

It had become necessary of recent years to readjust their views as to the aims or mission of the Institute. It was founded some ninety years ago to promote the study and practice of architecture; it was a learned society quite as much as it was an association of architects banded together to protect and promote their own interests. But since the days of its youth it had seen the number of practising architects increase tenfold; circumstances had changed in every direction; the outlook of the world was different. Almost every conceivable occupation now had its society which endeavoured to regulate not only the relations between its own members, but also the relations between its members and the public. It would be unwise, and indeed impossible, for any old-established body such as theirs to ignore this tendency, and it was necessary to recognise the fact that in the present day it was incumbent upon the Institute to promote the interests of architects as well as those of architecture. This meant a widening of its scope, an increase in the directions to which its energies might be guided; not so much a change of aim as an increase in the objects to be aimed at.

The Institute was, in fact, adapting itself to the changed conditions and had shown that it was so doing by taking its share in the recent negotiations which ended in the amalgamation of the Society of Architects with themselves. That object, which had been pursued for the last twenty years, but which, for one reason or another, had not hitherto been gained, had now been successfully achieved, owing chiefly to its intrinsic merits and partly to the goodwill displayed by both sides in their prolonged and delicate negotiations. The fusion would strengthen the Institute, especially in its relations with the public, to whom it could now speak with the voice of a united profession. On behalf of the Institute, he would welcome the Society into their ranks, and rejoiced to think that they were with them and would share the high aims which animated them and the great responsibilities which devolved upon them. They must all recognise that to forgo a separate existence was no small sacrifice, and they trusted that the sacrifice would be rewarded by the increased strength and wider opportunities which the fusion would confer.

It must not be forgotten that, however much they might have widened their borders, they adhered to the essential principle that a definite standard of efficiency must attach to membership of the Institute. They owed this to the public quite as much as to themselves; and the public might feel reassured as to their intention of maintaining a standard by the fact that their next step would be the promotion of a bill for the registration of architects after they should have passed a qualifying examination. Not only on its own merits was such a bill required, but they were pledged to its promotion by the terms of their fusion with the Society of Architects. He did not propose to go at length into this question at the moment; it had been discussed, demanded and denounced so much and so often as to leave nothing fresh to be said. But this, he thought, might be observed—that there was a strong and widespread feeling in its favour, especially among their provincial members. Difficulties there would be, especially those attaching to a private bill, but these would not deter them from pursuing their object; and a committee, formed for the purpose was now engaged upon the work of preparing a registration bill.

This successful amalgamation was the most outstanding event of the past year. It increased their membership, and consequently their funds, for which—needless to say—they should find good use; and it brought a large number of architects within reach of the help and discipline of the Institute. The amalgamation was not yet legalised; it had entailed a supplemental charter and certain changes in their by-laws, and these had to be sanctioned by the Privy Council; but the necessary steps were being taken, the process was well advanced, and as there was no opposition it should be successfully completed within a short time.

It would be within their recollection that already some two years ago they had decided to amend their by-laws, largely in matters of phraseology; the present opportunity had been taken to effect these amendments and to introduce one or two others which were of considerable importance. It had been felt for some time that their method of electing the Council was open to improvement. The need for change was not pressing in the long series of quiet and uneventful years to which some of them looked back with secret satisfaction. But when acute controversies arose, it was found that election appeals were highly efficacious in promoting the views of those who resorted to them, with the result that more than once a clean sweep was made of the old Council and an almost entirely fresh body of men were elected to sit on the new. It was generally recognised that such violent changes were undesirable, and only in less degree was it felt that keen electioneering and the attitude of mind engendered by it were not necessarily conducive to the advance of architecture as an art. So the Institute had decided to alter the method of electing its Council. Instead of the whole body retiring every year, only one-third would do so, thereby ensuring on the whole a continuity of policy, but at the same time affording opportunity for a gradual yet complete change, should the Council endeavour to pursue a course opposed to the wishes of the general body. This was a reform as wholesome as it was simple.

A second important matter was the relation of their provincial members to the government of the Institute. He used the word "provincial" from the long habit and because their headquarters were—and always have b London. At its inception, the Institu almost entirely a London affair. It wa amusing, in the light of present circum to find with what effusion the first n from outside London's cab radius we comed. But things had altered. Or another, architectural societies in pr towns, large and small, had become alli them; so had societies overseas, and present time, it is no empty boast to s on their own members and those of the societies the sun never set. The nu members practising beyond the Lond outnumbered those within it by two It would, therefore, seem possible that, i of time, it would be perfectly natura necessary to make a distinction, to s their "metropolitan" members inst their "provincial" members as th now.

But whether this slight yet significant should mature or not, it had become ve that the well-being of the Institute now depended upon the goodwill of those n who practised outside London; and equally clear that by-laws which hinde latter from voting on important issu inimical to the welfare of the body co Accordingly a greater share of represent the Council had been given to the Allied S and not only to them, but, in accordan the democratic spirit of the age, to the ates. Nor did the change end there, fo sentation was now to be given to Licen one step among several which had bee towards improving the status of that

With regard to voting, take one instanc Hitherto a resolution of the general bod only be passed at a meeting held in Lon was not difficult to imagine the trouble pense entailed upon members living in th of Scotland, Wales or Ireland, if they f strained to come up and vote; or, in th native, their annoyance at sitting imp at home while, perhaps, vital issues the balance in London. This serious di had been remedied by the establishmen certain conditions, of a postal vote.

Another matter which might have far-r effects was the permission now given members of the Institute to designat selves "Chartered Architects." This wi —and a useful step—toward registrat it was not a substitute for it; for reg would apply to all qualified architects, members of a Society or not; whereas t nation "Chartered" could only a their own members. Nevertheless, Parliament, in its wisdom, should de grant registration, the public would be protected by the opportunity afforded employing a chartered architect.

These were the most important of the which chiefly affected them, inasmuch altered and strengthened their con But there was another matter of some which had affected their well-being du last year, and that was the matter of t premises. They would recollect that a they held their inaugural meeting, an of those that succeeded it, outside th Now, he was glad to say that, thanl skill of their honorary secretary, th able to meet in their own building and i in which it was easy to speak, even if i pleasure to hear. But—and here cam reservation—these premises were still perfect. Their library, which he belie the finest architectural library in th was not entirely safe from the risk o was inadequately housed, and its growth would before long compel the large its boundaries. The question w complicated to be dwelt upon now; it was, and it would have to be d He need hardly add that the Council alive to the great importance of th and that it was already taking steps to out of the difficulty.

Another important event which ha in close connection with the Institut International Congress on Architectur

first of its kind. Two years of syste- reparatory work were crowned with ccess. A large number of nations in and New World were represented by their most distinguished architects hers of architecture. The lectures and n on the past, present, and future of ural education were of first-rate im- , and the complete report, which was s of preparation, would be the hand- those concerned with architectural for years to come. The exhibitions of work not only filled their galleries onshire House and Grosvenor House and gave an unexampled bird's eye what was being done by the architects mmediate future all over the world. social side the Congress was at least fruitful. Personal intercourse and discussions greatly helped to create understanding and good feeling, and uet which ended the Congress with so husiasm was one of the most successful istory. Their Board of Architectural n, and the authorities of their archi- schools had now at their disposal ody of information and doctrine to y could devote their liveliest powers of

wed a great debt of gratitude to those rd work made this Congress a success; Curtis Green (the Chairman of the o Mr. Maurice Webb (the Chairman xecutive Committee of the Congress), ll others who gave time and trouble ted measure to helping them.

their own body, by far the most g event that affected them in the pro- of their art was the appointment of l Commission on Fine Art. This act, ire, had been welcomed not only by , but by all who had an enlightened the arts. But in this, as in all reforms, ns that were too sanguine would sow of their own disappointment.

uld not abolish bad design by a stroke , although they could help to restrain e terms of its appointment, the Com- as an advisory body which could only. hen put in motion by an outside power er was with the Government and with r quasi-public bodies, who could Commission's advice or opinion on onnected with the arts as they affected . The Commission could not enforce or make its opinion prevail; it had o the good sense of those who sought But the means of drawing its attention s of public concern were fairly wide. luded all local authorities, and all l societies interested in matters relating f, therefore, some outrage on artistic lities were contemplated, it would pon the sufferers to bring to their of thinking either their own local or some reputable society having ims. This should not be difficult if the re one of real importance. This step en successfully taken, the facts of the mpanied by explanatory plans, draw- photographs, ought to be submitted to ission, which would consider them in l, if necessary, would visit the site and own inspection. The Commission en proffer its advice, which would carry great weight, although it need epted under compulsion. The public, if members of it were sufficiently l no longer stand by in impotence ie outrage on good taste was per-

the Government could always avail ie Commission's advice in any public mportant lay-out. But it must be mind that the Commission had no of its own, it could only deal with brought before it; and, supposing umber of sow's ears submitted to it, power to turn them into silk purses. n the nature of things, be largely con- h architectural matters, but of this rest assured, that it would not usurp ns of the practising architect; it would not, for instance, take on the assessorship of important architectural competitions, and this, less because such a course would unduly encroach upon the work of architects, than because the Commission would be unfitted to cope with the thousand and one details inherent in the assessing of a competition.

The withholding of compulsory powers from it, at any rate in its early life, was a wise limitation, but it would nevertheless exert a powerful influence in the formation of a sound public taste. Its preliminary steps must be taken with discretion, but it had before it, he was convinced, a fruitful and beneficent future.

One final reference to events of the last year and his survey of the past was done. They had never had a more delightful Conference than that which was held at Oxford in July. The attendance was never so large, the hospitality was never more cordial, the *locale* was never more attractive. To their provincial members, in particular, was the appeal strong. To see Oxford from within, to have the run of those ancient and beautiful homes of learning, was to most of the company a new and stirring experience, and behind all this moving of the spirit there was a soothing sense of peace appropriate to the atmosphere of leisured learning. The reception accorded by the municipal authorities and the University was flattering in the extreme, and no one who was present would ever forget that last and dignified banquet in the great Hall of Christ Church.

It was gratifying to know that the esteem in which representatives of the Institute were held by the authorities at Oxford was shared in an increasing degree by authorities of other kinds, and by citizens at large. Never had their help in important questions relating to architecture and building been more freely sought, and never had the applications for the appointment of arbitrators in building disputes been so numerous. It was recognised that the help afforded by the Institute was both wise and disinterested.

So much for the past; into the future he would not attempt to penetrate, but this they must all freely recognise—that the great controversy of the last few years having been at length settled, they could now devote their unfettered energies to matters which came home to their business and bosoms, questions connected with their practice, questions of science, questions of literature, and, above all, they could devote them to the untiring pursuit of their noble art.

The Vote of Thanks.

The Earl of Crawford, in moving a vote of thanks to the President, said the inaugural address had been in effect a review of a session which had been both remarkable and memorable, apart from the achievement of the unification of the art of the profession, or, as they might choose to call it, the unification of architects. The controversy had had to do with all classes, and it was good for the outer public to know that at length unity of outlook had been achieved by those on whom they were singularly dependant. He was sure he would not go too far in saying that architecture itself would not suffer from finding itself in the future less concerned with its domestic and internal organisation. He did not, however, think the Institute was justified in counting on the Registration Act passing into law for several years, although it might, of course, come immediately. It had been found that Bills which commanded universal sympathy from the professional and public interests concerned often took several years of Parliamentary life to come into operation. In reference to the Commission of Fine Arts, he was extremely glad the President did not take up the line of optimism—optimism was entirely out of place. There had to be twenty years of hard work before it was permissible to mention optimism with regard to the British outlook on art. The Commission was purely an advisory or consultative body, bereft of overriding or compulsory powers. It was based on the model which had now achieved security in the U.S.A. Although it would be many years before the English Commission reached a similar status, there was scope for good work here, and, as it became better known, more opportunities for usefulness.

It had been a memorable year in the history of British architecture, and he thought the success was largely owing to the sagacity, foresight, and shrewdness of the President, with the help and support of a committee working hard and strenuously for the welfare of the Institute, the promotion of its art, and the advantage of its *clientele*.

The vote of thanks was seconded by Lord Charnwood, and carried with acclamation.

The President briefly replied.

Presentation of the Street Architecture Medal.

In rising to present to Mr. Francis T. Verity, F.R.I.B.A., the R.I.B.A. Medal and Diploma, for the Best London Street Frontage in 1923, the President said, in presenting the medal to Mr. Verity, he was sure they would all admire the simplicity, soberness and dignity of the building, (Shepherd's Bush Pavilion) particularly with regard to the purposes for which it was intended.

Mr. Verity said the honour had given him fresh heart and energy. It was an appreciation of an honest endeavour to achieve something, and a sympathetic understanding of the difficulties which had to be overcome in the erection of the building, that gave the award such a special significance. There were very real difficulties by reason of the locality in which the building was placed. The practicability and absolute fitness for the purpose for which it was erected, with the minimum of expenditure, was the main idea. Faced with this definite economic problem—the greatest problem which faced many of them to-day—there grew a vision of a splendid simplicity and beauty of brickwork as seen in the early Roman work. Ideal brickwork had always had a fascination for him even during his student days; the Roman Thermæ especially had been a continual inspiration to him during the design of the building. The economic view-point would, perhaps, be of value to their younger men, showing how difficulties could be overcome by work and thought, and be the road to such an award as he had received this year.



New Inn, Stoneferry, Hull. Messrs. Harbron & Robson, Architects. (*See p.* 719.)

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ILLUSTRATIONS

Office Buildings.

This drawing was hung in the Royal Academy Exhibition this summer. It shows the elevation of a projected scheme for a large block of offices in London. There is a right-of-way through the centre of the site to a courtyard within, which dictated the arched treatment in the centre of the building. The elevation is the direct outcome of the plan. The architects are Messrs. Oswald P. Milne & Paul Phipps FF.R.I.B.A., of London.

Anningsley Park.

This house has been built at Ottershaw on the site of an early eighteenth-century residence which had been badly added to and mutilated at a later date. With the exception of a small wing, the old building had to be completely demolished, the new building being erected with the old materials.

The accommodation comprises a large open hall, with minstrel gallery, dining room, living room, study, kitchen, servants' hall, pantries, &c., on the ground floor; and 11 bedrooms, 3 bathrooms, &c., on the first floor. Messrs. W. H. Gaze & Sons, Ltd., were the contractors and were also responsible for the electric light installation; Messrs. George Wragge, Ltd., for the iron casements; and Messrs. Rosser & Russell for the heating system and the domestic hot-water supply.

Mr. Gerald Warren, F.S.Arch., 12, Norfolk-street, Strand, W.C. 2, is the architect.

Shops and Flats, The Quadrant, Hendon.

These premises are situated in the heart of the area opened up by the tube railway extension to Edgware.

The block is planned as a group of twenty shops, each having a small flat on the first floor and a larger "two-story flat" above. At present only twelve shops have been erected The frontage, in addition to being in part a quadrant embracing five of the shops, rises continuously from one end to the other, dictated an elevation of the varied or picturesque variety. The most prominent portion—the actual curve—is devoted to a series of brick piers, filled in with segmental bays, surmounted by a simple roof and flanked right and left by single shops having a contrasting treatment, consisting in each case of a large gabled treatment finished in "Atlas White."

To the right of the actual quadrant, the straight run of six shops fronting Finchley-lane is of a simple pseudo-Georgian nature, but broken in the centre by another single white front with Dutch gable and oriel window, introduced both as a feature and in order to mask the stepping of roofs necessitated by the sloping ground.

Internally, each shop is left as unobstructed as possible; the first flight of the staircase is lighted from below by a fanlight over the entrance, and from above by means of a window at second floor level. The first floor flat consists mainly of four rooms, and has rear balcony served by a trade-hoist continued to a similar balcony on the floor above. The upper dwelling has six or seven rooms, according to position.

The main elevations are in Dorking and red rubbed bricks, with "Atlas White" rendering and stucco. Constructional steelwork, The Aston Construction Co., Ltd.; metal casements, C. E. Welstead, Ltd. The whole of the buildings were erected by John Laing & Son, Ltd., of Lincoln House, Holborn, whose "ferro-brick" system of fireproof construction was used for the first and second floors. The designs were prepared by Messrs. Ewart G. Culpin & R. S. Bowers, in association with Mr. F. W. Chas. Barker, engineer and surveyor.

MODERN BUILDINGS IN THE TEMPLE

THE Stuart period terminated Mr. J. Bruce Williamson's accomplished narrative concerning the congeries of the Temple Courts, Gardens, and Buildings, so the last architect mentioned in his capital book (reviewed on page 729) is Sir Christopher Wren, the designer of the great Gatehouse in Fleet-street, the Cloisters adjoining Pump-court, and the house built for the Master of the Temple on the site of the old clergy residence destroyed by the Great Fire of London. It will, therefore, be interesting to mention the names of some of the architects who, during the last century, have left their mark more or less within the precincts of the famous Crusaders' church built by the order of the Templars. The lawyers, during many a year after they came into possession, used to await their clients in its round nave just as the old serjeants-at-law did in the nave of St. Paul's Cathedral. The other remaining circular churches in England, here incidentally alluded to for reference, are at Cambridge, Northampton, and at Maplestead in Essex. These are comparatively unimportant.

The Middle Temple Library was designed by H. R. Abraham (1773-1850), and built in 1839. Hard by this Library, and on the eastern flank of the lower gardens, Edward M. Barry, R.A. (1830-1880), carried Frenchified and somewhat florid chat pile of chambers at the bottom of Temple-lane, opposite where the Temple stairs once stood. The marking the approach to the from the Thames Embankment is m creased in importance by the round towers set at the corners of the comp Their outline can scarcely be called a

By way of contrast the less ambitio of chambers overlooking the same from the west, and built of red brick turesquely situate on a terrace endin and left by flights of steps leading do the Fountain Court to the river. J. Aubyn (1815-1901), who had offices Lamb Building for many years, architect, and a capable artist. Arthu (1828-1901) was responsible for the row of "Dr. Johnson's Buildings" d nondescript style and occupying t whereon the great lexicographer at o rented rooms, hence the designation.

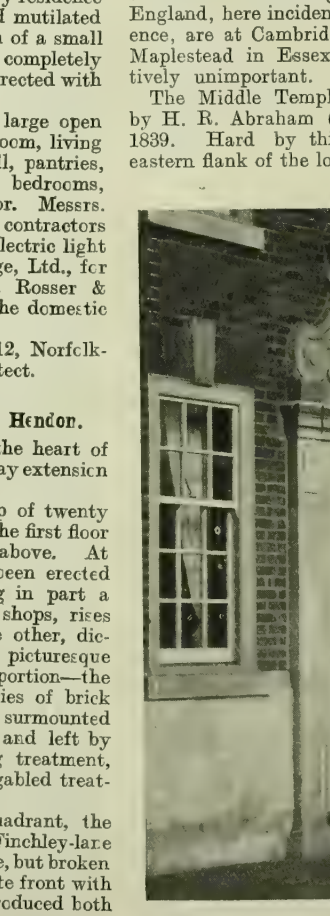
Sidney Smirke rebuilt the Inner Hall in a manner seemingly based upo Gothic, but presenting a miserably m terior carried out to some extent on foundations. Princess Louise open premises in 1870.

Colonel R. W. Edis, F.S.A. (183 the competition for the Inner Temple and carried out his design during th 'seventies a few seasons later than it diate neighbour just mentioned. Th ing faces King's Bench Walk, with presents no co-ordination whatever, frankly Victorian in manner and quite less of local amenities.

Few, if any, buildings of conte times reflect the spirit of the old-worl tity or architectural dignity of the more simply and sincerely than the g Chambers seen partly built on a cloist Middle Temple-lane, at the corner o tain-court, thus facing the Middle Hall. Sir Aston Webb, P.R.A., its typical Georgian style to his in purpose with no small success the past year the same architect h engaged upon the problem of renovat fine old hammer-beam roof of the Temple Hall, as it had become dange

Opposite the back buildings of Bank and on the east side of Middle lane, Sir T. G. Jackson, R.A. (v several years practised in Devereau Temple), was the architect, if we re rightly, of the row of Chambers whi rear frontages overlooking the court Through-ways for public access diver plan, with steps to accommodate levels in the "Lane."

The rearrangement of the Sanctua the erection of a new retable, has of l carried out under the direction of Sir Blomfield, R.A., in a quiet and befitti ner in the Temple Church.



New Inn, Stoneferry, near Hull.
MESSRS. HARBRON & ROBSON, Architects.
(*See p.* 719.)

MEETINGS

MONDAY, *November* 10.

Surveyors' Institution.—Presidential by Sir E. Savill. At 12, Great Geo S.W.1. 8 p.m.

TUESDAY, *November* 11.

Liverpool Architectural Society.—M Ayrton on "Use of Reinforced C Architecture." At 13, Harrington-st

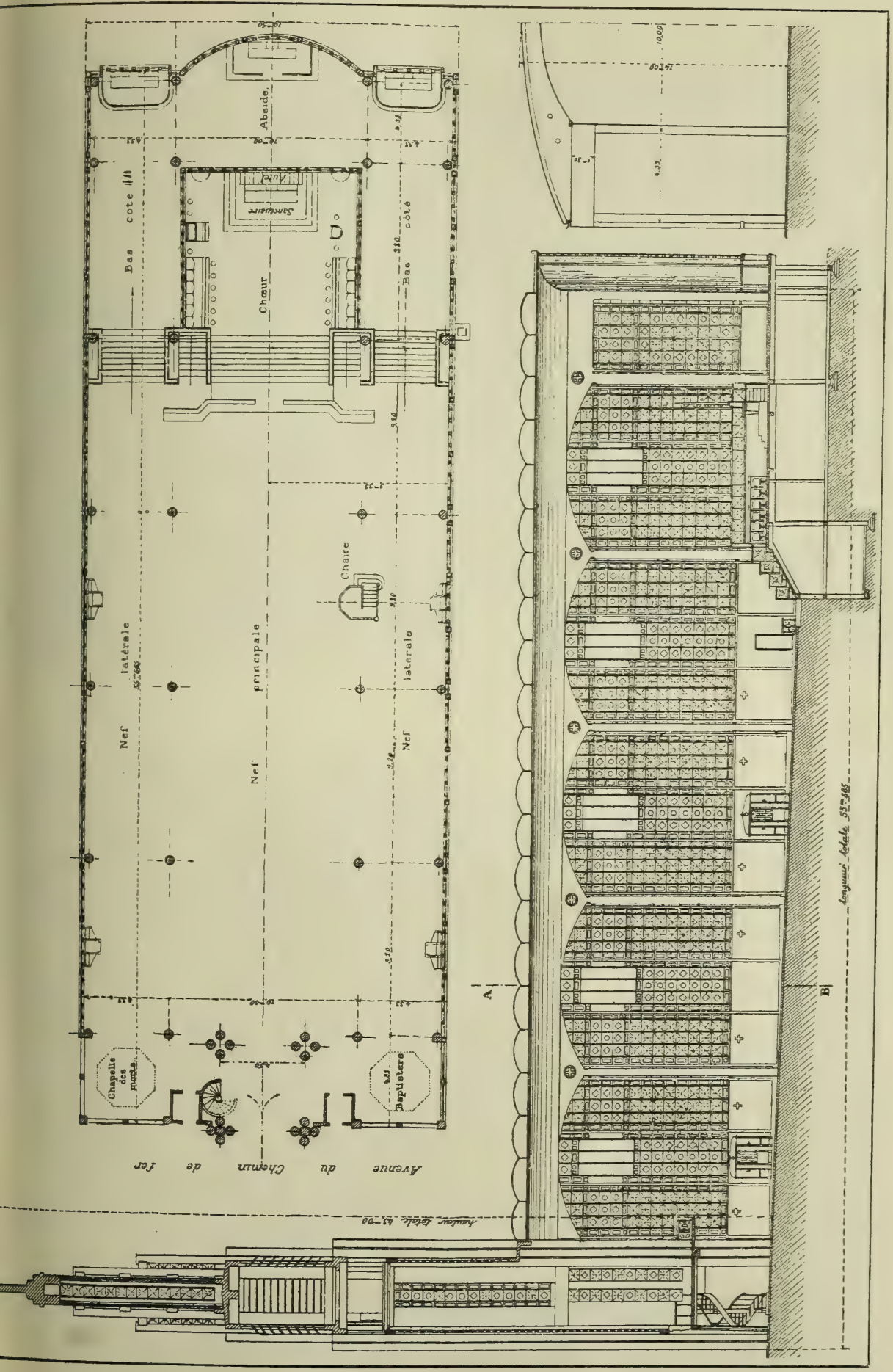
Society for the Promotion of Roman Discussion on the Antioch Chalice. lington House, Piccadilly, W.1. 4.30

WEDNESDAY, *November* 12

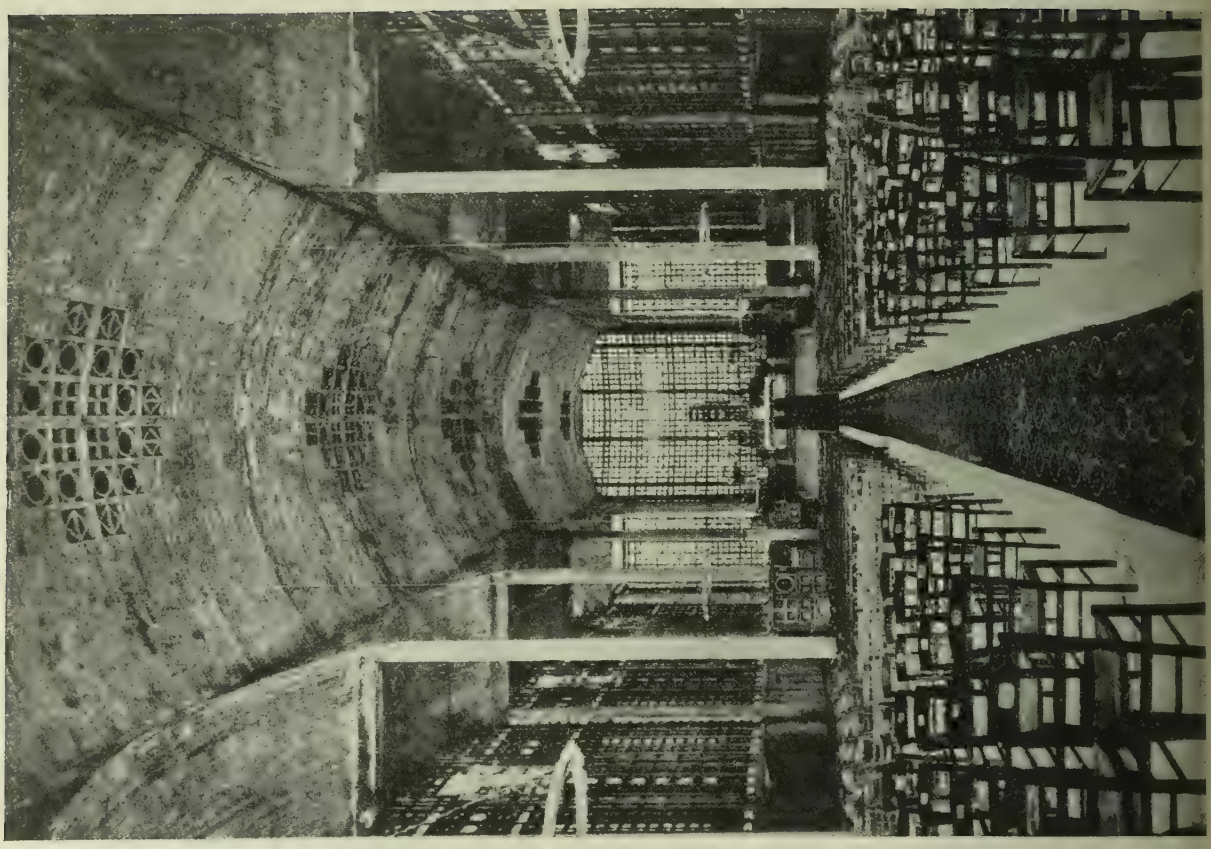
Royal Academy of Arts.—Profes Laurie on "Early Methods of Oil At Burlington House, Piccadilly, W.

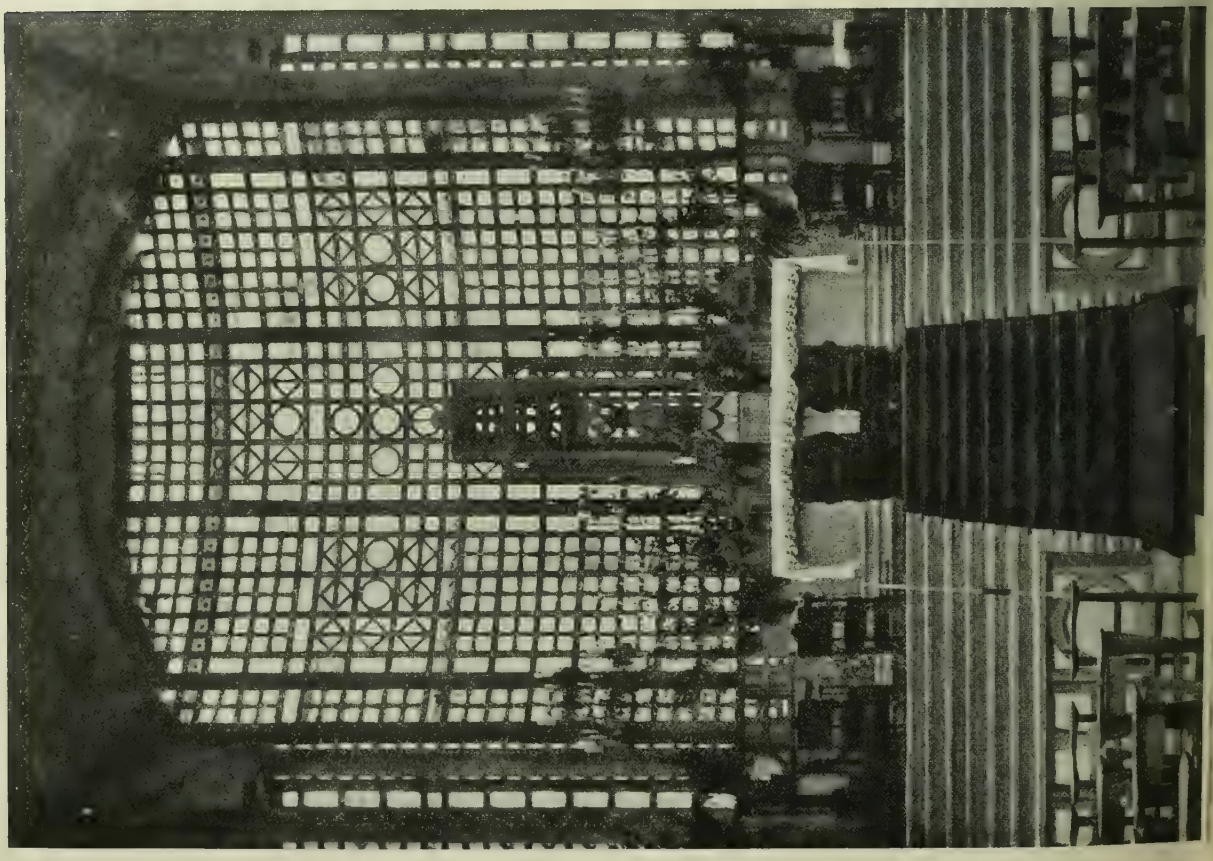
THURSDAY, *November* 13.

Builders' Benevolent Institution Dinner. Hotel Victoria, Charing C 7 p.m.



Concrete Church at Le Raincy. MM. PERRET, Architects. (See p. 710.)

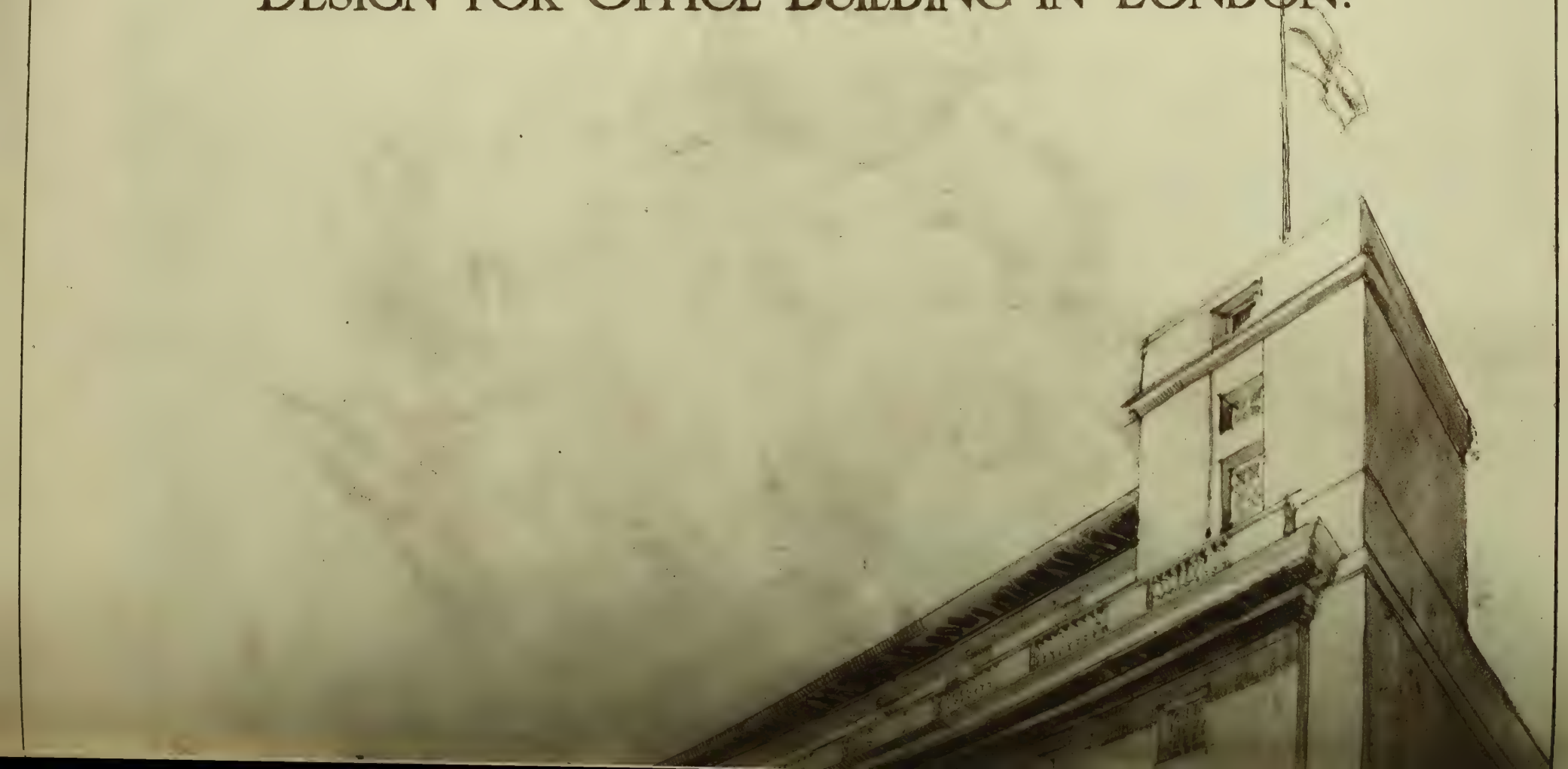






House in Connemara, Ireland. Mr. Oliver Hill, F.R.I.B.A., Architect.

Design for Office Building in London.





MESSRS. OSWALD P. MILNE & P. PHIPPS, FF.R.I.B.A., ARCHITECTS.

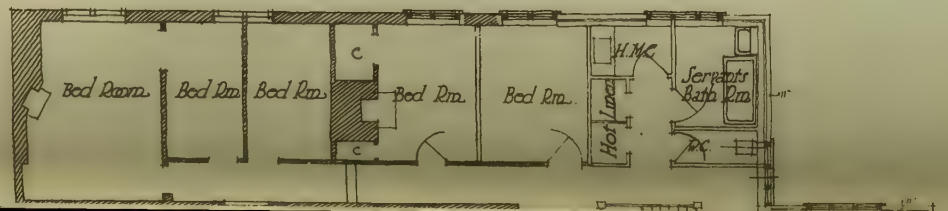


New Golf Hotel, Prestatyn.

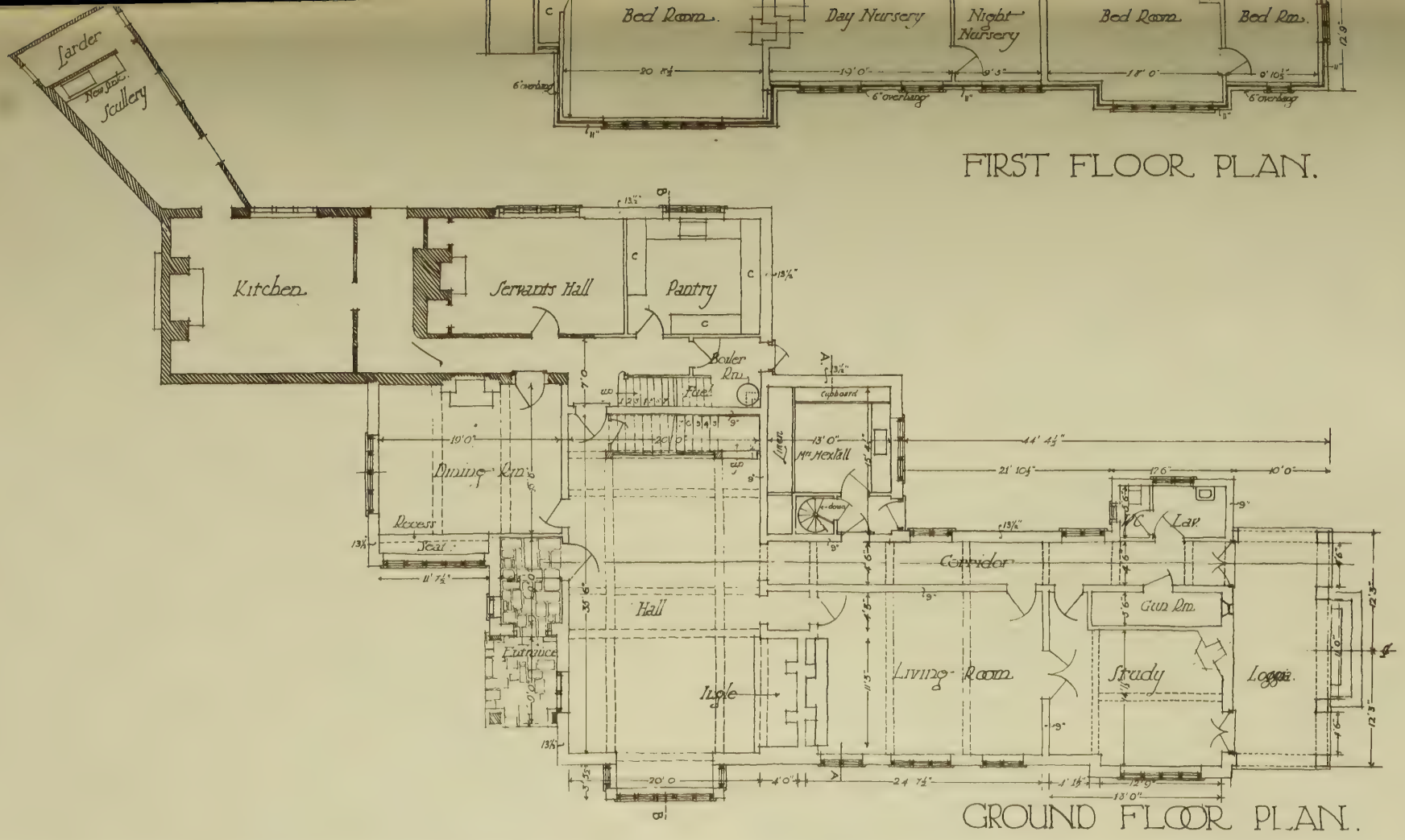
MESSRS. COLLCUTT & HAMP, Architects.

[This drawing shows the elevation to the sea front of the new golf house at Prestatyn. The existing club house is being retained and remodelled as part of the scheme. The main building will take the form of an hotel for golfers or other visitors. It is situated immediately on the beach, and the terrace enjoys uninterrupted sea views. The main structure consists of ferro-concrete stanchions and floors, the wall panels between the stanchions being filled externally with hollow brick walls and internally with concrete slab partitions. The walls externally will be finished in stucco, the roofs covered with black pantiles, and the windows throughout are in metal. The whole of the work is being carried out under the supervision of Mr. Stanley Hamp (Messrs. Collcutt & Hamp), 126, Wigmore-street, W.1; the perspective drawing is by Mr. Kenneth Anns.]




Bed Room
Bed Rm.
Bed Rm.
C
Bed Rm.
Bed Rm.
H.W.C.
Hot Lwtr.
Servants Bath Rm.
W.C.
C

FIRST FLOOR PLAN.



GROUND FLOOR PLAN.

ANNINGSLEY PARK OTTERSHAW for H.C.Hextall Esq.

Gerald Warren M.S.A.
Architect
12 Norfolk St. Strand.



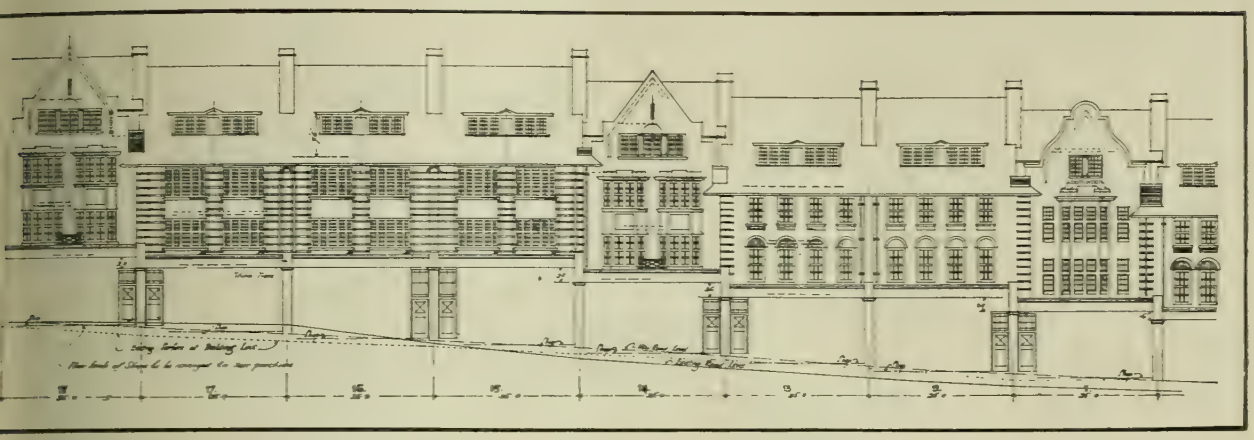


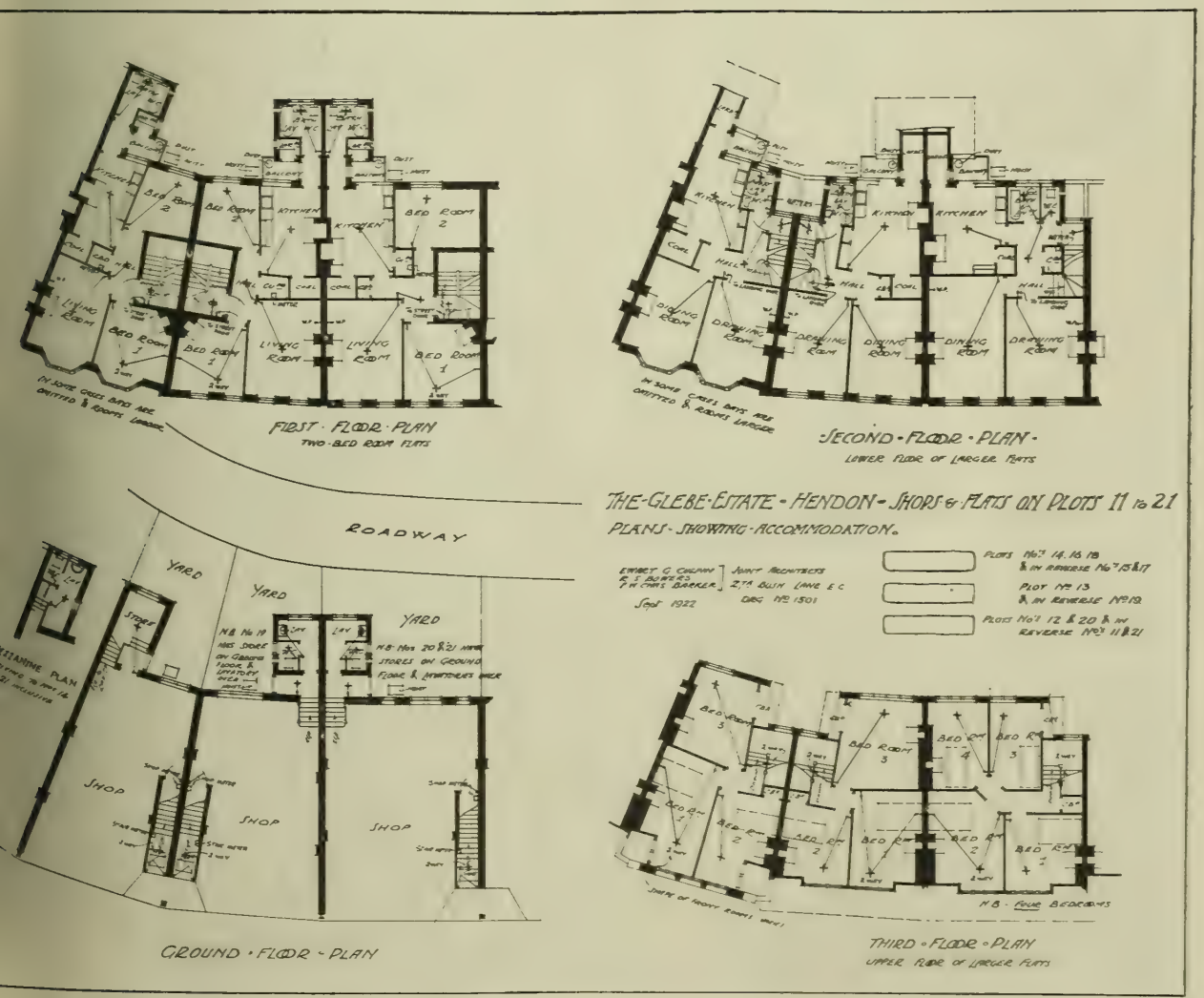
New Inn, Stoneferry, near Hull. MESSRS. HARBRON & ROBSON, Architects.

New" Inn is situated at Stoneferry, on the outskirts of Hull. It replaces a previous smaller inn which occupied part of the site. terials used on the external walls are Ravenhead rustic bricks and Portland stone. The roof is of hand-made tiles. Marble and work by Messrs. O. Toffolo & Co., Ltd. The architects for the building and fittings are Messrs. Harbron & Robson, Hull.]



Shops and Flats, The Quadrant, Hendon. MESSRS. CULPIN & BOWERS, Architects. (*See p.* 716.)





Shops and Flats, The Quadrant, Hendon. Messrs. Culpin & Bowers, Architects. (*See p.* 716.)

WALLIS JONES
FRUIT FLOWERS
& VEGETABLES
THE VICTORI
LAWRENCE





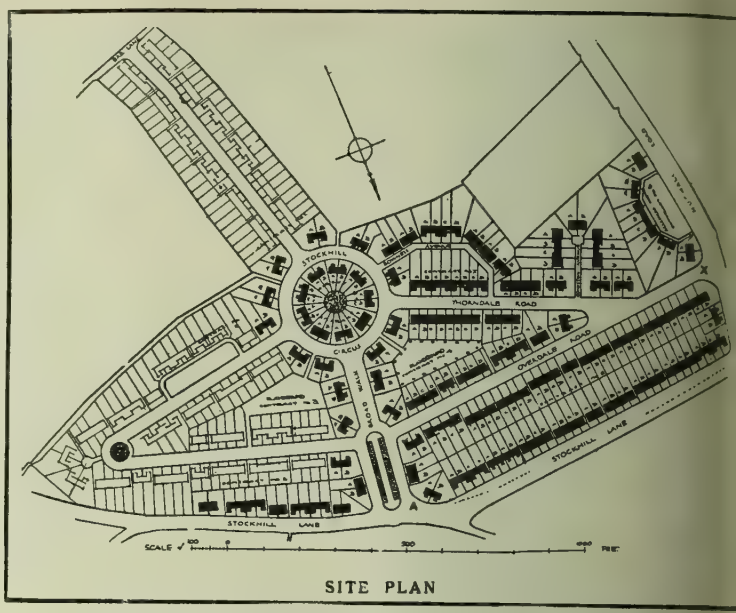
Nottingham Corporation Housing Schemes: The Bulwell Estate.

Mr. T. C. Howitt, A.R.I.B.A., Housing Architect and Surveyor. (*See p.* 724.)

NOTTINGHAM HOUSING SCHEMES

Up to the end of 1922 a total of 1,470 houses had been built by the Nottingham Corporation under the Housing Act of 1919, some of which were illustrated in our issue for February 17, 1922. The houses illustrated on p. 723 have been built on the Highbury-road, Bulwell estate, to the design of Mr. T. C. Howitt, A.R.I.B.A., Housing Architect and Surveyor to the Corporation, and were built by Mr. F. W. Horton, of Lincoln. The houses are of the parlour type. These illustrations are from a brochure which the Nottingham Town Council has issued dealing with its housing activities.

We give on this page the lay-out plan and two views of houses built on the Stockhill-lane site by the Nottingham Corporation to the design of Mr. William R. Gleave, A.R.I.B.A., of Nottingham.



SITE PLAN

Lay-out of Stockhill-lane Housing Site, Nottingham.



A View of Stockhill Circus.



A Block of Parlour Houses.

Nottingham Corporation Housing Schemes: Stockhill-lane Site. Mr. William R. Gleave, A.R.I.B.A., Architect.

STMINSTER ABBEY RE-EXAMINED—IX

By W. R. LETHABY.

SCULPTURE AND COLOURING.—I.

STER JOHN OF ST. ALBANS, SCULPTOR.

l story of the sculptures of the struc-he tombs would fill a book. I can here ss a few selected points. Two tall epresenting the Annunciation above loor of the Chapter-house, have already



Fig. 1.—Chapter House.

ribed. They are certainly to be num-ong the most impressive statues in casts at South Kensington can most tudied. The Chapter-house was being in 1253, and in the accounts for that images, costing 53s. 4d. (four marks),

are mentioned. As Professor Prior suggested, these images may have been the Annunciation group, and this is made the more likely by the evidence that the big figure of the Majesty now between them did not exist originally. Four marks seems a small price for the two figures, but it would be for labour only. The images of the Queen on the Waltham Cross cost five marks each nearly fifty years later (Fig. 1).

In 1257-8, John of St. Albans, "sculptor of the King's images," received a robe of office while working at Westminster along with Peter of Hispania, the King's painter, and Alexander, the King's carpenter, who, as we know from other records, were engaged on the Abbey works. John of St. Albans, the King's sculptor, was thus employed at the Abbey at the very time when the first work of the King was being completed. The Angel spandrels, high up in the transept ends, can have been carved only a very short time before, if, indeed, they were completed. As the most important sculptures now in the church, they may with confidence be attributed to Master John and his school of assistants, but of course the chief task of "the sculptor of the King's images" would be the wonderful northern portals, the work on which must have continued for many years. A measured drawing of the angels in the south transept, made by my old friend, J. A. Slater, in 1883, is reproduced in Figs. 2 and 3.

I have examined the angels from a scaffolding, and there are casts of two of them at South Kensington; they are certainly of great beauty,



Fig. 4.

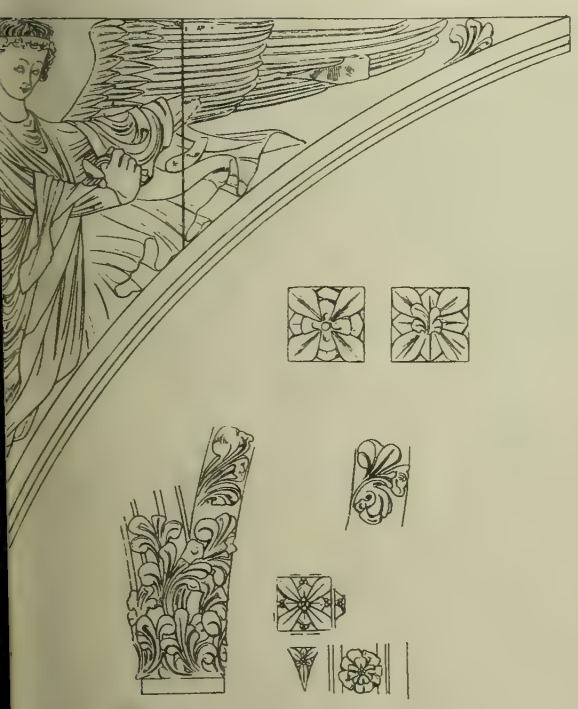


Fig. 2.—South Transept.



Fig. 3.—South Transept.



FIG. 5.

serious and yet gay, the very embodiment of rapture. Fig. 4 is a distant impression of one of the heads.

The style of the sculptor of the Chapter-house Annunication may, I think, be detected in these censing angels. Notice especially the hand of the more eastward of the two in the south transept, which is sharply turned at the wrist; the little lion under the foot of the same angel resembles the lions of the Chapter-house capital; compare also the clumsy feet and the drapery of the figures. The chief sculptor could not have done all the figure work in the church, but he would have guided the whole, and as chief of a school it would have been his in the sense that the sculptures of the Parthenon are by Pheidias. One master seems to have worked on the Annunciation and the Censing Angels.

Between the two angels in the north transept were two figures which are lost. Opposite, in the south transept, two still remain, which seem to have reference to the story of the Confessor's ring. Possibly the first pair showed the gift of the ring, and the second its return; both incidents appeared on the tapestry of Abbot Barking.

With these angels of the transepts must be associated some in the smaller spandrels of the wall arcade. One of these in a south-east chapel has an angel carrying two crowns; another now in the Museum, probably from the same chapel, plays a harp (Fig. 5); yet another in the west aisle of the north transept swings a censer (Fig. 6). These, taken together with the bigger angels, so closely resemble the angels in the spandrels of the wall-arcade of the Ste. Chapelle (see Viollet le Duc's "Ange," Figs. 4 and 8), that it seems that one series must have been suggested by the other.

These noble figures of angels have a marked affinity with another chief work of thirteenth-century English sculpture—a series of angels at Lincoln Cathedral, which was carved some 15 or 20 years later than the Westminster figures. They are in the Choir, which is often in consequence called the Angel Choir, but the sculptures themselves represent "a choir of angels." Some play musical instruments, others



FIG. 7.

guide the sun and moon and do all the things that angels should. These Lincoln angels, with the wonderful sculptures of the Judgment Door, which is contemporary with the Angel Choir, are so like the Westminster angels and the old north portal that it seems likely that the Westminster sculptors must have gone on to Lincoln.

At the Abbey there still exists a Choir of Angels, but it is in a position where it can hardly ever be seen, on the soffits of the six window lights above the interior of the great north door.

In July, 1911, I examined these medallions from the high Coronation stand erected in the north transept. They are on the soffit lower range of windows, and there are four, two on each side of every arch. the medallions are circular, but some a squares (Fig. 7); the frames touch one and in some cases throw off foliage in t drel spaces. The figures or rather bust sent a Choir of Angels, playing music, ping, carrying chalice, censer, incen crown, palm, scroll, book, &c. One bea (sun and moon ?) and another a dia musical instruments are harp, dulcime and bells. They are in fair condition great beauty; the casts that were obta Cottingham about a century since seem been excessively touched up. When tunity offers they and all the sculpture be photographed. These sculptures in lions, touching one another, confirm t that the medallions in the north porch tained sculpture. The lobed squares are of the form assigned to the central the great porch. Below the Choir of An the extreme window jambs, are two s figures of kings, one of which stands on prostrate figure. This is probably th fessor and the other Henry III (see Ne also Walpole's "Anecdotes of Painting, trated edition).

Another interesting group of sculpture Abbey is formed by the portrait heads, t special study should be devoted. It is that we possess no standard set of Roy traits, and I should like to suggest the to any student who wants an interesti Directly inside the Royal door at West is an altogether remarkable head (Fig. rather a dark place, it is hardly ever ob but it is carved in marble and has e injury, so that it is practically perfect. It beardless man crowned, and it must fr special character and place represent Her himself. It is recognised in France that p heads of Henry's contemporary, St. Louis and the earlier representations of Henry him as beardless. Higher up, above this is another portrait head; this time, I th the master mason, Henry de Reyns. the doorway, going into the Cloister, a other crowned heads; these may be of th and Queen, but they are badly decaye the Gallery Chamber, now the Muniment which was probably the Royal Pew, the



FIG. 6.



FIG. 8.—HENRY III

ned heads, and there were three—now decayed—at the Chapter-house door. eads of later date in the Cloister have tioned in another section.)
Triforium are many large sculptured der its roof beams. Some have fine eads, others are hideous, grinning

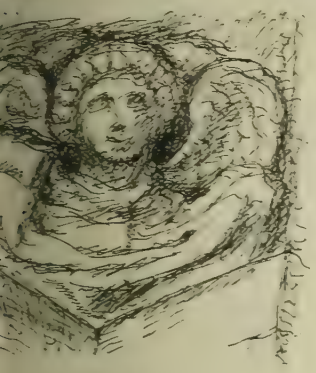


Fig. 9.

the former are on the south side and are on the north. It has never, I en noticed that a pair of busts among els, on the south side of the Choir, the Annunciation. The angel holds the heads have some resemblance to he Chapter House group (Figs. 9 A corbel head in the British Museum the Abbey. In St. Faith's Chapel



Fig. 10.

fine heads forming corbels, and again difference of character between those th and the south, following the idea were evil and good quarters. One of on the north side is a negro type. d 12 are from minor heads.

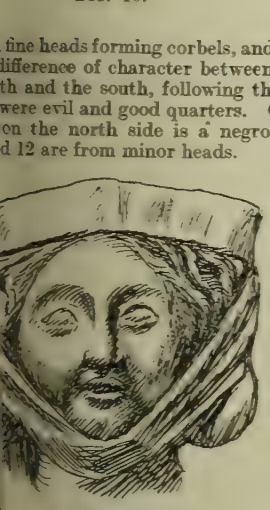


Fig. 11.

drels of the wall arcade are filled figure sculpture, foliage (naturalistic ental), or with diaper work. The St. Paul's, or the north-east chapel, sculptures of which a pretty group hind a tomb which looks like the f the Virgin. One of the chapels h side, as we saw, seems to have



Fig. 12.

had a choir of angels; the alternate chapels on this side have diaper spandrels. Of the spandrels carved with foliage a delightful one with birds amongst it is illustrated in *Gleanings*. At the Abbey is a drawing made nearly a century ago of the branching rose spandrel in the Chapter House (Fig. 13). The idea of

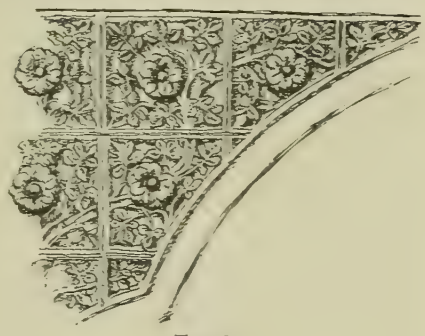
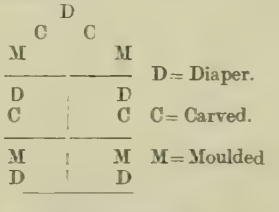


Fig. 13.

systematic variation is carried out in the triforium arches of the Presbytery which are decorated thus :—



D = Diaper.
C = Carved.
M = Moulded

With the spandrel sculpture must be mentioned the magnificent set of heraldic shields in the aisle arcades of the Choir. Amongst these are the arms of England, France and Germany. Of the last there has been question whether it was double-headed, but examining it in a good light, I found enough to show that the head was single; there is a turn of the neck which brought the head in profile (Fig. 14). This suggests a comment; a practice is springing up, following some old examples, of making heraldic charges face to the east in every case, but it was not so here, as may be seen also by the ramping lion of Simon de Montfort near by. The eagle of the German Empire in the



Fig. 14.

early stained glass was single-headed, and so it seems to have been on Crouchback's tomb. Matthew of Paris gives the eagle of the empire either with one or two heads. A shield on the south side, which has long been attributed to Rothsay, has recently been shown as that of De Ros.

The vaulting bosses of the west aisles of the Transepts are big, bold sculptures, about 2½ ft. in diameter, and in high relief. The one nearest the north front is David playing his harp; the next has two men who have been called Aaron and Moses, and a cast of this at South Kensington shows that Moses has horns; another has the Virgin and Child with angels on either hand, and others seem to be the Assumption of the Virgin and "Abraham's bosom." These are fine work, as may be seen by casts of four of them at South Kensington. Fig. 15 is from a delightful little seated Virgin at the top of the sculptured jamb of the Chapter House door; there is a companion figure of Christ.



Fig. 15.

Royal Portrait Statues.—Passing from the structure to the tombs we find a series of figures of great beauty, some of which are of bronze. First must be mentioned the noble bronze effigy of Henry III, the work of William Torel, goldsmith, of London. It formerly had a canopy, lions at the feet, and sceptres in the hands which are now lost, but the figure is practically perfect. The effigy of Queen Eleanor by the same artist is of unsurpassable freshness and grace; her hand holds the neck band of her mantle, and the body bends in a slight curve from head to feet. A figure of the Queen on her seal which was probably made several years before her death, resembles the effigy in many respects and was probably by the same goldsmith. Were it not for this we might suppose that the effigy had been modelled by the sculptor of the stone statues of the crosses. Rather we must think that the seal was referred to by the sculptor as well as by the goldsmith maker of the effigy.

I cannot think why this most lovely portrait of such a romantic person as Eleanor of Castile has not attracted somebody to write her life. If it were well done it might suggest the spirit of the Middle Ages in England almost more than anything else.*

The question how far the Royal and other important effigies are likenesses will be important whenever an attempt is made to form a series

* In the Wardrobe Accounts of Edward I are many delightful details of jewels, plate, and furnishings, which would adorn such a story. Begin with the *Dict. Nat. Biog.* and Agnes Strickland.

of early national portraits. In such a critical book as Sir J. H. Ramsay's *Daun of the Constitution* (1907), it is again asserted that tomb statues are not portraits. He says: "It would seem that the bronze effigy of Henry III executed about 1291, was not intended for a likeness, but only as an ideal of the stately and the beautiful. So J. H. Middleton, *Academy*, March 5, 1881." In this case the King had been dead nearly twenty years, and so there would have been special difficulties, but to say that a likeness was not intended seems against both reason and record. In the account for the making of the bronze figure by William Torel it is said to be *ad similitudinem Regis*. The orders of Henry III for images representing himself while alive are worded in what may seem to us a vague manner, but that must have been a custom. Thus a picture was ordered which was to have St. Edward presenting a certain King to the (Divine) Majesty. There may very well have been folklore reasons against too close identification while the person represented was living, but these could not hold when he was dead.

Doubtless tomb effigies for country churches were often done under conditions which would not allow of strict portraiture, but with Royal persons the circumstances were different. Their dead bodies were embalmed and were carried open at their funerals. At a later time the actual body was represented by an effigy made up like a waxwork, and it lay long "in state." The tomb statue was a more permanent representation of the body or of the funeral effigy, and was fully coloured even to the eyes, cheeks and lips. It was a "double" of the dead person. The custom persisted fully till the time of Elizabeth. Stow writes: "The city of Westminster was surcharged with all sorts of people who came to see the obsequies, and when they beheld her statue or effigy lying on the coffin, set forth in royal robes, having a crown upon the head and a ball and sceptre in either hand there was such a sighing, groaning and weeping as the like hath not been known." Miss Agnes Strickland adds that the effigy was the faded waxwork, which still exists. For embalming from the time of the Conquest, see Sandford.

It is recorded that Queen Eleanor was embalmed, and that Henry III was also is shown by the fact that his heart was given to Fontevrault. "The King of France died and was embalmed, and buried as befitted so great a prince" ("Jehan de Paris," French Romance). Such a custom made continuity of record easy. The statues of Queen Eleanor at Waltham and Northampton are very similar to the effigy; all agree in having freely flowing hair, and the same is found on her seal. This must certainly be an individual trait.

Master Alexander of Abingdon, the Imagour.

We have found that Robert of Beverley was occupying the office of King's mason in 1284. Master Richard of Crundale, "cementarius," was in charge of the Royal works at Westminster Palace in 1288, and he doubtless directly succeeded Master Robert. He may have had his name from Crundal, in Hampshire. Queen Eleanor died in 1290, and Edward at once set about building the series of memorials now known as Eleanor Crosses and tombs in the Abbey, at the Blackfriars, and in Lincoln Cathedral. The Abbey tomb and Charing Cross were the work of Richard Crundale, the King's mason, who, however, died about 1292, before Charing Cross was completed. The full original accounts for these works still exist, and it thus appears that the statues of this cross, as well as those which most fortunately still exist about the Waltham Cross, were sculptured by Master Alexander of Abingdon, "*le Imagi*nator." (These most beautiful works of such historical importance are all the time decaying in our acid atmosphere, and little as I like meddling, I think it might be wise to remove the best preserved figure from this and the Northampton Cross, and substitute a copy. I should like to ask the S.P.A.B. to consider this.)

Edmund Crouchback, the King's brother, died in 1296, just as the crosses were completed, and there can be little doubt that his superb tomb in the Abbey must be Alexander's work. Alexander is mentioned several times in the "Letter Books" of the City of London. In 1305, Alexander "*le Imagour*" acknowledged a debt of £6 to a merchant of "Besaz." This is repeated two other times ("Letter Book" B). In 1312, Master Adam the painter, and others, were sureties for Master Alexander "*le Imagour*" that he would complete his contract with the parson of Stanwell before All Saints' Day ("Letter Book" D). Adam the painter is mentioned again in 1313 ("Letter Book" E). We thus have a period of over twenty years of Alexander's working life marked out—1290-1312. The persistent calling of him "*le Imagour*" ("*Imogour*" was a not infrequent craft title), seems to point to some office or special reputation, and his work on the most important of the Queen's crosses conjointly with the King's mason, indicates that he was the King's sculptor. He was certainly the most important sculptor of his time. The entries in the "Letter Books" show that he was a citizen of London—and they suggest that he had what is sometimes called the artistic temperament; even his name was romantic.

The effigy is that of a very perfect Knight. Crouchback was not taken to the Abbey until 1299–1300, but his tomb was probably erected together with that of his wife Aveline (who died as early as 1273), about 1290. The graceful tomb statue of Aveline is in style remarkably like the figures of Eleanor on the Crosses, and there is every probability that it was by the same master.

Another effigy of a lady, at Chichester, is so akin to the Aveline statue that both should be by the same artist. Professor Prior says of this: "The effigy of Lady FitzAlan, who died c. 1280, shows a handling some way towards that of the Westminster lady." He observes also a resemblance between the weepers of both tombs, which "do not turn sideways as in the St. Denis model." While writing this I have re-examined the figure at Chichester, and noted the following points: The axis of the body bends in a slight curve from head to feet; the drapery falls in long lines from the shoulders and covers well the feet, which rest against two dogs; the mantle is caught up under each elbow; hands are palm to palm on the breast; linen around the head and chin leaves only a triangular opening for face; she has also a veil over the head, which falls on the shoulders; the head rests on two square pillows, the upper smaller one being placed diagonally; two angels at the head are rather big and have their hands on the upper pillow; in profile the figure forms a long low curve terminated by head and feet. The two figures are so much alike that one is practically a repetition—that at Westminster seems a little more developed, elegant, and later; I do not doubt that both are by the same sculptor.

Professor Prior compares another lady's effigy in Aldworth Church, Berkshire, with the Waltham queens and Aveline. "These ladies would seem executed c. 1280-1300, and are sufficiently alike to suggest their source from a special *atelier*. Is it possible that they show the style of a single artist?"

The weepers of the tombs of Aveline and Crouchback are also of one style with the queens of the Waltham Cross. Among these weepers are queens and princesses, which are practically reduced copies of the Queen's statues. (See for these Fig. 395 in Prior and Gardener's "Sculpture.") There is the same swaying attitude, the drapery caught up by the arm, the hands on the mantle strap; above all, there is the same expression of sweetness and dignity. The weepers of Aveline's tomb are much injured, and those of Crouchback's tomb have been defaced (literally), so that at first sight the little figures have a rather blunt look. Recently, however, they have been cleaned, and this, revealing the sharpness and delicacy of the modelling and the perfect measured grace of the poses and proportions, as well as the colouring, even to the flushed cheeks, shows that t master works. I should like to see casts set up in a museum.

The tombs of Aymer de Valence and Eltham also have weepers—there must than sixty of these figures altogeth weepers about the tomb of Aymer are s elegant, so that at first sight one is in prefer them to those of Crouchback The weepers of John of Eltham's tomb affectedly jaunty, but very gay and a fortunately, twelve of them still keep the —as they never did when alive! A little the series shows that there must have be cline of manners between 1290 and 13 high time of Edward I and after the Edward II. The weepers of the tomb of like the whole work, follow the traditio Crouchback tomb, but they can hardl the same master—rather by a pupil. T of John of Eltham must, I think, be by t master who wrought the monum Edward II in Gloucester Cathedral.

Later Sculptures.—The tomb of Philippa is a new departure in portraitu has suffered much violence; even the h been at some time broken off, but it is a able work of art. The figure is realised the drapery; even the pillow is not fo is the portrait of a pillow. The quee hand held her mantle strap, which was cut"; the right hand fell lower and sceptre; an iron pin which projects fr head must have supported its higher en hair was arranged in an elaborate net s with little pins, to which precious st gold beads must have been attached. S shows a crown still existing. The ca astonishingly delicate; the small tracery were set with deep blue glass, which rem places. Traceried margins on each side figure contained little figures, now lost. an account of the tomb in the Liber N appears that these were kings—probab Saint Kings of England. Two of the w remain (hidden by Henry V's chantry these still show remnants of "picking gold and colour." This tomb was by H of Liège.

The sculpture of the reredos of the C of Henry V (the Chapel of the Annunc has recently been cleaned, and this has b out in a remarkable way their exce quality. In the middle is an empty niche I suppose, occupied by a crowned figure Virgin. On either hand is the Virgin a announcing angel. Beyond are Edwa Confessor and Edmund, King and M while at the extreme left and right are the of England and France, St. George and St. These life-size figures are framed up in nacle work, containing a multitude of figures of prophets. The large heads are expression, human and pathetic; the h St. Denis, carried in his hands, is plac beautiful, yet so true that it might hav studied from a corpse. The head of the is that of a frank English girl, with h thrown back in a natural modern way (F These heads show close observation of o living types; they are not traditional c tions. The tomb effigies of Abbot Col and Philippa, Duchess of York, have son of the same character which was clearly of early fifteenth-century sculpture.

When I described these sculptures b thought that the central niche would hav occupied by Christ in Majesty, but fr prophets in the tabernacle work the g Virgin is more probable. I suggested al (*a*) two important figures on the staire the Confessor and the pilgrim; (*b*) th kings above in the middle who hold cl are Sebert and Henry III, or the latt Henry V himself as builder of the nave; bishops or abbots, SS. Wulsin and D The identification (*a*) is certain, for, see above, it is clear that the king's head is receive a metal crown, and the other fig a pilgrim's hat. The pairs (*b*) and (*c*) are less like the Confessor, *founders*. A g "founders" appeared on some thi

tapestry which once hung in the Choir, paintings on the sedilia comprised the or and the pilgrim, two other kings and lesiastics. We are justified, therefore, king of the statues on the front of the as a group of Founders of the Church. e big hollow of a table moulding below in sculptures are three pretty little n trefoils formed by a ribbon (compare efs on the screen of the High Altar).



Fig. 16.

lateral reliefs are similar. Each a figure of the Virgin with the infant she is seated on the moon and is ed by a glory of rays; beneath is a eated holding an animal; this is a hich might only be caught by a Virgin. al relief is half destroyed, but appar- figured the Annunciation. In the e of the trefoil the Virgin is seated book, and again surrounded by of rays; in the left-hand lobe otless the announcing angel; above, per lobe, appears a heart- ody, in which is struck a e hilt of which is towards the Chis upper object is also sur- y rays; on the ribbon border nscription the last word of ns to have been *d.em.* Be- ese reliefs were painted hich are so obliterated that ably had reference to the e Virgin. The altar screen rieze of sculpture of scenes ife of the Confessor was pro- the same mason as he who y V's Chantry. It is fully by Neale, and Dr. M. R. shown that the subjects ed from a manuscript now dge.

nb portraits of Henry VII ueen, with a third figure of mother near by, all of gilt e really great works of the naissance by Torregiano, the ary of Michelangelo. They tradition of Donatello and re in Italy they would be g the most wonderful things l be seen on tour. The e was probably modelled markable effigy in the Abbey hich was carried at the the King. The face of this s to be an actual death in the Italian manner. It lightly injured, but a cast be completed.

To be continued.)

THE HISTORIC BUILDINGS OF THE TEMPLE, LONDON

Mr. J. Bruce Williamson, of the Middle Temple, has compactly compiled a vast amount of varied and most interesting information in one handy volume* and based his consecutive narrative on the original records possessed by the learned and honourable societies of the Temple. These first-hand extracts include particulars concerning the legal history of both of the eminently illustrious bodies originating from the institution of the Order of the Knights Templars down to the end of the Stuarts. The chronicle is thus limited by the absence of further records. The scope, however, of this standard epitome is extensive and furnishes many illustrations of the times and manners of differing periods and also circumstances of administration incidental to the altered governing authorities. There is much that is humanly attractive among these documents besides pertinent quotations about building projects and contracts having reference during centuries to the Temple Church and its great Halls, also the Benchers' Chambers and the entrance gates from the days of the Crusaders to the reign of Queen Anne.

The origin and continued right of sanctuary naturally comes under review, and not a few amusing incidents are described in consequence of the independence of the Temple authorities from interference by the Lord Mayor and City Fathers, who naturally regarded with a jealous eye the privileged status enjoyed within the precincts of the Temple and its adjoining mediæval suburb extending from Blackfriars on the east towards the Savoy and Charing Cross. Blackfriars Priory stood within the City walls along the bank of the Flete Ditch. On its other side, beyond the rear of the Palace of Bridewell, and from St. Bride's Churchyard monks and crusaders as well as parochial clergy possessed acres of land skirting the Thames and extending mostly nearly to Fleet-street. The Bishop of St. Davids' property stood at the corner of what is now known as Ludgate-circus, directly facing St. Paul's Cathedral, seen from thence over Lud Gate at the foot of the hill and fronting the bridge spanning the Fleet River on its way from the shambles of Farringdon to the Thames, its outfall being near where Blackfriars Bridge stands. The Bishop of Salisbury's house and his adjoining manor so charmingly open and rural, had its own landing stage on the south. The property extended up to the great Priory of Whitefriars, whose famous collegiate church and Carmelite buildings were demolished at the Reformation. Out of their ruins favoured retainers of the Tudor king built themselves houses, which in their turn soon became degraded and made way for the notorious "Alsatia," the protected rendezvous for rogues and vagabonds housed beyond the Lord Mayor's jurisdiction. Some modification of this evil happened in 1697, when the right of sanctuary in "Alsatia" came to an end. Serjeants' Inn, with some frontage in Fleet-street, was contiguous to Whitefriars, and formed the easternmost outwork of the Temple. Their westernmost extent is not so easily defined, but the property there abutted on to the Bishop of Exeter's Inn and garden stretching south from Temple Bar and facing the Strand. The river frontage of Essex House Estate probably was set back alongside the Temple Lower Gardens, judging from the position of the Watergate still standing at the bottom of Essex-street. This mansion occupied the site of Walter de Stapledon's episcopal residence, which was built on the extremity of the Temple environs. Near the gate house at the top of Temple-lane, which ended at the river landing stage famous as Temple Stairs, was an ancient friary. When Child's Bank was rebuilt in 1879 the last house on the west side of Temple-lane had to be underpinned, and in doing this the bodies of several friars laid in a row had their legs protruding into the excavation under the porter's lodge. In order to build the new wall these obstructions, of course, had to be removed.

The sole means of access from Fleet-street to the Temple was at this point, and the absence of

*"The History of the Temple, London." By J. Bruce Williamson. With eight illustrations. (London: John Murray, Albemarle-street). 1924. Price, 21s. nett. Cloth, gilt.



From "The History of the Temple."

Middle Temple Hall, Court, Fountain and Railings erected in 1715.

any other frontage thereto from this mediæval suburb arose from the fact that the Thames furnished the great highway from the City to Westminster, while Fleet-street, little larger than a suburban lane, continued to be of little importance because Holborn, long known as "The King's Street," was the main thoroughfare from the West into London through Newgate, which stood near "the old stoccene of St. Andrew's Church," where the bridge stood ages before the Victorian Viaduct was dreamed possible.

This brief topographical summary furnishes an outline survey giving the environment of the Temple and demonstrating its geographic importance. Originally the Knights Templars founded their quarters near the top end of modern Chancery-lane, on the upper side of Holborn in the parish of St. Andrews. There they built a round church in Caen stone planned on the lines of the Church of the Holy Sepulchre at Jerusalem. It became known as "The Old Temple," and was sold about 1155 to Bishop Robert de Chesney of Lincoln. The Templars also acquired land on the north side of Fleet-street, in addition to their fine estate on its south. The smaller holding was near old St. Dunstan's and the Hospitallers purchased that with its forges in 1485. The Knights of the Order of Jerusalem, as warrior monks, were the head of the preceptory in London controlling the establishments in Scotland and Ireland, consequently no expense or labour was spared to strengthen their position. They took over the hides of Wideflete from the monks of Bermondsey on the south side of the Thames. The Order became the chief bankers of Christendom in the thirteenth century, sharing that distinction with the Jews. After the abolition of the Knights Templars by Pope Clement V, at the instance of the French King, Philip IV, they remained the custodians of the Revenues and Bankers to the English Monarchs. An early entry as to this is mentioned under the date of 1274, when King Edward 1st began to reign. The lawyers prospered accordingly. Their beautiful circular church standing in The Temple was consecrated in 1185, the year of its completion, and therefore is exactly contemporary with Canterbury Cathedral. The choir was added half a century later and consecrated in 1240. This extension has suffered much from bad restorations as well as from mutilations periodically. It is still reckoned the most perfect specimen in England of this graceful form of construction, vaulted throughout upon pillars of equal height and in general idea has been compared as a magnified transcript of the Lady Chapel at St. Saviour's. Up to the time of the seizure of the Temple estates by Henry VIII, the maintenance of the church was carried out by the order of St. John of Jerusalem. Subsequently the charge for repairs passed to the Crown. The two societies of the Temple in 1607 took over this liability by doing the work in a somewhat niggardly way. The entries quoted show this plainly, neglect and indifference prevailing. In 1682 Sir Christopher Wren was called in by the Benchers of both Inns. Great ideals were contemplated and amends promised.

A new organ had long been the cause of much disputation, and the scheme of beautification now decided on included its provision. Consequently, the organ became the predominant feature af Wren's enterprise. He entirely remodelled the screen between the "round" and the choir, filling in both the side arches with plaster blockings, which were entirely "concealed in a cunning manner." The central arch was also closed up by the organ and the view from the Nave or Circular Walk was completely lost. The choir walls up to the level of the windows were wainscotted. The floor level was heightened, and shortened the visible length of the Purbeck marble shafts by hiding their bases, and altered badly the proportions of the building. Plaster and whitewash prevailed, both in the circular nave and choir. The altar was removed from the middle of the choir and placed permanently under the central east window, where above and behind the table Wren set up a reredos of wood adorned with four pilasters and two columns, with an entablature of the Corinthian order set off by cherubims, festoons, fruit, and flowers. A pulpit, with a sounding board suspended above it, was located some way down the central aisle and enriched by classic carvings similar to those of the organ loft and screen. "A compass pediment and also the Queen's arms freely carved: the intercolumns are large pannels in carved frames, and near the pediment of the altar screen is an enrichment with cherubims and figure of a Pegasus, the badge of the Society of the Inner Temple." The Holy Lamb, the badge of the Middle Temple, is on the other side, "for though these 2 Houses have but 1 church, yet they seldom sit promiscuously there, but the Inner Temple on the s. side and the Gentlemen of the Middle Temple Nd. from the middle Ile." "Fortunately," adds Mr. Williamson, "the whole of Wren's work has been swept away." The story of the organ continued a serious business, often very amusing. Judge Jeffreys, as Lord Chancellor, settled the dispute in favour of Bernhardt Schmidt, who constructed the organ of Magdalen College, Oxford. His rival, Harris, favoured by the Inner Temple, was ousted in 1687 accordingly, and "Father Smith's" organ is still in use.

The first reference to the undertaking of building the New Hall of the Middle Temple is an order dated 1562, with regard to its actual completion. All the members had to contribute, but the silence of the Minutes is inexplicable. The Hall is described by Master Worsley as "a spatious beautifull and stately room, and may vie with any of the like nature in the Kingdom." It is 100 ft. long, including the passage at the east end behind the screen, and 40 ft. wide. the height being 45 ft., lighted by six windows and covered by a splendid hammer beam roof, just recently under considerable repair. There is no record to show who designed the very handsome screen, or by whom it was executed. The work is said to bear a close resemblance to the great screen at Audley End. The exterior of the Hall has been so altered from time to time, especially the entrance, that the structure has suffered artistically. The present tower dates from 1832. Inigo J elected a member of the Inn on Febr 1612, in recognition of his artistic t designing the scenic effects and dec in connection with the Temple Masque were famous and frequently performe difficulty of lighting King's Bench W various courts is mentioned in the acc the Inn, such as that about 1700 as to Richard Cole, who discovered "a extraordinary way of invention of glasses in conicall figures and lamps to himselfe." Candles were employe the buildings. The Inner Temple taken down (1868-70), as it had lo trace and vestige of antiquity

Most of the various chambers were enterprising venturers, and the Socie resolving to stop speculations of t often got into disputes, foreclosed and money to finish such contracts. Dr. plan, approved by the Middle Templ erection of chambers over the cloister on one side when Sir Christopher W mitted a competitive alternative. Lo cellor Henage Finch acted as refere 1680 made this award, "That the said shd be built 70 ffeet long and 30 ffe from out to out, and 3 stories high cloyster according to the within n modell drawne by Sir Xtopher Wren, the cloyster should reach unto Mr. East window, but not upon any pa window, and that noe tymber shoulc into the walls of the church or into th Petitt's buildings for supporting the . . . to be supported on substantial fo of Brick soe that the Cloyster shall n or endanger the Church or Petitt's b The Church porch had for many yea in this century been cluttered up wit and chambers.

No drawing exists giving the appe the Old Gate House, taken down and by the existing building by Sir Christop It seems to have been a large edifice on tion of stone and built of brick. The i across the facade by Wren records th its erection, "Surrexit impens Soc. M MDCLXXXIV," and above the entr the Holy Lamb and flag (incorrectly as the nimbus is wanting), with the fig "It is doubtful whether this gatehou regarded as adding to the reputatio great architect."



From "The History of the Temple."

Temple Church (1800), showing Cloisters designed by Wren.

OOK REVIEWS

stic Architecture of Holland. Edited by . YERBURY. (London: 27-29, Tothill-t, Westminster.) Price 25s.

the constant flow of books on historical ure, most of which are concerned ith churches and religious establish- is refreshing to notice a work such voted exclusively to the architecture me. The book consists of seventy- es of photographs of buildings selected ous Dutch towns, followed by twenty- s of measured drawings; and there and instructive introduction by Dr. Slothouwer. A reproduction in colour, inting by P. De Hoogh, of the interior h house forms the frontispiece to the The photographic plates are clear, hosen in respect to their subjects, and a great variety of phases of Dutch architecture of the seventeenth and centuries. They illustrate dwelling- public buildings and warehouses; devoted to fine examples of doorways, gateways, and pumps, while others teriors and internal fittings. These nnot convey an idea of the colour hich plays so important a rôle in omestic architecture, but they do he general grouping of wall spaces and and the reserve and charm of the How great is the value of large wall an architectural composition is well such examples as that reproduced in from Staphorst; and of fine brick- the example from Amsterdam, on while the fine effect possible with f the materials at the disposal of the well exemplified on plate 47, from

to be regretted that no space has d for a plan of any of the buildings l, or, indeed, of any other building. raph or measured drawing of a façade eful as a study of composition, but it far more intelligible and instructive ompanied by the plans from which eloped; its genesis is then clear, and of the whole infinitely greater

tch houses were generally built side eside a street or canal, on which they a narrow frontage, which, even in the ns, was not more than 15 ft. wide. w side of the house being thus against , it naturally formed the gable end. unts for the rows of tall and narrow ich form so familiar a feature in old wns, each façade being finished with aried according to the taste or means ner, or according to the date at which ilt. Stone is not found in Holland, of this material as is used, either alone njunction with brick, was imported. deficiency is amply compensated for ck clays which are found in abundance e boundaries of the country itself and oduce bricks of a considerable variety , though they are generally of a bright wards the end of the seventeenth he bricks were treated with oil or tar t their absorption of moisture, a pre- endered necessary owing to the very nosphere of the Low Countries, and, in time, these toned to a dark brown. ow bars and frames were painted white the doors and ironwork dark green; ses where the gables were embellished e decorations, these decorations were ed, usually in cream. In addition to window panes of the seventeenth and centuries, on account of the use of e containing silver in the process of nufacture, attained in time a violet ich, though not discernible from within, ly seen from the outside. The whole herefore, presents a chromatic scheme, st be understood in relation to the nd grouping of parts, and is a very t factor in the general effect produced. ental emphasis of important features by shadows obtained by the slight setting back of the window frames from the wall face and the projection of the coping beyond it—introduced for practical reasons—also enhances this effect.

There is much to learn from a careful study of the domestic architecture of Holland. Having for centuries employed bricks as the principal building material, the Dutch have acquired a power and freedom in their use of brickwork which is characterised by refinement and skill, indeed, often with daring. Of late years, owing to its use as a covering for the actual structural members, this freedom in the employment of brickwork has, in many cases, developed into a certain abandon which can scarcely command unqualified approval, but the work produced during the seventeenth and eighteenth centuries and illustrated in this volume will well repay a careful examination. The plates of measured drawings, which are of façades and of doorways, gateways, internal fittings and other details, are well and carefully drawn. Many of the subjects are also illustrated among the photographs and have cross references to the photographic plates. These drawings form a most valuable adjunct to what is a useful work.

L'Arte di distinguere gli Stili. By ALFREDO MELANI. 2nd edition. (Milan: Ulrico Hoepli. L.26.)

In his preface to the second edition of this, the first volume of his trilogy on the art of distinguishing styles, Prof. Melani states that three years' serious private study is worth ten at an art school or university. A lengthy experience has taught him that artists generally lack the historical knowledge necessary for the full appreciation of a work, which they judge solely by æsthetic standards. Certainly the Professor, by means of his Hoepli manuals and other books, has done much to provide the Italian student with suitable material for self-culture.

The present volume treats of architecture, sculpture and, in a lesser degree, decorative art. The space allotted to the so-called "minor arts" (a term which arouses the author's indignation) has been increased in this new edition, and the outstanding features of each style as applied to wood and metal work, ceramics, &c., are indicated, typical examples being given. The lists of these have in every case been carefully compiled. Where possible, the architectural, sculptural, and other works mentioned are Italian, and care has been taken to include examples from all over the country, so as to enable the student to see specimens near his own home. Not that the work of other nations has been overlooked when it "inspires, disciplines or governs"—as in the case of Gothic where, after describing the features and work of the various architectural schools in Italy, Prof. Melani gives a list of representative examples—entirely French.

Of special interest are the 262 illustrations, mostly from sketches by the author drawn at the time he was writing the book. They complete and illuminate the text in a way that photographs could not do, and permit of the inclusion of a number of details from lesser known works.

In a stimulating introductory chapter on "Style and Styles," the folly of seeking to establish a hierarchy in works of art is emphasised, since their æsthetic value lies in the artist, not in the material used. As water finds its own level, so does the true artist find his material and subject, by instinct not by selection.

EXHIBITION NOTES

THE R.B.A.

The R.B.A. is a very good exhibition, and probably, on the whole, one of the most vitally interesting we have had for some time, for it contains so much that is sincere and unobtrusive, and in keeping with the best tradition of our art. There is an unusually large proportion of architectural or building subjects, from the powerful drawing of Sir Richard Whittington's house (225), by G. A. Cox, and his Isaak Walton's house (221), to the fine impression of Truro Cathedral (140), by Barry Pittar. An excellent small drawing is that of the Bank of England Court Room (179), by J. F. Wilson; and a clever drawing of melancholy suggestion is the "Passing of Regent-street" (221), by W. E. Willats. Nos. 80, 202 and 206 are amongst the more interesting studies of building. The sparkle and interest of river scenery with its shipping are very effectively shown in "Alongside the Pool" (321), by W. Edward Riley. We cannot do justice in brief notes to the many excellent landscapes, which mean so much of the value of the exhibition, such as the brilliant sunlit meadow against purple hills and grey sky, by Leonard Richmond (85), the charming winter scene, "Melting Snow" (147), by J. Paul Brinson, the dark towered landscape (168), by Thurston Laidlaw Shoosmith, the same artist's "In Wensleydale" (174), and the able drawings by Hesketh Hubbard (633, 26, and 387).

R.I.B.A.

A small but interesting exhibition is now being held at the R.I.B.A. Galleries of water-colours by the late Sir Ernest George, R.A., and Y. E. Collcutt. There is a thoroughness and sincerity in the works which are well worthy of study by our young men. If they are devoid of the "slickness," thought so much of to-day, they are truthful and pleasing in colour, and the possession of one would at all times give pleasure. Sir Ernest's drawings show some charming examples of Dieppe, Naples, and Rome, excellent in their simplicity and technique; and Collcutt's, if not quite so delicately handled, are capital drawings, notably Bosham and Dunwich, typical English scenes. A good drawing of Ronda Cathedral is also well worthy of notice. The exhibition is open until November 15.

MODERN TOWN GROWTH

MR. WILLIAM HAYWOOD, in his fourth lecture at Birmingham University on town planning, said during the nineteenth century commercial and industrial towns in England lost that clear definition of form which was so apparent in ancient cities. The absence of need for military defence, and a rapid increase of industrialism, led to an irregular growth of towns often far beyond the Parliamentary boundaries.

Thus modern maps which represented cities as administrative areas only were apt to create a wrong impression of town-planning problems, which should be independent of such arbitrary definition because intimately connected with adjoining and even distant areas.

Modern town growth in England was best seen in the latest density maps of the Royal Geographical Society's Atlas, where a great part of Lancashire appeared as practically one great town, of which Oldham, Wigan, Bolton, &c., were the producing centres, Manchester the market, and Liverpool the seaport. Glasgow was joining up with the Clyde ports and even reaching out towards Edinburgh. The Midlands, South Wales, South-West Yorkshire, and East Durham, all tended to merge their towns into town belts, which, it should be observed, were situated more or less upon the coal measures to which they owed their position and development.

The housing evils of the nineteenth century were due to the ungoverned growth of towns, and were first checked by the powers which the Public Health Act of 1875 conferred on local authorities. Under recent town-planning legislation the future extension of great cities would avoid the evils of the past.

The doctrine of Mr. Ebenezer Howard and others that great towns were necessarily evil and so should be artificially limited in extent, had led to the building of self-contained garden cities of from 30,000 to 50,000 inhabitants, governed by a new policy of control; and as a variation of this idea, it was proposed to absorb the excess population of great cities by means of satellite towns, separated from the parent city by park belts, yet effectively associated with it by rapid transport services.

ARCHITECTS' AND BUILDERS' INQUIRY BUREAU

****** We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.*

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript?—ED.

Decoration of Walls.

SIR,—I should be very grateful if any of your readers could help me with the following :—

It is desired to re-decorate the walls of a room about 25 ft. by 25 ft. by 12 ft. high, and used for small public meetings.

The walls at present are "fair faced" and distempered, and we now wish to either plaster the walls or render in cement, to bring to a smooth surface, and then distemper and paint.

If one good coat of Portland cement is applied, followed by one coat of Keen's cement, will the painted dado, and the distemper above lose its colour or flake off ?

Could you tell me what the approximate cost will be ?

It is desired to decorate the walls straight away, and not wait a period of some months for the work to dry out.

"STUDENT."

Floor Coverings.

[REPLY TO "FLOORING," OCTOBER 31.]

SIR,—It is probable that what "Flooring" describes as "sweating" of the concrete floors which have been laid some time is really due to the concrete being insufficiently dense and allowing the moisture to come through from below. This is the more probable as the trouble is only experienced, apparently, on the ground floor.

The only remedy, I fear, would be to strip off the rubber covering, thoroughly clean the concrete and apply three coats of a 4 : 1 : solution of silicate of soda, allowing each coat to dry before the next is put on. The solution should be applied with a soft brush or mop.

T. J. CLARK.

SIR,—I wonder whether "Flooring" has met the same trouble of which I heard recently. This was an instance of a rubber floor that was given to rising long after all moisture should have been given off from the concrete. The trouble was laid at the door of the too zealous cleaners, who were instructed to be very sparing in the application of water thereon, and I believe it is a fact that there were no more complaints after these instructions had been followed. Cement concrete should not give off moisture after it has once finally set, or it points to improper materials. The use of sea-sand might cause it, and this is a very serious fault. If there is anything of the kind in the case in point, I should advise the coating of the surface of an experimental section with good waterproofed cement, and then trying the ordinary adhesive solution. First, however, have a talk to the cleaners and be sure that this is not the simple cause. Rubber flooring is such an ideal floor covering that it is worth exploring all roads before abandoning the use thereof.

"SOFTLY."

SIR,—It will be useless to attempt fixing the rubber flooring until the concrete becomes thoroughly dry.

The present rubber should be taken up and, if possible, the concrete left uncovered. The period may vary from a few days to perhaps a month.

When the sub-floor is really dry the rubber should be fixed with rubber solution such as used by the manufacturers of rubber flooring. Cold water glue is not a satisfactory medium for sticking rubber.

Probably it will be found that the rubber has stretched, and it should therefore be cut to correct size before being relaid.

Cement waterproofing brushed on the concrete is useless, as this will not adhere properly to the concrete, but only forms a skin which will break away.

"RUBBER FLOORING."

Concrete Garage.

SIR,—I have had a garage, 14 by 8, built in concrete, into the foot of a steep chalk hill. It is built right into the chalk (with about 18 in. of top soil) on its three sides, up to about 7 ft., the remaining foot being above and clear of the soil. My builder now informs me it never will be dry and fit to keep a car in, as, the chalk being porous, and the hill sloping down to the garage wall, all rain will drain down to it. Can you suggest an inexpensive remedy, please ? I have thought of cutting out all round one side and back, about a foot or so, as an air space, but I cannot do this on the third side as it is built on the dividing line of my neighbour's land, and I am not even sure if it would stand and be safe if left on its own. The roof is reinforced.

W. STEVENSON.

Filter Beds.

[REPLY TO SANITAS, OCTOBER 31.]

SIR,—With reference to the query of "Sanitas" in last week's *Builder*, my experience is that the best filtering medium for a small domestic septic tank is clean, hard, furnace clinker, that will not disintegrate, and which provides the necessary interstices. This medium should be graded and laid in the bed in three equal layers—2½ in. at bottom, 1½ in. to 1 in in the middle, and ¾ in. to ½ in. top layer. I have put down numbers of beds thus with excellent results.

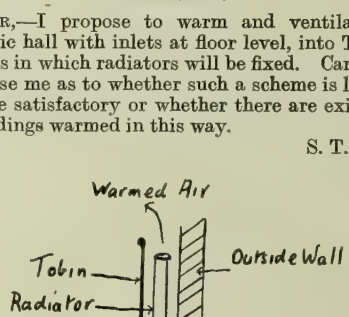
There are, however, many other requirements necessary to get good results : correct computation for the size of the bed, aeration, distribution, &c. ; but providing "Sanitas" is acquainted with these details, and will construct the bed as above I think he will get complete satisfaction.

W. B. SEWARD, M.R.S.I.

Ventilation.

SIR,—I propose to warm and ventilate a public hall with inlets at floor level, into Tobin tubes in which radiators will be fixed. Can you advise me as to whether such a scheme is likely to be satisfactory or whether there are existing buildings warmed in this way.

S. T. C.



Contaminated Water.

[REPLY TO "YOUNG BUILDER," OCTOBER 31.]

SIR,—Every owner of land is entitled to sink a well on his own premises and so obtain a supply of water, even if in so doing he drains off the water from his neighbour's well. But when a well is polluted (*i.e.*, something is added which changes the qualities of the natural water), the rule of law is "that you must not injure the property of your neighbour, and that, consequently, if filth is created on any man's then, in the quaint language of the *Rep Salk* (361), 'he whose dirt it is, must k that it may not trespass.'" See Hodgkin Ennor (1863), 4 B. & S., 229.

Again, in Ballard *v.* Tomlinson (1885), D. 115, Lindley, L. J., said, "No man right to use his own land in such a way a a nuisance to his neighbour, and wheth nuisance effected by sending filth on his bour's land, or by putting poisonous mat his own land and allowing it to escape neighbour's land, or whether the nuisa effected by poisoning the air which his neig breathes, or the water which he drinks, a to me immaterial. If a man chooses to pu on his own land, he must take care not it escape on to his neighbour's land."

It does not matter whether the polluted flows in a known or unknown chann trickles over the surface of the land or lates through the soil, or flows through a ficial channel of a permanent character. Fu where water flows in an unknown chan percolates through the ground, no rig pollute it can be acquired by prescriptio

The first point to be determined, by examination, is who it is has infringe enquirer's right. Is the source of the pol from an adjoining neighbour's land, o caused as the enquirer states in his que If it is a private owner, then his remedy seek an injunction and damages. It necessary to prove actual damage—mere of duty gives a good cause of action t person injured. If the source of the pollu from the main sewer, then, since the authority has obtained limited owners the sewer (under, *e.g.*, the Public Healt 1875), the enquirer has no other remedy to claim a mandamus to command the dants to discontinue the nuisance—fo local authority is not liable for "non-feas *i.e.*, the failure or omission to perform se which there is an obligation to perform—t it is liable for "mis-feasance," *i.e.*, th proper performance of some lawful act an action for injunction and damages lie. In Jone *v.* Llanrwst Urban C however, Parker, J., granted an inju against the local authority for neglecti prevent sewage escaping from their sewe

"DUR

Keene's Cement.

SIR,—I know of one or two architect make it a practice to specify all Keene's c work to be on a backing of the same ma instead of the usual Portland cement ba Are there any of your correspondents wh explain the reason for this practice, an advantages, if any, that follow ?

"QUER

MINGLING OF EASTE AND WESTERN ART

SIR BANISTER FLETCHER, F.R.I.B.A., le recently at the Central School of Arts and on the Romanesque buildings of Norther Central Italy, which, he said, presented contrasts. In the case of Southern including Sicily, architecture and history closely interwoven, and very varied pha artistic design—Byzantine, Norman, Sarac illustrated the successive religions and ci tions of its occupants. A solidity of str indicating European tradition was con with a blaze of colour of Mohammedan Sir Banister gave interesting views of Pa with that fine building the Martorani Monreale Cathedral, which combined a B basilican plan with Byzantine wall mosaic a roof of Saracenic character, the cloisters c adding the characteristic Romanesque The architecture of Sicily was thus carr unceasingly by mason and carpenter, decorations by the worker in metal and n leaving the unmistakable impress of each

The next lecture will deal with the archit of the succeeding (Gothic) period in No Italy.

THE BUILDING TRADE

HE FUTURE OF HOUSING SCHEMES

FROM A CORRESPONDENT.

change of Government will no doubt he future of many projected housing in various parts of the country. The should not be a political shuttlecock. chitects and builders in many districts he present time negotiating with local ies plans and tenders for housing . In some cases the housing com- have held their hands, because they ot decide whether they preferred to e increased subsidy offered by Mr. y rather than the smaller Chamberlain In other cases, as in South Essex, have, we believe, postponed making ision for another three months. There r instances, notably in colliery districts, ompanies after balancing the merits of schemes have decided to adopt the rlain subsidy.

pecial conditions imposed under the y scheme are likely to lead to con- e trouble and expense. There is first ssity that all the houses should be let han that they should be sold. Some treasurers, who have studied the com- ive regulations setting forth the rules to owed in determining the appropriate rent, confess that they are somewhat Particulars of the current rents of -class houses of all types erected in a before the war have to be obtained. articulars have to be divided, as they two main classes of houses, parlour and lour. Then, if there is a marked ce in the levels of rent in different parts area, a further sub-division has to be After all these statistics are arrived at, lved calculation has to be made in order the "final" rent. But this so-called rent may again be altered if any l change takes place in the level of the district, and also if costs have p, and the estimated annual loss of se exceeds the equivalent of £4 10s. or forty years.

ipal officials are not likely to embark some hesitation on a housing pro- surrounded by so many difficulties, majority of local authorities have so ed very warily before taking any action under the Wheatley Act. The therefore, before the new Minister of whoever he may be, will be to meet any delay the demand of the repre- s of local government in this country efinite lead on this question. It is l that Mr. Neville Chamberlain will o the Ministry of Health, and those s and builders who have come in contact will agree that he, at any rate, is a has first-hand and practical knowledge ubject.

s incline to the view that it is quite ry to repeal this Act. In any case plenty of loopholes for escape provided ct itself, by which any Minister of ay "reverse engines" without going ment for permission to cancel recently gislation. There is, for example, pro- de in the Act that when two years sed, i.e., after October 1st, 1926, the s to be reviewed in consultation with tives of local authorities and, if the uilding and other conditions warrant on, the contribution will be reduced. more important as a way of escape Wheatley commitments, the next f Health may seize on the provision ar's Housing Act by which, "in the he cost of houses being found, after ry, at any time to be unreasonable, er and the Scottish Board of Health an Order to be submitted to Parlia- ment terminating the Exchequer liability to make contributions except in so far as houses have already been completed." Under this provision the next Government can find a very simple way out.

But in the interests of housing it is essential that there should be no undue delay in coming to a decision. It should be a comparatively simple matter for the future Minister of Health to state quite clearly whether he intends to encourage housing under the scheme of Mr. Chamberlain's Act of last year, which has already resulted in over 164,000 houses being authorised.

Much more, too, can be done to assist private enterprise without any further legislation being necessary. More attention should be given to the powers granted under the Acts of 1923 and 1924 to advance loans to builders and others for the construction of houses of which the estimated value does not exceed £15,000. Both local authorities and county councils now possess the power to lend money to builders, to private persons who are desiring to build for their own occupation, and also to public utility societies and building societies. As very little publicity has been given to this matter, comparatively little advantage has been taken of these powers. Builders looking for capital will note they may obtain assistance in this manner. The loans will be secured by mortgage, and builders will not be able to obtain more than 90 per cent. of the value of the interest of the mortgagor in the property. A local authority now has power to make advances up to 50 per cent. of the value of the work done. This includes the value of the builders' interest in the site.

This is only one aspect of existing housing legislation that may be of practical importance to the building industry. The first necessity, however, is that a clear statement should be issued by the new Minister of Health as soon as he is in the saddle so as to blow away all the suspicions that have been aroused during the recent political struggle, and make clear to the country what line future housing policy is to follow.

NEW METHOD OF COTTAGE BUILDING

NINE local authorities have, we are informed, definitely adopted the system of house construction invented by a Blackpool architect, Mr. Edgar D. Dennis. Already a number of houses on this system have been erected at Blackpool, and a further scheme is under consideration. The York City Council has adopted a scheme for three hundred houses that has just been sanctioned by the Ministry of Health. In addition, St. Helens has adopted a scheme for 60 houses; Dudley, for 24 houses; and Preston, Walsall, Horwich, Ashton-under-Lyne and Bristol have agreed to build on this system, but the exact number is not yet settled. Several public utility societies have also projects under consideration.

The system, in the main, relies on a steel frame, which carries the entire superimposed loads direct to the foundations, and in turn supports patent roof trusses. The stanchions which carry the steel horizontal members are built on concrete padstones which are formed on a reinforced concrete raft or fender. This, in turn, acts as a foundation for the ground floor walls. The first floor and superstructure are carried by this steel frame, and it is claimed that, as the upper story can be completed first, this enables all trades to work together immediately under cover.

The ground floor walls have an outer shell and an inner shell with a wide cavity between to prevent the passage of moisture to the interior of the houses. The outer shell is of brick, while the inner is of thick breeze. The chimney stacks are carried up in brick in the usual manner. The first floor exterior walls are timber framed. It is claimed that all the timbers are perfectly ventilated, thus preventing both dry and wet rot. The ceilings are lined with an approved fibrous asbestos sheet.

The inventor states that the number of bricks required per house is only one quarter of that required for an all-brick house of equal dimensions, and that the steel frame for a block of four houses can be erected by three ordinary labourers in seven hours. After this, it is said that the first floor walls and the roof can be proceeded with immediately, and can be completely covered in by the end of the fourth day. A block of four houses could be ready for occupation in twelve days. At Blackpool, a staff which at no time exceeded 45 men are stated to have erected 80 houses within a period of little over four months.

At York the scheme is to be carried out by Messrs. H. Shepherd & Son, of York. Before the York Corporation passed the scheme, the system was investigated by the Housing Committee and by Mr. F. W. Spurr (the City Surveyor and Engineer).

LAND FOR CROYDON WIDENING

SIR ANKER SIMMONS, K.B.E., Official Arbitrator under the Acquisition of Land (Assessment of Compensation) Act, 1919, has issued his awards in three claims against the Mayor, Aldermen and Burgesses of the County Borough of Croydon by owners of property which has been acquired by the Council for the purpose of widening Brighton-road, Croydon.

The Governors of the Whitgift Foundation in Croydon claimed in respect of part of Hayling Park, part of Hayling Park Cottage, and part of Hayling Cottage, all situated in Brighton-road. The award is as follows:—(1) The Acquiring Authority to pay the claimants as compensation the sum of £1,516. (2) The Acquiring Authority to pay the fees on this award. (3) Each party to pay its own costs.

Mr. Albert John Schaefer claimed in regard to part of No. 2, Brighton-road, comprising an agreed area of approximately 837 square feet. The award is as follows:—(1) The Acquiring Authority to pay the owner-occupier in respect of the above land the sum of £56 10s. (2) The Acquiring Authority to pay the owner-occupier in respect of injurious affection or consequential damage the agreed sum of £50. (3) The Acquiring Authority to pay the fees on this award. (4) The Acquiring Authority to pay all other reasonable costs.

Mrs. Emma Maria Stiby claimed in respect of part of No. 4, Brighton-road, comprising an agreed area of approximately 796½ square feet. The award is as follows:—The Acquiring Authority to pay the owner-occupier in respect of the above land the sum of £53. (2) The Acquiring Authority to pay the owner-occupier in respect of injurious affection or consequential damage the agreed sum of £40. (3) The Acquiring Authority to pay the fees on this award. (4) The Acquiring Authority to pay all other reasonable costs.

Steel Frame Concrete Houses.

The York City Council has agreed to a contract for 300 houses of steel frame concrete to be erected within a period of 18 months at a cost of £175,000.

THE LAW RELATING TO BUILDING

By W. T. CRESWELL, Lic.R.I.B.A., Assoc. Surveyors' Institution, F.R.San.Inst. (Barrister-at-Law).

XVII.—NEGLIGENCE, NUISANCE, INSURANCE.

"NEGLIGENCE" and "nuisance" are wrongs to persons and property in general.

Certain acts are, however, authorised by Statute to be done in certain cases, where, though they may be a nuisance to a minority of those concerned, are a benefit to the majority; and authority is given conditionally on such acts not being made a public nuisance, *e.g.*, running a railway by the side of a road, or running a traction engine along the highway.

In order to succeed in an action for negligence or nuisance, "special damage" must be shown, *i.e.*, actual loss suffered in addition to the wrong for which general damages are awarded to the injured party.

Negligence.

"Negligence" has been defined as the wrong done by a person, "being under a duty to use care, and not doing what a prudent man would do, or doing that which a prudent man would not do, and thus causing damage." The burden of disproving negligence, where a contract exists between the parties, lies on the defendant; and, where no contract exists, the burden of proof is on the plaintiff; it must, further, in the latter case, be shown that there was a duty cast on the defendant to use care.

In certain cases, persons are bound to use *extreme* care. In Fletcher *v.* Rylands (1866, L.R. 1 Exch. 265), the rule was laid down that a man bringing dangerous property on to his land is bound to keep it confined within his own premises, at his peril; for example, where a reservoir is constructed on land, and it overflows and causes damage to adjoining property, the owner of the reservoir is liable; as he is also if a fire is lighted on his premises and spreads, causing damage to neighbouring property. However, when the damage is the result of an "act of God," as in the case of a great storm causing the reservoir to overflow, or where, as in the second case, a third party lit the fire, then the owner of the source of damage would be exonerated from blame.

Owners of property must make reasonable provisions for the safety of passers-by and others, though that duty has its limits—see Walker *v.* Midland Railway (1886, 2 T.L.R., 450), and Thatcher *v.* Great Western Railway (1893, 10 T.L.R., 13).

There appears to be a wider duty towards children than towards adults. A child climbed a fence near the highway, the fence gave way and the child was thereby injured. It was proved that the fence was defective, and the owner was held liable for the injury to the child.

If a person enters on premises, on business and by invitation, and he sustains injuries from an accident due to any part of the premises being unsafe, the owner of the premises is liable (see Heaven *v.* Pender—1883, 2 Q.B.D., 503).

Contributory negligence on the part of the plaintiff may be pleaded, if it can be shown that such was the proximate or decisive cause of the injury received.

If the accident has resulted also in damage to the property, where both parties are equally at fault, neither can claim damages.

Nuisance.

A nuisance may be a public nuisance, as when a person blocks up a public highway; or a private nuisance, as when an offensive trade is carried on.

No person can recover damages for a public nuisance, unless he can show that it has resulted in inflicting some peculiar damage on himself, as, for instance, if he has the misfortune to fall into a trench made in the public highway, and into which any other wayfarer might have fallen; this is the case, equally, whether the trench is made by the local authority or by any other (say, gas, water or electric light company) having statutory right to open up the road. He must have suffered some substantial damage over and above that sustained by the public at large.

A person cannot sue a local or public authority for an offence of omission ("non-feasance"), but only for improper performance of some lawful act ("mis-feasance"). So if a local authority fails to keep a road in repair, and a person sustains injury as a result, the latter cannot sue the local authority for damages.

It is no defence for a nuisance, to plead that it has existed for a period of time, and that the plaintiff came voluntarily to the affected area knowing of the existence of the said nuisance—for instance, a soap works—and that he could have stopped away if he objected to it.

However, there is recognised a different standard of comfort for different localities; and such standards are essential factors in determining if the cause of complaint constitutes a nuisance.

For instance, it would be no use for a man to go and live by a docks, and then try to bring an action to stop the noise of ship-building and other customary business.

Building Operations.

Building operations may be commenced at 6.30 a.m. if annoyance is not caused wantonly to adjoining owners, even though loss may accrue thereby to those owners. (See Clark *v.* Lloyds Bank (1910) 79 L.J., Ch. 645.)

A contractor must not occasion inconvenience to adjoining owners by taking advantage of certain streets or passages where others are available for his use, though less convenient to himself. (See Fritz *v.* Hobson (1880), 14 Ch.D., 542.)

A person who, although within the due exercise of his rights, interferes with or obstructs a highway, rendering it less safe for the public use; or who, in exercising his rights of access to his premises, either by means of the highway or a public navigable river, without having any regard to the right of his neighbour's rights thereon, creates a nuisance, and is liable for negligence.

Also, if operations are carried on at unusual hours of the night, when there is no express necessity, or the road is injured by running unusually heavy traffic thereon, or such noise or vibration is caused as materially interferes with the comfort of neighbours, when the locality is not one where such noises are usual or to be expected—in all these cases the aggressor is liable to the sufferer.

In general the employer, or owner, is liable. The contractor, however, accepts liability by signing a contract to do so (under which contract the building, during execution and until handed over, becomes vested in him). The architect, being an agent, would only be liable where the trouble was the result of his having misled the employer, and having instructed the contractor to perform such works as his due care and skill should have convinced him were unlawful or dangerous. If the enterprise itself is unlawful, the employer cannot claim indemnity from the contractor.

Insurance.

Under an "entire" contract, if a new building is at any time, before being handed over, destroyed or damaged by fire, the contractor is liable to the building owner for loss. But in cases of repairs and alterations, the owner bears the loss; but only for such materials as are fixed, and work already done to the property. Materials stored on the site are the property of the contractor. It is therefore prudent, on the part of the contractor, to insure against fire; since, in general, he has an insurable interest, which interest must, however, exist at the time of the loss. Building contracts usually contain a clause that the contractor must insure. When a proposal for fire insurance has been accepted, there is a binding contract in force. The policy need not b executed, if a fire occurs, to make it l

Reinstatement.

Insurers usually reserve the right of re as an alternative to payment of the money, where buildings are damaged And an average clause in a fire polic provides that the insured shall not greater proportion of his loss than the bears to the total value of the propert

Section 83 of the Fires Prevention (M Act, 1774 (an Act which applies to England and Wales) enacts that an company may exercise the option to In some cases persons interested may that the company shall reinstate. Se *v.* Royal Insurance Co. (1859, 1 E. & A contractor may reserve the right, as himself and the employer, to make goo caused by fire himself as an altern payment.

Anyone who once elects to carry out accepts all liability for defects in the w done, and for risk from any subsequen by fire during progress. Also, the w be done in such a way as to restore the to its former state, as far as is possi insuree is entitled to peruse the specifi works for the reinstating; and, in an avoids disputes if this is submitted to

The insurer or the contractor, which who reinstates, is entitled to all salvage, re-use such material as is not unfitted fo though it would appear that the emplo architect may question the condition o material which is being again brough work.

Colliery Housing Scheme.

A contract has recently been settled houses, to be built for the Bestwood Iron Co., in the Midlands. In this Chamberlain Act of last year that was by the late Government, to be in operat 1939, is to be utilised, and a subsidy house will be applied for. The Hous poration of Great Britain is responsibl arrangements for their erection. The a are Major Douglas Wood, who was Housing Commissioner for the Midland Dr. Addison, and Mr. Lloyd Thomas, Housing Commissioner for South Wal houses are to be built of bricks, but it stood that in some cases they may structed of concrete.

London Town-Planning Schem

At a recent meeting of the L.C.C stated that the necessary steps had be to advertise the Council's decision of that a town-planning scheme be prepa reference to an area situated within th politan boroughs of Woolwich, Green Lewisham. This area includes Charlto which was completed by Inigo Jones It has been stated that this house acquired for use as a town hall in Gree

The Council further state they have with the district surveyors that perso ing to proceed with building proposal informed of the necessity of obtai Council's consent to interim developm article 3 of the Town-Planning (Gener Development) Order, 1922. They h sented under this Order to the er Messrs. Eaglen Bros. of six houses Ash-hill, Lee, in accordance with the plan. The London Society has offere the Council the user zoning maps metropolitan boroughs north of the as and when they are compiled. Th has accepted the offer and have agreed to lend the Society the maps of t politan boroughs of Lambeth and S which have been prepared under their The Council have also continued the gations into the conditions and circu legal and otherwise, affecting the squares in London (not included in th to the London Squares and Enclos servation) Act, 1906), and the possibl the judgment in the Edwardes-squar

NEW CINEMAS

A. Hill, the Scala Theatre, Ryde, Isle of t, is contemplating the erection of a new a in Mill-street, Newport. Plans are in ands of Mr. F. W. Groundsell, Wellington e, 77, George-street, Ryde, but no contracts e placed for a few months.

ew cinema and dance hall is to be erected ndon-road, Norbury, S.W. 16, for which have been prepared by Mr. Frank Jennings, . James's-street, S.W.1, and the cinema is ccommodate about 1,000 persons and ance hall about 300. Contracts are to be l very shortly.

ns have been prepared by Mr. James R. orth, 14, Edgar-street, Accrington, shire, for structural alterations to the a in Peel-street, Accrington, for Palace es, Ltd. We also understand that a e has been promoted by the Reading Theatre of Varieties for the rebuilding theatre in Cheapside, Reading. Plans the hands of Messrs. Sprague & Barton, ment's-inn, W.C. 2, and the structure is ed to accommodate about 1,000 persons. scheme, we understand, is in its early , and no contracts will be made for some

s stated that Mr. R. Graham-Yooll, pro- of the Marine Gardens, Seafield-road, ello, has under consideration the erection new picture theatre at Abbeyhill, Edin- The scheme is in its early stages and no ct has yet been appointed. The building accommodate about 2,500 persons.

gress is being made with the erection new picture house at the corner egent-street and Jermyn-street, W.1, uilt for the Regent Jermyn Theatre Co., of Austin Friars, E.C. 2—a £250,000 n. The general contractors are Messrs. Vigor, Ltd., of Knightsbridge, S.W. 1, sub-contracts placed are for steelwork Messrs. Moreland, Hayne & Co., Ltd., of swell-road, London, E.C.1, and Messrs. , Austen & Young, 12, Buckingham- Strand, W.C. 2. The new building will of an auditorium and large sloping ; whilst there will likewise be shops on eet frontages, restaurant, &c. The archi- Mr. Frank T. Verity, F.R.I.B.A., of 7, lle-street, W. 1.

site of Nos. 62–65, Haymarket, S.W., is being excavated, and existing foundations removed, in order to make way for the new "Carlton" Theatre. The building will be built on a steel framework, with cantilever balconies and an exterior facade of Portland stone. The total number of seats to be provided will be 1,200; whilst considerable space will be devoted to lounges, refreshment rooms, &c. The total cost of the building is estimated at £160,000. The site has an area of 12,170 ft., with a rear frontage to St. Alban's-place. The architect is Mr. Frank T. Verity, F.R.I.B.A., 7, Sackville-street, W.1, acting on the instructions of the Carlton Theatre Co., Ltd., of Austin Friars, E.C.2.

The Leeds Corporation propose to build a large concert hall, with cinema equipment, capable of seating 5,000 persons, at a cost of £70,000.

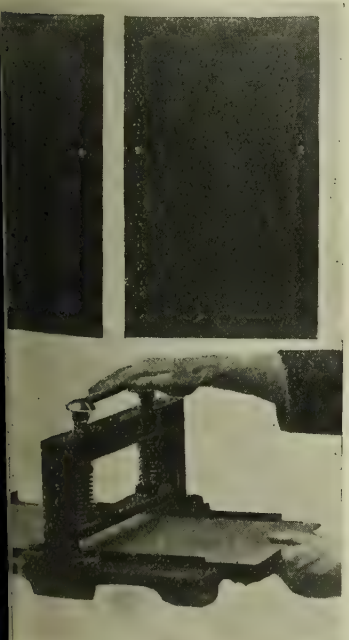
NEW INVENTION

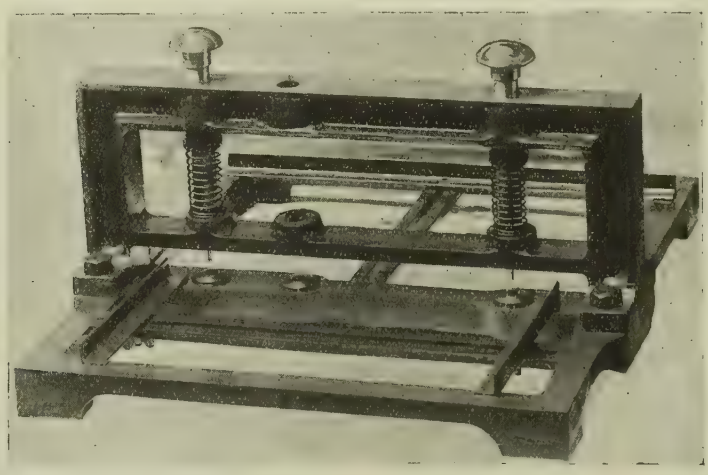
Slate-Punching Machine.

A simple and effective machine, designed for the purpose of preventing wastage of slates by breakage when punching holes in them, has been put on the market by Messrs. "Lion" (Patent) Machine Co., of St. Margaret's-road, Whitchurch, Cardiff, and is illustrated on this page.

This strongly built machine expeditiously punches the two holes necessary in any size slates for securing them firmly to the battens, without moving the slate when once set in the machine, and countersinks the holes in one operation in such a manner that the minimum amount of counter-sinking is effected, and thereby the top of the nail heads will fit level only with the surface of the slates; thus the maximum thickness of slate will then be available to receive the body of the nail, which is a tight fit, and, in consequence, the strength of the slate is in no way impaired by the operation. The punching of such holes is effected by the difference in the size of the die, the end of the punch, and the small flat bearing surface on top of the die on which the slate rests, and which gives the support necessary to avoid breaking any slates or impairing the thickness during the punching operation.

The following are the claims made on behalf of the machine by the makers: (1) Perfect countersunk holes; (2) body of nail a tight fit in hole; (3) head of nail a perfect fit in countersink flush with surface of slate; (4) machine is designed to punch all sizes of slates; (5) there are no breakages; (6) 700 slates can be punched per hour; (7) special care has been taken both in design and material used to make a most durable machine, there being nothing to break or wear out; (8) the price of the machine will be easily saved on a single house by the entire absence of broken slates and the difference in labour costs.





Slate-Punching Machine.

RENTS IN AMERICA

The Index recently issued by the New York Trust Company states rents in the United States in June, 1924, were higher than at any time since 1914. The average increase in rents for low and moderate-price accommodations between July, 1914, and June, 1924, was 85 per cent. This increase in rents is considerably greater than the increase in the cost of any other major item in the family budget. In the seven months previous to June, 1924, the increase in rents was 3 per cent., and from March, 1923, to June, 1924, the increase was 9 per cent. In the last ten years the proportion of rent in family expenditures reached a low point of 12.8 per cent. in 1918, while in March, 1924, the latest figure given by the National Industrial Conference Board, this percentage was 20. No changes in rents from November, 1923, to March, 1924, were reported from 83 cities, while there were increases in 69 cities and decreases in 26 cities. The greatest number of increases in average rents in these four months was reported from the eastern and middle-western sections. In the east rents increased in 31 cities. Six cities reported rises of from 11 to 20 per cent. The 24 other cities showed increases of 10 per cent. or less. The south was the only section for the country where more decreases than increases since November, 1923, were reported.

Delville Wood Memorial.

This memorial, which is being erected on the site of Delville Wood to the South African Brigade, is expected to be completed in the early part of next year. By the end of this year the whole of the masonry work will, it is understood, be completed. The chief features of the scheme, which has been designed by Mr. Herbert Baker, F.R.I.B.A., is a central arch with side pavilions, and in the centre of the foreground will be a memorial cross.

A Commemoration Dinner.

A dinner was recently given by Mr. W. R. Rawlings, of Messrs. Rawlings Bros., Ltd., at the Vanderbilt Hotel, to commemorate the addition to the directorate of Mr. J. Kirkham, who for many years had acted as secretary of the Company. Mr. Kirkham will also act as joint managing director with Mr. W. R. Rawlings, in place of Mr. John Rawlings who, although retiring from the managing directorship, will retain his seat on the board, and will act as technical adviser to the Company.

Demolition of Bradford Slums.

A scheme recently put forward by the Bradford City Council for the demolition of the White Abbey slum area and the erection on the site of new houses has recently been approved by the Ministry of Health. The expenditure involved in demolition and rehousing will, it is stated, be £235,766. The order of the Ministry of Health requires the Council to provide dwellings for 2,312 persons.

NEW BUILDINGS IN LONDON

Hatton Garden.—A new building is being erected in Hatton Garden, E.C.1, to comprise offices on the ground floor, stores and garage. The premises, of seven stories in height, will be supported on a steel frame and the frontage will be of brick with stone dressings. Central heating and electric lighting systems will be installed, together with a passenger lift. The windows will be of the metal casement type. The contractors are Messrs. Kirk & Randall, Ltd., 146, Grosvenor-road, S.W.1. The architect is Mr. S. Gordon Jeeves, of 4, George-street, W.1.

Wembley Park.—A new church is to be built at Wembley Park, Middlesex, from the proceeds of the sale of the site of St. Mary's Church, Vincent-square, S.W.1. The new edifice will be about 190 ft. in length by 100 ft. wide and will consist of nave, side chapels, apse, galleries, sacristy, &c. The first section of the building will include the apse and two bays of the nave. The interior of the church will be plastered and distempered, with Forest of Dean stone dressings. The exterior will be of Luton brown and purple brick and Portland stone dressings. The windows will be of steel and of stained and leaded glass. The builders are Messrs. Holloway Bros. (London), Ltd., Bridge Wharf, Grosvenor-road, S.W.1. The architect is Mr. T. H. Lyon, of the University College of Architecture, Cambridge. The consulting engineer is Mr. F. Broadhurst Craig, 1, Fitzroy-street, W.1. The quantity surveyors are Messrs. Horder & Wells, of 40, Catherine-street, S.W.1.

Green-lanes.—A large building, to be used as a public market, is to be erected in Green-lanes, Finsbury, N.4, on a site with a frontage of about 200 ft. Accommodation will be provided for about 250 stalls, arranged along the walls of the building and in streets down the centre. Steel frame works will be employed to support the building, which will be of brick with a roof of corrugated asbestos cement slates on the lower slopes and glazing, supported by patent bars on the peak. The floors will be of concrete, whilst a considerable amount of glazed tile and brick work will be introduced. Gas, water and electricity services will be laid on for the benefit of tenants, whilst a complete drainage scheme will be constructed. Lavatory accommodation for both sexes will be provided. The architect is Mr. S. Gordon Jeeves, of 4, George-street, W.1.

Golder's Green.—The large residence known as Fernside, in Golder's Green-road, N.W., is to be converted into a social club. Part of the existing building is to be gutted and reinstated, whilst a large dining room, servery and other accommodation will be provided in an additional building. The floor of the principal room will be fitted with a spring dance floor, with a parquet surface. Rooms will be fitted up for billiards, concerts and refreshments, &c., whilst there will also be extensive kitchens, lavatory accommodation, servants' quarters, &c. A similar scheme is now being completed by the same interests at Streatham, the contractors being Messrs. Rice & Son, of 15, Stockwell-road, S.W.9. The architect is Mr. John Hudson, F.R.I.B.A., of 131, Baker-street, W.1.

Woodstock-road.—A new motor garage is to be built on a site in Woodstock-road, Acton, W. The area to be covered has a frontage of about 60 ft. and extends back some 150 ft. A steel-framed building of one story is to be erected, with brick filling. The floor will be of mass concrete, asphalted, whilst the roof will be of asbestos slates. There will be a rest room for drivers, manager's office, &c., whilst the entire building will be extensively lighted by large skylights and casement windows. The architects are Messrs. Hearn & Shuter, of Town Hall Buildings, 12, Heathfield-terrace, W.4.

Fisherton-street.—Two blocks of flats are being erected in Fisherton-street, N.W.8. Each building is arranged to hold 16 flats, consisting of living room, kitchen, scullery, offices, &c., and two or three bedrooms. The work is to be carried out in brick with a few stone dressings on windows and doors. Lighting will be by electricity. The roof will be flat and asphalted. Staircases and landings will be in concrete. The contractors are Messrs. Walter Jones & Sons, Ltd., of 64, Victoria-street, London, S.W.1. The architects are Messrs. Ashby & Newman, of 14, Gray's Inn-square, W.C.1, whilst the quantity surveyors are Messrs. Drower & Brighton, of 28, Victoria-street, S.W.1.

Holborn.—The ground floor of the large new building in High Holborn, W.C., has been acquired by Messrs. F. W. Woolworth & Co., Ltd., of Victory House, Kingsway, W.C. New shop fronts are to be erected and a good deal of shop fitting and mirror building works are involved, the whole of which will be carried out by the company's own construction department, under Mr. W. Priddle, staff architect. The architects to the building are Messrs. Constantine & Vernon, of 82, Mortimer-street, W.1.

Pentonville-road.—The branch shop in Pentonville-road, King's Cross, of Messrs. Freeman, Hardy & Willis, Ltd., boot and shoe manufacturers, of Rutland-street, Leicester, is to be considerably improved, and a new shop front fixed. Work has not yet started, but will be executed by the company's own building staff.

Islington.—A new branch bank is to be opened in High-street, Islington, N., by Messrs. Barclays Bank, Ltd. A two-story building with a frontage in old brick and stone is proposed, with a metal window on the ground floor and wooden casements above. The general contractors are Messrs. Stevens & Sons, of Crouch Hill, N.4. The heating work is being carried out by Messrs. Colley, Meikle & Co., Ltd., 15, Great James-street, S.W.1.

Bishopsgate.—New buildings are being erected on the corner site at Bishopsgate and Leadenhall-street, E.C.3, as an extension of premises for the London & Lancashire Assurance Co., and new offices for the Marine Insurance Co. The new premises will be six stories high with a basement, and will be built on a steel frame with elevations in stone and marble. The floors are of hollow tiles reinforced with steel. A lift is to be installed to serve all floors. The casements for the windows will be of metal, while there will also be ornamental ventilator grilles. The contractors are Messrs. Ashby & Horner, Ltd., of 8, Aldgate, E.1, the excavation and demolition work being carried out by Mr. B. Goodman, of 88, Haggerston-road, E. The architect is Mr. Marcus Evelyn Collins, F.R.I.B.A., of 61, Old Broad-street, London, E.C.2.

Moorgate.—The Ocean Accident & Guarantee Corporation, Ltd., has decided to rebuild its old premises in Moorgate, E.C.2. The new premises will have a street frontage of about 100 ft., and will consist of six floors and a basement. A Portland stone-faced building on a steel frame, with lifts, heating, lighting and ventilating equipment is intended. The floors will be of fireproof materials, reinforced with steel, whilst all the window casements will be of metal; those on the ground floor being of an ornamental nature, and of bronze. The roof will be of hand-made tiles. The main entrance and staircase will be lined with marble and polished plaster. The demolition work is being carried out by Messrs. H. Sabey & Co., of 7, South Wharf, Paddington Basin, W.2. The architect is Sir Aston Webb, P.R.A., of 19, St. Anne's Gate, Westminster, S.W.1.

Regent-street.—The premises in Regent-street—Nos. 50, 52, and 54, occupied by the County Fire Office, and Messrs. W. Abbott & Co., Ltd.—at the corner of Glasshouse-street, W.1, are about to be rebuilt. Plans have been prepared for a new building of six stories, with shop frontages on the ground floor and offices above. The premises will be constructed of fireproof materials throughout, and will have an ornamental Portland stone front. The floors and main loads will be supported by a steel framework. The shop fronts will be of bronze, whilst the window casements will be of steel. Batteries of lifts, heating, lig ventilating, and vacuum cleaning installed. Plans have been prepared architects, Messrs. William Woodwar of 15, Great James-street, London, W Messrs. Ernest Newton (R.A.) & So Raymond's Buildings, Gray's Inn, W.C.1. The work of demolishing buildings on the site is being carrie Messrs. St. Mary's Wharf Cartage Smith Wharf, Paddington Basin, W

Kingsway.—New premises are bein Nos. 30—31, Great Queen-street, W.C.2, for the Royal Masonic Instit Girls. A building of five stories is constructed on a steel frame with land stone front and slated ro window casements will be of steel. modation will be provided for admi offices, halls, &c. The contractors a Allen Fairhead & Sons, of Sydney-road Middlesex. The demolition and e work has been carried out by Mr. Nel of Henshall-street, N.1. The steelwo erected by Messrs. H. Young & Co. Nine Elms Ironworks, S.E. The arch Messrs. Brown & Barrow, of Lenno Norfolk-street, London, W.C.2.

Whitcombe-street.—New premises erected in Whitcombe-street and square, W.1, for the Automobile As Ltd. A building of Portland stone, of t and basements, is planned, two stor contained in a mansard roof, and f above the main cornice. The buildin supported by a steel frame with floors, with a roof covered with gre The contractors are Messrs. Arthur Vi Knightsbridge, S.W.1, and the princ contractors :—Heating and ventilatin S. Mullinger, Ltd., 72, Harrow-road, Pa W.2; lifts, Messrs. Waygood-Otis, Fetter-lane, London, E.C.4; art m Messrs. Comyn Ching & Co., Ltd., 5 street, Long Acre, W.C.2; ornamen iron window fronts, The Carron Com Upper Thames-street, E.C.4; vacuum installation, Messrs. The British Cleaning & Engineering Co., Ltd., Green-lane, S.W.6; metal windows, Morris & Sons, Ltd., 239, Kenning London, S.E.11; asphalte, Messrs. Faldo & Co., Ltd., Windsor House, F London, W.C.2; steel, Messrs. Smith Ltd., 33, Tothill-street, London, S.W.1 Messrs. Allenson, Ltd., Whippen Watford, Herts; electrical installatio Mann, Egerton & Co., Ltd., 156, N street, London, W.1. Work has be completed on the first section of the the demolition of the old buildings o of the site, which includes a bank, wi ceeded with by the end of the y architect is Mr. Andrew Mather, of street, London, W.C.1.

Trafalgar-square.—Work on the e the new stone frontage to the pr Trafalgar-square, S.W.1, for the Do Canada's new London offices has jus The interior is being entirely gutted floors, &c., erected. Extensive rece public and semi-public offices are t vided. The stone frontage will be c in Portland stone, and will be of a desi to the principal elevation of Bu Palace. The general contractors a Trollope & Colls, Ltd., of 5, Colen E.C.2, whilst the principal sub-contr been placed as following :—Stone, Mc and Portland Stone Firms, Ltd., 132, road, London, S.W.1; steelwork, Mc Construction Co., Ltd., Eagle W Hoxton, N.1; patent "Bigspan" mosaic work, Messrs. Diespeker & Co Holborn Viaduct, London, E.C.2; ma Messrs. Fenning & Co., Ltd., Pala Rainville-road, W.6; scagliola wor Bellman, Ivey, & Carter, Ltd., 36, street, N.W.1; stone carving, Mess Martyn & Co., Ltd., 5, Grafton-str street, W.1; fibrous and solid pla Messrs. Clarke & Fenn, 45, Sedgr S.E.5; art metal work, Messrs. I

Allied Arts, 199, Piccadilly, London,
itary fittings, Messrs. John Bolding
svenor Works, Davies-street, London,
s, Messrs. Waygood-Otis, Ltd., 54,
e, London, E.C.4; and heating
n, Messrs. Comyn, Ching & Co.,
le-street, Long Acre, London,
The architect is Mr. Septimus
F.R.I.B.A., of 13, Somers-place,
k, London, W.2.

on-street.—A new building is being
the corner of Farringdon-street and
r-street, E.C., for Messrs. Gordon
Ltd., advertising contractors, of St.
ne, E.C.4. Of seven stories in height
ge basement, the new premises will
four large shops on the ground floor
accommodation above. The principal
will be carried out in Portland stone,
rear walls will be in common and
k. The floors will be of the armoured
eproof type. The roof will be of the
ype—containing the top story—and
ated in green Westmorlands. A lift
stalled to serve all floors, whilst the
engineering equipment will include
ating, electric lighting, &c. The site
ea of about 120 ft. by 50 ft. The
ntractors are Messrs. G. E. Wallis
Ltd., of Broadmead House, Panton-
ndon, S.W.1, and of Maidstone. The
being installed by Messrs. G. E. Wallis
nakers of the "Armoured Tubular"
The steelwork is being supplied and
Messrs. H. Young & Co., Ltd., Nine
works, London, S.W.8. The archi-
Messrs. Robert Angell & Curtis, of 133,
eet, London, W.1.

d-street.—Demolition of old buildings
y to the erection of a large modern
k is now being carried out at the site
rner of Union-court and Old Broad-
C.2. It is proposed to build a new
f five stories and basement of brick
frame, with an elevation in stone, &c.,
sement will be excavated for as soon
ent operations are complete. A large
probably occupy the corner position
und floor. The demolition contractor
Stephen Dennis, 20, Blewitt-street,
, S.E. The general contractors for
ng are Messrs. The General Building
48, St. Martin's-lane, W.C.2. The
is Mr. Paul Hoffman, Capel House,
d-street, E.C.2.

Harrow School Memorial.

mmittee was able recently to put in
complete building scheme and signed
for £26,000 to complete the body of
ng. The expenditure on the whole
scheme will be about £75,000. The
ready built is an arcaded memorial
above it is an oak-panelled
room. The work of demolition for
art has been carried out, and the new
ich is now being built will consist of a
stone walls and vaulted roof stretching
present Memorial Hall to the speech
large rooms above. The contractors
. Holloway Bros. (London), Ltd., of
harf, Grosvenor-road, S.W.1. The
s Mr. Herbert Baker, A.R.A., of 14,
eet, Westminster, S.W.1. The quan-
ors are Messrs. Horder & Wells, of 40
street, S.W.1.

Housing at Carlisle.

isle City Council recently decided to
a loan of £128,000 to carry out a
cheme whereby 880 houses can be
o years. Three hundred, it is stated,
in hand at once. The houses will
blocks of four, with not more than
the acre, and will be of two
three bedrooms and two bedrooms
. The former will cost £360 each,
ter £336 each.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam. (Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3¾
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London :—								
Within 12 m. rad.us	1/9½	1/9½	1/9½	1/9½	1/9	1/9½	1/8½	1/4½
From 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

For rates of wages in the Building Trade in Scotland, see page 743.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

NOVEMBER 8.—**Bexhill.**—HOUSES.—Erection of 10 houses in Church Hill-avenue, Little Common, for the Borough Council of Bexhill. Borough Surveyor, Mr. George Ball, Assoc.M.Inst.C.E., Town Hall, Bexhill. Deposit £1 1s.

NOVEMBER 8.—**Forres.**—SCHOOL.—For mason, carpenter, slater, plumber, plaster, painter, and heating work for new school, for the Moray E.C. Mr. D. C. M'Intosh, Executive Officer, Education Offices, Elgin. Deposit £1 1s.

NOVEMBER 8.—**Hull.**—HOUSES.—For erection of 200 houses on the East Hull site, Southcoates-avenue, for the Corporation. Town Clerk.

NOVEMBER 10.—**Auckland.**—HOUSES.—For erection of 10 houses at St. Helen's, Auckland, 16 at West Auckland, 10 at Fir Tree, 8 at Middlestone Moor, and 10 at Helmington-row, for the R.D.C. Mr. W. T. Foster, Clerk to the Council, Union Offices, Bishop Auckland. Deposit £2 2s.

NOVEMBER 10.—**Crediton.**—DWELLINGS.—For erection of three blocks of artisan dwellings in Belle Field, for the U.D.C. Mr. Inon J. Leach, Masonic Hall. Deposit £1 1s.

NOVEMBER 10.—**Frinton-on-Sea.**—SHELTER.—For erection of a public shelter on the Greensward, at Frinton, for the U.D.C. Mr. P. O. Macdonald, Clerk to the Council, The Council House.

NOVEMBER 10.—**Gildersome.**—HOUSES.—For the making-up of road and the erection of 10 houses on Vicarage site, for the U.D.C. Mr. W. Wilby, Surveyor, Council Offices.

NOVEMBER 10.—**Llandovery.**—HOSPITAL.—For erection of a cottage hospital, for the T.C. Mr. H. V. Watkins, Secretary to the Hospital Committee. Deposit £2 2s.

NOVEMBER 10.—**Peterborough.**—HOSPITAL BUILDINGS.—The Peterborough and District War Memorial New Infirmary Committee require to select a limited number of building contractors to tender for the new buildings for 123 patients' beds. Mr. Joseph Stephenson, Hon. Sec., Queen-street Chambers, Peterborough.

NOVEMBER 10.—**Tynemouth.**—BUILDING.—For erection of an electricity sub-station, for the T.C. Mr. J. F. Smillie, Borough Surveyor's Office, Howard-street, North Shields. Deposit £1 1s.

NOVEMBER 10.—**Washington.**—HOUSES.—For erection of 20 houses on Spout-lane site, in blocks of ten, for the U.D.C. Mr. J. R. Carr, Clerk to the Council, Council Chambers. Deposit £3 3s.

NOVEMBER 11.—**Carlisle.**—HOUSE.—For work required to be done in the erection of proposed new house for head teacher, for the Cumberland E.C. Mr. J. Forster, County Architect, The Courts.

NOVEMBER 11.—**Glasgow.**—OFFICES.—For works required in connection with the proposed erection of offices and billiard room and extension to Newlands Depot, &c.—digger, brick, and mason works; carpenter, joiner, and glazier works; steel works; plumber work; slater and rough cast works; and plaster and terrazzo works, for the Corporation. Mr. J. Lindsay, Town Clerk, City Chambers.

NOVEMBER 11.—**Machen.**—BUILDING.—For erection of an electrical sub-station, near Forge-road, for the Bedwas and Machen U.D.C. Mr. C. Davies Jones, Clerk to the Council, Council Offices, Bedwas.

NOVEMBER 11.—**North Shields.**—BUILDING.—For construction of police station, &c., at Albert Edward Dock, for the Tyne Improvement Commission. Mr. A. Blacklock, Secretary, Tyne Improvement Commission Offices, Bewick-street, Newcastle-upon-Tyne. Deposit £2 2s.

NOVEMBER 11.—**Plymouth.**—EMPLOYMENT EXCHANGE.—For the erection of Employment Exchange for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NOVEMBER 11.—**Rathmines.**—PAINTING.—For external painting at Mountpleasant buildings, Hollyfield buildings, and Gulistan cottages, for the U.D.C. Mr. Seacome Mason, Clerk to the Council, Town Hall, Rathmines.

NOVEMBER 11.—**Wellington.**—CONVENIENCE.—For erection of a public convenience in the Market Yard, for the U.D.C. Mr. J. W. Littlewood, Clerk, Bank Chambers. Deposit £2 2s.

NOVEMBER 11.—**Whitehaven.**—HALL.—For erection of proposed new dining hall at the Secondary school, for the Cumberland E.C. Mr. J. Forster, County Architect, The Courts, Carlisle. Deposit £1 1s.

NOVEMBER 11.—**Wood Green.**—PAINTING.—For external painting of the Town Hall, for the U.D.C. Mr. C. Eric Staddon, Clerk of the Council, Town Hall.

NOVEMBER 12.—**Eccles.**—FLOORING, FENCING, AND GATES.—(1) Providing and laying composition flooring; (2) supplying and fixing fencing and gates to 176 houses in course of erection on the Peel Green estate, for the Borough of Eccles. Mr. T. Elce, Borough Engineer and Surveyor, Town Hall, Eccles. Deposit £1 1s.

NOVEMBER 12.—**Kilcullen.**—SCHOOL.—For erection of a new national school at Kilcullen, co. Kildare. Mr. J. Jones, P.P., The Presbytery, Kilcullen.

NOVEMBER 12.—**London, S.W.7.**—WORKSHOPS.—For the erection of workshops at the Victoria and Albert Museum, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

NOVEMBER 12.—**Neath.**—REPAIRS.—For repairs and alterations at the Cottage Homes, for the B.G. Mr. T. D. Windsor Williams, Clerk of the Guardians, 8, New-street, Neath.

NOVEMBER 12. **Pantynawel, Blackmill.**—HOUSES.—For erection of 20 houses, together with the construction of roads and sewers, for the Ogmore and Garw U.D.C. Mr. W. T. Ollivant Jones, Engineer and Surveyor, Council Offices, Brynmenyn. Deposit £2 2s.

NOVEMBER 13.—**Cleethorpes.**—SCHOOL.—For erection of a secondary school for girls for the Lindsey C.C. Mr. S. Maudson Grant, Director of Education, Education Offices, Lincoln. Deposit £2 2s.

NOVEMBER 13.—**Dewsbury.**—EXTENSIONS.—For extension of kitchen at Staincliffe Institution, for the B.G. Mr. E. T. Tunnicliffe, Clerk to the Guardians, Union Offices, Wellington-street.

*NOVEMBER 13.—**Erith.**—HOUSES.—For construction of 12 semi-detached cottages at the Lesney Farm housing estate, Northumberland-heath, for the U.D.C. Mr. D. S. Twigg, Clerk, Council Offices. Deposit £1.

NOVEMBER 13.—**London, N.1.**—REMEDYING DAMPNESS.—For remedying dampness in Flats Nos. 2 and 3, Park House, Holly Park, Crouch Hill, N., for the Metropolitan Borough Council of Islington. Mr E. C. P. Monson, F.R.I.B.A., 192, Finsbury Pavement House, 120, Moorgate, London, E.C.2. Deposit £1.

NOVEMBER 13.—**Scunthorpe.**—SCHOOL.—For erection of a secondary school for boys and girls, for the Lindsey C.C. Mr. S. Maudson Grant, Director of Education, Education Offices, Lincoln. Deposit £2 2s.

NOVEMBER 14.—**Belfast.**—SCHOOL.—For erection of a public elementary school, at Euston-street, for the C.B. Mr. R. Meyer, Town Clerk. Deposit £2 2s.

NOVEMBER 14.—**Horncastle (Lincs).**—POST OFFICE AND TELEPHONE EXCHANGE.—Erection of a post office and telephone exchange at Horncastle, Lincs. for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

NOVEMBER 14.—**Stockton-on-Tees.**—PA... internal painting work at the Children's ... Hartington-road and Windsor-road, for th... J. Bell, Clerk to the Guardians.

*NOVEMBER 14.—**Weybridge.**—HOUSE... of 26 "A" and 21 "B" type houses, for ... scheme in Old Palace-gardens, Weybri... Weybridge Urban District Council. Mr. A... Clerk to the Council, Council Offices, ... Deposit £2 2s.

*NOVEMBER 15.—**Bristol.**—STORES, &c... various stores, &c., building requisites, ... brushes, paints, oils, saddlers' sundries, ... and twine, lead pipe and plumbers' sund... bass brooms, &c., during twelve mo... December 31, 1925. City Engineer, 63, ... Bristol. Deposit 10s. for each copy.

NOVEMBER 15.—**Congleton.**—HOUSES... of 40 non-parlour type houses on the wes... the Borough Council of Congleton. The ... veyor's Office, Congleton. Deposit £2 2s.

NOVEMBER 15.—**Hertford.**—HOUSES.—... of 24 houses, in four blocks, situated i... road, Hertford, for the B.C. Mr. A. Baker, ... The Castle. Deposit £3 3s.

*NOVEMBER 15.—**Mill Hill.**—ARTIFIC... WAR DEPARTMENT CONTRACT FOR WORKS ... —Artificers' Works Contract from Decem... Tenders are required for the undermentio... in the Woolwich Royal Engineer Division ... Mill Hill Area. Commanding Royal En... Engineer Office, New-road, Woolwich, S.E.

NOVEMBER 15.—**Ripon.**—HOUSES.—For ... a block of eight houses, for the T.C. Mr. ... Town Clerk, Town Hall. Deposit £3.

NOVEMBER 15.—**Tipton.**—SCHOOL.—For ... a R.C. School in Victoria-road. Rev. C... Deposit £3 3s.

NOVEMBER 15.—**Wallasey.**—EXTE... SCHOOL.—Erection of the extensions to ... School, for the County Borough of Wa... Architect's Office, Town Hall, Wallase... £2 2s.

NOVEMBER 17.—**Batley.**—EXTENSION.—... joiner's, plumber, heating engineer's, ... slater's, painter's, and electrical engi... required in the erection of extensions to ... for the Committee. Messrs. W. Hanstock ... architects.

NOVEMBER 17.—**Wakefield.**—ADDITION... ditions to laundry at the West Riding Men... for the Mental Board. Mr. W. E. H. Burt... and engineer. Deposit £1.

COMPARISON OF PRICES OF BUILDING MATE... BETWEEN AUGUST 4, 1914, AND NOVEMBER ...

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	Oct. 1, 1924. £ s. d.	Nov. 1, 1924. £ s. d.
Bricks—				
Best Stocks	1 16 6	3 3 6	4 3 6	4 3 6
Flettons	1 14 0	2 7 8	2 13 3	2 13 3
Glazed	13 0 0	17 17 6	23 0 0	23 0 0
Thames Ballast	5 9	17 0	10 6	10 6
Thames Sand	7 3	17 0	15 6	15 6
Shingle (¾ in.)	—	15 0	14 0	14 0
Portland Cement	1 17 0	3 8 0	2 18 0	2 18 0
Ground Blue Lias Lime	1 0 0	2 2 6	2 4 6	2 4 6
Grey Stone Lime	1 8 0	2 7 0	2 11 9	2 11 9
Bath Stone	1 7½	1 7	2 9½	2 9½
Portland Stone	2 4½	2 10½	4 4	4 4
Good Sound Building Timber—				
4 in. × 11 in.	16 10 0	53 0 0	32 0 0	32 0 0
3 in. × 7 in.	13 0 0	46 0 0	28 0 0	28 0 0
3 in. × 11 in.	15 0 0	50 0 0	28 0 0	28 0 0
2 in. × 11 in.	—	51 0 0	28 0 0	28 0 0
2 in. × 7 in.	—	46 0 0	23 0 0	23 0 0
3 in. × 4 in.	—	—	24 0 0	24 0 0
Slates—				
24 in. × 12 in.	—	—	37 12 6	37 12 6
22 in. × 12 in.	—	—	34 0 0	34 0 0
20 in. × 10 in.	—	—	25 12 6	25 12 6
16 in. × 10 in.	—	—	17 12 6	17 12 6
16 in. × 8 in.	—	—	13 15 0	13 15 0
R.S. Joists	9 10 0	—	13 10 0	13 10 0
Iron—				
Common Bars	9 0 0	16 10 0	13 10 0	13 10 0
Mild Steel Bars	9 5 0	21 0 0	12 10 0	12 0 0
Steel Bars	9 5 0	19 10 0	13 0 0	12 10 0
Cut Nails	11 10 0	29 0 0	20 10 0	20 10 0
Sheet Lead	22 15 0	40 0 0	44 0 0	47 10 0
Glass—				
15 oz. Sheet	2	7	3⅜	3⅜
21 oz. ,,	3	8	5	5
26 oz. ,,	3¾	9	6	6
Raw Linseed Oil	2 4	8 4	3 11	4 4
Turpentine	2 6	11 0	5 11	5 7
Ground English White Lead	30 5 0	60 10 0	57 0 0	57 0 0
White Lead Paint	—	83 10 0	80 5 0	79 5 0
Red Lead	28 10 0	47 0 0	52 0 0	47 10 0

r. — **Whitehaven.**— HOUSES.— Erection the Moesby Park site and 50 houses on site, for the R.D.C. of Whitehaven. Good, M.Inst.M.C.E., Engineer and e Council, Union Hall, Whitehaven.

18.—**Bessbrook.**—ADDITIONS.—For additions to Bessbrook R.U.C. Barracks. for the Ministry of Finance. Mr. W. R. stant Secretary, Ministry of Finance,

8.—**Carperby.**—HALL.—For work rerection of a village hall. Messrs. F. chitects, 10, Houndgate, Darlington.

8.—**Castletownberehaven.**—PAINTING—he oil tanks, &c., at the Admiralty Lough, for the Commissioner of Public J. Healy, Secretary, Office of Public ha Cliath.

8.—**Dublin.**—HOUSES.—For erection mporary dwellings on ground situate h Barracks area, for the C.B. Mr. J. J. clerk. Deposit £1 1s.

.—**West Riding.**—ADDITIONS.—(1) For itional class rooms, &c., at Adwick-le-neil school: and (2) fittings required in f Burley-in-Wharfedale Town school as ects centre, for the E.C. Education ntry Hall, Wakefield.

—**Bushey.**—BATHS.—For construction wimming bath and contingent works ge Recreation grounds, for the U.D.C. Payne, Clerk to the Council, Council £2 2s.

9.—**Hornchurch, near Romford.**— he supply and erection of about 494 ft. ing at the Cottage Homes, for the Parish of Saint Leonard, Shoreditch. ith, F.R.I.B.A., Parliament Mansions, Westminster, S.W.1.

20.—**Essex.**—DWELLING HOUSES.— men's dwellings houses as follows:— Great Stambridge, 18 houses; No. 2, uses: No. 3, Rochford, six houses, for ral District Council. Surveyor of the C. Madge, at his office at Rayleigh.

20.—**Hipperholme.**—WORKSHOP.—For n the erection of a large engineers' M. Hall, architect, Harrison-road,

—**Leeds.**—ALTERATIONS.—For structo premises in Alexander-street, for T. Lancashire, City Engineer, Muni-

20.—**London, W.**—PAINTING, &c.— the Western District Post Office, W., for the Commissioners of His of Works. Contracts Branch, g Charles-street, London, S.W.1. heques payable to the Commissioners &c.).

—**Bognor.**—WALL.—For construction, maintenance of about 810 lin. ft. of nenade, for the U.D.C. Mr. J. Jubb, ncil, Council Offices. Deposit £5 5s.

21.—**Chelsea.**—PAINTING.— External oyal Hospital, Chelsea, for the Com-Majesty's Office of Works. Contracts W., King Charles-street, London, £1 1s. (cheques payable to the Com-. Works, &c.).

1.—**Essex.**—COUNCIL SCHOOL.—Erecntary school at Dagenham for 1,050 ld-road, Dagenham, for the Essex County Architect, Mr. John Stuart, gfield Old Court, Chelmsford. Deposit

1.—**Lewisham.**—HOSPITAL BUILDf buildings in connection with the ewisham Hospital, consisting of two ch three stories high and containing erations department, and sick nurses' ds, and the usual offices and sanitary additions of one story on the existing d sundry alterations to the same; chimney shaft, disinfecting pavilion. ways, subways, drains, roads and rdians of the Lewisham Union. Mr. , quantity surveyor, 39, Bloomsbury-Deposit £3 3s.

22.— **London, W.C.** — PAINTING.— rnal painting at Somerset House, for s of His Majesty's Office of Works. , H.M.O.W., King Charles-street, Deposit £1 1s. (cheques payable to of H.M. Works, &c.).

—**Carlisle.**—HOUSES.—For erection e Blackwell-road and Wigton-road C. Mr. H. C. Marks, City Engineer Fisher-street.

—**London.**—HOUSES.—For erection of administrative buildings, together spaces and other incidental work, 205 houses, including fencing, open incidental work, with roads and pton housing estates, for the L.C.C. of the L.C.C. Deposit £3.

24.—**London, S.W.**—DEMOLITION on work at the Ministry of Pensions court and Cheltenham-terrace, the Commissioners of His Majesty's Contracts Branch, H.M.O.W., King don, S.W.1. Deposit £1 1s. (cheques mmissioners of H.M. Works, &c.).

. — **London, S.W.15.** — HOUSES.— ions IV and V of the Roehampton V.15, as follows:—Section IV: Com- of 217 houses and administrative with fencing, open spaces and other connection therewith. Section V: tion of 205 houses, including fencing. her incidental work, together with for the London County Council. Council, The County Hall, (Room No. 3), Westminster Bridge, S.E.1. Deposit £3 (payment to the Cashier).

NOVEMBER 25.—**Durham.**—SCHOOLS.—For builders' work in connection with the alterations and improvements to Annfield Plain infants' school, and builders' work in the adaptation of existing buildings into an elementary school to accommodate 300 boys at Elisabethville school, for the C.C. Mr. A. J. Dawson, Director of Education, Shire Hall.

✱NOVEMBER 25.—**Greenwich, S.E.**—CHEMICAL LABORATORY.—Erection of a new Chemical Laboratory at H.M. Fuel Research Station, Greenwich, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 25.—**Margate.**—PAVILION.—For erection of a steel and timber bathing pavilion on the Marine-terrace sands, for the T.C. Mr. E. Brooke, Town Clerk. Deposit £5.

✱NOVEMBER 25.—**Tonbridge.**—HOUSES.—Erection of 40 houses (comprising eight parlour and 32 living-room types) in Shipbourne-road, Tonbridge, for the Urban District Council of Tonbridge. Mr. W Laurence Bradley, Engineer and Surveyor, The Castle, Tonbridge. Deposit £2 2s.

NOVEMBER 27.—**Cork.**—OFFICES.—For erection of new municipal offices on the site at Albert quay, for the Corporation. Mr. W. Hegarty, Town Clerk, Town Clerk's Office, School of Art. Deposit £2 2s.

✱NOVEMBER 27.— **Coventry.**— TELEPHONE EXCHANGE.—Erection of a Telephone Exchange at Foleshill, Coventry, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 29. — **Thomastown.** — REPAIRS. — For carrying out certain new works and repairs to cottages in Scheme No. 6, for the Sailor and Soldiers' Department. Mr. R. E. Beckerson, Sailor and Soldiers' Department, 30, Fitzwilliam-street, Dublin. Deposit £1 1s.

✱DECEMBER 10.—**Middlesex.**—HOSPITAL.—Erection of a hospital for 173 beds, nurses' home, and children's probation block, Edgware, Middlesex, for the Guardians of the Hendon Union. Mr. C. W. Wyles, Clerk to the Guardians, Union Offices, Edgware. Deposit £5.

NO DATE.—**Barnsley.**—HOUSES.—For trades required in the erection of a pair of semi-detached houses in Woodstock-road. Mr. P. A. Hinchliffe, 14, Regent-street, Barnsley.

✱NO DATE.—**Hockfield.**—COTTAGES.—Erection of 20 cottages at Hookfield Estate site, from plans and specifications only, for the Epsom Rural District Council. Mr. E. G. Wilson, Clerk to the Council, 37, Church-street, Epsom. Deposit £2 2s.

NO DATE.—**New Tredegar.**—REBUILDING.—For rebuilding of premises, 12 and 13, School-street. Mr. O. P. Bevan, architect, Station-road, Bargoed.

NO DATE.—**Solihull.**—HOUSES.—For erection of two houses at the depot, Streetsbrook-road, and two houses at the sewage outfall works, Barston, for the R.D.C. Mr. Chas. H. Cook, Clerk to the Council, Streetsbrook-road.

FURNITURE, MATERIALS, etc.

NOVEMBER 10.—**Blackpool.**—CEMENT.—For supply and delivery of 4,500 tons of Portland cement, for the Fylde Water Board. Mr. Geo. F. Atkinson, Engineer, Sefton-street, Blackpool.

NOVEMBER 10.—**Dublin.**—STEELWORK.—For supply of steelwork for bridges, for the Midland Great Western Railway of Ireland Co. Mr. E. H. Taylor, Acting Secretary, Broadstone Terminus. Charge 4s.

NOVEMBER 10.—**Stockport.**—MATERIALS.—For materials required in the construction of a wooden movable floor in plunge bath, and other incidental work at the Petersgate Public Baths, for the C.B. Mr. H. Hamer, Borough Surveyor, Town Hall.

NOVEMBER 11.—**Dundee.**—PIPES.—For supply of approximately 70 tons of 4 in. internal diameter and 90 tons of 6 in. internal diameter cast-iron pipes, with turned and bored joints, for the Water Commissioners. Mr. George Baxter, Jun., A.M.I.C.E., Engineer and Manager, Waterworks Engineer's Office.

NOVEMBER 11.—**Portsmouth.**—CEMENT.—For supply of 1,600 tons, of Portland cement, for the Tramways Committee. Mr. W. R. Spaven, General Manager, Town Hall.

NOVEMBER 12.—**Cambridge.**—MATERIAL.—For supply of broken granite, &c., for the C.C. Mr. A. E. Peake, County Surveyor, County Hall.

NOVEMBER 14.—**London.**—MATERIALS.—For supply of artificial stone, cement, and broken granite, for the Wandsworth B.C. Mr. D. A. Nicholl, Town Clerk, Council House.

NOVEMBER 14.—**Walsall.**—FENCING.—For 275 yds. run of fencing, for the Walsall and West Bromwich School District. Mr. A. H. Ward, Clerk to Managers, 22, Lombard-street, West Bromwich.

NOVEMBER 15.—**Buxton.**—MATERIALS.—For supply of paving setts, flags, kerbs, &c., Portland cement, earthenware pipes, paints, varnishes, &c., for the T.C. Mr. F. Langley, Borough Engineer, Town Hall.

NOVEMBER 15.—**East Sussex C.C.**—GRANITE.—For the supply of materials: (1) granite; (2) granite, binding gravel and sand. Mr. F. J. Wood, Assoc.M.Inst.C.E., County Surveyor, County Hall, Lewes.

NOVEMBER 17.—**West Hartlepool.**—MATERIALS.—For supply of footpath and road materials, sewer pipes, metal castings, Portland cement, for the C.B. Mr. F. Durkin, Borough Engineer, Municipal Buildings.

NOVEMBER 20.—**Stockport.** — MATERIALS. — For materials required in excavating, sewering, forming, paving, curbing, and flagging Vicarage-road, Willis-road, Beech-road, Haslam-road, &c., for the C.B. Mr. H. Hamer, Borough Surveyor, Town Hall.

NO DATE.—**Newton Abbot.**—PIPES.—For supply of about 10 tons of 6 in. and about 10 tons of 9 in. cast-iron pipes, for the R.D.C. Mr. F. Horner, Clerk.

ENGINEERING, IRON AND STEEL.

NOVEMBER 10.—**Eston.**—BRIDGE.—For construction of bridge over the L.N.E.R., Eston Branch, Middlesbrough to Redcar trunk road, for the U.D.C. Mr. T. Belk, Clerk to the Council, Council Offices, Cleveland House, Grangetown, S.O., Yorks. Deposit £1 1s.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W.1.

NOVEMBER 22.—**Great Holland.**—RECONSTRUCTION.—For reconstruction of Gt. Holland Bridge and other works on the Kirby Cross-Clacton-road for the Essex, C.C. Mr. W. H. Morgan, County Surveyor, Old Court, Chelmsford.

DECEMBER 1.—**Egypt.**—TOWER.—For erection of a water tower at Init Ghamr, for the Ministry of Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 5.—**South Africa.**—SEWERAGE.—For erection of a pumping station and some machinery and cast-iron rising mains, for the City Council of Port Elizabeth. Messrs. Davis & Soper, Ltd., 54, St. Mary-axe, E.C.3, or Mr. W. How, Town Clerk, City Hall. Deposit £2.

DECEMBER 20.—**Egypt.**—RESERVOIR.—For construction of a steel reservoir, for the Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—**Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.**

ROAD, SANITARY, AND WATER WORKS.

NOVEMBER 10.—**Egham.**—FILTER BED.—For construction of an additional filter bed and incidental works in connection with the sewage plant, for the U.D.C. Mr. G. W. Booth, Engineer and Surveyor, Council Offices.

NOVEMBER 10.—**Hebburn.**—SEWERS.—For laying 12 in. and 9 in. sewers with the necessary manholes, &c., in back Station-road and Charles-street, and back Rose-street and Shamrock-street, for the U.D.C. Mr. T. Stuart, Clerk, 2, Coquet-street.

NOVEMBER 10.—**Hertford.**—PAVING.—For kerbing and paving of footpaths in Hertingfordbury-road, for the T.C. Mr. A. Baker, Town Clerk, The Castle. Deposit £2 2s.

NOVEMBER 10.—**Howth.**—WATER.—For laying a branch water supply at Sutton, for the U.D.C. Town Clerk. Deposit £1.

NOVEMBER 10.—**Leeds.**—RE-LINING.—Tenders are invited by the Property Committee for (1) re-lining in brickwork of second-class swimming bath; (2) new lining of asphalte to second-class swimming bath; and (3) new Turkish bath, filtration plant, house, &c., all at Meanwood-road baths, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings.

NOVEMBER 10.—**Manchester.**—SEWERS.—For sewering, draining, paving with concrete, flagging artificial flags, &c., Clough-street, Houldsworth-street, and Ballantine-street, Newton Heath, and constructing 466 lin. yds. of 3 ft. diameter brick sewer, with the necessary manholes, in Forge-lane, Bradford, and filling in the old sewer with concrete, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

NOVEMBER 10.—**Whitley and Monkseaton.**—ROADS.—For making-up and constructing Hillcrest-street, Uplands-street, and Hillfield-street, for the U.D.C. Mr. A. Barker, Clerk to the Council, Council Offices, Whitley Bay.

NOVEMBER 11.—**Barking Town.**—SEWERS.—For work to be done and the materials to be supplied in connection with the laying of about 970 lineal yds. of 12 in. diameter and 18 in. diameter glazed ware pipe intercepting sewers, &c., for the U.D.C. Mr. H. Hargreaves, Clerk to the Council, Public Offices.

NOVEMBER 11.—**Sheringham.**—SEWER.—For construction of 200 lin. yds. of 6 in. sewer, with two manholes, in Barford-road, for the U.D.C. Mr. E. C. Rolfe, Clerk to the Council, Council Offices.

NOVEMBER 11.—**Southgate.**—SEWER.—For construction of a foul sewer, consisting of about 390 lin. yds. of 18 in. diameter stoneware pipes, with all necessary manholes, &c., in Oakthorpe-road, Palmers Green, for the U.D.C. Mr. A. E. Lauder, Clerk and Solicitor of the Council, Town Hall, Palmers Green, N.13.

NOVEMBER 11.—**Witham.**—SEWER.—For laying about 1,040 ft. of 9 in. sewer, and about 1,000 ft. of 3 in. cast-iron water mains, for the U.D.C. Mr. F. H. Bright, Clerk to the Council, Witham, Essex.

NOVEMBER 12.—**Birmingham.**—ROADS.—For completion of Cartland-road, Stirchley, for the T.C. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2.

NOVEMBER 12.—**Ogmore and Garw.**—ROAD.—For works in connection with the construction of a new road at Caedu, Ogmore Vale, for the U.D.C. Mr. W. T. Ollivant Jones, Engineer and Surveyor, Council Offices, Brynmenyn, near Bridgend.

NOVEMBER 13.—**Cardiff.**—ROADS.—For remaking roads, at City Lodge, for the B.G. Mr. R. Stephenson, Clerk, Union Offices, 11, Park-place, Cardiff.

NOVEMBER 14.—**Doncaster.**—SEWER.—For construction of about 900 yds. of 9 in. pipe sewer at Bawtry, for the R.D.C. Mr. H. M. Marshall, Clerk to the Council, Union Offices, Nether Hall.

NOVEMBER 14.—**Dublin.**—SANITARY.—For adaptation and sanitary works at Griffith Military Barracks, for the Commissioner of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £1.

NOVEMBER 15.—**Birmingham.**—SEWERS.—For construction of about 862 yds. of brick and concrete sewers and 833 yds. of stoneware pipe sewers, for the T.C. Mr. H. H. Humphries, M.Inst.C.E., City Engineer and Surveyor, The Council House. Deposit £2.

NOVEMBER 15.—**Greetland.**—FOOTPATH.—For retaining wall, footpath and drainage works, for the U.D.C. Mr. A. T. Longbotham, Clerk to the Council, 4, Carlton-street, Halifax.

✱NOVEMBER 17.—**Hornsey, London, N.**—ROAD AND SEWER WORK.—Sewering, levelling, paving, metalling, kerbing, channelling, and making good of various roads for the Borough of Hornsey. Mr. E. J. Lovegrove, Borough Engineer and Surveyor, Town Hall, Highgate.

NOVEMBER 17.—**Margate.**—MAINS.—For supplying and laying the water mains, sluice valves, hydrants, &c., approximately 558 lin. yds. of 8 in. main; 2,479 lin. yds. of 6 in. main; and 199 lin. yds. of 3 in. main, in the roads now in course of construction on the Palm Bay Estate. Mr. E. Brooke, Town Clerk, 13, Grosvenor-place.

NOVEMBER 17.—**Margate.**—SEWER.—For supplying about 999 yds. of 48 in. by 32 in. egg-shaped intercepting sewer, 428 yds. of 21 in. concrete tube sewer, and 252 yds. of 15 in. cast-iron sewer, for the T.C. Mr. Edward Brooke, Town Clerk, 13, Grosvenor-place.

NOVEMBER 17.—**Morpeth.**—SEWERAGE.—For execution of works of sewerage, including sea outfall, for the R.D.C. Mr. H. W. Sample, Clerk to the Council, Council Offices, 15, Bridge-street. Deposit £2 2s.

NOVEMBER 17.—**Ruislip-Northwood.**—STREETS.—For making-up Kingsend-avenue, Ruislip, Oaklandsgate, Northwood, from Council Offices to Wesleyan Church, for the U.D.C. Mr. E. R. Abbott, Clerk to the Council, Council Offices, Northwood, Middlesex. Deposit £1.

NOVEMBER 18.—**Birkenhead.**—SEWER.—For construction of a supplementary sewer in Borough-road, comprising about 700 lin. yds. of reinforced concrete sewer formed with 24 in., 27 in., and 30 in. diameter pipes, together with all manholes, gullies, and subsidiary works. Mr. E. W. Tame, Town Clerk, Town Hall. Deposit £3 3s.

NOVEMBER 18.—**Hampton Court.**—ROADWAY AND PATHS.—Re-surfacing of roadway and paths at Tennis Court-lane, Hampton Court, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

NOVEMBER 18.—**Hemsworth.**—PIPES.—For laying and jointing 4,777 yds. of 6 in. cast-iron water mains, from Shafton Two Gates to Havercroft, for the R.D.C. Mr. E. A. Winder, Clerk, Rotherham-road, Hemsworth, near Pontefract.

NOVEMBER 18.—**Loughborough.**—MAINS.—For execution of works required in providing, carting, excavating and laying about 790 lin. yds. of cast-iron and other mains in Park-road &c., for the T.C. Mr. A. H. Walker, Waterworks Engineer, Town Hall. Deposit £3 3s.

NOVEMBER 18.—**Prestwich.**—ROADS.—For making-up Albert-avenue, approximately 500 yds., and Back George-street, approximately 250 yds. Mr. F. H. Ashton, Clerk to the Council, Town Hall. Deposit £1 1s.

NOVEMBER 18.—**Rochester.**—SEWER.—For construction of about 6,390 yds. lin. of concrete sewer culvert, for the Rochester & Chatham Joint Sewerage Board. Mr. E. B. Lee, Clerk to the Board, Town Hall, Chatham. Deposit £5 5s.

NOVEMBER 22.—**Deal, Kent.**—EARTHENWARE PIPES.—Renewing 2 ft. diameter earthenware pipes and extending two 18 in. cast-iron storm relief outfalls, all work practically above ordinary low-water mark, for the Borough Council of Deal, Kent. Borough Engineer and Surveyor's Office, 18, Queen-street, Deal.

NOVEMBER 24.—**Chesterfield.**—MAINS.—For construction of six main intercepting sewers with all necessary manholes and subsidiary works, consisting of 2,317 yds. of stoneware pipe sewers and 429 yds. of cast-iron pipe sewers, for the T.C. Mr. V. Smith, Borough Engineer and Surveyor, Engineer to the Scheme, Borough Engineer's Office, 2, Gluman-gate, Chesterfield. Deposit £2 2s.

NOVEMBER 24.—**Chesterfield.**—SEWAGE WORKS.—For construction of a sewage disposal works, for the T.C. Mr. V. Smith, Borough Engineer and Surveyor, Engineer to the Scheme, Borough Engineer's Office, 2, Gluman-gate. Deposit £5 5s.

NOVEMBER 29.—**Tilbury.**—FOOTWAYS.—For works in connection with the reconstruction in artificial stone paving and re-bedding and levelling of kerbs to footways on both sides of 22 unclassified roads or streets, for the U.D.C. Mr. A. W. Buckner, Clerk of the Council, Council Offices. Deposit £2.

NOVEMBER 29.—**Tilbury.**—ROAD.—For works in connection with the reconstruction in reinforced concrete, portion of Calcutta-road, for the U.D.C. Mr. A. W. Buckner, Clerk of the Council, Council Offices. Deposit £1.

✱DECEMBER 2.—**Kensington and Hammersmith.**—SEWER CONSTRUCTION.—For the construction of a 9 ft. 6 in. internal diameter sewer in cast-iron, with concrete lining, of a total length of about 9,695 ft.; also 6 ft. internal diameter sewer in cast-iron, with concrete lining, of a total length of about 2,375 ft., for the L.C.C. Chief Engineer of the Council, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

Competitions.

(*See Competition News, page* 710.)

Auction Sales, Tenders, etc.

NOVEMBER 10.—**Wembley (Middlesex).**—Mr. Richard J. Steel will sell, upon the premises, Oakington Manor Farm (close Wembley station and trams), 200 lots of new and secondhand timber, large portable hut. Auctioneer, 2, Plough-terrace, South Ealing, W. 5.

NOVEMBER 11.—**London, S.W.1.**—Messrs. Hampton & Sons will sell, in the St. James's Estate Rooms, 20, St. James's-square, S.W.1, Lot 1, "The Poplars," country house, just off Brockley Hill, Edgware, grounds about 2½ acres, Lot 2, a high-laying meadow of nearly 2½ acres, part of which has a potential building value, at Edgware; vacant possession of each lot. Auctioneers, 20, St. James's-square, S.W.1.

NOVEMBER 12.—**London, W.2.**—Messrs. Henry Butcher & Co. will sell, by order of the liquidator, Mr. Alfred Smart, *re* Messrs. Clements, Jeakes & Co., Ltd., on the premises in Macklin-street, Drury-lane, W.C., the engineers' plant, machinery, tools and stores. Auctioneers, 63 and 64, Chancery-lane, London, W.C.2.

✱NOVEMBER 12.—**Sussex.**—Mr. C. E. Clark will sell, without reserve, at the Old Brickfield, Queen-street, Horsham, prime new timbers and builders' effects. Auctioneers, Beddington House, Beddington, near Croydon, Surrey.

NOVEMBER 12 & 13.—**Lower Edmonton.**—Messrs. Stanley Parkes & Brown will sell building materials, at Messrs. Carter Paterson's Yard, Balham-road, at twelve o'clock each day. Auctioneers, 816, High-road, Tottenham, N. 17.

✱NOVEMBER 13.—**Holloway, N.**—Messrs. Joseph Hibbard & Sons will sell, without reserve (owing to dissolution of partnership), upon the premises, 137 Holloway-road (5 miles from Highbury Station), stock in-trade of builder's merchants. Auctioneers, 15 Newington Green, London, N.16.

NOVEMBER 18.—**London, E.C.2.**—Messrs. Ventom, Cooper & Co. will sell, by order of the owners, who no longer require this section of their extensive works (unless previously disposed of privately), in one or more lots, the valuable freehold property erected by Brifco, Ltd., at Ashtead, on an enclosure of about 17 acres of land, mainly walled in, and comprising five extensive modern blocks of buildings, plant and machinery. Auctioneers, 35, Old Jewry, London, E.C.2.

✱NOVEMBER 18.—**London, S.E.18.**—Mr. F. H. Clark will sell, without reserve, at The Boy's Hostels, Woodhurst-road, Plumstead, S.E.18 (L.C.C. car routes Nos. 36, 38 and 40), timber hutments, timber and building materials (new and second-hand). Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

NOVEMBER 18.—**London, S.W.1.**—Messrs. Hampton & Sons will sell, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1, freehold building site known as No. 70, Drayton-gardens, South Kensington, having a frontage of about 64 ft., and containing an area of about 6,600 sq. ft. Auctioneers, 20, St. James's-square, S.W.1.

NOVEMBER 18 and 19.—**Middlesex.**—Messrs. A. & G. Gulliver will sell, by order of Messrs. Field & Son, who are retiring from business at the premises, Ponders End, Middlesex, No. 259, High-street, the whole of the valuable stock, plant, and machinery of a timber merchant and saw mills, stock of timber. Auctioneers, 45, High-street, Ponders End, and 318, Fore-street, Edmonton, N.9.

✱NOVEMBER 19.—**Sussex.**—Messrs. F. H. Clark will sell, without reserve, at Crowborough Camp, Sussex, timber and corrugated iron buildings, timber and building materials, timber, asbestos sheeting, doors, sash-lights, guttering, bricks, baths, ruberoid, &c. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

✱NOVEMBER 20.—**East Ham.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Trustee, Mr. E. F. Eyres, under a Deed of Assignment, *re* J. M. Hinton, deceased, upon the premises, No. 332, Barking-road, East Ham (10 minutes from East Ham Station, District Railway), stock of a timber and builders' merchant and housebreaker. Auctioneers, 15, Newington Green, London, N.16.

Public Appointments.

NOVEMBER 8.—**Burnley.**—DRAUGHTSMAN.—Draughtsman (temporary) required immediately for building and constructional work (at least 12 months' employment), in the Borough Engineer's Department by the County Borough Council of Burnley. Borough Engineer and Surveyor, Burnley.

✱NOVEMBER 17.—**Bromley, Kent.**—Builder's Manager required by the Bromley Rural District Council, to take charge of the completion by direct labour, of the Council's housing scheme on three separate sites, where houses are in different stages of erection. Mr. Leonard O. Wall, Clerk to the Council, Beckenham-lane, Park House, Bromley, Kent.

✱NOVEMBER 18.—**Leicester.**—Clerk of Works required in connection with a large housing scheme by the Housing and Town-Planning Committee of the City of Leicester. Mr. J. S. Fyfe, A.R.I.B.A., Housing Architect, Wyggeston House, 18, Highcross-street, Leicester, endorsed "Clerk of Works."

✱NOVEMBER 20.—**Wigan.**—Architectural Assistant thoroughly qualified, required in the Borough Engineer's Department by the County Borough Council of Wigan. Mr. William Henry Tyrer, Town Clerk, Municipal Buildings, Library-street, Wigan.

✱NOVEMBER 21.—**Brixton, S.W.4.**—Visiting Teachers Carpentry and Joinery and Geometry. (1) Instructor for one evening and Assistant Instructor for two evenings weekly. (2) Assistant Instructor for two evenings weekly. (3) Assistant Instructor for one evening weekly. (4) Joiners' Machine Work Instructor for one evening weekly. (5) Painting and Decorating Assistant Instructor for three evenings weekly. (6) Architectural Drawing and Design Instructor for one evening weekly, required by the L.C.C. at School of Building, Ferndale-road. Education Officer (T.1a). (Stamped addressed foolscap envelope necessary.)

✱NOVEMBER 22.—**London, N.W.3.**—Borough Engineer and Surveyor, at an inclusive salary of £1,000 per annum (no War Bonus), for the Borough of Hampstead. Mr. Arthur P. Johnson, Town Clerk, Town Hall, Haverstock Hill, London, N.W.3.

✱NO DATE.—**Scotland.**—Temporary Civil Engineering Draughtsman, with practical experience in harbour and dock works, land surveying, and the design of structures in steel and reinforced concrete; also Draughtsman with knowledge of building construction, land surveying and levelling, good mathematical training desirable. Superintending Civil Engineer, H.M. Dockyard, Rosyth, Dunfermline, Fifeshire.

PROPOSED NEW
INGS & OTHER

IN these lists care is taken to
racy of the information given,
sionally happen that, owing to
taking the responsibility of c
before plans are finally approv
authorities, "proposed" work
publication have been actua
Abbreviations: T.C. for Town
for Urban District Council; R
District Council; E.C. for Educa
B.G. for Board of Guardians;
Council; P.C. for Parish Cou
Ministry of Health; M.T. for M
port; and B.E. for Board o

ACTON.—Part of the old Mill H
been sold for building purposes.—
now building houses in Noel-road,
five vacant sites on the Willett
Avenue-crescent, Avenue-gardens,
road, and his plans include the ere
at £1,075 each.

ALTRINCHAM.—The Lancs Aero
23 acres of land at Timperley for
aerodrome and for club headquar

ASHTON-UNDER-LYNE.—The Di
recommended the purchase of a plo
the present site of the Failsworth
and the erection of an additional
modate 120 scholars in three class-

BALLYMONEY.—The R.D.C.'s E
an estimate for the labourers' cotta
built by the Council. It was decide
the scheme.

BARRY (GLAM.).—The U.D.C. has
£20,000 to be utilised in extending the
scheme, &c.

BARNSLEY.—Plans approved by
Pogmoor-road, for Mrs. G. Taylor.

BEDWORTH.—Land has been set
to be erected in the new streets off

BELFAST.—The E.C. propose to
two elementary schools, each of 1,00
to plans prepared by their Educa
W. G. Davies.

BEXHILL.—Plans passed by
Brockley-road, for Mr. W. T. Gent
road, Messrs. Rayson & Rayson, for

BILLINGHAM.—The U.D.C. has giv
lay-out plan of the housing site,
to the acre, and also to the plans of th
parlour types of houses proposed
Furness Shipbuilding Co. are to be a
view to the purchase of a portion o
Belasis-lane for housing purposes.

BIRKENHEAD.—The development
Hall estate is now in hand. The T
the erection of four houses by Mr
Prenton.—The M.H. has sanctioned

BLACKPOOL.—Plans passed by
houses, Calder-road, W. Wrigley; fo
road, W. Wrigley; four houses, Hig
& Howard; three houses and shop,
Longford-road, Blackpool Co-operati
two houses, Warbreck-drive and
W. B. Snape; three houses
H. H. Johnson; five bungalows,
Chislehurst-avenues, Cartmell & I
houses, Lomond-avenue and Pr
F. Taylor; house, Central-drive, Vi
Holy Trinity Church, S.S.; hou
Cocker, Ltd.; pair semi-detached
street, W. Miller; six houses,
Collingwood-avenue, E. Armitage
Saville-road, E. Saville; house and
road, W. Haslam; bungalow, Broad
J. Scholfield; pair semi-detached hou
S. B. Hulme; house, Alexandra-ro
house, St. Clement's-road, H. Hage
mere-road, Victoria Hospital; pai
road, W. H. Smith; house, Wats
five houses, Lilac-avenue and
Walmsley; cottage, off Norbreck
Higham; house, Norbreck-road, J.
Clinton-avenue, Lumb & Morris;
Lytham-road, District Bank, Ltd.;
F. Hargreaves; three houses, St.
Bourne; 13 shops, Promenade an
square Buildings, Ltd.; two sem
Westmoreland-avenue, S. A. How
mington-road, Sir Lindsay Parkin
seven houses, Watson's-road, G. Fra
is to make application to the M.H.
raising of a loan for the purchase o
elementary school at South Shore.
been made to the M.H. for sanction
£3,005 for the purchase of land in
construction of a public elemen
Borough Surveyor submitted plans
to be erected on the North Park-ro
submitted to Messrs. Mawson & Son
examined plans for the new Medi
Director was instructed to forward

BLANFORD.—The R.D.C. approv
Sir Randolf L. Baker, D.S.O., thre
Farm, Steepleton Preston.

BOURNEMOUTH.—The Corporatio
shelters, one near the pier, to a
200 people, and another about
Bournemouth and Boscombe Pier
about 1,000. The cost is to amoun

BRACKLEY.—Northampton Count
additional accommodation at t
School, at a cost of £1,800.

BURNLEY.—The T.C. approved
parade, submitted by the Social Den

* See also our List of Contracts.

ses, Stephenson-street, submitted by Messrs. . Clegg: two houses, Rose Hill-avenue, sub- by Mr. L. Todd.

RIDGE.—Plans are being prepared for a new the Infirmary to provide additional accommo- or the female Infirmary and children, and a rtuary. The architect is Mr. S. French, of ge.

GANSHIRE.—The County E.C. has decided to new wing, cloak-room, and offices at the Bryn- tral School, at an estimated cost of £1,695.

SLE.—The City Council decided to apply for of £128,000 to carry out a building scheme 880 houses can be built; 300 will be put in once.

RVON.—At the Carnarvonshire C.C. meeting, rnment had offered to sell the disused prison rsion into county offices for £4,358.

ERFIELD.—Plans passed: Four houses, Spring- nue, Mrs. Heath; house, Storr's-road, Mr. F. nt; house, Paxton-road, Mr. C. Markham; asland-green, Mr. S. Turner; house, Brookside, Wilkins.

ROE.—Plans approved for the erection of ses in Hall-street.

'SHIRE.—The Board of Education has approved the erection of new schools at Stonebroom sfield.

URNE.—The T.C has purchased the Devon- hs for £16,000. They have also decided to suitable site for the construction of swimming the working-class quarters of the town.

SUSSEX.—The C.C. has decided on further s of the London-Brighton road, at a cost of

TRGH.—The Portobello library is to be cted. The T.C. have accepted a tender for —The Dean of Guild Court granted to erect 20 contiguous cottages at Beresford- Edinburgh; two bungalows at Portobello- bungalow at Capelaw-road, Colinton; eight Niddrie and Newcraighall; a cottage at oad, Corstorphine; and a bungalow at , Barnton.

—The T.C. are to consider a scheme for the f municipal buildings, with an assembly hall, site of the Higher Market in Queen-street.

ILL.—The D.C. approved plans: Eight r. E. L. Woodward, at Biggin Hall-crescent s-road, Stoke; 8 houses for Mr. W. Lissaman, road, Stoke; 2 houses, for Mr. A. G. Johnson, 's-lane, Exhall; 2 houses, for Mr. W. Brom- Blackberry-lane, Wyken; house, for Mr. P. Wheelwright-lane, Foleshill; a bungalow, for Bawden, at Blackberry-lane, Wyken.

W.—The Dean of Guild Court granted: J. Sons, Ltd., pattern store at works, Drumoyne- an; Clyde Valley Electrical Power Co., power Knightswood housing scheme; A. Aitken, Courthill-avenue, Cathcart; Glasgow High Girls, Garnethill, pavilion behind Kirklee- vinside.

GTON.—Northampton C.C. has purchased a e erection of three cottages.

K.—Lancashire E.C. is making a grant of wards the cost of a proposed new technical part of a war memorial.

AD.—The B.G. passed plans: House, k Estate; houses at Cringleford, Mulbarton, gland.

Y.—The T.C. passed plans; 21 houses at n-avenue; 8 houses in Woodside-avenue and for 14; 6 and block plan for 19 in Lanchester- se at the corner of Cranley-gardens and Park-

—Plans approved by the U.D.C.: W. J. ice building and dwelling, Mossford Green, le: Suburban Developments (London), Ltd., 280 to 326, Perth-road; Harber & Cox, four reamore-road; E. A. Russell, four houses, s-avenue; P. E. Brand, Ltd., 38 houses, lens; W. H. Knox, three houses, Parkway; nox, eight houses, Levett-gardens; W. H. se, Frimley-road; T. W. Davies, 36 houses, ad; A. P. Griggs, 14 houses, Fairholme-road; tchcock, nine houses, Green-lane; C. W. 15 houses, Kingston-road; F. B. Harrison, Colombo-road.

ER (NORTHANTS).—The P.C. is to lay out land for a recreation ground, at a cost of

ORTH.—Plans approved by the U.D.C.: s, Queen's-road, for Mr. A. D. Orr; house, e, for Mr. J. H. Pitman; 4 houses, Clinton- Ir. Cramp; 6 houses, Crackley-hill, for the lousing, Ltd.

The H.M. has sanctioned the erection of uses on the Abbott's-lane site, for the U.D.C., oan for erecting 38 type A houses at a cost of each. Mr. Sampson Sall has agreed to tender for 12 type B houses to £500, making £6,000.

—The U.D.C. passed plans; W. M. Knight, on and house, Dawlish-road; Adshead & ouse, Temple Mills-lane; J. S. Hartshorne, rch-road.

OL.—The contract for the excavation of e site of the new premises—New India n Water-street, for Messrs. Alfred Holt & hipowners, has been placed with Messrs. oss & Sons, Ltd., of Liverpool, Lough- d London. It is not expected that this be completed or the plans and quantities March or April for the invitation of tenders ndations and superstructure. The steel- act will probably be settled in January. ted architects are Messrs. Briggs & Thornely t J. Rowse, of 622, Royal Liver Building, The consulting engineer is Mr. J. B. f 6, Queen Anne's Gate, Westminster, he Corporation approved plans: Six gburth-road, corner of Honiton-road, Son, for J. W. Jones; house, Speke-road Hunt's Cross, O. Williams & Sutcliffe, for F. Bentham; 10 houses, Talbotville-road, R. Tinker, for R. O. Jones & Co.; house, Queen's-drive, Mossley Hill, Gray & Evans, for M. T. Glynn; six houses, Menlove-avenue, for J. W. Jones & Sons, Ltd.; 24 houses, Whinmoor-road, West Derby, A. E. Shennan, for Whinmoor Estates, Ltd.; house, Menlove-avenue, Wainwright & Sons, for R. Jones & Co.; warehouse, Porter-street, W. P. Horsburgh, for J. Travers & Son; laundry, Mossley Hill-road, A. Ellis, for The Mother Superior; four houses, Watergate-lane, W. Jones, for R. Lloyd Jones; eight houses, Melbreck-road, Mersey Building Co., Ltd.; two houses, Dudlow-lane, Gray & Evans, for Thomas Jones; 232 houses in Liverpool, for T. Wainwright & Sons; two houses, Garston Old-road, R. Owens & Son, for Williams & Jones; two houses, Olivetree-road, for H. Kay & Sons; 18 houses, Whitehedge-road, R. Owens & Son, for H. Hughes; two houses, Heathfield-road, Gray & Evans, for Thomas Jones; house, Menlove-gardens, North, J. W. Jones & Sons, Ltd., for J. H. Humphries; four houses, Warnerville-road, F. H. Peate, for Scarrett Bros. & Davies; new married quarters at fire station, Greenfield-road, Land Steward & Surveyor, for the Corporation; fire station and firemen's dwellings, Longmoor-lane, Land Steward & Surveyor, for the Corporation; two houses, Heathfield-road, Gray & Evans, for Thomas Jones; eight lock-up garages, Marcot-road, W. T. Clarke, for W. D'Arcy; church, Mather-avenue and Springwood-avenue, Campbell & Honeyburne; nine shops, Orrell-lane and Moss-lane, Williams & Kelly, for E. Tomley; bank premises, Bold-street, Grayson & Barnish & F. H. Shann, for Lloyds Bank, Ltd.; three houses, Bowden-road, Garston, R. Owens & Son, for S. Jewell; house, Rutherford-road, for Thomas Jones; house, Uttingavenue, W. Pecorini, for J. Hughes; house, Cherry-lane, G. Anag, for G. Rollinson; 13 houses, Warnerville-road, F. H. Peate, for Scarrett Bros. & Davies; house, Sandforth-close, W. Tomkinson & Son, for T. Mulhern; two houses, Gwydrin-road, T. Wainwright & Sons, for Sealey & Lucas; two houses, Darby-road, S. A. Kelly, for W. Penman; house, Eaton-road, Cressington, Irving & Mosscrop, for Mrs. Cowan; six houses, Greenhill-road, and two houses, Westwood-road, for Mersey Building Co., Ltd.; two houses, Dudlow-lane, corner Montclair-drive, Gray & Evans, for Thomas Jones; two houses, Long-lane, Aintree, J. Hughes, for Thomas Porter & Sons; house, Garden-lane, Fazakerley, Medcalf & Medcalf, for J. Meldrum.

LONDON.—The L.C.C. propose additional special rooms at West Kensington central school, Fulham, which provides for an art room for the boys, and a new kitchen and a new girls' cloakroom. The cost of the work, including incidental expenses, &c., is estimated at £677. The B.E. have approved the proposal for the purpose of a grant.

LONDON (FULHAM).—The L.C.C. recommend the borrowing by the B.C. of £1,250 for housing purposes.

LONDON (KENSINGTON).—The L.C.C. recommend the borrowing by the Royal Borough of Kensington of £23,150 for housing purposes within the borough.

LONDON (LEWISHAM).—The B.C. has approved plans: H. R. Watt, Bromley-road, pavilion; H. W. Laxton & Sons, Cranston-road, two houses; Osborne & Son, Canonbie-road, two houses; W. H. Stevens, Baring-road, house; W. J. Scudamore, Ltd., Manorlane, five houses; Middletons (Builders), Ltd., Cassleeroad, 10 houses; Dibben & Co., Ltd., Calmont-road, seven houses; Messrs. Grace & Farmer, building on the site of "The Green Man," Bromley-road, Catford Southend.—The Borough Surveyor has been authorised to carry out the necessary alterations to the stables at Home Park Depot for the purpose of providing garage accommodation, at an estimated cost of £240.

LONDON (POPLAR).—The L.C.C. recommend the B.C. to borrow £780 for the adaptation and equipment of a tuberculosis dispensary.—Yates & Co., men's club, at Messrs. Bryant & May's factory, Old Ford-road.

LONDON (ST. MARYLEBONE).—The L.C.C. recommend the borrowing by the B.C. of £650 for housing purposes.

LONDON (WEST HAM).—The M.H. has sanctioned an extension of the operating theatre at Whipps Cross Infirmary at a cost of £2,000.—The L.C.C. sanction the proposal of the West Ham local education authority to provide a new public elementary school for about 430 children on the South Hallsville school site.

LUTON.—The T.C. passed plans: A. Carter, four houses, Colin-road; F. G. Loveday, two houses, Lincoln-road; G. Kingham & Son, house and shop, Biscot-road; W. E. Turney, house and shop, Leagrave-road; W. D. Dyer, four houses, Biscot-road; W. D. Dyer, two houses, Marlborough-road.

MANCHESTER.—The Courts Joint Committee is providing additional accommodation at the Manchester Assize Courts, at a cost of £2,500.

NORTHALLERTON.—Members of the All Saints' Parish Church have commenced a scheme for the erection of a new parochial hall, to cost approximately £3,000.

NORTH DUBLIN.—The R.D.C. has asked the Munster and Leinster Bank if they would loan £25,000 for the purpose of carrying out a new housing scheme.

NORTHFLEET.—Plans passed: House, London-road, Mrs. Knight; house, Wrotham-road, Mr. S. Bridger; workshops, High-street, Mr. B. Lingham.

NORTH WHITEFORD.—The R.D.C. passed plans: Two houses, Mr. H. M. Whitworth, Welches-dam; Mr. W. Fresher, bungalow, Ransonmoor.

OKEHAMPTON.—The R.D.C. has approved proposals for the erection of 46 houses.

OXFORD.—A new building is to be erected in Norham-gardens, Oxford, to provide accommodation for students at the Lady Margaret Hall. Of three stories, the new block will contain rooms for 40–60 students, dining and recreation rooms, kitchens, offices, &c., and will be constructed of local brick on a steel framework, with stone dressings. The roof will be tiled. The floors will be of fireproof construction, and a central heating apparatus and electric light will be installed throughout. The contractors are Messrs. J. A. Hunt (Hoddesdon), Ltd., of High-street, Hoddesdon, Herts. The architect is Sir Reginald Blomfield, A.R.A., of 1, New Court, Temple, E.C.4.

PENARTH.—Sanction has been given by the M.H. for the immediate erection of the following: Twenty houses at Llandough, for the Penarth Mutual Housing Society, Ltd.; 25 houses at Comerswell-road, for the G.W.R. (Penarth) Employees Building Society; caretaker's house at the Penarth Athletic grounds. The U.D.C. is to build 30 terrace houses at Cogan. The Council has received sanction to proceed with the layout of sea-front gardens at an estimated cost of £2,000.—Tenders are to be invited for the rebuilding and extension of the pier landing stage, for the U.D.C. The Council has applied for sanction to the borrowing of £14,500 for housing purposes.

PENYBONT.—The R.D.C. is to apply for sanction to erect an additional 24 houses at Pencoed.

RAWMARSH.—The M.H. held an inquiry into the U.D.C.'s application for sanction to borrow an amount not exceeding £14,000, in addition to a sum of £8,000 to be contributed by the Miners' Welfare Committee for the provision of public baths.

RIPON.—The T.C. confirmed a recommendation for the erection of a block of eight houses in Bondgate. The Town Clerk has applied to the M.H. for their approval and sanction to the borrowing of £20,000.

SALFORD.—The T.C. approved the following plans: Two semi-detached houses at Broom-lane, Broughton; two semi-detached houses at Cavendish-road, Broughton; house at Doveleys-road, Pendleton; two semi-detached houses at Lancaster-road, Pendleton; transformer sub-station at junction of Weaste-road South and Hassall-street, Pendleton.

SHIPLEY (YORKS.).—The Surveyor has prepared plans and estimates for the provision of a smallpox hospital at Heaton Royds; the estimated cost is £5,600, and application for sanction to borrow is being made to the M.H. A lay-out plan for 196 houses proposed to be erected on the Albert-road site has been approved by the Council.

SPALDING.—After considering various sites for the proposed Lincolnshire sugar beet factory, Spalding has been selected. The Anglo-Scottish Sugar Beet Corporation, Ltd., has just announced that about £300,000 will be spent on the work.

STOCKTON.—The R.D.C. has approved a plan for the erection of four cottages in Crook-street, Norton, for the London & North-Eastern Rly. Co. Cottage Homes and Benefit Fund.

SURREY.—The E.C. of the C.C. have on hand a big programme for the provision of additional facilities for secondary education in different parts of the county. The estimated cost of sites and buildings regarded as urgently necessary at present is, approximately, £220,000.

TAUNTON.—The Borough Surveyor of the T.C. has been instructed to prepare a plan and estimate of cost of the alteration of the swimming pool at French Weir.

THETFORD.—The T.C.'s Borough Surveyor is to carry out, by direct labour, alteration and additions to the hospital buildings.

THRAPSTON.—Northampton County E.C. is purchasing land for a proposed secondary school.

TORQUAY.—A large residence with about 20 acres of land has been acquired by Messrs. Spiers & Ponds, Ltd., the well-known caterers. It is proposed, as soon as building prices permit, to erect a palatial hotel, with several hundred rooms. The new building will embrace all modern improvements in hotel design, and will involve a considerable expenditure. The staff architect to Messrs. Spiers & Pond, Ltd., is Mr. J. Martin, A.R.I.B.A., of the company's headquarters at New Bridge-street, London, E.C.4.

TOTTENHAM.—The D.C. approved plans: Thirty-five houses in Elm Park-avenue, Lealand-road and Ferndale-road, for the S.M.H. Co.; 18 houses, in Downhills Park-road, for Messrs. Rowley Bros.; five houses Higham-road, for T. Snell.

TROON.—The Dean of Guild Court passed plans for buildings estimated to cost £11,750, as follows: Troon Pavilion Co., picture house in Templehill, and other linings for the erection of semi-villas and houses of the bungalow type in Logan-drive.

UPMINSTER.—The P.C. has received sanction for the purchase of Clock House for Council offices. The Public Works Loan Board has granted £2,000 to enable the Council to make the purchase.

WAYLAND.—The R.D.C. authorised the erection of the second four houses and are applying for a loan of £1,434.

WIMBLEDON.—Plans passed by the B.C.: Spiritualistic Church, Hartfield-road, for Mr. H. Jeffrey; house, Copse-hill, for Mr. R. W. Dibben; two houses, Devas-road, for Messrs. H. Coombs & Sons; house, Montana-road, for Messrs. W. H. Whitehead & Co.; house, Copse-hill, for Mr. McKay; house, Lauriston-road, for Messrs. Limpus & Son; house, Langham-road, for Messrs. Whitehead & Co.; four houses, Albany-road, for Mr. Browne: house, Wimbledon-hill, for Mr. W. W. Gibbings.

WOKING.—The U.D.C. has prepared a scheme for the erection of 50 houses, at an estimated cost of £30,683.—Plans passed: Alterations, "St. Austin's," for Trustee of Home for Ladies; warehouse and stores, West-street, for Mr. A. Lamdin; premises, Church-street, for Woking Co-operative Society; two houses, Ashwood-road, for Mr. A. E. Jones; two houses, Highclere estate, for Mr. J. Harding; two houses, Hockering-gardens, for Messrs. W. G. Tarrant, Ltd.; house, Kingsway, for Mr. A. Rollings; house, Knaphill-road, for Mr. W. H. Arthur; house, High-street, for Mr. O. S. Bond; house, Prey Heath-road, for Mrs. Witham; house, Park-road, for Mr. A. Hardy; house, Pile Hill-road, for Mr. A. G. Clifford; house, Triggslane, for Mr. C. E. Mutter; house, Russell-road, for Mr. J. Taylor; house, Church-road, for Mr. R. D. Smith.

YORK.—Plans passed by the T.C.: E. Relton, two houses, Carrington-avenue.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inqui

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£	s.	d.
Best Stocks	4	3	6
Second Hard Stocks	3	18	6

Per 1,000. Delivered at London Goods Stations.

	£	s.	d.
Flettons, at King's Cross	2	13	3
Do. grooved for plaster	2	15	3
Do. Bullnose	3	8	3
Best Stourbridge Fire brick:—			
2½ in.	8	11	0
3 in.	10	3	0

GLAZED BRICKS—

	£	s.	d.
Best White Ivory, and Salt Glazed Stretchers	23	0	0
Headers	22	10	0
Quoins. Bull-nose and 4½ in. Flats	29	10	0
D'ble Str'tch'rs	31	10	0
D'ble Headers	28	10	0
One Side and two Ends	32	10	0
Two Sides and one End	33	10	0
Splays and Squints	31	0	0

Best Blue Pressed Staffs. 9 5 0; Do. Bullnose .. 9 15 0; Blue Wire Cuts 7 5 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	£	s.	d.
2 in. per yd. super	2	1	
2½ in. "	2	6	
3 in. per yd. super	2	11	
4 in. "	3	6	

	s.	d.	
Thames Ballast	10	6	per yard.
Pit Sand	14	9	" "
Thames Sand	15	6	" "
Best Washed Sand	15	6	" "
½ in. Shingle for Ferro-Concrete	14	0	" "
¼ in. "	15	0	" "
¼ in. Broken Brick "	10	6	" "
Pan Breeze	7	6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

	£	s.	d.
Ferrocrete per ton extra on above	0	10	0
Super Cement (Waterproof)	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
" " Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
" " White	3	12	6
" Fine	5	12	0
Sirapite, Coarse	3	9	0
" Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	11	9
Best Ground Blue Lias Lime	2	4	6
Hair	17	0	0
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s.	d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2	9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2	11½
PORTLAND STONE—		
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4	4
Do. do. delivered on road wagons at above stations, per ft. cube	4	5
White basebed, 3d. per ft. cube extra.		

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

	s.	d.
Small random blocks, up to 10 ft. cube. Per ft. cube	7	/-
Random blocks from 10 ft. and over "	17	/-
Sawn two sides "	27	/-
Sawn three or four sides "	32	/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s.	d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5	6
6 in. rubbed two sides, ditto "	6	0
3 in. sawn two sides slabs (random sizes) "	2	3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1	6½
1½ in. to 2 in. ditto, ditto "	1	4

HARD YORK—

Delivered at any Goods Station London.

	s.	d.
Scappled random blocks Per Ft. Cube	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5	1½
	6	1½
6 in. rubbed two sides ditto "	2	10
4 in. sawn two sides slabs (random sizes) "	2	1½
3 in. ditto. ditto "	9	0
2 in. self-faced random flags. Per Yard Super		

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2½ × 11	28 0
4 × 7	26 0	3 × 9	26 0
3 × 8	24 0	2½ × 9	26 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	23 0	3 × 4	24 0

PLANED BOARDS.

1 × 11 £34 10 — 1 × 9 £32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
¾	16/6
⅞	20/-
1	25/-

BATTENS

Inches	s.	d.	
⅞ × 2	2	6	per 100 ft.

SAWN LATHS.

Per bundle				0	2	6
Dry Wainscot Oak, per ft. super, as inch	0	2	0	to	0	2	6
¾ in. do. do.	0	1	6	to	0	2	0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9	to	0	2	6
Cuba Mahogany	0	3	0	to	0	3	6
Teak (Rangoon, Moulmein or Java), per ft. cube	0	14	0	to	—		
American Whitewood planks, per ft. cube	0	12	0	to	0	14	0
Best Scotch Glue, per cwt.	4	10	0	to	—		
Liquid Glue, per cwt.	4	7	0	to	5	10	0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	6	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

Per 1,000 f.o.r. London.

	£	s.	d.
Best machine-made tiles from Broseley or Staffordshire district	5	12	6
Ditto hand made ditto	5	17	6
Ornamental ditto	6	2	6
Hip and valley tiles (per dozen) Hand made	0	9	6
Machine made	0	9	0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£	s.	d.
R. S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
Stanchions	17	10	0
In Roof Work "	20	10	0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
½ in.	16	10	0	⅝ in. to ¾ in.	13	10	0
⅜ in.	14	10	0	⅞ in. to 2½ in.	13	0	0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

All sizes.	Tubes.	Fittings. ¾"&up.	Fittings. ⅛"to¼" inclusive.	Flanges ¾"&up.	Flanges ⅛"to¼" inclusive
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1⅛	11d.	3½d.
3½ in.	1/2⅛	1/0⅛	3½d.
4 in.	1/4	1/1⅛	3½d.
4½ in.	1/5⅛	1/4	4d.
5 in.	1/7⅛	1/5⅛	5d.

O.G. GUTTERS.

3 in.	1/6⅛	1/2⅛	3½d.
3½ in.	1/6⅛	1/2⅛	3½d.
4 in.	1/7⅛	1/4	3½d.
4½ in.	1/9⅛	1/6⅛	4d.
5 in.	2/1⅛	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1⅛	1/8
2½ in. "	1/9⅛	1/4	2/0⅛
3 in. "	2/1⅛	1/8	2/5⅛
3½ in. "	2/6⅛	1/11⅛	2/10⅛
4 in. "	2/11⅛	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s.	d.	Bends, stock angles. s.	d.	Branches, stock angles. s.	d.
2 in. per yd. in 6fts plain	3	0½	2	2½	2	8
2½ in. "	3	6½	2	5½	3	3½
3 in. "	4	2½	2	8	4	0½
3½ in. "	4	7	3	3½	4	8½
4 in. "	5	1	3	9½	5	5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s.	d.	Bends, stock angles. s.	d.	Branches, stock angles. s.	d.
3 in. per yd. in 9ft. lengths	4	9	5	8	8	10
4 in. "	6	3	6	8	11	4
5 in. "	7	6	11	6	18	2
6 in. "	8	10	14	4	23	5

Per ton in London.

IRON—	£	s.	d.		£	s.	d.
Common Bars	13	10	0	to	14	10	0
Staffordshire Crown Bars—good merchant quality	14	10	0	—	15	10	0
Staffordshire "Marked Bars"	17	0	0	..	18	0	0
Mild Steel Bars	12	0	0	..	13	0	0

METALS (*Continued*).

	£	s.	d.
Steel Bars, Ferro-Concrete quality, basis price	12	10	0
Hoop iron, basis price	16	10	0
" Galvanised	31	0	0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	14	10	0
" " " 24 g.	15	10	0
" " " 26 g.	17	10	0
Sheets Flat Best Soft Steel, C.R. & C.A. q			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21	0	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24	10	0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20	10	0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21	0	0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23	0	0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23	10	0
Best Soft Steel Sheets, 22 g. and 24 g.	24	10	0
Best Soft Steel Sheets, 26 g.	26	0	0
Cut Nails, 3in. to 6 in.	20	10	0

(under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£	s.	d.
LEAD—Sheet, English, 4 lb. and up			
Pipe in coils			
Soil Pipe			
Compo pipe			
NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2			
Old lead, ex London area, at Mills per ton	35	0	0
Do., ex country, carriage forward per ton	36	0	0

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
29/-	45/-	76/-	153/-	246/-

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in
41/6	62/-	92/-	174/-	300/-	589

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per

CAPS AND SCREWS.

1½ in.	1¾ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- p

NEW RIVER PATTERN CROYDON BALL VAL

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRA SCREW.

1½ in.	1¾ in.	2 in.	3
33/-	41/-	56/-	10
35/-	45/-	66/-	12

COPPER—	£	s.	d.
Strong Sheet per lb.	0	2	3
Thin "	0	2	4
Copper nails "	0	2	3
Copper wire "	0	2	4
TIN—English Ingots "	0	2	6
SOLDER—Plumbers' "	0	1	2
Tinmen's "	0	1	4
Blowpipe "	0	1	5

PAINTS, &c.

Raw Linseed Oil, in pipes			per gallo
" " " in barrels			"
" " " in drums			"
Boiled " " in barrels			"
" " " in drums			"
Turpentine in barrels			"
" in drums (10 gall.)			"
Genuine Ground English White Lead, per t (In not less than 5 cwt. casks.)			
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms "Park," "Supremus," "St. Paul's "Spedol" and other best brands (14 lb. tins) not less than 5 cwt. lots			per ton deliver
Red Lead, Dry (packages extra)			per t
Best Linseed Oil Putty			per c
Filocol			per c
Size, XD Quality			fl

[*Continued on next page.*

* The information given on this page has compiled for THE BUILDER and is copyright this list is to give, as far as possible, the of materials, not necessarily the highest or and quantity obviously affect prices—a fact be remembered by those who make use of th

URRENT OF MATERIALS *(contd.)*

GLASS.

HEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
s ..	3¾d.	32 oz. fourths	8¾d.
....	4¾d.	32 „ thirds	10¼d.
s ..	5d.	Obscured Sheet, 15 oz.	4d.
....	6¼d.	„ „ 21 „	5¼d.
s ..	6d.	Fluted 15oz. 6¼d., 21oz.	9¼d.
....	7¼d.	En'lled 15oz. 5¼d., 21 oz	7¼d.

ccording to size and substance for squares tock.

OLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
ate	4¼d.
lled	5¼d.
lled	5¾d.
Rolled, Baltic, Oceanic, Arctic, Stip- and small and large Flemish white..	6¼d.
, tinted	9d.
eet	6d.
olled Cathedral	5¼d.
do.	7¾d.

late is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
arriage	ditto	1 4 0
.....	ditto	1 12 0
.....	Inside	0 18 0
per	ditto	0 18 0
abinet	ditto	1 2 6
latting	ditto	1 0 6
Oak.....	ditto	0 18 0
rying Oak	ditto	0 19 0
arnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
Gold Size		0 10 0
apan		0 10 6
ogany Stain (water).....		0 12 0
ack.....		0 7 6
.....		0 14 6
cent)		1 5 0
Brush Polish		0 17 0
in Terebine.....		0 9 0
Enamel.....		0 7 0

TRADE NEWS

r is made to electric light users by mens and English Electric Lamp -39, Upper Thames-street, London, have brought out a new game, "Wizard Electric," and offer to any reader who applies to the epartment at the above address, d. stamp for postage, and mention- er.

eceived from Messrs. The Foamite o., Ltd., 24-26, Maddox-street, , W. 1, a brochure dealing with s fire-fighting appliances, irefoam, it states, protects every perty—from the private house to farm—and is effective upon fires cription. It is suitable for the offices, garages, cinemas, factories, distilleries, and oil-storage tanks. aim, absolutely neutral, and does even the most delicate fabrics. oncerning their installations are the booklets, "The Foamite em for Extinguishing Oil Fires," uishing Oil Fires on Board Ship," sent upon application.

v Lincolnshire Factory.

r-beet factory is to be built at th Lincolnshire, by the Anglo- Beet Corporation, Ltd., at an st of £300,000. The site selected irts of the town between a tidal atercourse, and building is to be ortly.

ord Bricklaying Classes.

wn Council recently adopted a working class houses, of which built by direct labour and the enterprise. As this scheme will ilable building trade labour in the ord Technical Institute proposes g classes for teaching practical plastering.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Greenock.—HALL.—The Dean of Guild Court has passed plans for a new hall for the Salvation Army to be erected at the corner of Holmscroft-street and Duncan-street. The building will be two stories high.

Hawkhead.—INSTITUTE.—The Local District Board of Control has passed plans for a new institute for mental defectives at Hawkhead. The estimated cost is £92,537. The plans were prepared by Messrs. Abercrombie & Maitland, architects, Paisley. The building has been designed to accommodate 100 patients, and, if necessary, an extension can be arranged for a total accommodation of 500.

Stanley.—HALL.—It is proposed to lengthen Stanley Temperance Hall by 12 to 14 ft., to add a large ante-room, to re-model the present ante-room, to provide sanitary accommodation, and to relay the flooring.

GLASGOW SLUM CLEARANCE

THE Glasgow Corporation Housing Committee recently projected a scheme for the clearance of slums and the erection of new houses. The houses comprised in the scheme prepared by the Medical Officer recommends that 3,976 houses should be dealt with. Of these, 530 dwellings are situated in the Central Division of the city, 1,082 in the Northern, 1,405 in the Eastern, 463 in the South-Eastern, and 496 in the South-Western divisions. In all 453 "lands" or tenements are involved, 286 being front lands and 167 back lands. These include 1,996 one-apartment houses, 1,798 of two-apartment houses, and 182 houses of three and more apartments.

The inhabitants of these dwellings number 16,246, and for their future accommodation it is proposed to provide new dwellings situated elsewhere in the city. In all, 127 areas are involved in the suggested clearances, and of these areas the committee propose to reserve 87 that are mainly the sites of back "lands" for the purposes of open spaces, while 23 areas when cleared will be occupied by re-housing schemes, and the remaining 17 areas will be devoted to the erection of only business premises.

Bathgate.

It is reported that Mr. Marwick, of Edinburgh, has consented to act as assessor in a competition for designs for a technical school at Bathgate.

Scottish Architects.

The Incorporation of Architects in Scotland announce the following prizes and studentships for 1925:—(1) Howard Anderson Medal and £100 for a design for a central library for a provincial city; (2) Rutland Prize of £50 for the study of materials and construction; (3) Prizes of £10 to £15 for Third Year Students at the Schools of Architecture in Scotland. Pamphlet with conditions obtainable free from the Secretary, 15, Rutland-square, Edinburgh. At a recent monthly meeting of the Council a jury composed of the President and five Vice-Presidents was appointed to award the R.I.B.A. medal for street architecture throughout Scotland.

Steel Houses.

At a recent election meeting Councillor P. H. Allan said, with reference to housing, that they could do with 200 bricklayers, joiners, plasterers, plumbers, slaters, and masons at Canongate Ward, but they could not get them, and as a result the Town Council could not finish the houses which were being built at the present time. He had advocated that they should try steel houses for that reason. There was a complaint that they were dear, and he agreed. He would not advocate them if they could get the real thing, but it was necessary to try and solve the housing difficulty, and he considered they should be encouraged to proceed on any lines which would get houses.

Builder's Estate.

Mr. John Parker Appleton, of Oakdene, Anlaby Common, Anlaby, Yorks (net personalty £52), £5,083.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plasterers' Masons' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0	
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 737.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	38/–	44/–	50/–	80/–

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.		49/–	58/–	67/–
Do. tongued and grooved	"		54/–	65/–	72/–
Do. matchings	"	45/–	55/–		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½″	1¾″	2″
Two-panel square framed	per ft. sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1″	1¼″
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/8	1/9
Deal shelves and bearers	"	1/5	1/7
Add if cross tongued	"	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—
Deal strings wrot on both sides and framed	1/8	2/–	2/2	2/8

Housings for steps and risers		each
Deal balusters, 1 in. × 1¼ in.		per ft. run.
Mahogany handrail; average 3 in. × 3 in.		" "
Add if ramped		" "
Add if wreathed		" "

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges a letting in to floor a	
Casement stays	1/2	making good	
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt
Plain compound girders	"
Do. stanchions	"
In roof work	"

RAIN-WATER GOODS.

		3″	4″	5″
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7
Ogee Do. Do.	"	2/4½	3/1	3/10
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/7
Do. nozzles for inlets	"	2/2	2/7	3/10

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt				
Do. Do. in flats	"				
Extra labour and solder in coated cesspools	each				
Welt joint	per ft run.				
Soldered seam	" "				
Copper nailing	" "				

	½″	¾″	1″	1½″	2″
Drawn lead waste per ft. run	1/1	1/9	1/11	3/5	4/2
Do. service "	1/8	2/2	2/7	3/10	
Do. soil "					3/3
Bends in lead pipe each					
Soldered stop ends "	1/2	1/8	2/1	2/10	3/6
Red lead joints "	11d.	1/–	1/3	1/11	2/4
Wiped soldered joints "	2/10	3/6	4/–	4/11	6/6
Lead traps and cleaning screws "				14/7	19/6
Bib cocks and joints "	6/4	9/7	15/4	41/–	
Stop cocks and joints "	15/4	17/2	25/8	64/–	

PLASTERER.

Render, float and set in lime and hair	per yard sup.	
Do. Do. Sirapite	" "	
Do. Do. Keen's	" "	
Add sawn lathing	" "	
Add metal lathing	" "	
Portland cement screed	" "	
Do. plain face	" "	
Mouldings in plaster	per 1 girth	
One-and-a-half granolithic pavings	per yard sup	

GLAZIER.

21 oz. sheet plain	per foot sup
26 oz. Do.	" "
Obscured sheet	" "
⅛ in. rolled plate	" "
¼ in. rough rolled or cast plate	" "
¼ in. wired cast plate	" "

PAINTER.

Preparing and distempering, 2 coats	per yard su
Knotting and priming	" "
Plain painting 1 coat	" "
Do. 2 coats	" "
Do. 3 coats	" "
Do. 4 coats	" "
Graining	" "
Varnishing twice	" "
Sizing	" "
Flatting	" "
Enamel	" "
Wax polishing	per foot sup
French polishing	" "
Preparing for and hanging paper	per piece 2/

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges; a percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole information given on this page is copyright.

AILURE OF STATE RAILWAYS*

ne when the nationalisation of the oduction, distribution and exchange o the nation as the means of attain- alvation, and when the issue has hat obscured by the heat engendered al Election, reasoned argument is change from party cries, and such rgument is furnished against the ion of the railways in an admirable hlet by Mr. Harold Cox, entitled re of State Railways." The author, hapter, points out that, as regards s, the Socialists have one point in their contention for the nationalisa- class of undertaking in that they o other countries where the system and in this pamphlet he devotes a careful analysis of the results hose countries where State-owned st, and shows the difficulties attend- failure of the system; but, besides tive consideration of the principle orce, we would draw our readers' the very lucid statements contained apter, where, amongst other points, e Socialistic argument for nationali- on the Post Office. Not only does at the origin of our postal system enterprise, as also of the system of nd telephones, but that the taking elegraph system by the Government l in heavy loss to the taxpayer; e case of the telephones, although l results have been less unsatis- probable that the taxpayer would r better had the Government been ith the heavy royalties it exacted e management in private hands. any years can have read the corres- olumns of almost any newspaper ng that the telephone service as by the Government of the day h to be desired. Since the days of is notorious that passengers who eat a stale bun in a railway refresh- ave written to the papers complain- railway system, but as regards plaints by traders we may quote amphlet, where it is shown that, war and after increased facilities ven to complainants to go to the de, instead of only to the Railway Commission, and when any person grievance of any sort could appeal d of Trade, the number of com- g out of the millions of transactions the railways are concerned only er a period of ten years 153 per cidentally, we may observe the is case has the advantage of an a private company to a Govern- tment, whereas were the railways the only appeal would be to the itself responsible for the under- we think those who appeal to the and the revenue Departments al experience of the delays involved, emedy is forthcoming in the end. oes not permit us to do more than e analysis of the working of State he attention of thoughtful persons, y to call attention to the author's on the "Socialist Proposals" lts of what in the end might prove Government control but workers' ar which recent events have shown t all unreasonable. We wish this re likely to be read universally by t present, with their eyes closed, ng a change in our whole economic al system.

eers' and Estate Agents' Institute.

neers' and Estate Agents' Institute its old offices in Russell-square, n occupation of its new building, at Inn Fields, W.C.2.

of State Railways. By HAROLD COX, Edinburgh Review, Author of "Economic e Problem of Population," etc. (Long- Co., 1924.)

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

AIGHTON.—Rebuilding retaining walls to approach of Hodder Higher bridge, for Lancashire C.C. :—
*Varley & Son £1,228

AYLESBURY.—For reconstruction of the joint station :—
*H. Willmott & Sons (Hitchin), Ltd.

BARNSLEY.—For painting the administrative block, the long block, and the covered corridor at the Kendray hospital, for the T.C. :—
*T. L. Stephenson & Son..... £366 10

BEXHILL.—For painting, &c., Nos. 28 to 70, London-road, for the T.C. :—

W. H. Sanders	£488	0	0
Kemp Bros. & Bristow	467	0	0
E. R. Payne	460	19	6
Matthews & Co.	444	18	4
D. Miles & Sons	433	0	0
Geo. F. Farnfield	427	17	8
*E. Godwin & Sons	252	15	0

BLACKPOOL.—For re-flooring of the central hall, boy's secondary school, for the T.C. :—
*Burgess & Co., Liverpool.

BRAUNSTON.—Widening Castle Bridge, for Northampton C.C. :—
*G. F. Y. Hartigan, Northampton.. £2,856

CHORLEY.—Construction of steel bridge to replace Skew bridge, for the Lancashire C.C. :—
*Skipworth, Jones & Lomax, Manchester..... £5,221

CHORLEY.—Masonry work in connection with the new Skew bridge, for the Lancashire C.C. :—
*J. M. Firth, Todmorden £15,629

ELLESMERE PORT.—Erection of four houses on gasworks site, for U.D.C. :—
‖‡E. B. J. Gould, Ltd. £2,352

GARSTANG.—Erection of bridge over canal at Garstang, for Lancashire C.C. :—
*L. Fairclough, Ltd., Adlington..... £2,645

GEDDINGTON.—For erection of three cottages, for Northampton C.C. :—
*A. Johnson & Co., Kettering £1,327

GUERNSEY (CHANNEL ISLANDS).—For erection of 52 houses, for the States Committee for Homes for Workers. Mr. Sydney Newcombe, architect, Greve-d-Azette, Jersey :—
*Jesty & Baker, Weymouth—

40 houses, Collings-road site—36 "A" type, 4 "B" type	£22,011	5	4
Drainage, roads and fences	1,308	5	10
12 houses, Sausmarez Mill site—8 "A" type, 4 "B" type	6,811	0	8
Drainage, paths and fences	711	19	2
	£30,842	11	0

HECKMONDWIKE.—For erection of 12 houses on the Stubley Farm Estate, "A" type, for the U.D.C. H. Stead, surveyor :—
*T. Horsfall, Liversedge.

ILFORD.—For alterations to 2 to 7, Railway-terrace, and 1 to 8, Laburnam-grove, for the U.D.C. :—
*W. G. Lewin, Ilford £303 15

LANCASHIRE.—For painting various steel bridges in the County, for the C.C. :—
‖*H. Gladwell & Co., Rochdale £254

LEEK.—For extensions to the fire station, for the U.D.C. :—
*T. Godwin & Sons, Hanley..... £385

LONDON.—For erection of a schoolkeeper's house at Haverstock-hill school, for the L.C.C. The architect's estimate comparable with the lowest tender is £984 :—

Cole, Loasby & Co., Ltd.	£1,608
A. Roberts & Co., Ltd.	1,593
Lole & Co.	1,579
A. & F. Polden, Ltd.	1,465
J. & C. Bowyer, Ltd.	1,458
Bovis, Ltd.	1,130
Y. J. Lovell & Son	1,088
J. P. Williams, Ltd.	1,020
*A. Monk	970

LONDON.—For painting and cleaning the Balham High-road L.C.C. school, for the L.C.C. :—
*J. Potterton & Sons, London.. £1,059 14 6
(In lieu of the Sycamore Works Co.)

LONDON.—For erection of an oak fence at Maryon Wilson Park, for the L.C.C. :—

J. W. Ward & Son, Ltd., Boxmoor	£609	6	9
Albert Turner & Son, Ltd., London	590	17	6
Astolat Co., Guildford	493	10	9
B. Horton & Son, Ltd., Lewisham	490	4	7
*W. Stenning & Son, Redhill....	480	5	0

LONDON.—For painting various schools, for the L.C.C. :—

Anerley residential deaf—*J. & C. Bowyer, Ltd., Upper Norwood	£1,279	0	0
Avery-hill training college, Woolwich, W.—*Bovis, Ltd., London	1,674	0	0
Basnett-road, Battersea, S.—*Triggs & Co., London	1,598	0	0
British-street, Poplar, S.—*Vigor & Co. (Poplar), Ltd., Poplar	1,113	0	0
Camberwell central and Crawford-street, Camberwell, N.W.—*E. C. Sames & Co., London	1,231	17	10
Clifton-hill, Deptford—*Sims & Russell, Westminster	1,498	0	0
Cormont-road and Akerman-road, M.D., Brixton—*J. Marsland & Sons, London	1,088	0	0
Gopsall-street, Shoreditch—*G. Keetch, Hackney	1,740	0	0
The Highway, Whitechapel and St. George's—*R. Woollaston & Co., Limehouse	1,544	0	0
Holbeach-road, Lewisham, E.—*J. H. Sutch & Sons, Plumstead	1,062	0	0
Olga-street, Bethnal Green, N.E.—*T. Watson, London	1,785	0	0
St. Dunstan's-road, Fulham, W.—*M. Greenwood & Son, Ltd., Harlesden	1,734	5	10
Sandhurst-road, Lewisham, E.—*A. Black & Son, Forest-hill	1,097	0	0
Sleaford-street, Battersea, N.—*Triggs & Co., Clapham	2,325	0	0
South Lambeth-road, Kennington—*W. Hammond, Battersea	2,089	0	0
The Springfield, Kennington—*Sims & Russell, Westminster	2,078	0	0
The Strand school, Norwood—*J. Garrett & Son, London	1,815	0	0
The County secondary school, Streatham—*J Garrett & Son, London	1,830	0	0

LONDON.—For the erection of a refreshment house at Clapham Common, for the L.C.C. :—

*Arthur Phelps & Wilton, Ltd., 3, Streatham-place, S.W.	£3,654
Holliday & Greenwood, Ltd., Stewarts-road, Battersea	3,597
Triggs & Co., Mackay-road, Clapham	3,485
H. S. Lee, Ltd., 221, St. John's-hill, S.W.	3,043
T. D. Leng, Evelyn-street, Deptford	2,987
Humphreys, Ltd., 187, Knightsbridge, S.W.	2,970
W. Akers & Co., Ltd., South Norwood	2,891
A. & F. J. Leather, 17, Victoria-street, S.W.	2,806
J. Garrett & Son, 83, Balham-hill, S.W.	2,736
*W. J. Dixon & Son, Blue Anchor-lane, Bermondsey	2,320

LONDON.—For construction of two tramway passenger shelters at Kennington-gate, for the L.C.C. :—

Higgs & Hill, Ltd.	£1,224 0
A. Phelps & Wilton, Ltd.	1,086 0
Triggs & Co.	1,059 0
Lole & Co.	1,020 0
Humphreys, Ltd.	797 0
J. McManus, Ltd.	796 0
J. Harrison & Co.	790 10
W. Harbrow, Ltd.	672 0
*J. & C. Bowyer, Ltd.	587 0

(All of London.)

LONDON.—For erection of 102 flats on the Tyndale-place site, Upper-street, N.1, for the Islington B.C. Mr. E. C. P. Monson, F.R.I.B.A., Architect to the Council, Finsbury-pavement House, E.C.2. Quantities by Mr. F. N. Falkner, 11, Princes-street, Cavendish-square, W. :—

Chessums, Ltd.	£68,622
Bovis, Ltd.	68,350
Hooper & Hooper	67,676
Allen Fairhead & Sons, Ltd.	67,634
J. E. Billings & Co., Ltd.	67,358
Rice & Son	65,827
Patman & Fotheringham, Ltd.	64,621
*Geo. Bollom	61,057

(All of London.)

LONDON.—For erection of a secondary school in Cumberland-road, for the West Ham E.C. :—

Perry Bros., London	£26,891
W. M. Brand, London	26,670
E. A. Russell, Leytonstone	26,439
A. E. Symes, London	26,217
G. B. Farrar & Co., London	26,097
Clements, Grays, Ltd., Grays	25,719
F. J. Coxhead, Leytonstone	25,026
H. Somerford & Son, Clapham	24,777
*H. C. Horswill, London	24,720
Architect's estimate	25,500

LONDON.—For open-air school, Knox-road, for the West Ham E.C. :—

E. Beasley, London	£1,538
A. E. Symes, London	1,533
J. T. Luton & Son, London	1,521
W. J. Clemens, London	1,515
A. Webb, London	1,498
Chapman & Sturton, Tidal Basin	1,400
E. A. Russell, Leytonstone	1,349
*H. C. Horswill, London	1,290
Architect's estimate	1,000

LONDON.—Extensions to the Tuberculosis Dispensary premises, 47, Catford-hill, for the Lewisham B.C. :—
*A. T. Peyton £457 10
(Subject to M.H. approval.)

LONG EATON.—For erection of 54 houses in Tamworth-road, for the U.D.C. :—

*J. E. Jervis, Ltd. £25,000

MANCHESTER.—Sub-contractors approved for erection of new tram office at Lloyd-road, Levenshulme, for the Tramways Committee of the C.C., submitted by the general contractors, Messrs. S. Megarity & Co. :—

*_Excavator, drainer, bricklayer_—Moston Brick & Building Co., Ltd.
*_Mason_—Walmersley & Sons.
*_Plumber and glazier_—R. Crabtree.

MANCHESTER.—For alterations to females' wash-houses, and alterations of Committee room for extra wash baths at Osborne-street Baths, for the Corporation :—

*Fearnley & Sons, Salford £1,750

MANCHESTER.—For the erection of a new public elementary school on a site at Peacock-street, Gorton, for the E.C. :—

*Tinker & Young, Ltd., Miles Platting.

MANCHESTER.—Sub-contractors approved for the extension to the kitchen block at Baguley Sanatorium :—

*_Excavator, drainer and bricklayer_—G. Bridge.
*_Slater_—Huntingdons, Ltd.
*_Plumber and glazier_—R. Heyworth & Co., Ltd.
*_Plasterer and painter_—G. F. Holding.
(All of Manchester.)

MORLEY.—For the erection of (_a_) 26 houses on the Middleton-road estate; and (_b_) 22 houses on the same estate, for the T.C. Mr. F. Turner, surveyor :—

(_a_) *J. Clegg & Sons, Morley.
(_b_) *F. Turner, Tingley, near Morley.

NEWMARKET.—For erection of 10 non-parlour houses in Stanford-street, for the U.D.C. :—

*Edmondson & Son £5,177

OXFORD.—For painting Hinksey and Littlemore stations, for the T.C. :—

Messrs. Barrett & Son	£238	9	3
J. H. Tucker	215	0	0
*Harris & White	155	15	0

PEMBROKESHIRE.—For erection, for the County Small Holdings Committee, of a cottage and a bungalow at Trefwynt :—

	Cottage.	Bungalow.
Griffiths & Harris, Norbeth	£779 0 0..	£757 0
Parry & Thomas, Haverfordwest	680 0 0..	695 0
E. W. Griffiths, Tenby....	575 0 0..	590 0
*Thomas Bros., Templeton..	520 5 6..	515 8

TROWBRIDGE.—For erection of 20 houses in ten pairs, at the Rock housing estate, for the U.D.C. Mr. W. W. Snailum, Lic.R.I.B.A., architect, Trowbridge :—

	North Aspect. per pair.	South Aspect. per pair.
T. Conway, Ltd., Weymouth	£1,434 0 0..	£1,469 0 0
Thompson & Son, Louth	1,323 0 0..	1,353 0 0
H. Isley, Trowbridge ..	1,281 8 0..	1,276 5 0
Building & Public Works Construction, Ltd., Swindon	1,199 0 0..	1,249 0 0
Bigwood & Co., Melksham	1,171 10 0..	1,185 5 0
Linzey & Son, Trowbridge	1,150 0 0..	1,150 0 0
A. Culverhouse, Trowbridge	1,118 18 9..	1,135 16 6
Holdoway & Son, Westbury	1,090 0 0..	1,147 0 0
W. G. Brewer, Trowbridge	1,065 0 0..	1,140 0 0
*J. T. Parsons, Westbury	1,010 0 0..	1,010 0 0

(Subject to M.H. approval.)

PRESTON.—For erection of the Wal Market-square, for the T.C. Sir Giles G R.A., architect :—

*G. Longden & Sons, Sheffield ....

PORTISHEAD.—For erection of 1 South-road, for the U.D.C. :—

*Burstow & Hawkins, Clevedon.
(Revised tender.)

ROTHWELL (YORKS.).—For erectio mortuary at the rear of Council Offices, Mr. Southwart, surveyor :—

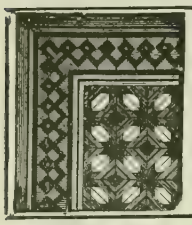
*H. Bennett & Son.....

SALFORD.—For erection of a tramw the T.C. :—

*W. Macfarlane & Co., Glasgow.. £1

THETFORD.—For erection of 72 roads and sewers, for the T.C. Mr. S. architect :—

*A. Holden £66,99



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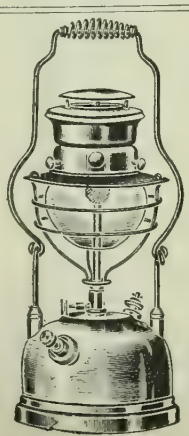
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. 4267. NOVEMBER 14, 1924.

ACTIONS AND REACTIONS

, production, and prices are the three factors of industry. The vital interests of the workers of the world are absolutely up in the stabilisation of wages on the sure and certain basis of money's worth. They are entitled to every penny they ey are not entitled to, and can never permanently secure, one farthing more."—W. M. COLLES, in the *Fortnightly Review*.]

RE is a popular detective story by "Sapper" sed upon the economic law dealing with supply d demand. We are introduced to the diamond agnate who controls the market, on the principle at the smaller the supply of diamonds the greater . A scientist discovers how to make diamonds so t a scullery maid can afford to wear a necklace of s large as tomatoes. The discovery must be kept orld at all costs, and it is here that the detective . This introduction holds a moral for the building lous and irrelevant as it may appear at first sight. ls are purchased because they are valuable, but they e because they are scarce. We, as a nation, have nited the supply of houses like diamonds, but we d their potential value—a fatal blunder from the int of view. When houses are as scarce as diamonds ar, but obviously they should possess an economic from their function in providing shelter for our the last few years we have destroyed the economic houses, with the result that we have to be content of them. We do not part company with our : the building trade has carried the process a stage limiting our supply we must be certain that the e will be paid. We refuse to pay the scarcity price and it is here that our analogy with the diamond us. Although we could not afford the price of individuals, public opinion forced us to build as With a sure and certain market in front of him, the ised his prices, and defying all the laws of political e demonstrated that scarcity values can be wrung on caught in an unfortunate dilemma.

cedure on the part of the workman is perfectly erstand; it is as obvious as it is elementary, but or its success upon too many artificial conditions. red a demand for houses from the State, it becomes estion of keeping intact a certain number of factors. n must be certain (1) that the demand is guaranteed erable period ahead; (2) that the supply can be stricting the number of men to be employed in the that there is only one particular method of building that only one particular trade can do the work. programme extending for fifteen years was the ffered by the Government, and the representatives ng industry in return completed the vicious circle by a large majority any proposals for absorbing and unskilled labour. The position was ripe for a wages, and taking into consideration the extra- umstances, and the fact that those responsible for f the building trade seemed to have chosen the it is quite conceivable that prices and wages been higher.

pect of a total annual loss, computed by Mr. ceed £60,000,000 on Mr. Wheatley's houses when uilt, may not have been overlooked by the building ought to have been only too obvious that it was duty of the State to examine every possible ducing this stupendous burden upon a country ly taxed.

always advocated that the building trade should own internal problems, and we urged that any ution should be controlled by the trade rather than by Government. Having refused to entertain the idea, the problem still remains that some other trade may deal with the housing shortage and the appalling number of unemployed. These two problems are serious and urgent, and both of them are putting a serious strain upon the financial resources of the country. It is both a natural and irresistible suggestion that every means should be tried to deal with both problems at the same time. In our view there is a call for sounder economics and more imagination than has hitherto been shown. We do not pretend to suggest a detailed housing policy; we submit that any scheme of housing—and with it the building trade—is bound to suffer the fate which will befall every attempt to suspend the laws of supply and demand. It is fairly evident that the public is beginning to realise that it may be subsidising inefficiency, instead of attacking the root of the trouble by increasing supply.

Lord Middleton and Lord Weir have put forward suggestions for auxiliary schemes of housing built on the mass production principle, with the minimum of skilled labour, and it is certain that public opinion will demand that these proposals should be carefully examined and that every encouragement and latitude should be given. In an age which has many wonderful inventions to its credit, it is idle to believe that there is only one method of building houses. The philosophy which distinguishes between realists and idealists may be wrong, or at least misleading, but between these two parties we have seen every housing scheme wrecked. We have seen the building trade entrenched in what was considered to be an impregnable position, and the social reformer clinging to his best debating points. The daily papers, heedless of our experience of war-time controls, persist in the delusion that they can do all that is necessary by detecting "rings" for us. They welcome the setting up of "a small committee to watch the prices of building materials, and keep the Government fully informed." Attention is drawn to these matters, and to the number of bricks which a bricklayer can reasonably be expected to lay in an hour, in much the same way that ability to read the barometer may create a desire to try and alter the weather.

In a national emergency of this nature, we are likely to find that the solution of our present difficulties will be found in a modification of our housing ideals which will admit of the adoption of less permanent building materials. We shall be sorry to see our traditional forms of building departing, but it is useless to apply the shibboleths of the past to the crisis of the present. We hold that no one can, in fairness, claim the monopoly of social or political idealism, and it is no more than a patent truism to say that the decisions of the building trade unions in the matter would have been the better for more of the earnestness and high purpose which should mark the activities of those who are commercially serviceable to their neighbours. We sympathise with the building trade in that its operations have been hindered and complicated for several years by a Government control, and we do not believe that any other industry under similar conditions would have acted differently or seen farther into the problem. Instead of drawing nearer to an economic balance between values and costs, the breach is widening, and the problem of housing is more serious, and the burden of carrying it is greater than ever. It is impossible to prophesy what the future holds, but it would be foolish to ignore the possibility that the result may be a permanent loss to the building industry.

NOTES.

The Late Sir T. G. Jackson, R.A.

We regret to have to record the death of Sir Thomas Graham Jackson, Bart., R.A., who lived to within about a year of 90. In the wonderful revival of modern architecture which followed the deadly dullness of the earlier half of the nineteenth century, the late T. G. Jackson played a conspicuously successful part, and much of his work was very markedly in the front rank of modern work during the earlier part of his practice. He was not a mere pedant or archæologist, and no servile follower of precedent; he was a thinker and a critic with a well furnished intellect. We cannot say that he rose to the level of the artistic attainment of the best of his compeers, but he has done much sound and excellent work, and certain of his college work in Cambridge is as good as any modern architect can show. He was an architect of great ability, and has done much to uphold the credit of modern architecture. His literary work has been both valuable and interesting, and we still recall the delight with which we hailed his books on Dalmatia. All his publications gained immensely by the vivid illustrations which he himself produced by pen and ink and wash, giving a reality of interest which no photographs could supply. It is to be hoped that the practice of architecture in this country may be followed by many who will achieve as fine a reputation for high endeavour as the late Thomas Graham Jackson.

Manchester New Art Gallery Competition.

An intending competitor in this competition writes: "It is to be regretted that the assessors in answering a protest against the onerous requirement of four elevations and two sections to an eighth scale adhere to the stipulation that all these plans and a half-inch detail should be 'rendered in monochrome.' The recent tendency to relieve competing architects of needless labour is thus reversed. Do the assessors imagine that the office staffs of practising architects use this academical and useless system of rendering in their daily work? Cannot some concession be made in the interests of the large number of competitors who will labour in vain by reducing labour which must be wasted." We agree with our correspondent and hope that some concession will be made.

The Prime Minister's Speech.

As we listened to the Prime Minister's speech on Monday night it came as a pleasant note to hear such an appreciative reference to the excellent books by Mr. Lethaby, the architect, from one of which Mr. Baldwin found some pertinent illustration to his remarks. We are not, of course, surprised that Mr. Lethaby's writing appeals to others outside a professional circle, but it would be well if the Prime Minister's allusions interest some who are unacquainted with Professor Lethaby's works, so that they may add to their stores of interest and pleasure.

Mr. Neville Chamberlain

The wheel has turned the complete circle and we find ourselves once again with Mr. Chamberlain as Minister of Health. It is to be hoped that constant changes of policy and personnel are at an end and that we are in for a prolonged period when a definite housing solution will be given a fair trial. Whatever may be said of Mr. Wheatley's scheme as a whole, he has certainly introduced one very necessary change; one that we sincerely hope will not be nullified by reactionary pressure upon the new Minister—we refer to the necessity for consulting the Ministry when an unusual number of houses to the acre is in contemplation.

Housing Density.

While we fra
that in certain
neither feasible
able to restrict
of houses to twelve, or even
the acre, yet we deny strenuo
power to build an unlimite
houses to the acre is one tha
to the discretion of local
With some it would be safe,
others; and it is one of th
principal functions to satisf
dark and dreary terraces, th
for future slums, are not bein
Government auspices.
authority who wishes to b
than twelve to the acre shou
to obtain the consent of th
Health. We trust that the
ment will not lay itself open
of reaction by going back on
of density.

Rent Decontrol.

In these colu
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of rents, but w
that Mr. Baldwin has intim
position of the housing que
that a postponement of de
necessary, and we need ha
any necessary postponemen
be opposed, and we are gla
this was the tone adopted
meeting of the Property
tection Association. There
a point which was raised at
which we had also drawn at
a note in our Legal Sectio
issue. There is some doubt
Eviction Act of this year ha
or affected the right to de
by the Rent Act, 1923, un
where a landlord has come in
and we see from the state
Edwin Evans at the above
there is a county court jud
no doubt turned upon th

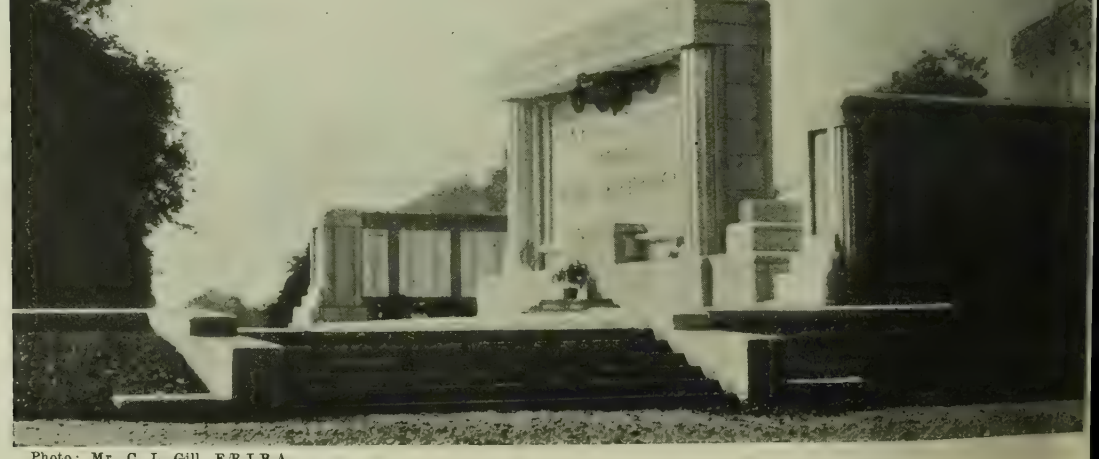


Photo: Mr. C. L. Gill, F.R.I.B.A.

War Memorial, Boulogne.



. C. L. Gill, F.R.I.B.A.
Doorway at Pisa.

e effect of that section. We have the decision in question, but we at doubts may be set at rest, y an early decision of the High hen by legislation confirming the decontrol furnished by the Rent 23. The Government has an y difficult task before it in on with the Housing Acts, and at sent moment the question of decontrol should take quite a place, and we should be the last for it, but until the effect of the Act is determined landlords are a position of difficulty in under- their position under the Act of

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While making full allowance for the force of the cies. criticisms made by Sir Reginald Blomfield in a recent on certain tendencies in the art y and the worship of strange s more difficult to be just to the e which lies between personal d the forms of nature. Realism rection and reaction in another— ralistic painter and the emulator ast have together led to a rejec- oth by those who missed the life either. As a consequence, this too far, and has produced ex- a morbid character, as in the an Gogh. But we should not be his into reaction ourselves, and the lecturer in his address failed up the further consideration of ect which would have thrown ght on it. We see in the some of the new primitives an each beauty at first hand, rid of en of past knowledge, and the of preconceived styles. It is spirit which shapes art, not , though authority is included in it. A new spring time, such as the present, will not reveal the ripeness of harvest, but we believe that there is a sowing of the ground of more promise than perhaps the lecturer perceives. We must allow for the difficulties of the time when art has so much to build its house anew—on tradition, no doubt—but not on the falsification so often mistaken for it.

County Hall Art.

The proposal of the L.C.C. to invoke the aid of men eminent in the world of art to act as an advisory Committee to deal with the proposals to decorate the County Hall is of much interest, and we are glad to know that they are not prepared to accept any and every offer of statuary, paintings and the like which may be made to the Council. We have the example of the Royal Exchange to caution us against this piecemeal method of proceeding. It appears to us that the first requirement in any such enterprise is to prepare a scheme for the decoration as a whole, a scheme so co-ordinated that every contribution offered should help towards the realisation of the scheme thus prepared. Is it not possible to invite a limited number of schemes dealing with the decoration as a whole in order that the same unity which we expect to find in an architectural building may be included in the decorations of it. We shall succeed so much better when this more intelligent forethought anticipates the execution of internal decoration.

Technical Training.

We watched but recently a stone mason occupied in carving a capital to a pilaster which showed complete knowledge of the handling of his material, but the result also showed that the knowledge he possessed of working in the material had provided him with no capacity to make any desirable use of it, for the artistry was deplorable. The present exaggeration of craft ideals and all the loose and theoretic talk about it has led us to forget that it is the least part of art that can be learned, and that we have done but little when we have trained the hand, and that there is much truth in the dictum of Thomas Carlyle in speaking of his own craft, that if a man has something important to say he will generally find the means of saying it. When we have more trust in the inspiration of life we shall put the emphasis in the right place, and when we do our views on art training will be strangely altered.

Admission to Picture Exhibitions.

A correspondent asks why a fee of a shilling or so is generally charged for admission to a gallery where pictures are exhibited for sale, "whereas he can admire works of art in a shop or store or our famous salerooms for nothing." No doubt a charge for admission is made in order to keep out people who would go in simply to look at the pictures with no intention of buying, but there is probably much in the idea of the big stores who invite all and sundry to make a rendezvous of their premises in the hope that while there they will see something they need or that attracts them, and become customers in spite of their original intention of not purchasing anything.

Possible Legislation.

How easy it would be now to create a popular government, says a correspondent. "Give us back our penny postage, remove the restrictions that prevent the employment of the unemployed (so much due to Trade Union restrictions) and finally reduce the income tax." Who knows whether the signs of trade activity to be seen on all hands do not justify so bold a policy.



Photo: Mr. C. L. Gill, F.R.I.B.A.
Entrance to Pier and Open Pavilion, Ostia.
[In course of construction in reinforced concrete.]

GENERAL NEWS

Professional Announcements.

Messrs. Chesterton & Sons have removed to new offices on the first floor at 79, Queen-street, Cheapside, E.C.4.

Messrs. Smee & Houchin, architects and surveyors, have removed to "Fleet House," 58, Fleet-street, London, E.C.4.

Obituary.

The death occurred recently of Mr. D. O. M. Roberts, M.S.A., architect, Portmadoc, of the firm of Messrs. O. M. Roberts & Son, Portmadoc, at the age of 58.

Abandoned Development Scheme.

The Ford Motor Company have officially informed the Southampton Corporation that they have abandoned their scheme to erect factories and works on the River Test.

Dover War Memorial.

The unveiling of the Dover War Memorial was performed recently by Vice-Admiral Sir Roger Keyes. The memorial consists of a central pedestal and two low wing walls mounted on a plinth some 18 in. in height, the whole forming a solid base of grey Cornish granite about 15 ft. in length. The sculptor was Mr. R. R. Goulden, of London.

Lancaster War Memorial.

The memorial to the men of the King's Own Royal Regiment (Lancaster) in the King's Own Memorial Chapel in Lancaster Parish Church was recently completed. It is in the form of a stained-glass west window in the chapel, and a roll of honour to be placed in a carved oak shrine beneath. The shrine was designed by the architects of the chapel, Messrs. Austin and Paley, of Lancaster.

Royal Society of Arts.

Under the Peter Le Neve Foster Trust the Council offer a prize of £25 for an essay on "The Effect of Trade Union Regulations on Industrial Output." Intending competitors must send in their essays not later than March 31, 1925, to the Secretary, Royal Society of Arts, John-street, Adelphi, London, W.C.2. The essays must be typed or clearly written. They may be sent in under the author's name, or under a motto, accompanied by a sealed envelope enclosing the name, as preferred.

Sheffield Society of Architects and Surveyors.

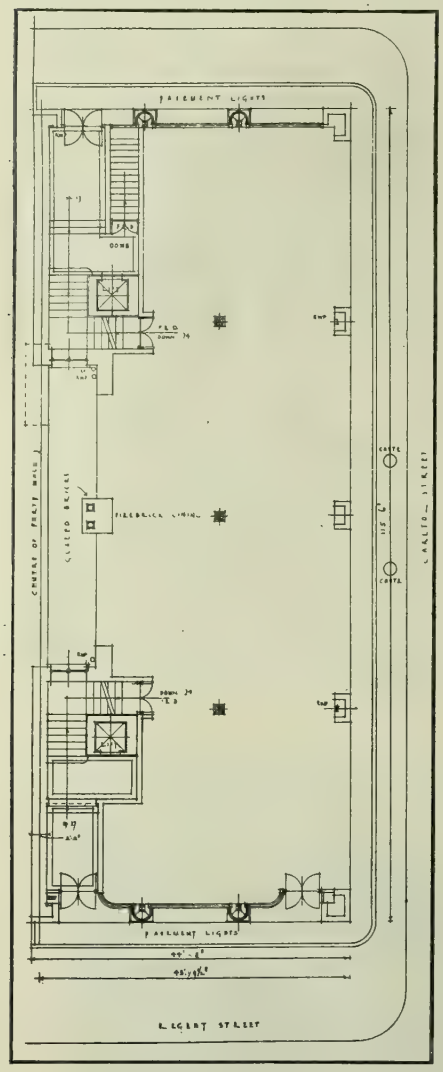
We have received from the Sheffield, South Yorkshire and District Society of Architects and Surveyors their thirty-sixth annual report. Mr. H. L. Paterson, F.R.I.B.A., is Preside session 1924–5, and the Report states April the total membership was as One Honorary Member, 25 Fellows, ciates, 2 Students and 6 Lay Member a total of 80, as against 77 last year. given in the Report of a valuable series read during the last session.

Ex-Service Vacancies.

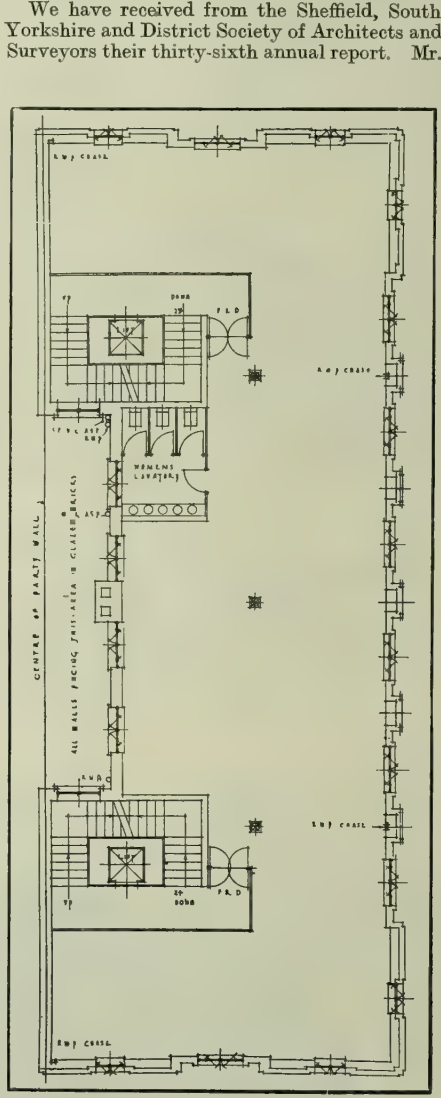
We are informed that a limited n vacancies for male officers in the pri Borstal Institutions will be filled d course of the next few months. Cand is stated, should be not more than 35 age, and must have served with the the War. Men of character and pe with good health and physique, are The selected candidates will be those education, training, and temperamen fitted to take part in the difficult work o offenders for citizenship. Knowledge if thorough, will be an additional reaso sideration. Particulars of pay and co with application form, will be forw application to the Secretary, Prison Co Home Office, S.W.1.

A Margate Improvement.

Sir Anker Simmons, K.B.E., Offic trator under the Acquisition of Land (A of Compensation) Act, 1919, has is award in a claim by Mr. Francis Mars against the Mayor, Aldermen and Bu the Borough of Margate, acting by th of the Borough, concerning the Council tion of vacant land on the west side of High-street, for the purpose of setting frontage. The award is as follows:— Acquiring Authority to pay the owner pensation in respect of his freehold in the land the sum of £188 15s. (2) The Authority to remove the existing wall boundary fence, retaining the wall mate leaving carefully stacked the iron fen gate for the use of the claimant, to whom a further sum of £44 towards the cost of within six months, to the satisfactio Acquiring Authority, a suitable bounda with gate, on the new line of boundary a by the existing fences. (3) The Authority to pay the fees on this (4) Each party to pay its own costs.



GROUND FLOOR PLAN.



1ST, 2ND, 3RD AND 4TH FLOOR PLANS.

Dorland House, Regent-street. MR. J. J. JOASS, F.R.I.B.A., Architect.

The top floor of this building with light on each side, and top light, would be particularly suitable for accommodation for an architect or engineering draughtsman. The contractor is Mr. F. G. Minter, Putney, and among the sub-contractors are: Steelwork, Messrs. Moreland, Hayne & Co., Ltd.; floors and roofs, Messrs. The Kleine Patent Fire Resisting Flooring Syndicate, Ltd.; casements, Messrs. The Crittall Manufacturing Co., Ltd.; asphalte, Messrs. Lawford & Co.; sanitary fittings, Messrs. Shanks & Co., Ltd.; radiators, Messrs. The National Radiator Co.; lead castings, Messrs. H. H. Martyn & Co., Ltd.; pavement lights, Messrs. J. A. King & Co.

COMPETITION NE

Glasgow High School Memoria

The assessor, Mr. John Keppie, F. has made the following award in this tion out of the fourteen designs sent in Mr. Alex. Cullen, A.R.I.B.A., 88, street, Hamilton; (2) £100, Mr. W. I I.A., 131, West Regent-street, Glasgow Mr. J. A. Wilson, I.A., 92, Bath-street,

Southend School.

Designs are invited for the erection Senior Elementary (Intermediate) Westcliff. Premiums of one hundred, five, and fifty guineas, are offered res The assessor is Mr. J. W. Fisher, F.R. Wellingborough. Details can be had cation to the Education Offices, 20, square, Southend-on-Sea, not la December 10.

Other Competitions.

Other competitions still open in following (the dates given are, first the date, and second the issue of *The* which full particulars were given): Hall (May 1). Manchester Art Gallery Aug. 22). Essays on Ventilation (no in day announced; Oct. 31). Vall oct (June 30, 1925; Oct. 31). Office bi (Feb. 28, 1925; Nov. 7). Barrow —banned by R.I.B.A. (no sending Nov. 7). Jugo-Slav Landscape (Nov. 7). Church at Southport (no date; Nov. 7).



Dorland House, Regent-street.

MR. J. J. JOASS, F.R.I.B.A., Architect.

PRESIDENTIAL ADDRESS.

MR. A. J. TAYLOR (President) delivered his presidential address before the Society of Architects, No. 28, Bedford-square, W.C.2, yesterday (Thursday).

After referring to the work of the immediate Past President, Mr. E. J. Partridge, in the negotiations with the R.I.B.A., which resulted in the amalgamation agreement, and to whom, he said, the thanks of the Society were due for the tactful and firm manner in which he had handled the work entrusted to him by its members, he dealt with the amalgamation with the R.I.B.A.

Amalgamation with the R.I.B.A., he said, was not sought by the Society as such, but the Society very gladly availed itself of the renewed invitation of the R.I.B.A. to discuss the registration question with them, and eventually agreed to amalgamation as a means to an end, viz., registration, and it was certain that the disappearance of the Society would be received by its members and by the profession generally with a good deal of regret; and that not from a sentimental, but from a practical standpoint, because there was no doubt that had the Society not taken the lead in many instances in professional reforms, and kept things going, a good deal of the progress which had been made during the past few years would not have been accomplished, at any rate so rapidly.

It seemed clear, from a public reference to the subject by the President of the R.I.B.A., that it was only a question of time before the actual machinery of amalgamation would commence to function, and that for all practical purposes the amalgamation had taken place. What they had to consider now was their future personal relations with the Institute to which they would presently transfer themselves. Although the Society as a separate entity would drop out of the race, it would, under the amalgamation scheme, hand on the torch to the Institute, which body, he was convinced from personal contact with its leading members, was genuinely desirous of carrying on the Society's educational work and scholarships, &c., and also was very much in earnest in proceeding with the registration proposals, in connection with which a joint registration committee was formed immediately the agreement was settled. He could assure the Institute that it was the intention of the Society individually and collectively when they transferred to give it the same loyal and active support which they were giving to the Society. If they did that, then those who feared that after amalgamation progress in the direction of attempting registration and other reforms would not proceed so rapidly as they would wish, would prove happily mistaken; or if there were any apparent lack of initiative in the new Institute it would be due to the fact that the ex-members of the Society had not availed themselves of their corporate privileges in taking that active part in the work and government of the Institute which it would be within their power to do under the new supplemental Charter and revised by-laws.

The Council was now engaged on a scheme for the disposal of the Society's assets for the consideration of the general body of members, and he was merely expressing his personal view in anticipating that they would have no wish to do otherwise than transfer it to the care of that body with which they were about to be amalgamated, it might be pointed out that such a course would merely be transferring the members' possessions from one pocket to another, because as members of the Institute they would retain their interest in its property and the way it was administered. There was no doubt that the Society's premises would form an extremely valuable addition to the Institute's possessions for meeting its extended activities and needs after amalgamation, and might well form the headquarters of the joint registration committee. For all practical purposes it seemed there was a reasonable possibility that to all outward appearance there would be, or need be, very little change in the present arrangements, and that what would happen would be that the members of the Institute would have two addresses instead of one until such time as the Institute grew too large to be housed either in Conduit-street or Bedford-square, or both, and an entirely new headquarters of the architectural profession became necessary.

Something had been heard of the labours of the Society's Negotiating Committee in connection with the amalgamation scheme, but the bulk of the work in the preparation of the details of the Society's protective clauses, counter suggestions and the adjustment of innumerable small but essential points necessarily fell upon the Secretary, Mr. McArthur Butler, to whom he felt they were all greatly indebted for the way in which he had discharged the very responsible duties entrusted to him.

MUNICIPAL RECREATION

MR. WILLIAM HAYWOOD, F.R.I.B.A., in his fifth lecture at Birmingham University on town planning, said an adequate provision for municipal recreation was not usually found in town-planning schemes for English cities, but in the gardenless, tenemented areas of America, municipal responsibility for community recreation had been accepted for more than thirty years. No American town plan was thought complete without an allocation of recreation facilities within easy reach of all citizens; indeed, a carefully-worked-out "Park system" (upon which city recreation was based) was all the town plan many American cities possessed.

In some respects the English need had been less than that of the United States. There were probably no towns in this country, for instance, where it was necessary to prohibit traffic in certain streets during a part of each day, in order to make some provision—however inadequate—for children to play in safety near to their homes. They had comparatively few tenements, and little need for drastic action of this kind.

But the pressure was felt in other directions. With more leisure, their people now took their recreation more systematically. There was a great demand for special accommodation for the larger ball games, and in Birmingham, within the last twenty years, 350 acres of land had been acquired and set apart for this purpose. During the same period the acreage of their suburban parks had been increased by over 600 acres, and all such parks were used almost to excess for cricket, tennis, and bowls. They had 475 acres at the Lickey Hills as a nature reservation for rambling, and the total area of land now available for public recreation in the city was no less than 2,566 acres.

They had made little progress, however, in two important aspects of American practice, viz., the linking together of suburban parks by means of parkways; and the provision of neighbourhood centres and childrens' playgrounds. They had no parkways; but these, although important, were not urgent. Playgrounds in the built-up parts of the city were initiated by Mr. Norman Chamberlain before the war, but were now disorganised; and it was only within the last few years that a start had been made with neighbourhood centres in Birmingham. The outdoor appurtenances of a neighbourhood centre were in full use at Muntz Park; and it was hoped that indoor accommodation would be available at this centre before long. There were some prospects, too, of a similar centre at the Henburys; and the need for a co-ordinated programme of recreation for the systematic equipment of the whole city, and especially of its congested central areas, was now under consideration. So that it might be said of Birmingham that it was definitely moving towards a wider policy in municipal recreation.

GEOGRAPHY AN ARCHITECTURE

SIR BANISTER FLETCHER lectured r the Central School of Arts and Crafts on tecture of Italy, referring to the Goth and more particularly of Northern Ita he said, many influences affected th The classical remains in that country the Roman tradition in design, and t style never took root there, except and other places in the north, where influence was sometimes apparent. Eastern influence, *via* the Mediterra produced a Byzantine element. Sir showed lantern slides of S. Petronio, with its interesting unfinished fron Antonio, Padua, with its incongruou SS. Giovanni e Paolo, Venice, a simple interpretation of Gothic, with its int beams to reduce outward thrust; the or church of the Carthusian monastery, a very Romanesque type of design, remarkable Renaissance addition; an that more typically Gothic and i Cathedral, at Milan, whose "heigh gloom and glory" were so described b son.

MEETINGS

FRIDAY, *November* 14.

Glasgow Architectural Craftsmen's Mr. H. R. Cox, on "Manufacture of Cement." At Royal Technical Colle p.m.

Royal Academy of Arts.—Professo Laurie on "Painting Media: Oils, V and Tempera." At Burlington Hou 4 p.m.

Town Planning Institute.—Pr Address by Mr. W. T. Lancashire. Victoria-street, S.W.1. 6 p.m.

London Society.—Dr. S. Sunderland London's Spas and Wells." At 18, Jo Adelphi, W.C.2. 5.15 p.m.

MONDAY, *November* 17.

Royal Institute of British Architects. Bagenal on "Planning for Good A At 9, Conduit-street, W.1. 8 p.m.

Royal Academy of Arts.—Profess Laurie on "Methods of Wall Paint Burlington House, W.1. 4 p.m.

Edinburgh Architectural Association. sion on architectural education opene J. Begg. At 15, Rutland-square, 8

TUESDAY, *November* 18.

Royal Academy of Arts.—Profess Laurie on "Theory of Colour and It tion to Painting." At Burlington H 4 p.m.

Architecture Club.—Annual Meetin Conduit-street, W.1. 8.30 p.m.

WEDNESDAY, *November* 19.

Chadwick Public Lectures.—Pro Derend Cohen on "Smoke." At 9, street, W.1. 8 p.m.

Royal Academy of Arts.—Profess Laurie on "Some English Cathedrals Decay." At Burlington House, W.1.

THURSDAY, *November* 20.

Society of Antiquaries.—Ordinary At Burlington House, W.1. 8.30 p.m

Woodblocks for Schools.

The London County Council Educe mittee recently reported in favour pine wood-block flooring instead flooring being used in the halls and new, rebuilt and remodelled elementa The additional cost involved in wood-block flooring instead of board in both halls and corridors of an av school, is estimated at £268, or, if are dealt with, the additional cost about £168.

SIR T. G. JACKSON, BART., R.A.

By PROFESSOR BERESFORD PITE, M.A., F.R.I.B.A.

ath of Sir Thos. Jackson in his eighty-ar, removes a dignified figure and a l mind from the ranks of the profession. e remembered for the consistency of tecture and honoured by a reputation rship and high-mindedness, which we elieve he would have valued most.

s a type almost by himself, funda- an English gentleman, and an Oxonian, Fellow of Wadham, the college of d an architectural practitioner who ck upon his professional education, by ethod of pupilage to a great man, as and satisfactory. He was a product -gone school of devoted enthusiasm to f historic art, and it was interesting to this outlook on architecture persisted t his practising life, and only seemed n as in later years his literary labours nwards from Byzantine through Gothic ssance history. But having at the ntracted the new enthusiasm for the pised English Renaissance, he more ne else delivered it from the invidious- ts current description as "debased," istently adhered to this first attach- affected by the still rolling tide of ral fickleness. A certain lack of on kept him faithful to a narrow path, ad the satisfaction in his particular operation of proving that consistency stablishes an architect's reputation as spasmodic genius.

look was sound, though tending to be and desirious to be reasonable he was is judgments. He was always cool in towards student-like experiments, neither swayed by essentially Greek eval notions, or by modern ideas of He once remarked that it was not d letting students work at Greek Doric man or Tuscan form was more likely seful. His wide practice gave him, , an authoritative position which his judgment from hesitation or

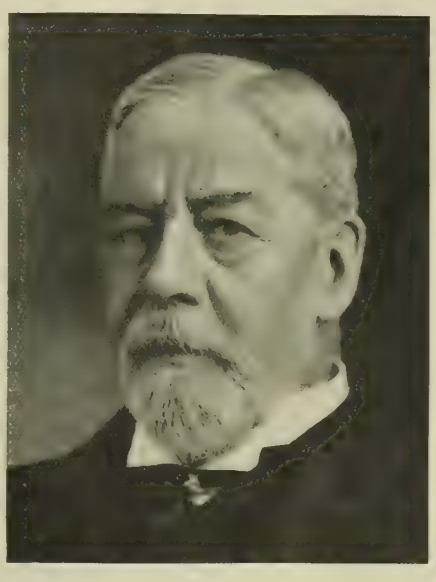
Jackson belonged to the honoured but ng race of architects who draw their lings in perspective; he had been in rt Scott's nest of draughtsmen; his nk drawings were always nervous and g, they never wanted style, and his our sketches evidenced his enjoyment ecreation of architectural youth.

mpetition for the new examination Oxford in the late 'seventies was his ion to the world. If Norman Shaw, tic work, made the running with ne, Jackson's Jacobean led the way in building from that time until Georgian d. The Examination Schools, his ins his most important work. It still eshness in spite of much hackneyed based upon careful study of examples, Burleigh seems apparent, its qualities h of design and interest of detail was, and continues a landmark in t of the late nineteenth century.

ius of Oxford had been seized by her he archæological flavour, which has disastrously popular, was imparted he first time to a prominent public in a favourable atmosphere. The s set and pursued with such effect inguished Oxonian said that the City rebuilt in the "Anglo-Jackson style." ny additions to colleges and public ldings designed by Jackson were all y a rule of harmony with the seven- ntury, and the odd phantasies of workmen were extended by the solemn his scholarship. Difficulty only arose prescription had to be applied to n a differing scale, and for such s laboratories and museums; but, that the problem was completely of treatment by precedent, Jackson's of Jacobean seldom failed.

The large block of museum and library buildings at Cambridge was built about 30 years later. In spite of some prominent anachronisms, next to the Oxford Schools it may be judged to be his most successful work. The architect wrestles characteristically with its purpose, it attains real dignity, and the detail is expressive. One is made conscious that it is the work of a man who has felt his building and has imparted to it somewhat of his own dignity of ideal.

Jackson seldom entered for architectural competitions, but it is interesting to recall two designs which illustrate his outlook when Jacobean would not avail. As one of the nominated competitors, he submitted a design for the Imperial Institute in 1887, which echoed the Low Countries; the lofty bell tower and Flemish treatment coming nearest to his usual school. An interesting design in modern Russian Byzantine was submitted in competition for the memorial church at St. Petersburg to the murdered Czar Alexander; this reflects Jackson's early acquaintance with the architecture of the Near East.



The late Sir T. G. Jackson, Bart, R.A.

Ecclesiastical work came naturally to a pupil of Scott. Jackson's churches were usually in the later Gothic manner, and were sound, if uninspiring. The School Chapel at Giggleswick, with its dome, involving difficult acoustics, was a compulsory experiment that has the interest of peculiarity. The restoration of the walls of Winchester Cathedral to the vertical, and of the statuary of St. Mary's Tower at Oxford were works of difficulty, full of opportunity for criticism. The confidence of the authorities in each case fortified the architect, though it could not satisfy all his friends.

In London Mr. Athelstan Riley's house at Kensington Court, with its Flemish front facing the Park, is the best known of Jackson's buildings; it was elaborately detailed and belongs to the early days of his connection with the Arts and Crafts movement. It possesses a Jacobean grand pianoforte case designed by him and painted by Burne-Jones—a restrained and beautiful work.

In his later years Jackson's scholarly mind and extraordinary industry produced a series of architectural histories of which full account must be taken in estimating his life work.

In 1873 he published a small octavo volume on "Modern Gothic Architecture," which revealed his dissatisfaction with the results of the Revival.

Travels in the Adriatic produced a series o interesting studies. A paper on Ragusa, written in Italian, was produced for a Dalmatian annual in 1885. Two years later, an important book in three volumes on "Dalmatia, the Quarnero and Istria," illustrated with his own drawings; and a sessional paper at the R.I.B.A. on the subject. In 1893, a very full and pious history of his own College of Wadham; and in 1897 a history of St. Mary the Virgin, Oxford, an indirect apology for its restoration, with photographs of the ancient statues and of their successors by Sir Geo. Frampton. In 1892 appeared "Architecture: a Profession or an Art," of which he was co-editor. In 1898, a sessional paper was contributed on "Mediæval Libraries of Great Writers."

The series of architectural histories began in 1913 with "Byzantine and Romanesque," in two volumes, the most important of his works; followed in 1915 by "Gothic Architecture in France and Italy," in two volumes.

In 1917 came a holiday volume on Umbria. The histories resumed with the "Renaissance of Roman Architecture, Italy," in 1921; "England," in 1922; and "France," in 1923. These works are, of course, well written and pleasantly illustrated by his own and his son's drawings and photographs, but their permanent value as adequate to their subjects remains to be examined. A sense of affection for the enthusiasm and industry of the author controls our judgment. They have the evidences of artistic sensibility and of the partialities of an Englishman whose confidence of outlook was characteristic. One wonders what the effect on the author's practice would have been had this wider field of vision opened to him in earlier days.

Sir Thos. Jackson belonged to the once important group of able architects who cherished a repugnance to alliance with the Institute, on grounds that were not easily understood. When others gave way in this matter he stood firm. The main reason was perhaps a nervous fear of professionalism—his editorship with Norman Shaw of the volume of essays, entitled "Architecture: a Profession or an Art," illustrated a point of view which was then theoretical but now has practical bearing. But Jackson was never unfriendly; he occasionally contributed papers and attended meetings and accepted the Royal Gold Medal in 1910. Outside the charmed circle of the Royal Academy elect he was little known, apart from his works to architects; but his brethren by profession always confessed that respect, which often deepens into affection, for a consistent worker who never derogated from his own high standard in architecture, and who preserved a scholarly outlook and the high reputation of a Christian gentleman and artist.

Sir Thomas, amongst other work, was responsible for the new Radcliffe Library and additions to Brasenose, Lincoln, Balliol, Trinity, Hertford, and Corpus Christi Colleges, he restored St. Mary's and All Saints' Churches, and planned the City High School and the High School for Girls. Cambridge owes to him the Sedgwick Museum, the Law Schools, and Library and laboratories. He also designed much for public schools—Eton, Westminster, Rugby, Harrow, Christ's Hospital, and many lesser schools, including his own, Brighton College. Sir Thomas was associated with Sir Francis Fox, the engineer, in the strengthening and restoring of the foundations and the superstructure of Winchester Cathedral, and in London his work, although rare, is to be seen at Draper's Hall and the Inner Temple. He designed but few churches; Annesley, in Nottinghamshire, in 1873, and St. Augustine's, Wimbledon, in 1907, are early and late examples. He has also left few private houses.

He was a D.C.L. of Oxford, LL.D. of Cambridge, an Associate of the Royal Academy of Belgium, a Past Master of the Art Workers' Guild, and a Fellow of the Society of Antiquaries. Sir Thomas was left a widower in 1900, with two sons, the elder of whom, Captain Hugh Nicholas Jackson, of the R.F.A., who was born in 1881, succeeds to the baronetcy.

THE GLASGOW HIGH SCHOOL COMPETITION

THIS competition for a club house and pavilion at Anniesland provides one more example of the growing recognition of the importance of athletics in the development of the nation's future manhood, and it is but fitting that the Glasgow High School, which occupies a pre-eminent position in both the scholastic and athletic life in the West of Scotland, should lead the way.

The assessor in the competition was Mr. John Keppie, A.R.S.A., F.R.I.B.A., and his decision was as follows:—(1) Mr. Alex. Cullen, A.R.I.B.A., 88, Cadzow-street, Hamilton; (2) Mr. W. H. Howie, I.A., 131, West Regent-street, Glasgow; (3) Mr. J. Archd. Wilson, I.A., 92, Bath-street, Glasgow.

The winning design is certainly the best of the fourteen schemes submitted, unnecessary expenditure being cut down to a minimum without loss of the essential dignity and substance which such a structure should possess. The approaches to the ground have been very carefully worked out in relation to the pavilion, a segmental entrance area being provided. This will certainly contribute to the avoidance of congestion on the main road on the occasion of crowded gatherings. In planning the building the author has made fair use of the existing ground level; at the same time nothing is lost in the way of suitable placing in relation to the playing fields, the western front commanding an uninterrupted view of the whole. The pavilion terracing is approached by flights of steps on both north and south sides of the club house, whilst a central flight leads to the main floor. A members' entrance to the terracing is also provided. The front part of the building facing the fields contains a substantial entrance hall, flanked by the secretary's office and ladies' room respectively, while on a lower ground floor below the terrace level a training centre with auxiliary dressing-room and the heating chamber are shown. The rear wing is devoted to dressing and washing accommodation on upper and lower floors, providing two complete units. Direct access to the field is provided for the latter. The plan as a whole is well balanced and symmetrical, this being justified by a sympathetic treatment in the elevations. These are of a restrained and simple character and contain no feature likely to deteriorate quickly through the action of the weather or suggestive of the "temporary pavilion" type of design so commonly met with in this connection. Brick cavity walls are proposed with roughcast exterior, while stone dressings mark the principal features of the front portion of the building. The roof over the main part is carried on steel principals and is intended to be slated. The remaining roofs over the dressing-room and lavatory wing, and over the staircase and kitchen, are to be of concrete reinforced with steel wire lattice and covered with asphalt. Metal windows are provided throughout. The floors are of reinforced concrete, covered with wood blocks in the entrance hall, terrazzo in the lavatories, and wood flooring in narrow breadths on runners in the remainder. Electric lighting will be easily supplied from an existing cable in the main road, and heating and ventilation are dealt with by means of the low pressure hot-water system in the first case, and by the natural system in the latter, use being made of direct acting ventilato invisible roof type over the assemb The hot water arrangements have b fully thought out with a view to r the supply to immediate requireme thus saving fuel. The estimated co design is placed at £8,576.

The design placed second has elaborate treatment in the elevations terior being intended to have a whit finish. The plan, although not unlike design in general arrangement, is and a feature is made of the main sta is shown in the elevation as a squa which is not of sufficient height to the main portion of the building, a what loses its value as an external f consequence. A well-lit and ventilate bly hall is a good feature of this The estimated cost is £7,734.

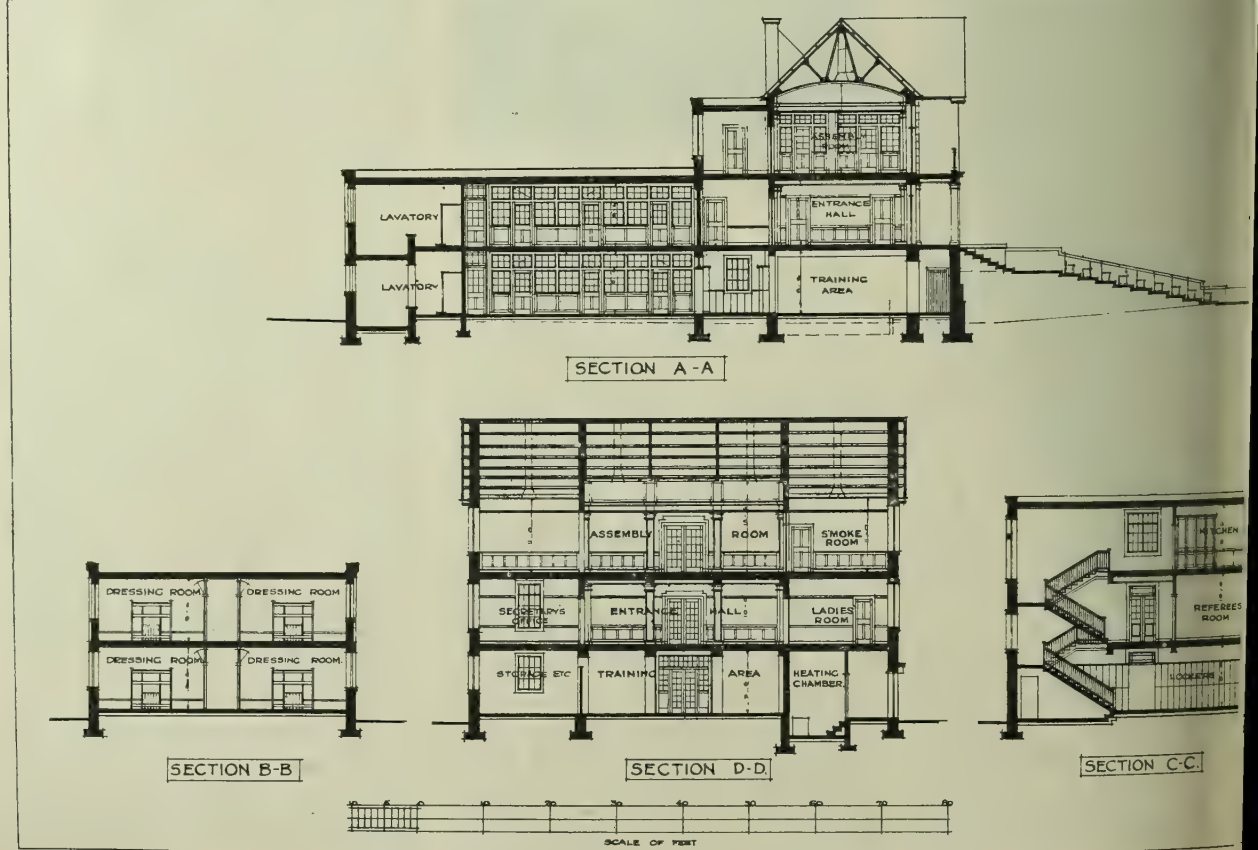
The third premiated design is pl a rectangle with the main front fac west. A pleasing treatment in the el somewhat marred by the relationsh lower wing to the main building, wh perhaps not appear so happily place perspective sketch would seem to ind

The remainder of the designs s show a great deal of careful thou usually effect is gained at the expen utility of the plan, while prohibi would certainly rule out some whos have placed their estimates rather lo

Argles Memorial Church.

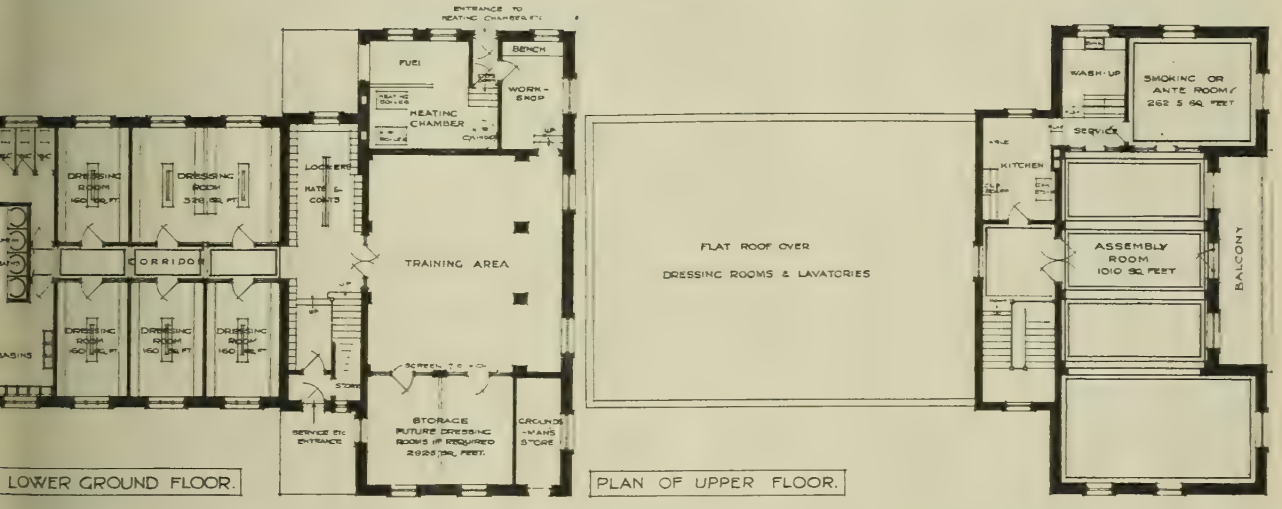
The Argles Memorial Church of S which will be built at South Bank, Y has been planned for the seating of 70 and will be in the Early English sty architects are Messrs. Brierley & R York.

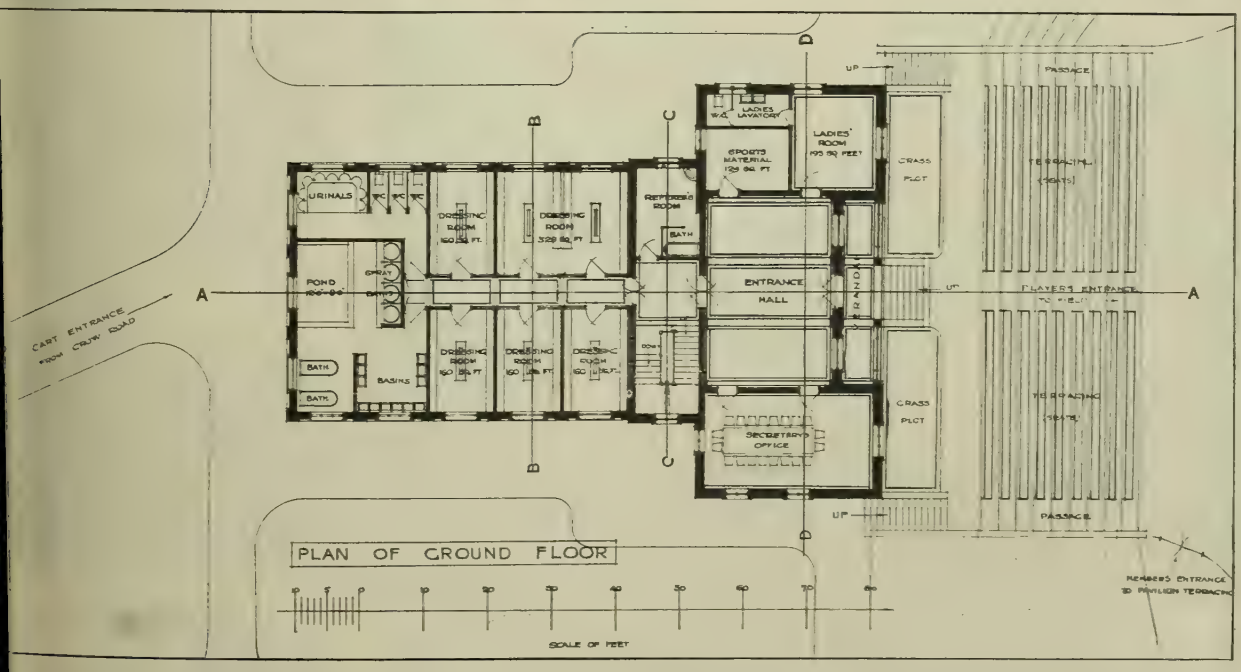
THE GLASGOW HIGH SCHOOL CLUB
PROPOSED CLUB HOUSE & PAVILION AT ANNIESLAND



Design placed First: BY MR. A. CULLEN, A.R.I.B.A.







Glasgow High School Competition. Design placed First: By Mr. A. Cullen, A.R.I.B.A. (*See p.* 754.)

SECURITY FOR PRIVATE BUILDING

In a recent letter to the *Times*, Mr. John Murray, F.R.I.B.A., writes :—

"With the advent of a new Government we are reminded that no real solution of the housing question has yet been formulated. I therefore, *pro bono publico*, venture to offer a few suggestions, which, if tried, might, I think, go far towards a solution.

"(1) The problem is primarily a financial one, and if this aspect of it were solved satisfactorily, I think adequate designs, materials, and labour at reasonable cost would soon be forthcoming, and produce speedily the requisite dwellings at fair rents.

"(2) No really satisfactory solution can, however, be attained unless finance is justly treated and assisted by sufficient credit and security.

"(3) Government control of rents and subsidies should be discontinued as soon as possible, Government aid for building substituted, and private enterprise should be given a free hand, thus producing general competition.

"(4) The Government could aid sufficiently by merely guaranteeing the interest (not the capital), upon all mortgage money advanced by anyone to building owners upon the security of approved houses, flats, and housing schemes, and let the existing machinery of private enterprise do the work in practically the same way as it was formerly done by the public. Thus the public would lend their money direct to the borrowers, which would be better and cheaper than if it were collected and disbursed by local authorities or other representatives of the public. The mortgage limit to be higher than the usual two-thirds and the interest limit to be higher than War Loan interest. The Government to guarantee the mortgage interest for a period of years upon approved and independent valuers' reports obtained by mortgagees in the usual way. A small fee in each case to be paid to the Government by the mortgagee for the guarantee; this would assist to pay the Government's administrative costs. If the interest payable by the owner to the mortgagee be in arrear for, say, six months, the Government to have the right to require foreclosure and a public sale of the property by the mortgagee, the Government retaining a lien on the proceeds, and then settle with the owner and mortgagee. The Government would probably be called upon to pay but little interest, and when paid it would soon be recouped by the sale, and there should be no bad debt. Flats are greatly needed in towns, and single flats could and should be sold as well as let to occupiers.

"(5) With forty-four years' experience of building work, I venture to think that the cost of arranging such Government aid, decentralised by the assistance of local authorities, would be comparatively small. The scheme might prove to be self-supporting.

"(6) It is now quite possible to build good and suitable houses and flats with existing materials without the aid of either bricklaying or plastering, the two depleted trades which are largely retarding building.

"(7) Unskilled and women workers can be largely employed in building brickless houses, and this should be permitted untrammelled by unnecessary by-laws and trade union rules.

"(8) Such a scheme would probably and speedily attract millions of pounds of private capital for housing, much of it now lying idle, a large amount being deposited in banks. The money thus used would, however, not vanish but merely circulate and oil the wheels of industry. A great and immediate development of competitive building by private enterprise would, I think, be inevitable, and rents would consequently soon decrease. Adequate supply for the demand is the best and surest way to reduce cost and rents.

"(9) All the capital thus invested by the public on mortgage of this real estate would possess the country's new guaranteed security. I think this inducement would produce from the usual business sources all the necessary money, the builders, labour, materials, and the dwellings, too, at reasonable rents. The security of real estate in this country stood the strain of the Great War as well as, if not better than, any other.

"(10) It is unlikely that the gradual diversion of so large an amount of liquid capital for developing real estate throughout the country would have any depreciating effect upon gilt-edged securities, while it would produce probably millions of additional small property owners, thereby developing thrift and contentment in the country.

"(11) Capital thus invested would necessarily percolate into numerous other channels and undoubtedly stimulate trade in various other directions, while, at the same time, it would provide additional employment for all those contributing work in any trade connected with housing and the equipment of the buildings.

"(12) If this scheme be deemed worthy of a trial, it could do no harm and would not be costly, but it should be thoroughly advertised in the public Press, and during the trial the Chamberlain Act might be extended."

CORRESPONDENCE

The New Session.

Sir,—The leading article on "The New Session," published in a recent issue of *The Builder*, represents, I think, what has, for some time, been the undercurrent of opinion in many quarters, and should prove of value as a starting point in what might be a very instructive exchange of ideas on the subject.

It is now evident that public interest in good architecture is growing, and the moment therefore seems opportune for the Institute to give a lead on such questions as the national housing problem as is suggested in your columns.

It would, no doubt, be of considerable assistance to the R.I.B.A. Council to have the opinion of members of that body and others interested in the matter on the various points to which you call attention, as it is evident that no useful action could be taken in the matter unless it was supported by the profession as a whole. The obvious way for this to be ascertained would appear to be for readers to express their views in your columns.

P. Cart de Lafontaine.

Ministry of Labour.

We have received a letter from the Ministry of Labour in which they state that over 79,000 ex-officers and educated ex-service men have been assisted by the Appointments Department of the Ministry of Labour to find appointments. The number remaining on the Register is 2,300, and on their behalf they make an appeal to our readers. The aim of the Committee is to find suitable work for these men immediately, and they believe that a renewed effort on the part of employers and the public generally would result in a solution of the problem. The Register covers men of every qualification. Vacancies should be sent to the National Appointments Committee, 3–4, Clement's Inn, Strand, W.C.2. (Telephone, Regent 5220.)

Trafalgar-square Improvements.

The Finance Committee of Westminster City Council, at a recent council meeting, submitted an estimate of £35,000 for the purpose of constructing underground footways from north to south at Trafalgar-square. The main subway will begin with a flight of steps at the corner of The Mall Approach, connect with the Tube stations, and emerge at existing exits from the latter in Trafalgar-square and the Strand. A widening of the carriage road is provided for by the scheme. The Council recommend that the work be authorised and that detailed estimates be prepared.

R.I.B.A. INTERMEDIA EXAMINATION

The Council has approved the revised tions (which can be had on application) Testimonies of Study to be submit candidates for admission to the Examin

R.I.B.A. Scholarship at the Unive Cambridge.—The Council has sanctio award of the Scholarship this year to Miss Norah Aiton, Girton (£35). Secon Mr. Edward Le Bas, Pembroke (£35).

R.I.B.A. (Archibald Dawnay) Schol 1924.—The Council has awarded Mr. Turner (Liverpool University), who was a Scholarship of £25 in 1923, a Schola £50, and have granted a renewal of the ship of £25 awarded to Mr. A. C. (Architectural Association) in 1923.

Board of Architectural Education Silve for the Best Set of Designs Submitted at the Exhibition of Designs of Students of Re Schools Exempted from the Final Examin The Council has approved the recomme for the award of the Medal to Miss Elsie (School of Architecture, Manchester).

Examination in Professional Prac Students of Recognised Schools Exempted Final Examination.—The following ha successful in this examination :—Mr. Grant (A.A.), Mr. L. Hiscock (A.A.), M Banres (A.A.), Miss S. G. Moberley (A.A J. E. Townsend (A.A.), Mr. Aziz Ali (A.A A. Farewell Jones (A.A.), Mr. R. J (Manchester Univ.), Miss E. Rogers (Ma Univ.), Mr. W. H. Owen (Manchester Un J. S. Dawson (Aberdeen), Mr. H. S. (Liverpool Univ.), Mr. W. V. Jenkins (Li Univ.), Mr. R. H. Turner (Liverpool Un W. A. Norbury (Manchester Univ.), M Shanks (Glasgow), The Hon. H. A. Pa (A.A.), Mr. R. E. Enthoven (A.A.), Mr Donaldson (Liverpool Univ.), Mr. C. L worth (Liverpool Univ.), Mr. J. H. (Liverpool Univ.).

The School of Architecture, The Royal England Academy, Bristol.—The Cou decided, under certain conditions, to r the four years' part-time course of the S Architecture, the Royal West of Academy, Bristol, as exempting fr R.I.B.A. Intermediate Examination.

R.I.B.A. (Alfred Bossom) Travelling Stu Associates of the Royal Institute of Architects who have not passed throug the Schools included in the competi required to deliver their designs and r competition for a Silver Medal) at th Institute not later than 5 p.m. on December 1, 1924.

The following are the Schools includ competition :—The Architectural As (London); University of London S Architecture; Robert Gordon's Colleg deen; Glasgow School of Architecture; sity of Liverpool School of Archi University of Manchester School of ture; McGill University, Montreal, Architecture; Edinburgh College of A Technical College, Cardiff; The Pol Regent-street, W.1; Northern Po Institute, Holloway; L.C.C. School of Brixton.

Architectural Pupils in Offices Upon the advice of the Board of Arch Education the Council of the Royal recommend all Members and Licentia accept pupils until they have been as Probationers of the R.I.B.A. C with this request will greatly assist the their efforts to improve the status of fession by raising the general level of tural education throughout Great Full particulars with regard to regis Probationer and copies of the applica can be obtained from the Secretary, R

"Westminster Abbey Re-examin The continuation of Part IX of Lethaby's series of articles on "W Abbey Re-examined" will be given i issue.

SOME NOTES ON THE DESIGN OF CINEMAS

ER may be said of the general level oduction, there will be few who will hat many cinema buildings maintain gh standard of architectural merit at has been rapidly progressive during ars. The architect who designs nds himself, therefore, in a very us position, in that he is at least th modern thought, if not, as many far ahead of it.

ect of cinema design is one of peculiar the profession, and it presents a portunity of expressing an essentially novement, unfettered by that pro- norance that is unprepared for events. admirable articles have been written subject, and in these notes we shall stress the bare essentials and present act form those points of the subject otherwise too much buried in matter ly extracted.

Choice of Site.

it is not already pre-imposed, this have a very important bearing upon of the scheme. A site chosen near ntre, or at the close of a street vista, o streets on three sides and one at en an important thoroughfare, is to rt to the scheme that will carry it a owards success before pencil touches is extraordinary how lazy is the eking crowd and how reluctant to e beaten track in its quest after the nted place of amusement. Another eature in the selected site is that it pe towards the convenient position reen, and so obviate the necessity of avation.

Planning.

selected a suitable site, there will problem of splitting it up in the most ous manner. The ideal shape for the n will be that of a wedge or fan, that be no section of the seating from s not possible to obtain a reasonably ew of the screen. Important as this an ordinary theatre, it is doubly so e of a cinema, for where in the one unfortunate members of the audience part of the scene cut off and miss near the wing, in the other case is entirely distorted, in the worst unting to the indecipherable. Such no legitimate money value. Where gle is imposed by natural conditions ape of the auditorium, the seats ap- the screen must be limited by the m and the remaining floor space in s by the screen usefully occupied as ooms for artistes, exit lobbies, organ ome other such purpose. In conjunc- the auditorium have to be arranged le, the staircases to balconies (if any), ccommodation, administrative offices, box and re-winding room, and the and we will consider these units in an eye chiefly to plan.

The Vestibule.

uld be treated in a striking architec- ner, but without vulgar display. that the vestibule is visible from d must invite the public, and is also npression which the visitor gets of on entering. The gaudy, vulgar is no longer regarded as sufficient for the public, and it is left for the find a better way, so that the public with regularity to the popular place ment for its own sake as well as for of the entertainment, which is under ol.

Staircases and Exits.

e case of the theatre, the cheaper seats e not in the gallery, but are generally, ate, sometimes, just within the limit of comfortable focus, and the gallery becomes the home of the elect, where their view approximates most nearly to the normal throw of the picture. The balcony staircase should generally be planned in conjunction with the vestibule and opening therefrom with some architectural importance.

The arrangements of exits and staircases is largely governed by regulation, though the mushroom growth of the industry has not permitted that uniformity of law throughout the country that must ultimately and inevitably arrive. The Cinematograph Act of 1919 is by no means all-embracing, and details are filled in by local authorities, in the form of by-laws, county council regulations, police regulations, or even in some cases by the ruling of that ubiquitous body the Watch Committee.

Generally the following rules will meet most conditions and it is certainly wise to aim at them as a sensible minimum of safety. Two separate exits per floor for each 500 persons should be provided, and one additional for every further 250 per floor, and each exit should be 5 ft. wide in the clear between doors when open. All exit doors must open out and any other doors opening on to an exit corridor must be hinged on the side that will ensure that they will be driven closed by a stream of people leaving the hall in a panic.

Mention has been made of the desirability of choosing a site that is open on three sides to the public street. Where in default of this advantage any exits cannot discharge direct to the street, a 10 ft. wide way must be provided for this purpose, and this may well cut off a very material area from the site.

Staircases should be 5 ft. wide at their narrowest point (or 4 ft. where the accommodation is under 300). Even where regulations do not demand it, it is well to arrange the staircase of even "bore" throughout with all external angles rounded and all internal angles the arcs of circles. This will make the quarter space landing a quadrant, and the half space a semicircle and so obviate the trapping of people in a corner during a panic rush. Steps must not be less than 10 in. on tread or more than 6 in. in rise, with a maximum of 15 risers to a flight and not more than two such flights without a turn. An emergency external iron staircase from the balcony is also required. All exits should, of course, be provided with panic bolts. Where exits open direct on to a street without intervening corridor, a width of 4 ft. 6 in. is allowed in some districts instead of 5 ft. Exit doors must be provided on three sides of the auditorium, one wall only being permitted as a blind side, and this is generally the screen end. Occasional steps are not allowed in corridors, not less than 3 at a time passing under this rule.

Waiting or "queue" corridors seem to be passing out of favour, but quite a considerable queue can be accommodated in a small space by a judicious arrangement of rails leading ultimately to the pay-box. As a general rule, however, the average cinema with a continuous programme can cope with its patrons without resorting to the queue.

Lavatory Accommodation.

It is desirable to arrange the lavatory accommodation for both sexes on each floor in a position at once accessible but unobtrusive, and in addition there must be similar accommodation for the use of the staff. In the smaller class of theatre it is best to arrange the w.c.'s with penny-in-the-slot locks to limit their use and obviate the need of an attendant. In the better and larger theatres it can be taken for granted that there will be an attendant and the lavatories can be planned on more spacious lines and perhaps in conjunction with cloak-rooms.

Where the main body of the hall caters for two distinct classes of patron, it is well also to separate the ground floor lavatory accommodation and the balcony lavatory accommodation; a very good arrangement is to place the first-class lavatories off a mezzanine landing to serve the balcony and the rear ground floor.

Administrative Offices.

These should include a manager's room, with clerk's office attached, switch-room, heating chamber, generator room, store rooms, staff rooms, &c. It is advisable to arrange the main box office *en suite* with the administrative rooms. The manager should be placed in such a position that supervision over all branches of the establishment can be readily maintained. Different managers have their own ideas upon the subject, and where possible it is wise to obtain the views of the one who is to be appointed in the case in question, that there may be no future cause for complaint. A manager who is dissatisfied with



From "The American Architect."

Entrance Lobby, Easton Theatre and School of Music, Rochester, New York.
MESSRS. GORDON & KOELBER, Architects; MESSRS. McKIM, MEAD & WHITE, Associate Architects.

the arrangements of his own particular department can make things very unpleasant and injure the reputation of the architect, if he is that way inclined, and in any case we should aim at the particular ideal.

The Operators' Room, &c.

This is a very important part of the establishment, and is more often than not far too cramped for easy working. It should, of course, be of fire-resisting construction throughout, well ventilated, and near and accessible to the generator room. There should be two means of escape, preferably one leading out over the roof, and the other leading down and out so that outbreaks of fire from different quarters can be avoided. The door must be self-closing, and of teak or other suitable hard wood, as must all other joinery in this part of the theatre. A space of 12 ft. by 8 ft. is a desirable minimum for this room, and even more space is not extravagant. There should be at least two apertures for projectors, and in larger theatres three or more with corresponding observation holes, and all with self-acting shutters on the operators' side, in case of fire. It is also well to have clear plate glass in all apertures to deaden the sound of the machines. The walls and fixtures and ceiling of this room should be finished dull black. Good ventilation to the open air is very necessary as this room gets very hot and stuffy and unhealthy to work in. The re-winding room should be separate but *en suite* with the operators' room, and all woodwork therein also in teak.

Orchestra, Stage and Screen.

It is most necessary that the orchestra lights should be carefully shaded as not to cast any light upwards on to the screen or in front of same. At the same time the entirely hidden orchestra is a little foreign to this country. A small stage, 4 ft. to 6 ft. wide, and about 4 ft. 6 in. above the floor, is a wise provision if not an absolute necessity, as it allows the hall to be let off for Sunday meetings and concerts, besides providing a stand for lecturers upon certain films and for variety turns. In connection with the stage should be arranged rooms and lavatories for artistes, utilising the space behind the screen or the corners of the auditorium where it has been indicated that seats cannot be placed.

The screen is obviously of great importance, and its position should be as near as possible normal to the centre ray of the picture, though this is rarely achieved except where the operators' box is set in the front of the balcony, or from behind the screen, which does not appear to find much favour, in spite of many obvious advantages. The screen itself being tilted about 7 to 9 deg. pitch must, for reasons of economy, be constructed on a stud framework to save the cost of a battered main wall. The actual size of the screen will vary according to the size of the theatre, and the throw of the picture, but in any case it should be proportioned as 3 is to 4. Probably the best material is lath and lime plaster, a finish that absorbs condensation which otherwise would tend to collect and run down the screen in a disfiguring manner. There are also patent mixtures on the market, and also specially treated canvas. The surround of the picture should be masked with black material to cut off the irregular outline of the projection, and for effect it is usual to treat the screen feature in the form of a proscenium arch framed in with a bold architrave mould often heavily enriched. A dark curtain to cover and disclose the screen as the pictures change and thus never leave the plain white screen exposed is another smart arrangement. The curtain can be drawn by an electric motor operated from the operators' box.

Seating.

Passing from these separate units of the theatre, we have the all-important question of seating, which is dependent upon the section of the theatre. It cannot be too strongly urged that for every separate theatre scheme empirical rules should not be too much relied upon, and the only royal road to the ideal arrangement is by way of a careful section set up for each case. Points to be specially watched are (1) that the ray from the projector to the bottom of the picture is above the heads of the patrons entering by the balcony gangways. There is nothing more irritating than to have bobbing shadows constantly interrupting the picture. (2) The slope of the floors and balcony should be arranged so that each eye level should clear the heads of those sitting in front, towards the bottom of the picture. (3) That the ray from the eye level of those standing at the back of the ground floor should clear the bottom of the balcony towards the top of the picture. Standing eye level may be taken as 5 ft. 6 in. above floor, and sitting as 4 ft. These points present simple problems in the case of a rectangular hall with straight rows of seats and balconies, but where in the more usual cases the rows and balconies are curved, a number of oblique sections should be tried up to ensure the perfect arrangement. (4) The bottom of the picture should not be more than 7 ft. 6 in. from the floor unless the front portion of the floor is tilted up towards the screen about 1 in 15, and the seats on the same arranged with level legs and so tilted back to relieve neck strain. (5) The front row should not be less than 18 ft. from the picture. (6) The rows should be 2 ft. 4 in. back to back for the ordinary seats, and 2 ft. 9 in. for the better class seats, and from this it will be possible to set out the ideal line of floor by drawing rays from the bottom of the picture to the head level of each row, and producing to the next row behind, giving the eye level thereof. This ideal floor line will be found to be a curve, but this must be separated up into slopes, generally a slope down from the screen with a flat between that and the slope up towards the back of the hall. These slopes must respond to the worst case in each section. In width the seats will vary from 19 in. centres for the ordinary seats up to a maximum of comfort of 22 in. centres for the best seats.

In planning gangways it is necessary to give a clear width of 5 ft. to the main ones leading direct to the exits; and other gangways, at least 3 ft. 6 in. between seats. No seat may be more than the seventh from a [illegible] or, in other words, where the row of s[eats] upon a wall there may not be more t[han] seats in that row, and where they run [be]tween gangways there may not be more tha[n] seats in a row. Reverting once mo[re] section of the theatre, it will be found [the] line necessary to ensure a clear view of [the] picture from all seats in the balcony, w[ith] tate a slope to the latter that will be [not] to be dealt with simply as an inclin[ed] and it will be necessary to raise th[e] tiers, generally about 12 in. high, w[ith] mediate steps of not more than 6 in. [in] balcony gangways.

Ventilating and Heating.

The Plenum system of ventilation i[s] able ideal, but seldom permissible on t[he] of cost. Electric fans should be arran[ged] there is no fear of draught beating do[wn] audience, and it is well to provide [the] fans that can be operated between per[for]to rapidly clear the air of smoke and i[ts] Low pressure hot water heating is the [most] accepted system, and here again [the] should be arranged with discretion so [as] inconvenience individual members [of] audience. Where baffle plates are pr[o]the radiators, these should be remo[ved] the backs of these fittings are favour[able] tacles for cigarette ends and chocolate [pa] A portion of the auditorium that s[eldom] receives neglect on the score of vent[ila]the ground floor under the balcony, w[hich] particularly liable to become foul, ow[ing] upward slope of the balcony ceiling [to] a trap for foul air. A sliding roof i[s] ideal comfort that cost as a rule ve[ry]

Lighting.

Electric light is almost universa[l] even where there is no public supply [of] it is usual for the cinema to run its own [gas] ing plant, from which light and power [for] projectors, winding machines, curtain [gear] &c., is obtained. All lights should be [fitted] with a dimming apparatus, by which t[he] glare of the lights after a period of semi[-]is avoided. All the lights of the a[uditorium] should be under the control of the [operator] to ensure co-ordination. In additio[n] electric light, gas lighting must also be [fitted] as a safeguard against the failure o[f the] rent. Exits must be lighted with ga[s] taps, and in boxes covered with red gla[ss] the word "Exit" in white letters.

Authorities differ as to the advis[ability] providing windows. The claim that [they] means a considerable saving in curre[nt] cleaning operations is a little extrava[gant] much can be done with all doors op[en] few lights on to supplement the di[ffused] obtained. It is rarely that windows, [if] vided, can be efficiently masked d[uring] formance.

Tea Rooms.

General experience seems to indica[te] rooms in conjunction with a cinema [are] themselves paying propositions, bu[t] little doubt that they are sources of [profit] towards the establishment, and give [the] complete luxury and convenience to [the] that can hardly fail to attract a pub[lic] must be many shillings spent in t[he] that should rightly be credited to the [cinema] and they continue to appear in new s[hapes]

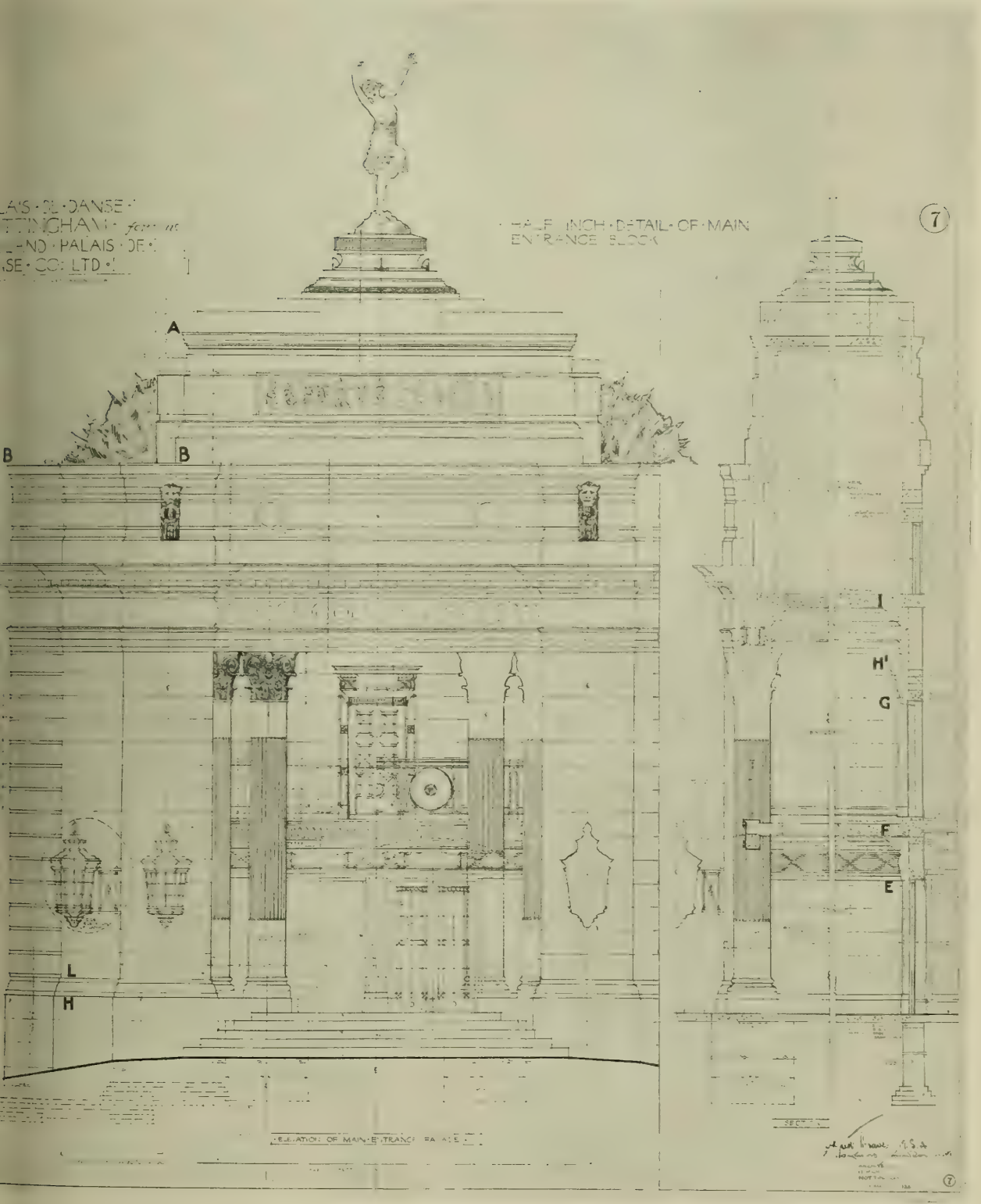
The whole question of cinema c[an] matter of £ s. d. and of a wise balan[ce] outlay and anticipated revenue. Th[e] has undoubtedly entered into the s[tage] problem without priggishness or [false] academism, and with a result that [is] a young industry a long way toward[s] Would that we might be able to [say] readily with many other of the [arts] building as they exist to-day.

Cinematograph Theatres.

[Some particulars of the cin[ema] theatres illustrated on the followin[g] given on p. 788.]

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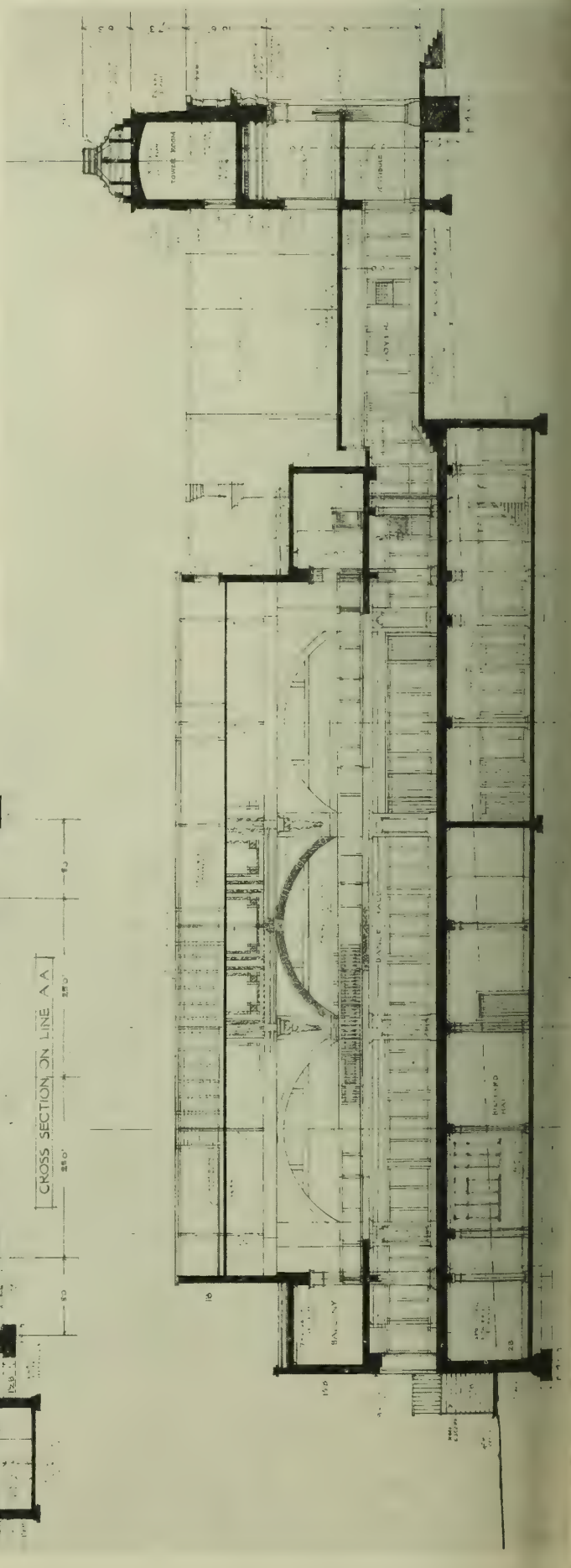


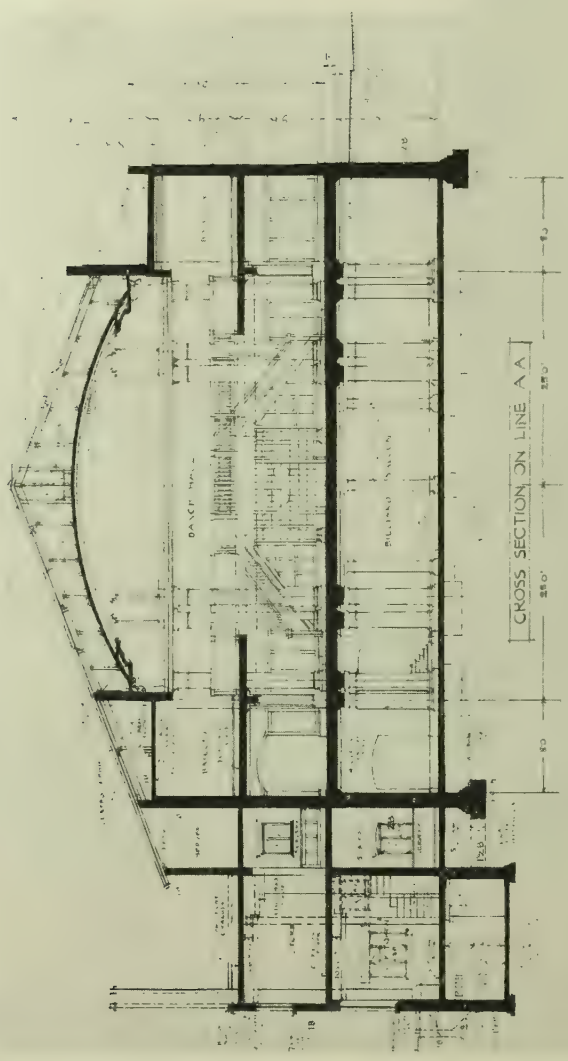
Palais de Danse, Nottingham.

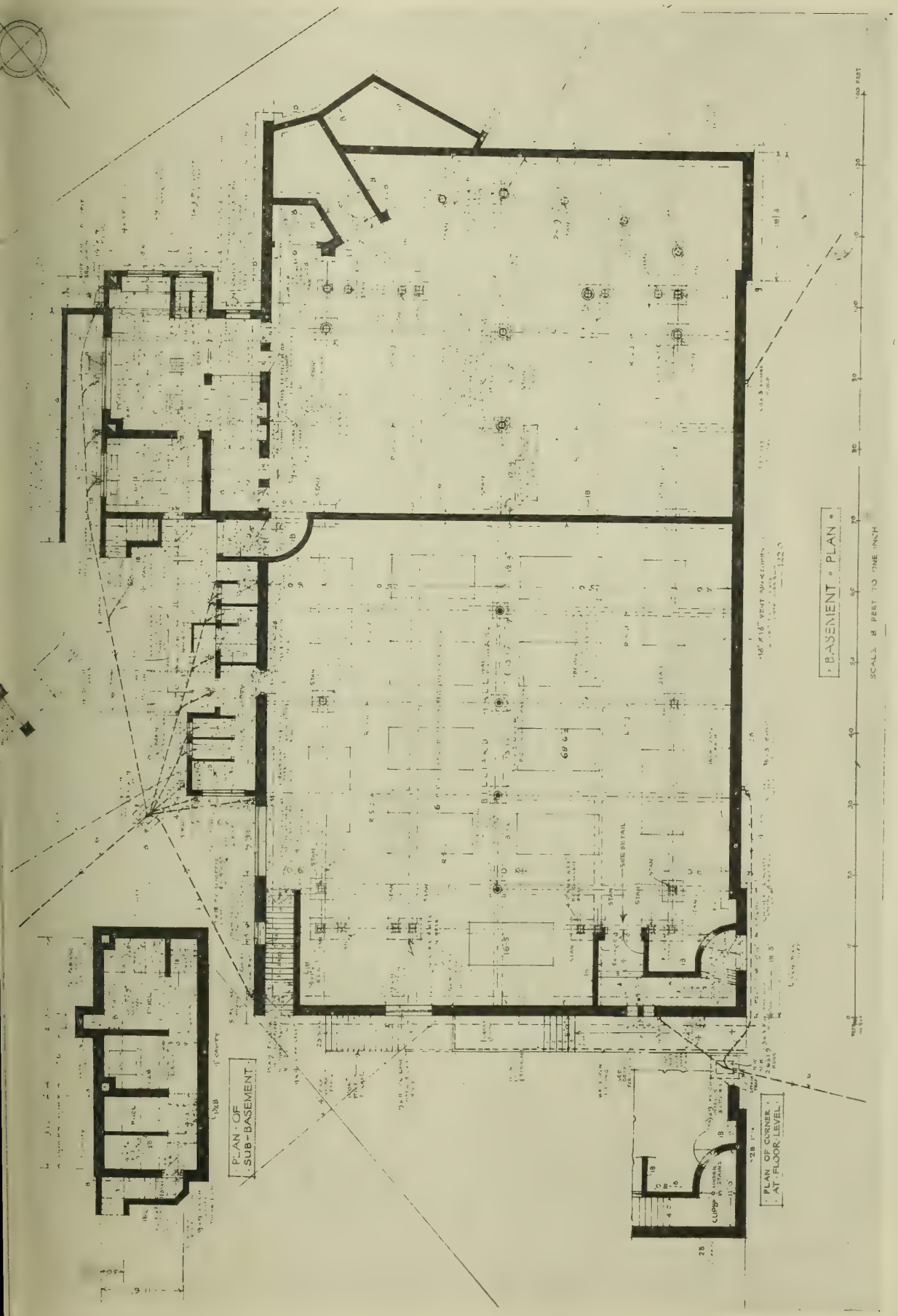
MESSRS. THRAVES & DAWSON, Architects.

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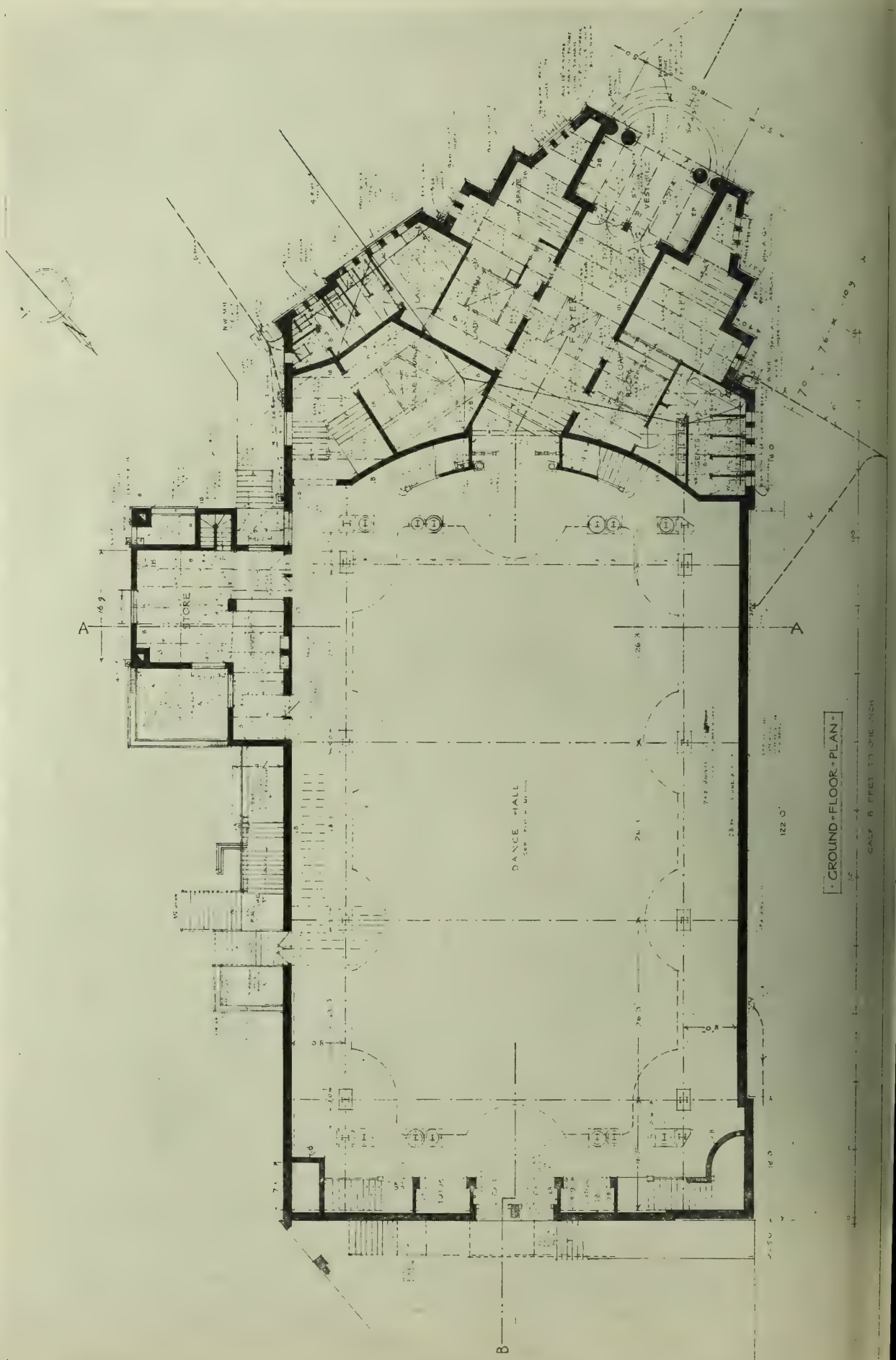



DANCE HALL
BALCONY


CROSS SECTION ON LINE A A
DANCE HALL
BALCONY



Palais de Danse, Nottingham. Messrs. Thraves & Dawson, Architects.


A
A
B
STORE
DANCE HALL
VESTIBLE
FOYER
SMOKE LOUNGE
SEATS
122 0"
GROUND FLOOR PLAN



The Rivoli Picture Theatre, Worthing. MESSRS. BURDWOOD & MITCHELL, Architects.



VIEW TOWARDS BALCONY.

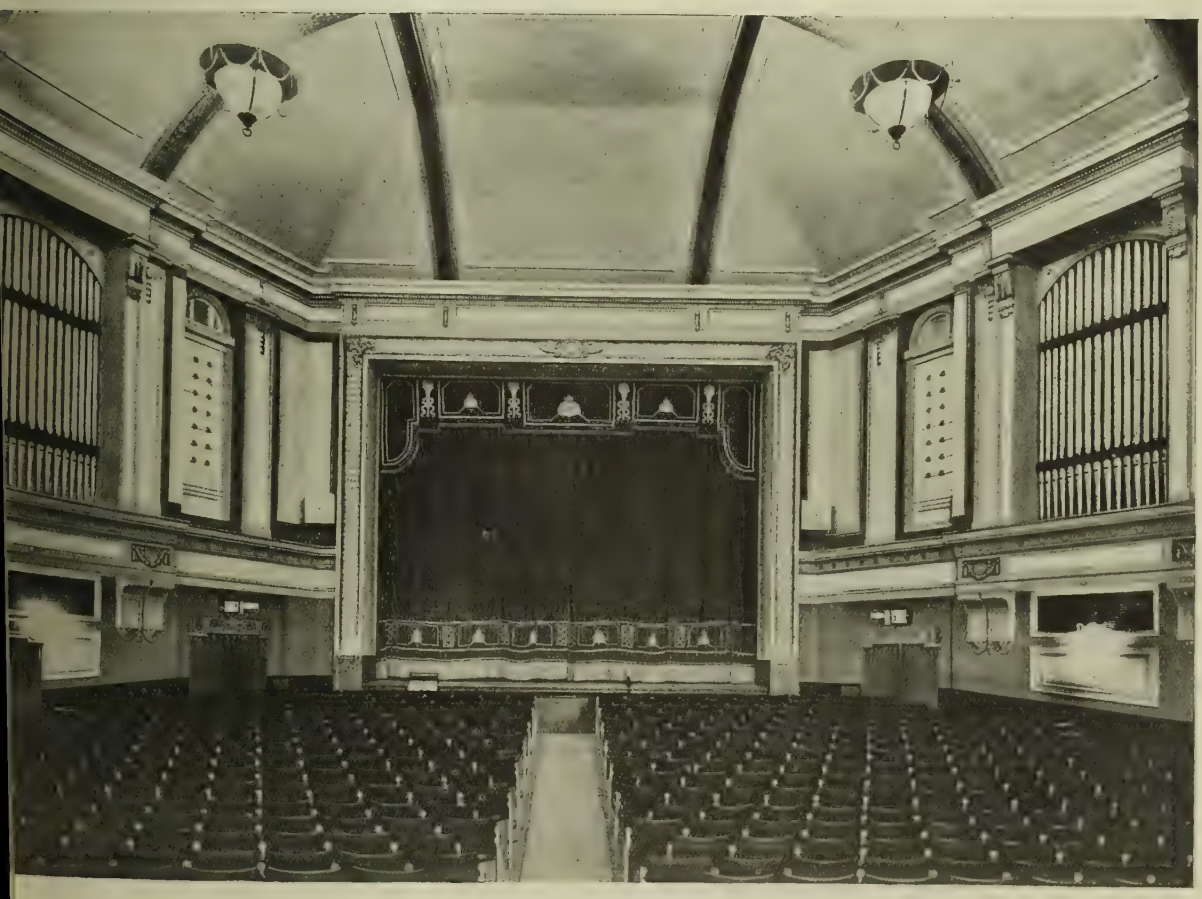


ENTRANCE HALL AND BOOKING OFFICE.

The Rivoli Picture Theatre, Worthing. MESSRS. BURDWOOD & MITCHELL, Architects.



THE LOUNGE.

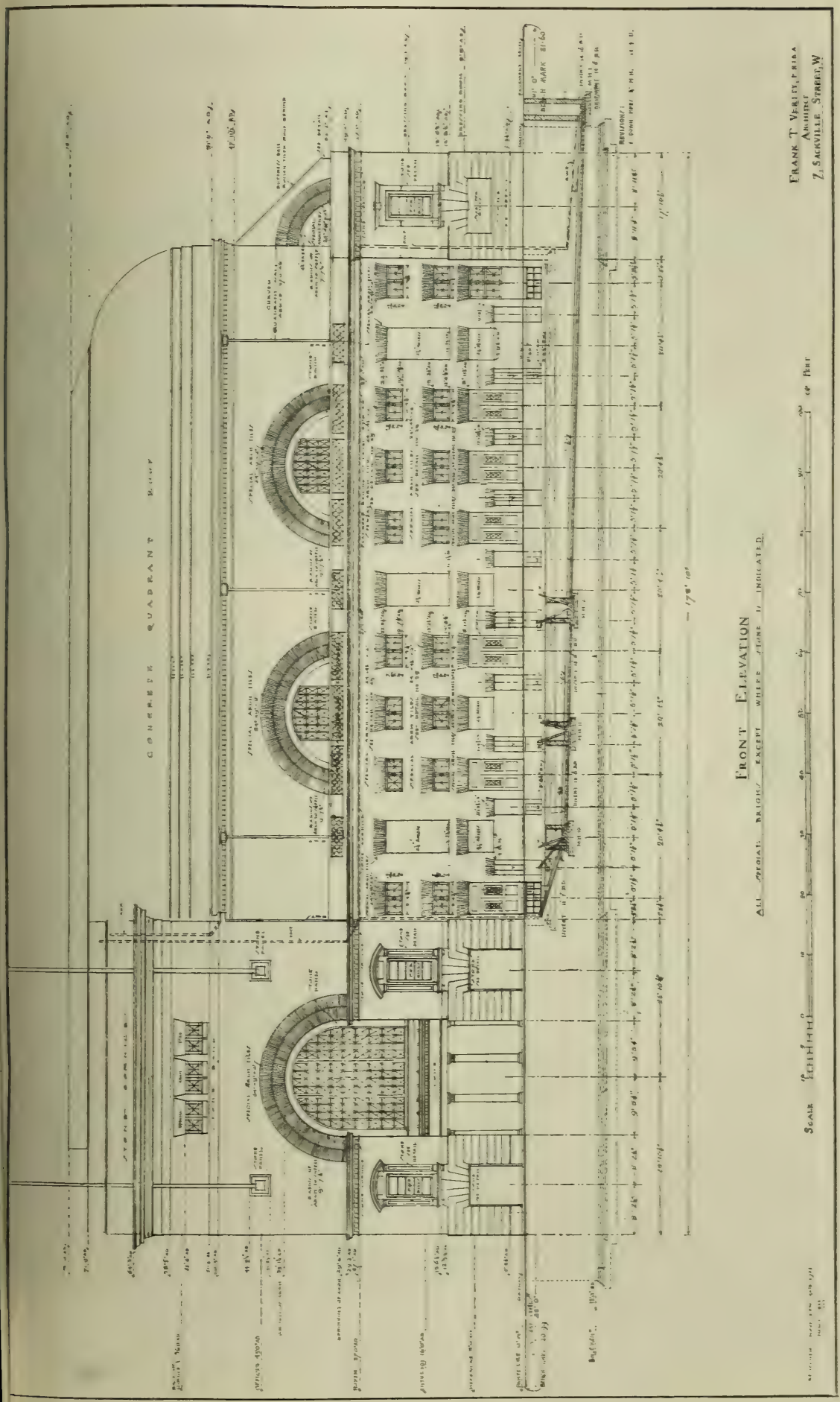


VIEW TOWARDS SCREEN.

The Rivoli Picture Theatre, Worthing. MESSRS. BURDWOOD & MITCHELL, Architects.

NEW CINEMA for J.T.MEARS Esq. in KENSINGTON ROAD, LONDON

Shepherd's Bush Pavilion. Mr. F. T. Verity, F.R.I.B.A., Architect.
[Mr. Verity was awarded the Street Architecture Medal, 1924, for this building.]

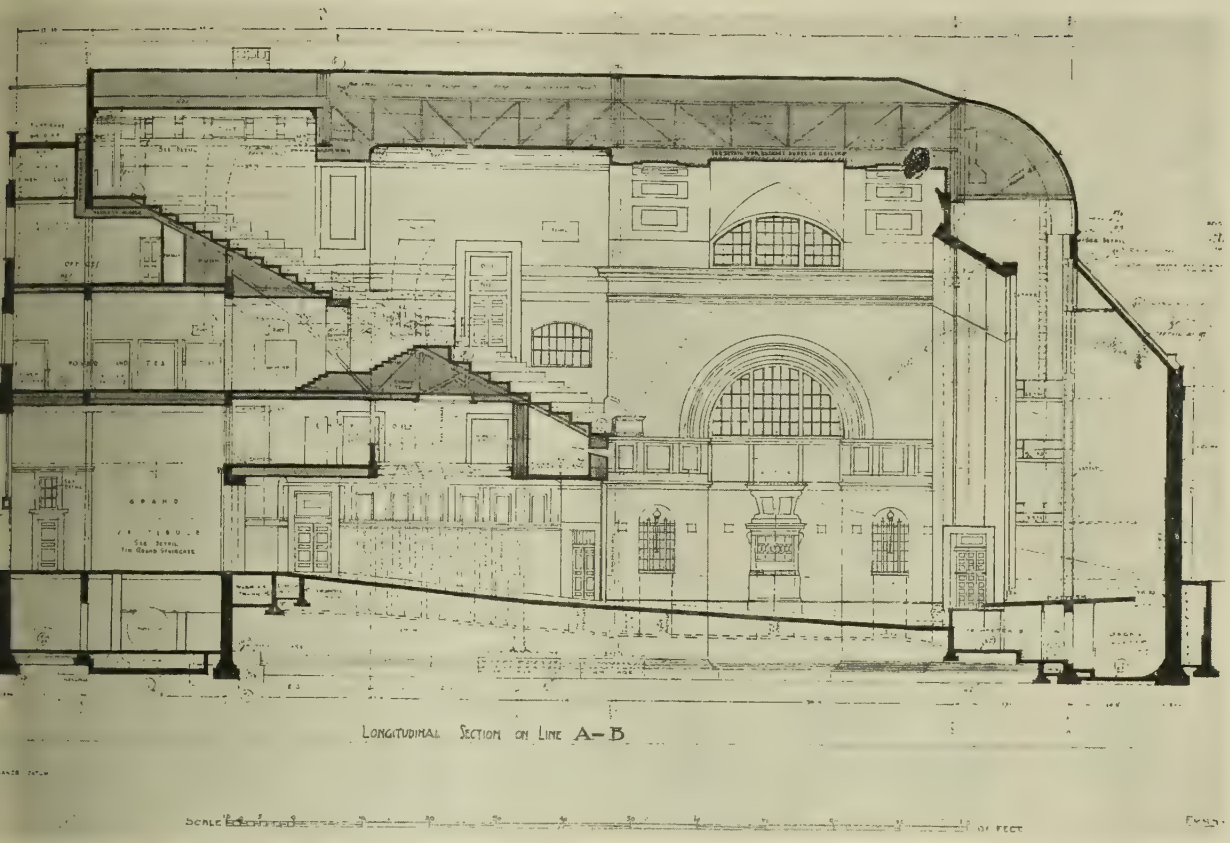


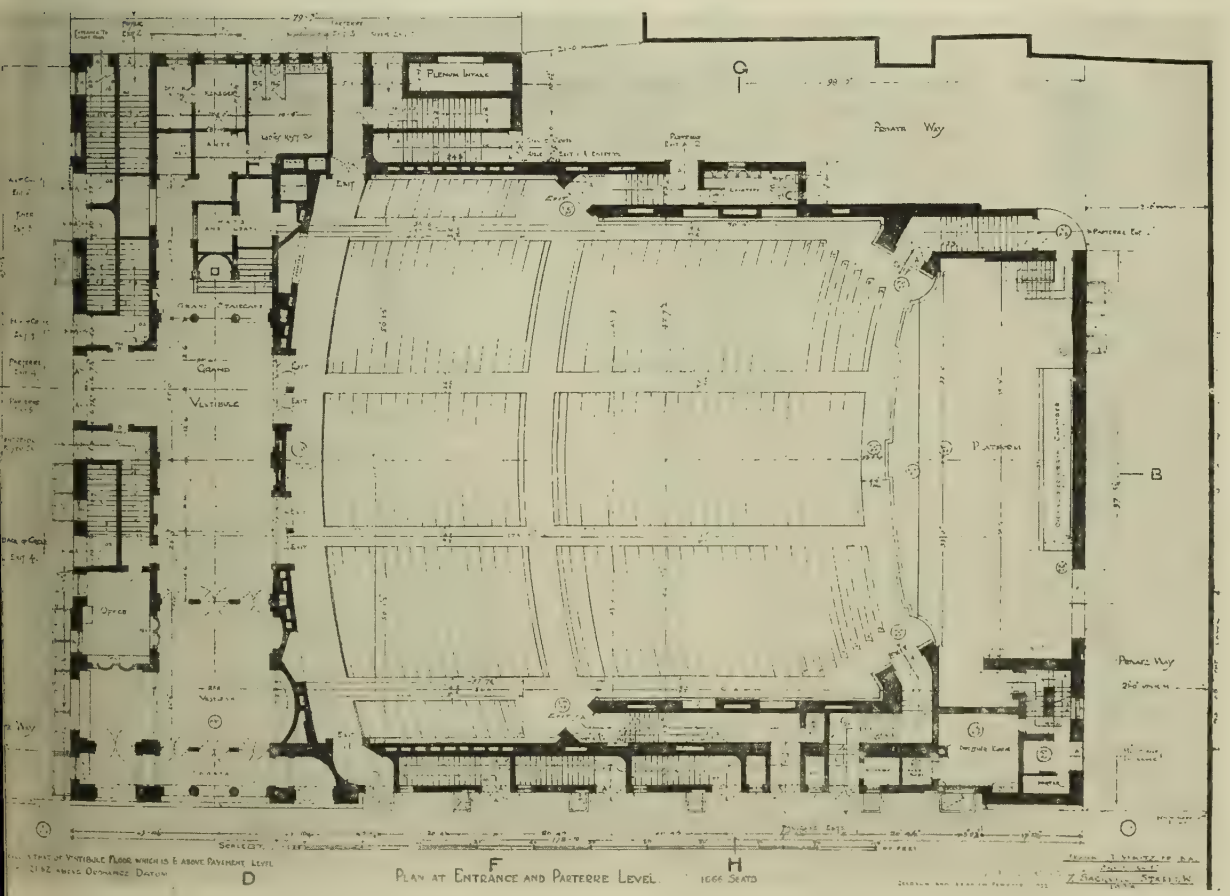
Shepherd's Bush Pavilion. Mr. F. T. Verity, F.R.I.B.A., Architect.



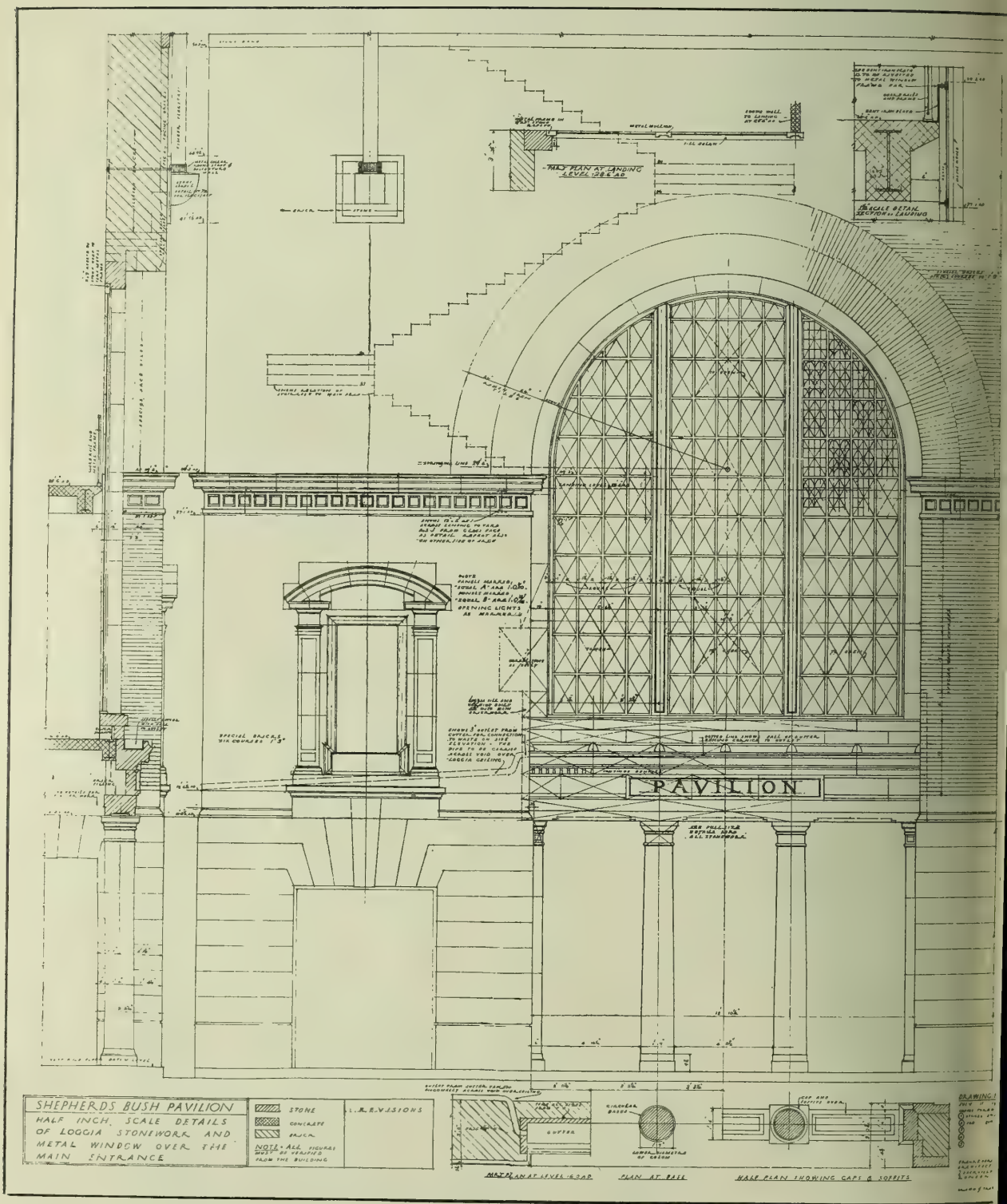


Shepherd's Bush Pavilion. MR. F. T. VERITY, F.R.I.B.A., Architect.





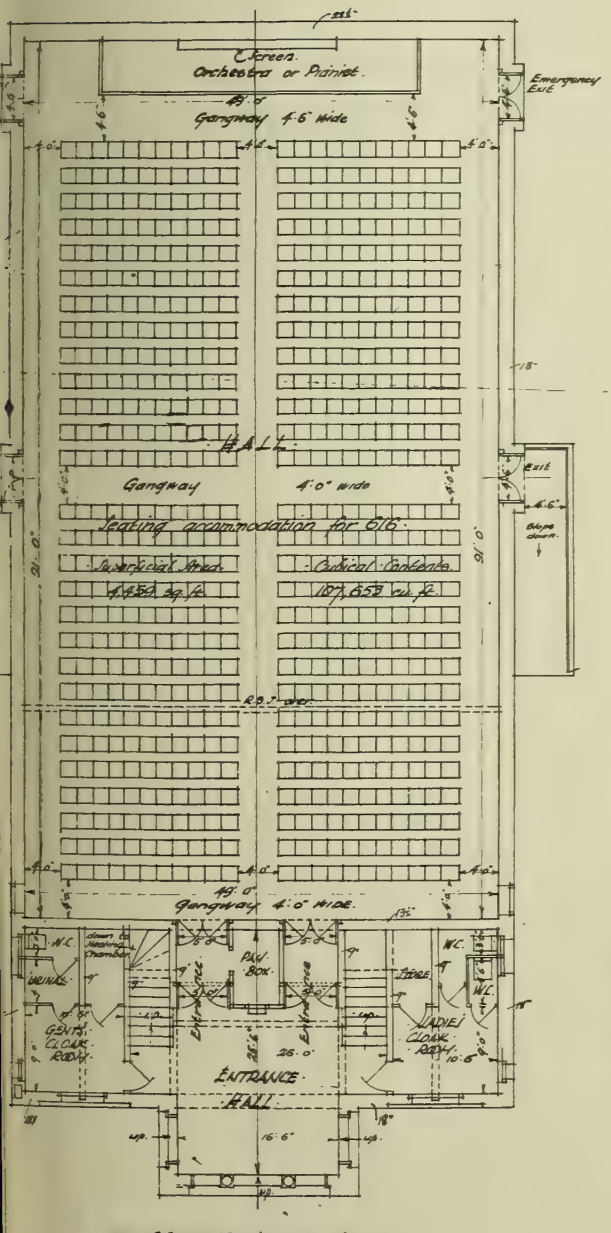
Shepherd's Bush Pavilion. MR. F. T. VERITY, F.R.I.B.A., Architect.



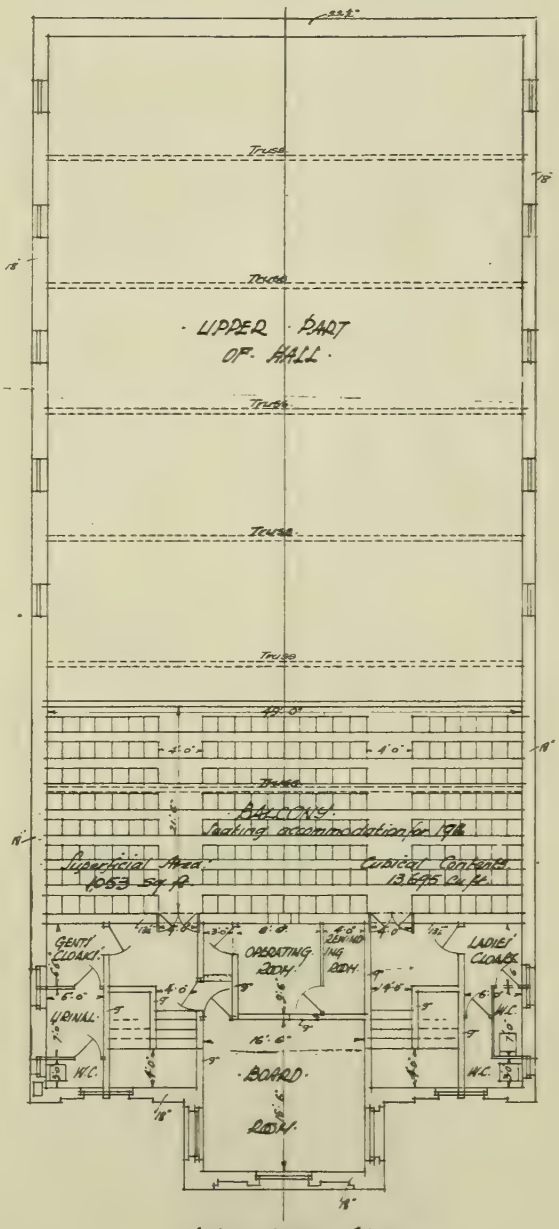
Shepherd's Bush Pavilion. MR. F. T. VERITY, F.R.I.B.A., Architect.



EXTERNAL VIEW

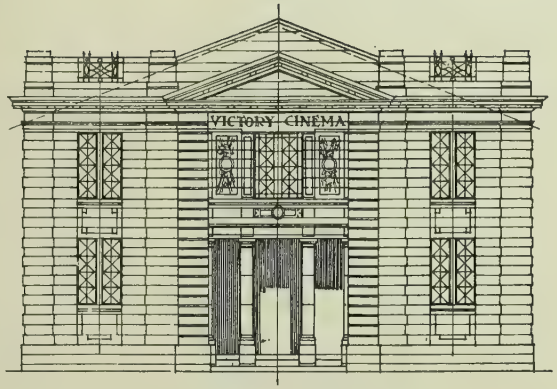


GROUND FLOOR PLAN

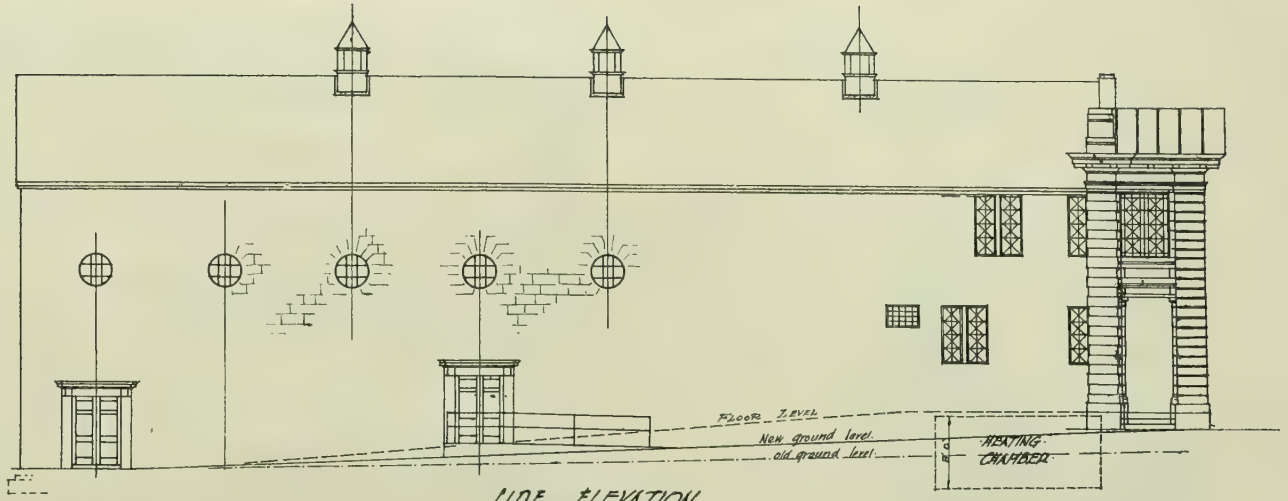


FIRST FLOOR PLAN

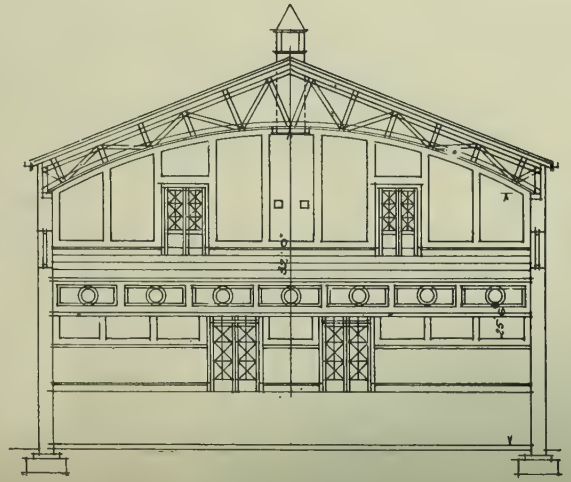
Victory Cinema, Bath. Mr. Alfred J. Taylor, P.S.Arc., Architect.



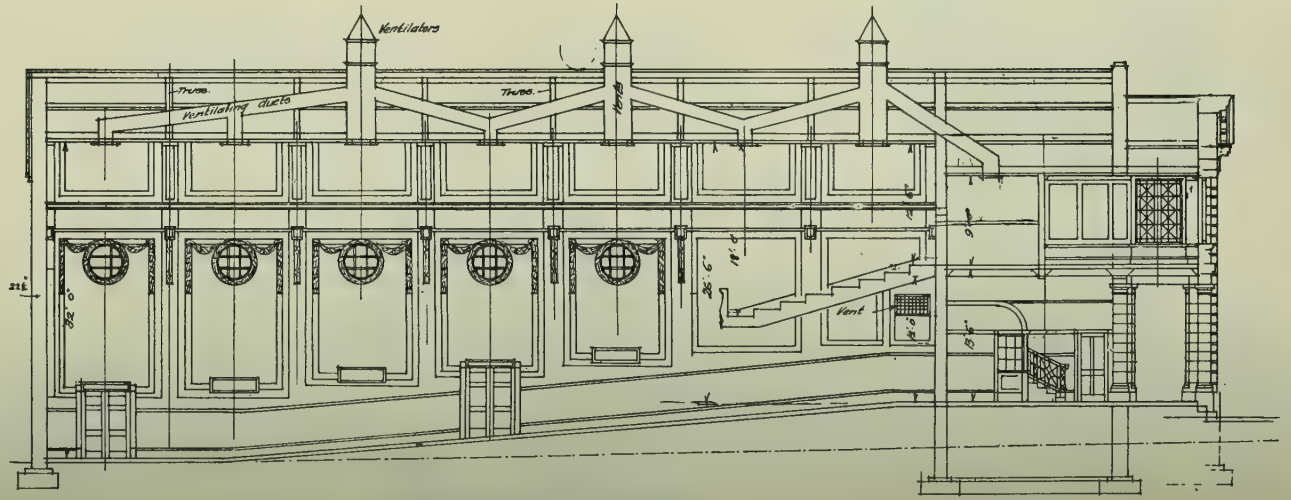
FRONT ELEVATION



SIDE ELEVATION

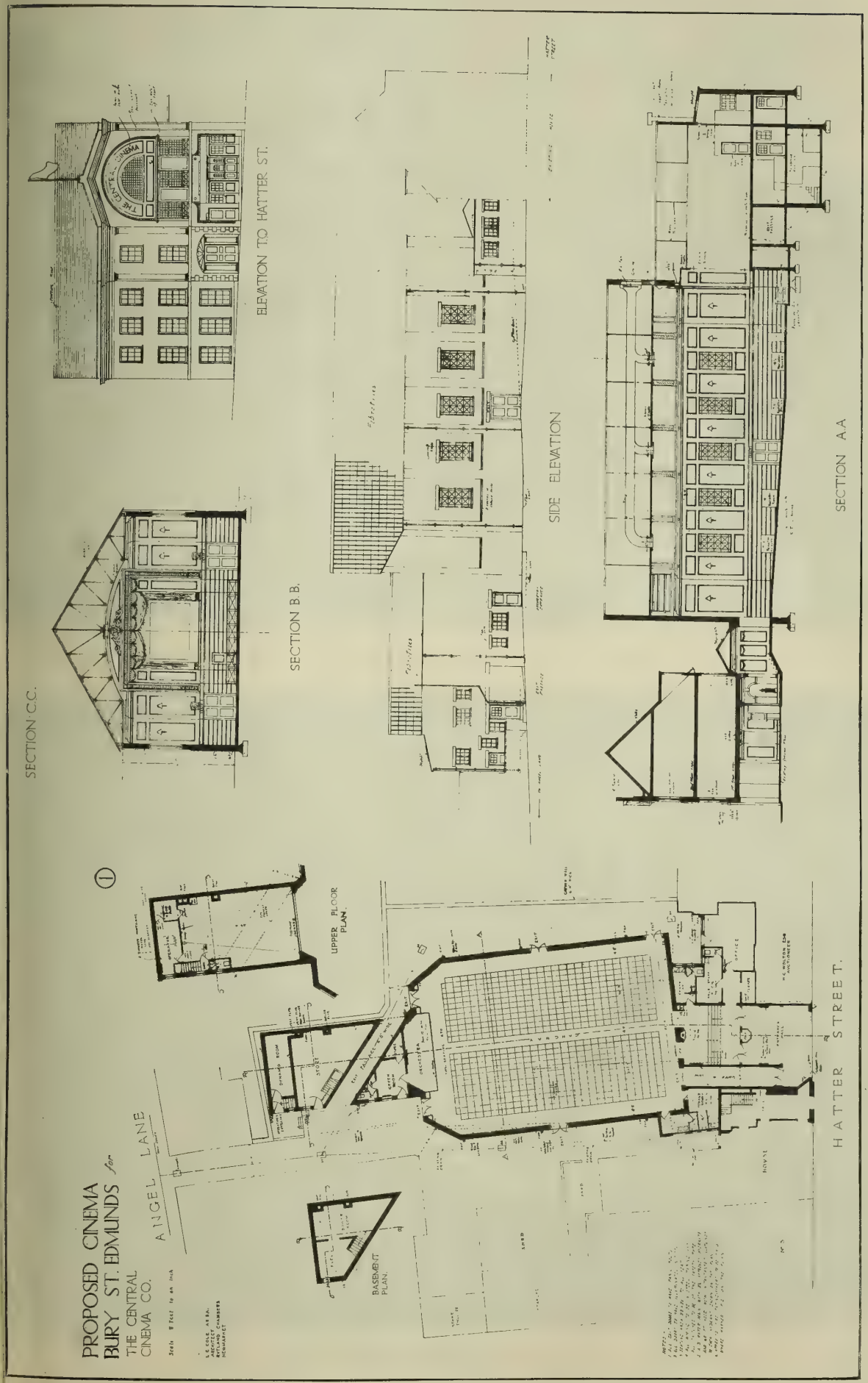


CROSS SECTION



LONGITUDINAL SECTION

Victory Cinema, Bath. Mr. Alfred J. Taylor, F.S.Arc., Architect,



Mr. L. E. Cole, A.R.I.B.A., Architect.



General View.



Detail of Entrance.



View of Balcony looking towards Screen.

The Savoy Picture Theatre, Hull. Messrs. Blackmore, Sykes & Co., Architects.

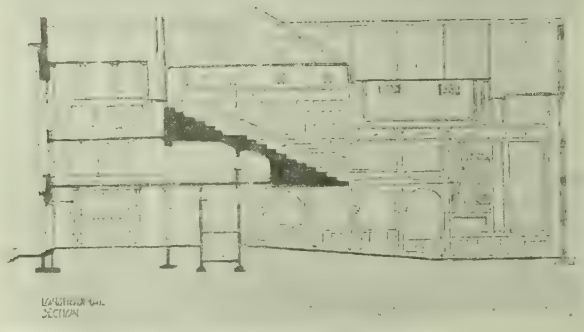


View towards Screen.

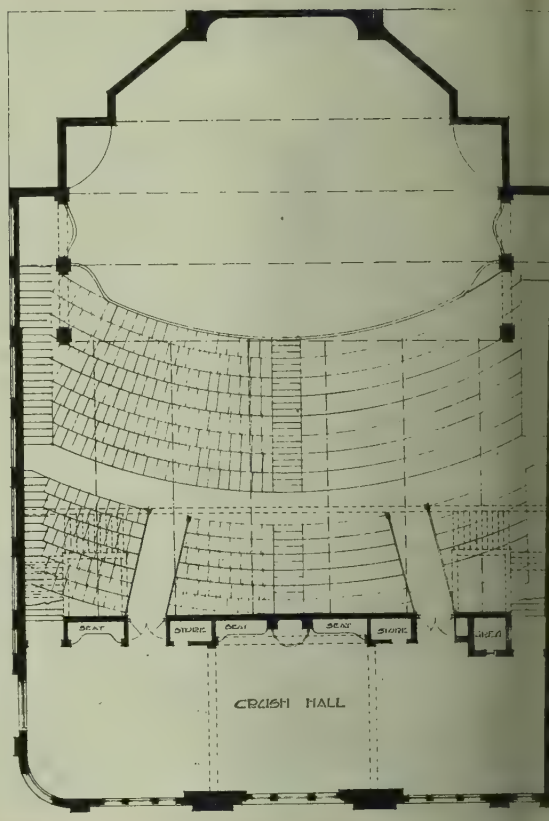


View from Stage.

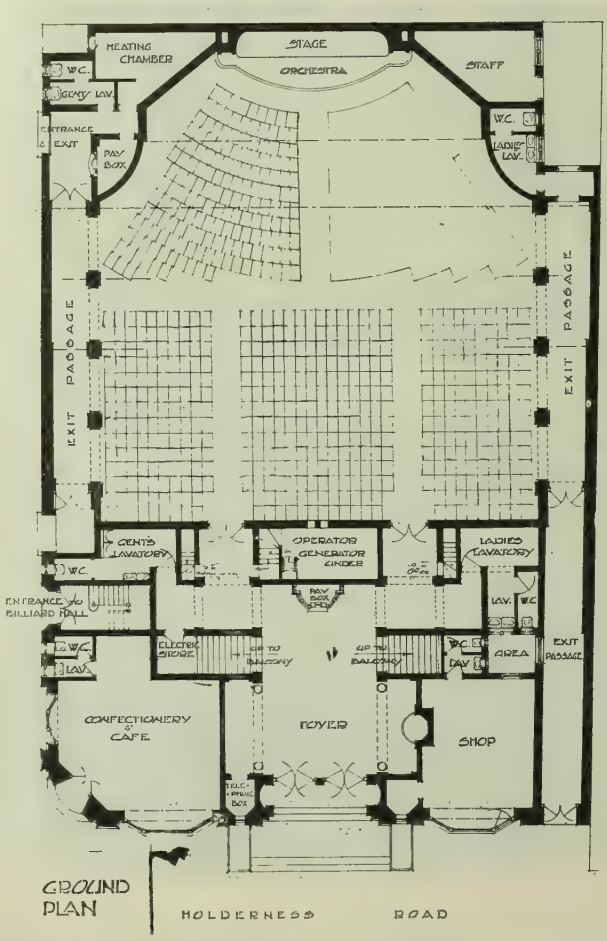
The Savoy Picture Theatre, Hull. Messrs. Blackmore, Sykes & Co., Architects.



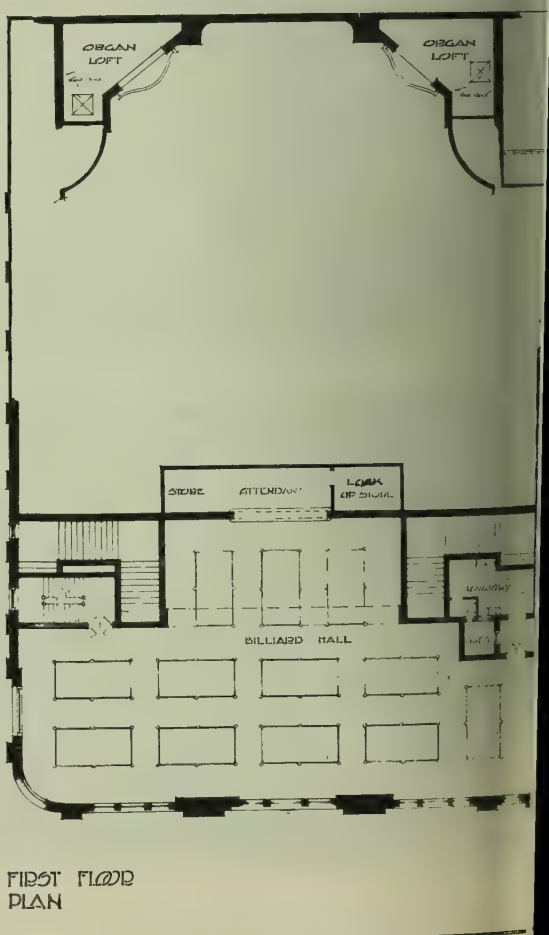
LONGITUDINAL SECTION.



BALCONY PLAN



GROUND PLAN



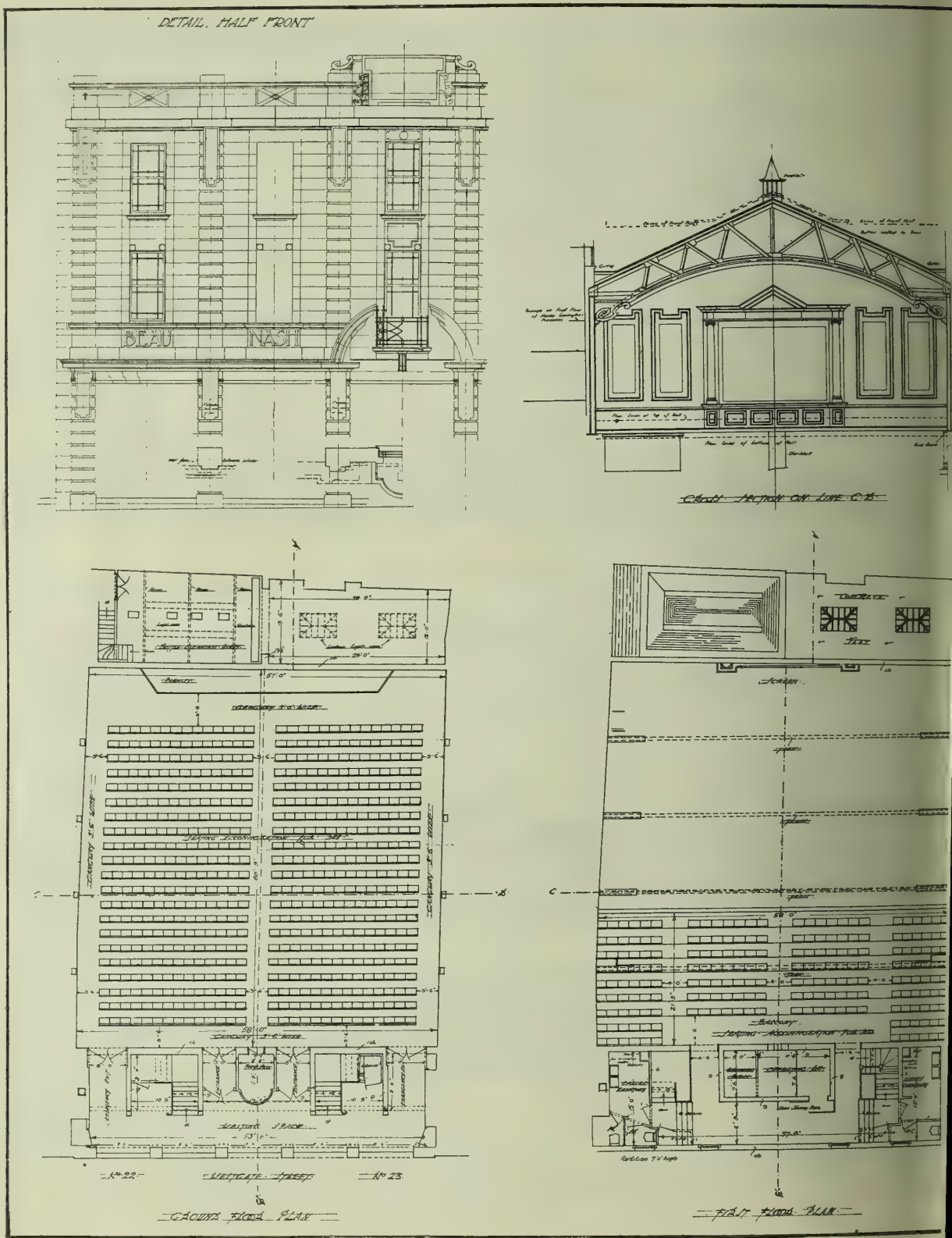
FIRST FLOOR PLAN

The Savoy Picture Theatre, Hull. MESSRS. BLACKMORE, SYKES & CO., Architects.



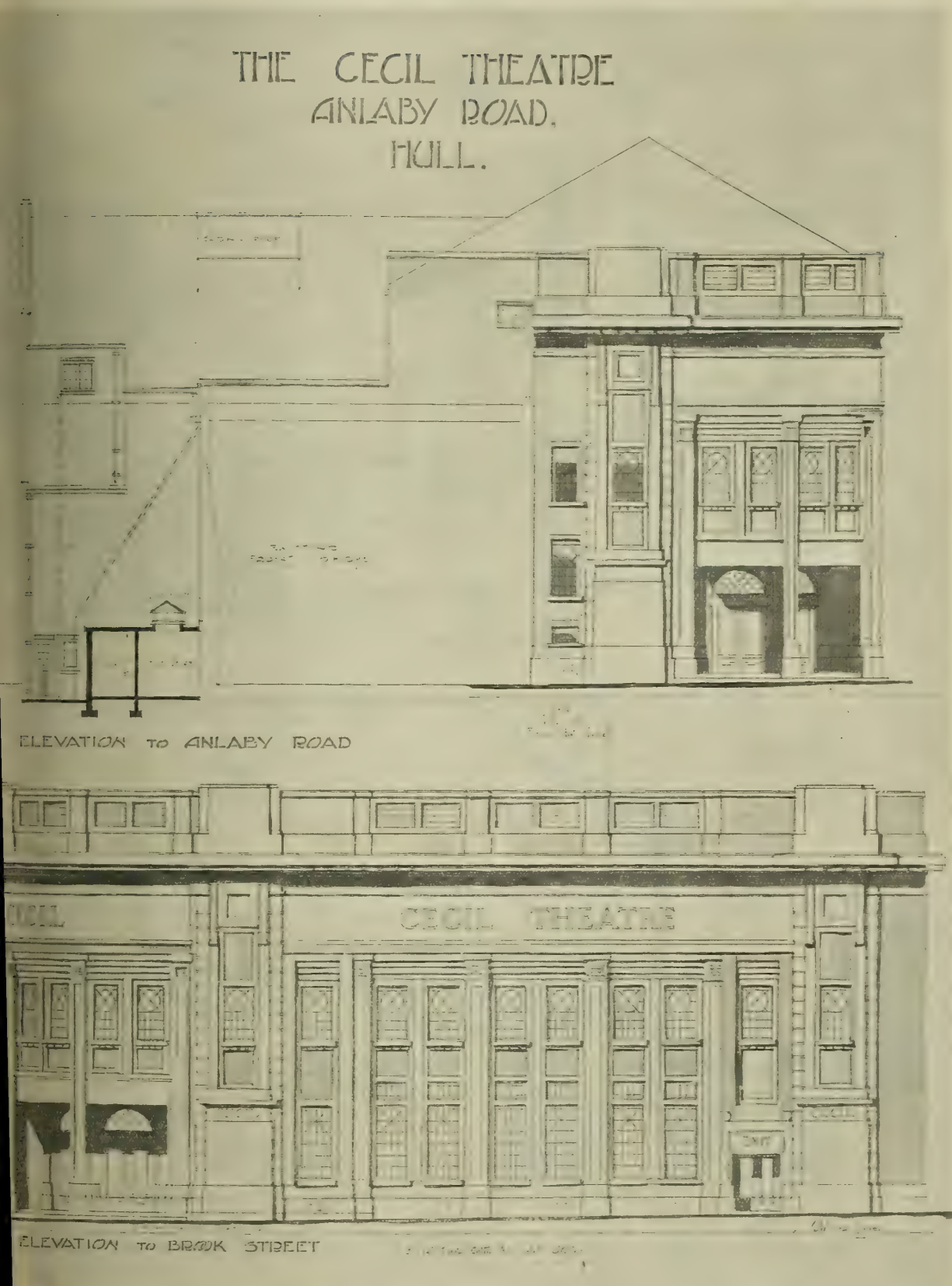
Beau Nash Picture House, Bath.

Mr. A. J. Taylor, P.S.Arc., Architect.



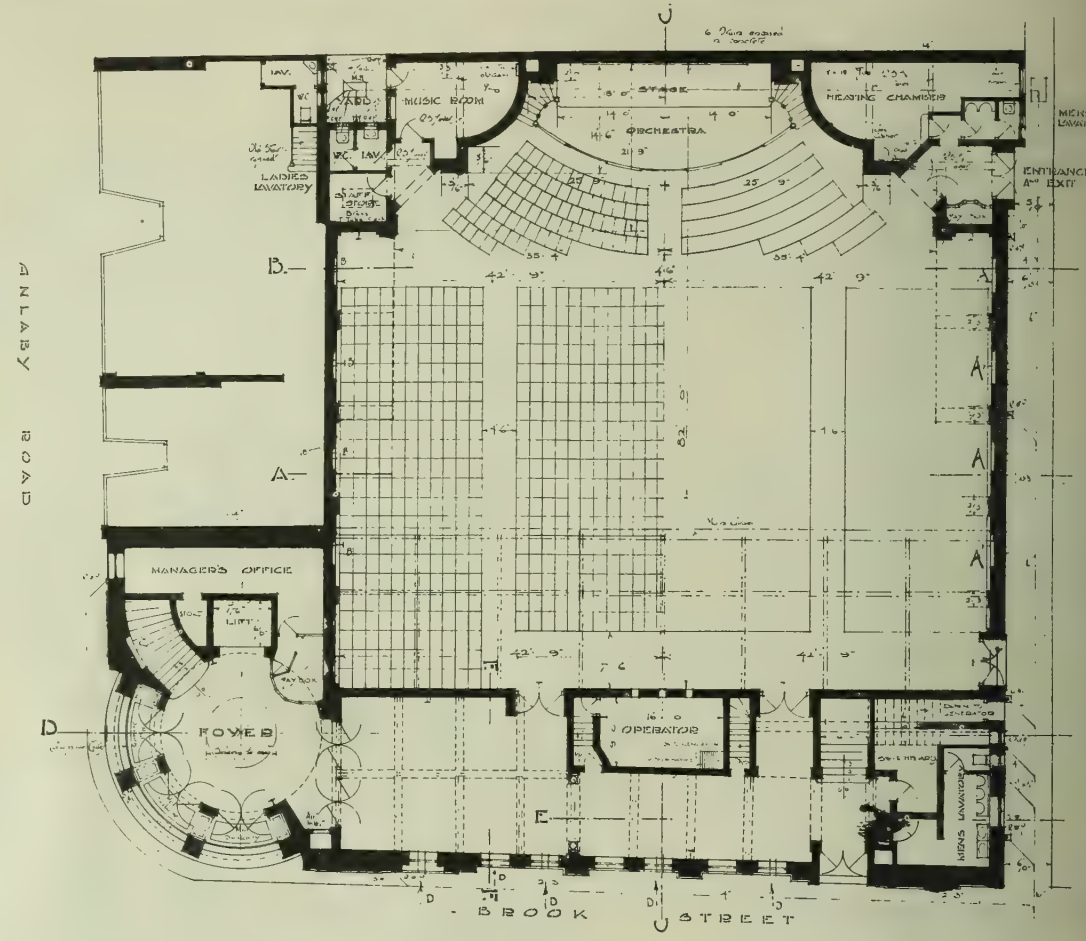
Beau Nash Picture House, Bath.

Mr. A. J. Taylor, P.S.Arc., Architect.

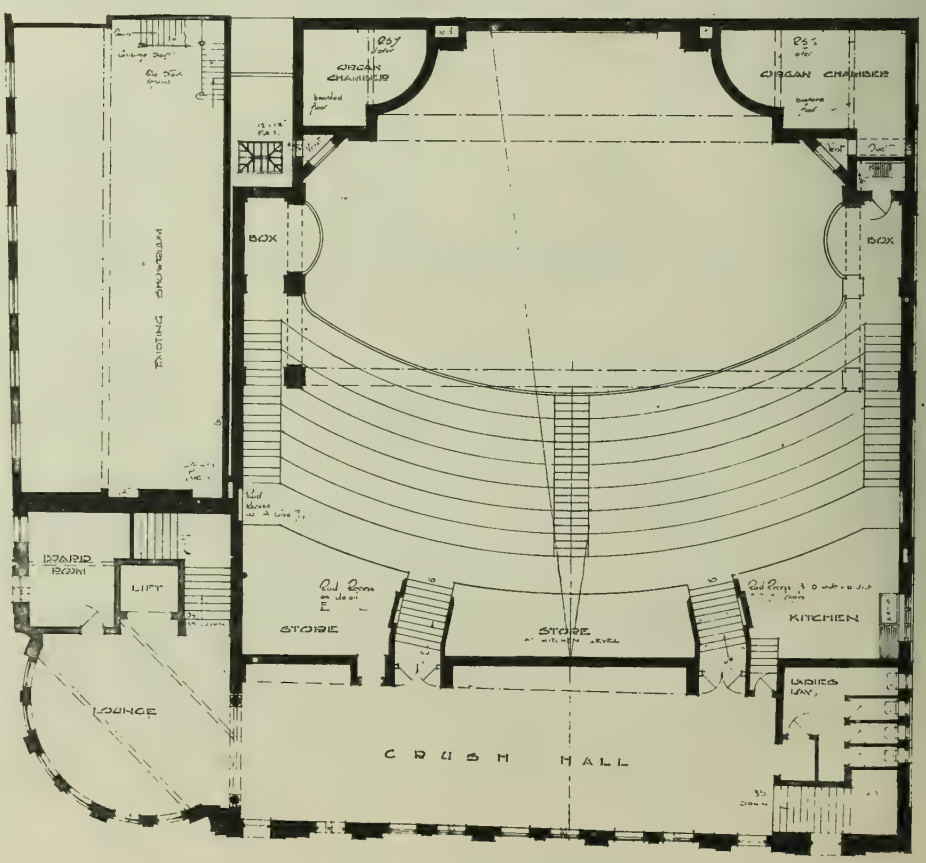


The Cecil Picture Theatre, Hull.

MESSRS. BLACKMORE, SYKES & Co., Architects.

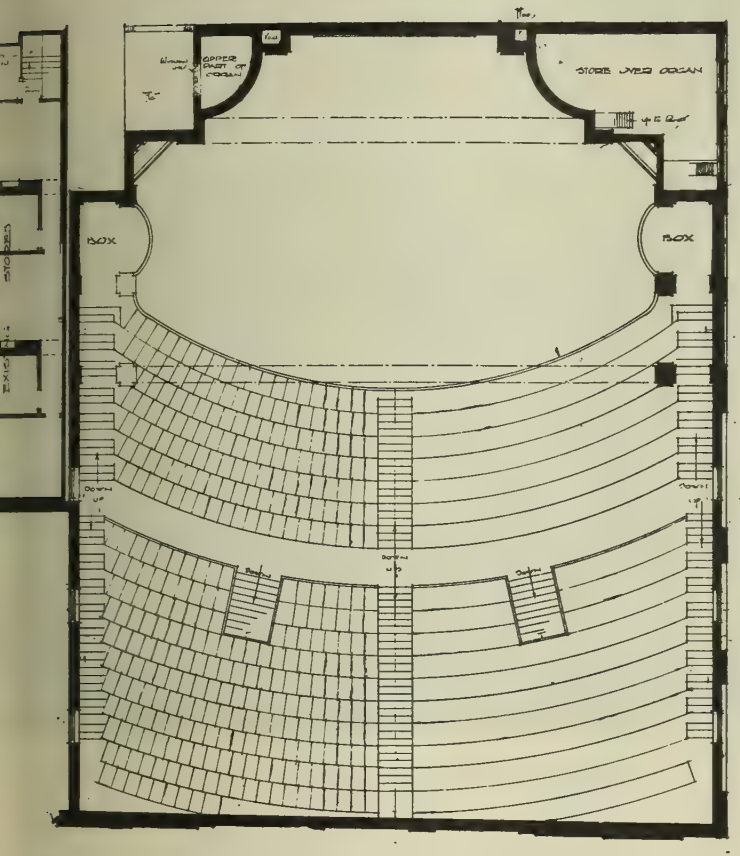


GROUND PLAN.

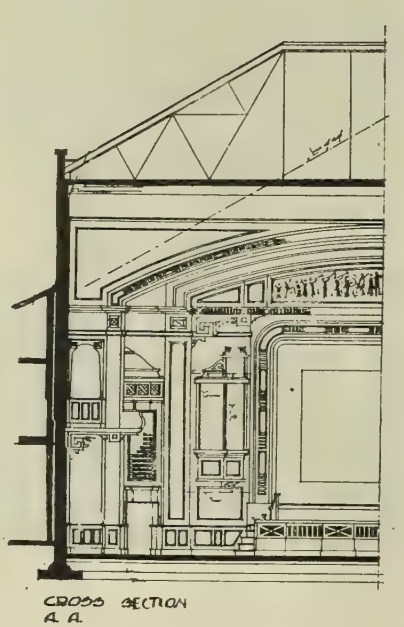


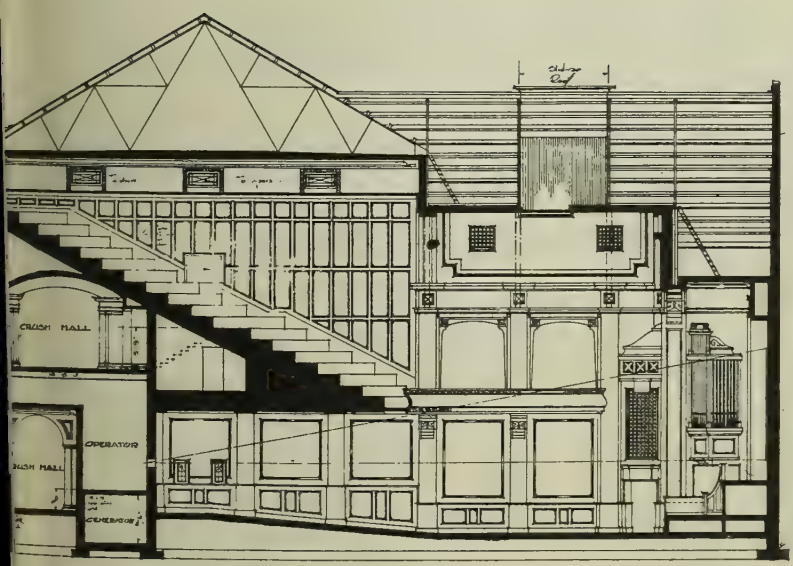
PLAN SHOWING CRUSH HALL.

The Cecil Picture Theatre, Hull. MESSRS. BLACKMORE, SYKES & Co., Architects.

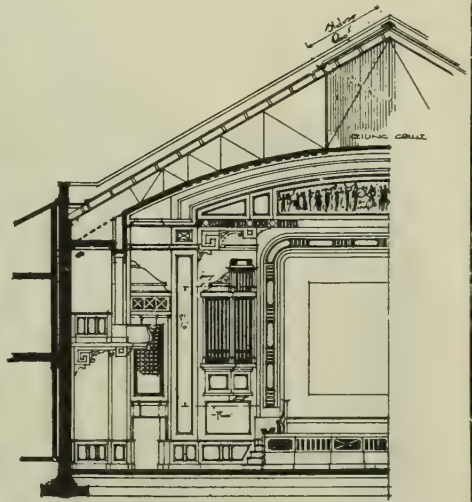


BALCONY PLAN.

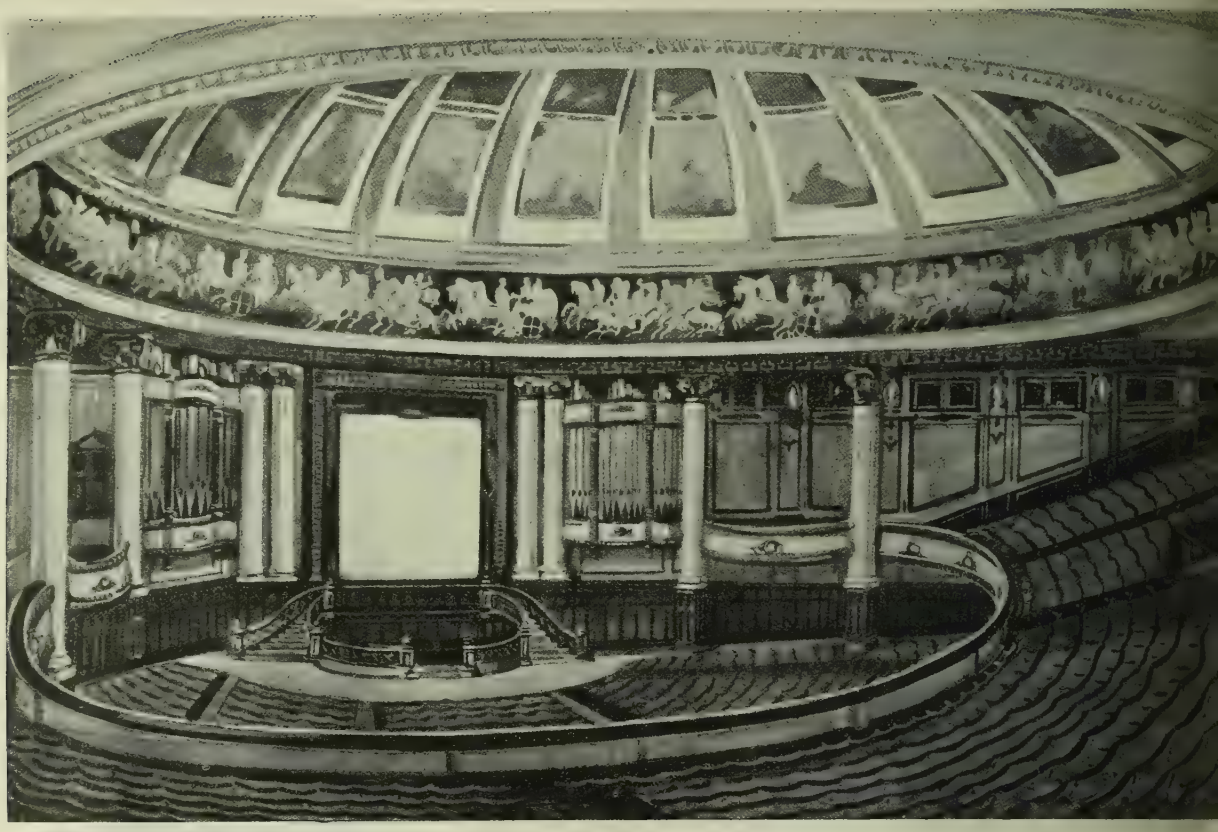




ITUDINAL
ION C. C.



The Cecil Picture Theatre, Hull. MESSRS. BLACKMORE, SYKES & CO., Architects.



AUDITORIUM AND PROSCENIUM.



The Majestic Theatre, Leeds. MESSRS. P. J. STIENLET & J. C. MAXWELL, Lic. & A.R.I.B.A., Architects.



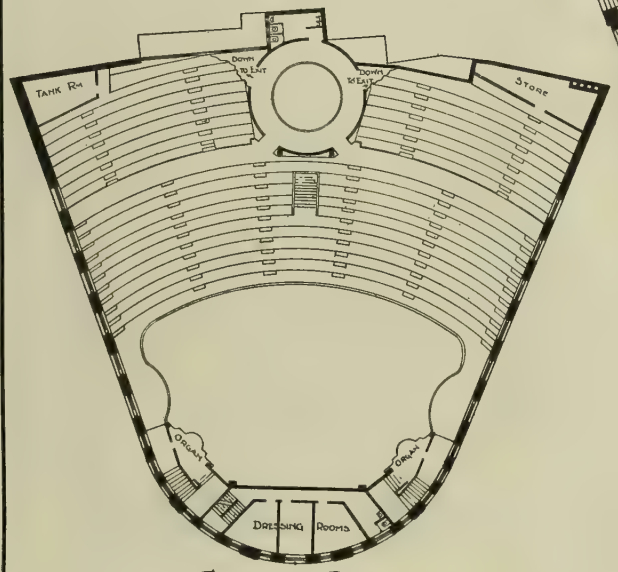
RESTAURANT.

The Majestic Theatre, Leeds.

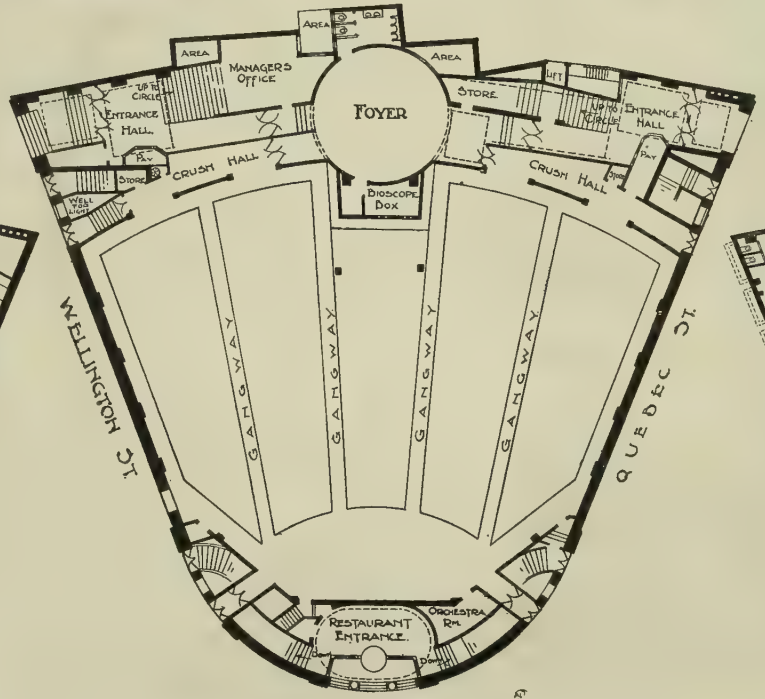
MESSRS. P. J. STIENLET & J. C. MAXWELL, Lic. & A.R.I.B.A., Architects.



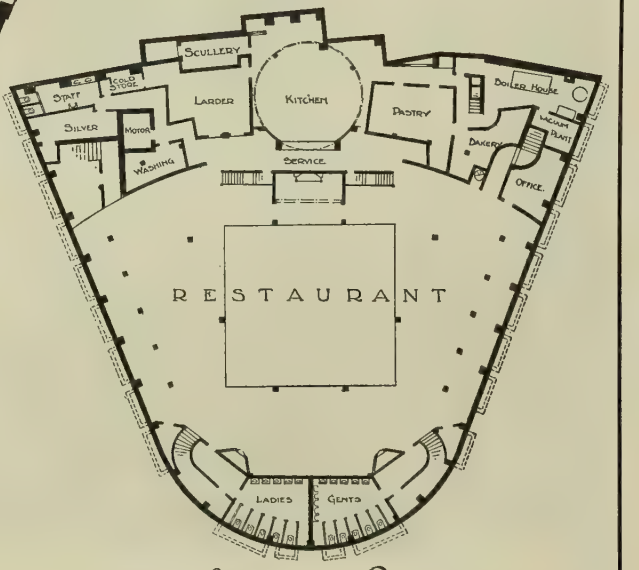
WAITING SPACE.



CIRCLE PLAN.



PARTERRE PLAN.



BASEMENT PLAN.

GAS-FIRED BOILERS INSTALLED FOR HEATING PLENUM SYSTE AT LONDON CINEMAS

In an article entitled "Gaseous Fuel as an Aid to Smoke Abatement," which appeared in our Heating and Ventilating Number, of September 30, 1921, we first drew attention to the possibilities attached to gaseous fuel for central heating systems, and mentioned that in this field the use of gas was beginning to extend. In September, 1922, in an article entitled "The Progress of Gas Heating," attention was again drawn to this subject, and details were given of the application of a gas-fired steam boiler to a central heating and ventilating system in a synagogue in the West End of London.

It is interesting to note that the possibilities to which we drew attention in these articles have recently been more fully recognised, gas having been adopted as the heating agent for several central heating installations of considerable magnitude. Our readers will, no doubt, welcome a description of one of these which includes several novel features.

Heating Plant at the Tolmers Cinema.

A gas-fired boiler was installed during last winter at the Tolmers Cinema, Tolmers-square, Hampstead-road (seating 1,250 people), where it is used in connection with an up-to-date "Plenum" heating and ventilating system. A plan of the Plenum chamber is shown in Fig. 1, and the following is a brief description of the plant, which was installed by the Wembley Heating Company, Ltd. It embodies all the latest mechanical devices, and in every way complies with the requirements of the London County Council, whose inspectors have examined and approved the installation since it was completed, and when in use.

Air, after being drawn in from the outside by the action of an intake fan, passes over a number of atomisers, which eject water in the form of mist in order thoroughly to saturate and wash the air. It is then passed over a number of specially constructed dirt eliminator plates having many deflections, which, owing to their construction and the velocity with which the air passes over them, pick up and retain the whole of the dirt contained therein. Jets of water are continuously playing on the plates to cleanse them, and the whole of the dirt is thus carried into a sump at the bottom of the washer. Some idea of the efficiency of this operation may be gathered when it is noted that it is necessary to clean out the sump every morning before the plant is started. After passing over the cleansing plates, the air is partially dried and raised to the required temperature by passing it through a tubular steam heater. This heater is constructed of 1-in. tubes supported vertically, and supplied with steam from a gas-fired boiler. This boiler is of the tubular pattern, but instead of ending in a fire box, the tubes are extended to the front plates (see photograph in Fig. 2). These tubes have spirals fitted within them in order that the maximum amount of heat may be extracted from the gas flames which play into them, and from the products of combustion during their passage through the tubes to the flue outlet at the other end of the boiler. As a proof that this desideratum is reached, it may be mentioned that after the gas has been burning for some hours it is quite possible to place a hand at the flue outlet without experiencing discomfort.

The steam heater was designed to dry (partially) and warm the necessary quantity of air, while working at a steam pressure of 4 to 5 lb. per sq. in., and the gas boiler is, therefore, adjusted to maintain this working pressure, which is reached within 30 minutes after the gas has been lighted. The boiler is controlled by a thermostat which automatically reduces the gas consumption whenever the steam pressure rises above a pre-determined figure, *i.e.*, slightly higher than that needed for the steam heater. A further automatic control, which is electrically operated from the auditorium, has been installed—a full description of which is set out later in this article. The condensed water from the steam heater is returned to the gas boiler by gravity, without the aid of any mechanical device, and apart from lighting the gas and starting the motors for driving the fans an hour or so before the cinema opens, no attention whatever is required to the apparatus. The simplicity and efficient running of the plant are thus clearly indicated. After the air passes through the steam heater, it is propelled to the auditorium through underground ducts by means of a centrifugal fan, which runs at a very low speed in order that there shall be no noise to disturb the audience. The air, heated to a temperature of about 68° Fahr., then passes over gratings into the auditorium. A low velocity is maintained to prevent draughts, which are such an unpleasant feature in some public buildings. The vitiated air is extracted through ornamental gratings in the ceiling;

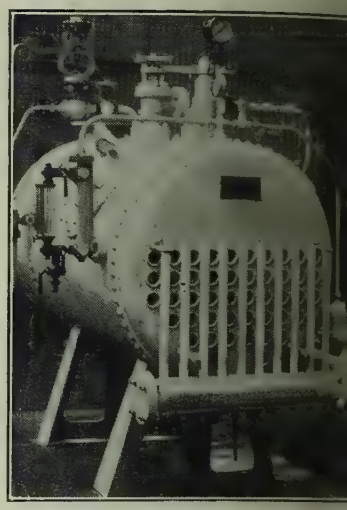


Fig. 2.

then carried along trunking in the roof and subsequently discharged into the sphere by another centrifugal fan.

The motors of the intake and extract are interlocked, and are both controlled the Plenum chamber, by which means t tract fan cannot be put in motion unle intake fan, providing pure air, is running maximum heating capacity of the pla 1,086,000 cu. ft. of air, and the gas bo which is only 3 ft. in diameter by 5 ft. long—is capable of providing a maxi duty of 800,000 British thermal unit hour, with a consumption of about 1,900 ft. of gas=9½ therms per hour. As th mand, however, is approximately 70 British thermal units per hour, the maxi gas consumption is about 1,650 cubic ft therms, which is only consumed when plant is being heated from cold, or tempo after having been shut down by thermo or thermometric action.

The Thermostatic Control.

When the system has become fully h and the steam pressure at any time ris the predetermined figure (about 6 lb.), thermostatic control on the boiler comes action and the gas is entirely shut off, e for a by-pass supply, by which the gas fl are left burning low in the tubes at a

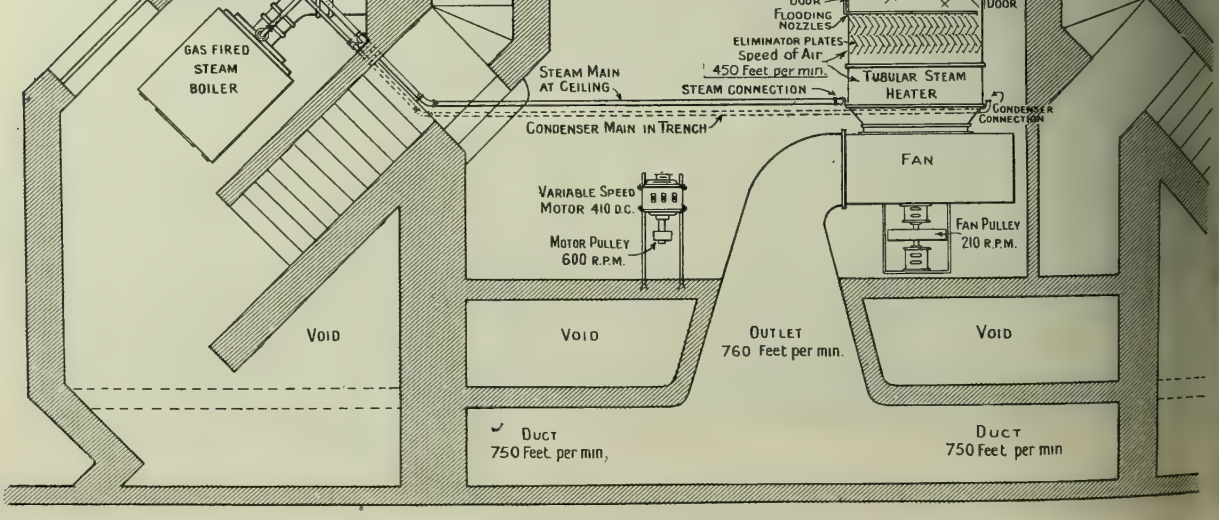


Fig. 1.—Plan of Plenum Chamber.

ion of about 300 cubic ft. per hour= rns. Directly the steam pressure drops to the cooling effect of the air passing h the heater, the reverse action takes the thermostatic valve again opens and nsumption increases to the maximum This action, *i.e.*, the alternate shut- ff and opening up of the thermostat, is uous during the whole time air is being , thus materially reducing the consump- f gas.

ther Control by Electrically Operated Valve.

ost interesting—and, as an aid to the ed use of gas as a fuel in cinemas, a aluable—feature of the installation is the idge automatic temperature control ap- s, which is fixed in the centre of the front gallery, and may be seen in the photo- Fig. 3). This instrument acts as a further , and automatically reduces the amount consumed, because, when the tempera- the cinema reaches a predetermined the boiler is shut off except for a by- It will be seen, therefore, that there o controls, one actuated by the steam e when it reaches a certain figure, e other by the temperature of the air auditorium, and economy in the con- n of gas is thereby doubly assured. oviding an opportunity of enjoying all antages attached to such a labour- and convenient heating agent as gas, mparatively low fuel cost. It may be ed that when gas boilers are installed t necessary to set aside—or take up— e space for the storage of fuel. No incurred for labour, and no storage or of ashes is involved.

ction of the Cambridge automatic tem- e control apparatus is as follows:—A indicating thermometer is fitted in a approximating to the centre of the um—a convenient spot in this case ne centre of the front of the gallery, in photograph (Fig. 3). The instru- as two hands, one a short pointer, nay be set at any desired temperature s case it will be seen to be about . Fahr.) and the other an ordinary " arrow " registering pointer which ted in the ordinary thermometrical by a rise or fall in the temperature all. Mercury is contained in a special lb, which—it will be noticed in the ph—projects through the instrument uspended below the dial. As the mer- pands it actuates a bourdon spiral,

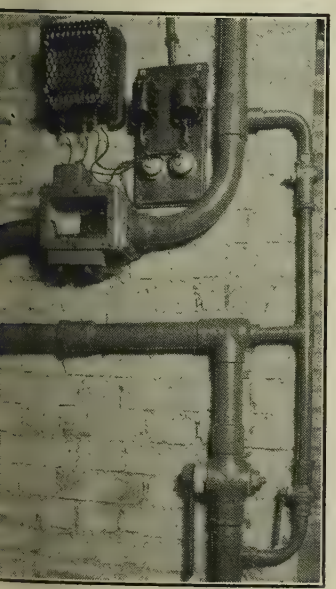


Fig. 4.

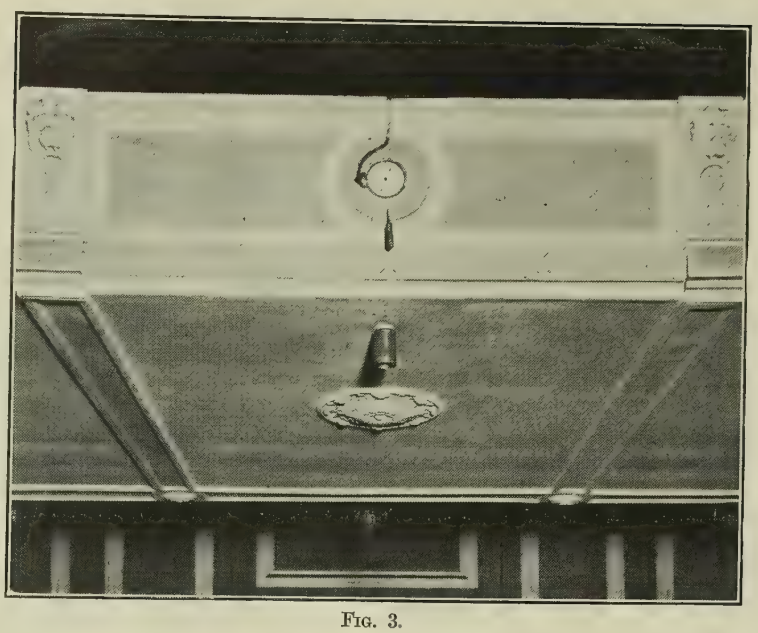


Fig. 3.

thus causing the registering pointer to indicate the temperature on the dial. A pair of electric wires are run from the instrument to a valve in the basement (described later) and these wires are so connected to the instrument, that the circuit is not complete, until the registering pointer rises to the predetermined temperature, when it makes electric contact by touching the short pointer " set " at this figure. The valve action in the basement near the gas boiler is contained in a hermetically sealed box, fitted with a plate glass front, in order that the mechanism may be seen to be working, and thus known to be in order. This valve box is interposed at a suitable position in the run of the gas supply pipe to the boiler, as will be seen in Fig. 4, and a by-pass is run from a position above the valve box, again entering the supply pipe below it, thus ensuring that a certain amount of gas will always flow past to the boiler (to maintain the heat therein) even though the automatic valve is shut off. A front sectional elevation of the valve box and the mechanism it contains may be seen in Fig. 5. The action is as follows:—

The glass-fronted box contains a double-beat valve A, through which gas passes to the boiler as indicated by the arrows shown in the drawing. This valve is attached to a lever B, which is pivoted at C, and the other end of the lever is held down by a spring D beneath an electric coil E. The current to this coil will be noticed, in Fig. 4, to be passing from the main cables through resistance, but the voltage and current necessary is so negligible (about 4 volts) that the apparatus could readily be worked from accumulators if required. If and when the temperature of the hall as registered on the thermometer shown in Fig. 3 reaches the desired figure (*i.e.*, the degree at which the short pointer has been set) electric contact is made at the instrument, and the current then passes around the coil in the valve box in the basement. This sets up a magnetic field in the coil, which pulls up a solenoid attached to the spring D, thus raising the lever, which action entirely closes the valve A. The gas supply to the boiler will then be shut off with the exception of that flowing through the bye-pass previously mentioned, which quantity has also been predetermined by the cock shown at the top of the bye-pass supply (in Fig. 4) being set at a point which will allow about 300 cu. ft. per hour to pass. If and when the temperature of the hall drops below the desired figure, electric current is again broken at the instrument in the auditorium, the spring D is thereby released from the magnetic influence and again pulls down the lever B, thus reopening the valve and allowing the full gas supply again to pass to the boiler.

From the foregoing details, it will be gathered that the whole installation is so regulated and controlled that the greatest possible degree of economy in consumption of gas is assured, while the plant also rapidly responds to changes in temperature, thus ensuring the utmost degree of comfort, adaptability, convenience, and saving of labour.

Another Installation.

It is worthy of note that an even larger Plenum system than the one set out above, also heated by gas-fired boilers, has recently been completed at a new and very fine Cinema (known as the " Capitol ") in Haymarket, London, on a site adjoining Piccadilly Tube Station. This installation, again, presents several novel features and, owing to the great value of ground area—and, therefore, floor space—in this neighbourhood, the boilers are installed in the roof. They supply hot water to a Plenum system operating many feet below their level, and circulation is effected by means of an impeller. In this case two gas-fired boilers of the Spencer Bonecourt type are installed, capable of providing over 1,500,000 B.Th.U.s per hour.

It will readily be realised that solid fuel, with the difficulties attendant upon its delivery to the top of the building and the daily removal of ashes and clinker, could not have been used under such circumstances, and that the adoption of gaseous fuel also obviated the necessity for the occupation of costly room for fuel storage.

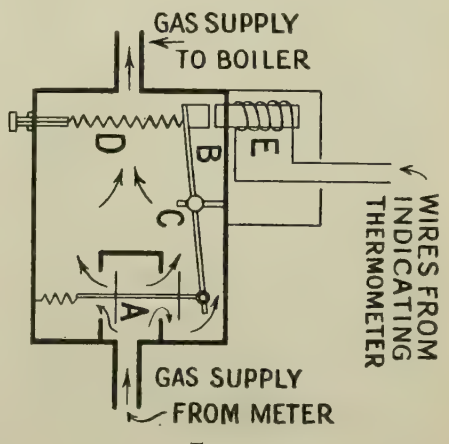


Fig. 5.

ILLUSTRATIONS

The Shepherd's Bush Pavilion.

Mr. Frank T. Verity, F.R.I.B.A., is the architect of the Shepherd's Bush Pavilion, and was last week awarded the Royal Institute of British Architects' Medal for the Best Street Frontage built during the year, for this building. The following were the contractors and sub-contractors:—F. Bradford & Co., reinforced concrete steppings to pier; Clark & Fenn, all plaster work, including decorated fibrous-plaster work; G. C. Cuthbert, copperlite glazing; W. H. Collier & Co., special bricks and arch tiles; J. Compton, Ltd., organ; C. W. Courtenay & Co., stonework; Archibald D. Dawnay & Son, steelwork; Express Lift Co., lifts; J. W. Gray & Son, lightning conductor; Haywards, Ltd., casements; Helliwell & Co., casements; J. A. King & Co., pavement lights; London Asphalte Co., asphalt; Malcolm MacLeod & Co., Ltd., concrete steps throughout building; M. & R. Moore, marble work; F. H. Pride, electric light fittings and bronze standards; Geo. Pixton & Co., theatre chairs; Reading Boiler Setting Co., boiler setting; Sinclair & Co., fire hydrants; Stephens & Carter, flagstaffs; Sturtevant Engineering Co., vacuum cleaning installation; Synchronome Co., Ltd., electric clocks; Waring & Gillow, painting, decoration, carpets, and curtain; Young, Austen & Young, heating and ventilation; Robert Young's Construction Co., joinery; Mr. Basil Davis was responsible for the design of the electrical installation.

The ornamental grille and electric torches on each side of the main auditorium were executed by Light Steelwork, Ltd., 178, York-road, King's Cross. The same firm were also responsible for the front entrance door grilles, the upper rails, iron stairs, and lights in this building.

The complete fire protection has been undertaken by Messrs. Sinclair & Co., of 8-9, Clerkenwell Green, London, E.C.1.

Kensington Cinema.

The seating accommodation of this cinema is 2,370; with allowance for standing the total is 3,200. The estimated cost is £150,000. The general contractors are Messrs. Joseph Mears, Ltd., and although all the sub-contracts are not let, the following have been allocated:—Steelwork, Messrs. Morland, Hayne, Ltd.; granite work, Mr. W T. Goodale, Twickenham; artificial stone, Messrs. The Impervious Stone Co.; casement and cast-iron facias, Messrs. The Luxfer Prism Syndicate, Ltd.; faience work (terra-cotta), Messrs. Shaw's Glazed Brick Co.; architectural modelling to exterior, Messrs. John Daymond & Co.

The architects are Messrs. Granger & Leathart; quantity surveyors, Messrs. Booth E. Dickie.

Palais de Danse, Nottingham.

The main entrance is at the point of a triangle, and this has been made the most important feature of the external treatment, of which all elevations are executed in Weldon stone. Over the entrance lounge the roof is formed with a concrete flat covered with "Ragusa" asphalte, it being the intention to form a roof garden or open-air café for summer use. The entrance vestibule is executed in stone, and leads into the foyer. On each side of the foyer doors lead into cloakrooms, &c. The main entrance to the salon dansant leads direct from the foyer, which passes into a promenade surrounding the whole of the dance floor. This will be used for the service of light refreshments whilst dancing is in progress. There are four main staircases leading from the promenade to a balcony promenade, which entirely surrounds and overlooks the salon dansant. This also is designed for the service of refreshments. There is a series of electric lifts connecting the balcony promenade, dance floor, and supper rooms under.

The walls of the dance floor, balcony, smoke lounge, and supper rooms are decorated with Columbian pine panelling treated with the "Drytone" process. The main ceiling is cambered and divided into panels, which have grilled openings in them and extract fans over. The whole of the fibrous work in the salon dansant is designed in the Georgian style. The dance floor is of the latest type "Valtor" spring floor. A feature is made of the tympanums at both ends of the salon. These will contain frescoes depicting the spirit of dance and carnival.

The general contractors are Messrs. W. & J. Simons, of Nottingham, and the sub-contractors are:—Steelwork, Messrs. W. Richards & Sons, of Leicester; heating, Messrs. Goodacre, Glover, & Butler, of Nottingham; ventilating, Messrs. Goodacre, Glover & Butler; fibrous work, Messrs. W. J. Wilson & Son, of Mansfield; external stone work, Messrs. The Croft Granite Co.; asphalte roofs and flats, The Ragusa Asphalte Co.; sanitary goods, Mr. F. Binley, of Nottingham; spring floor, The Valtor Spring Floor Co., Ltd.; ornamental ironwork, electrical work, &c., by various contractors.

Messrs. Thraves & Dawson are the architects.

"Majestic" Picture Theatre, Leeds.

This theatre has separate entrances from Wellington-street and Quebec-street, Leeds, into entrance halls with staircases to balcony level and the rotunda and parterre level. The rotunda has two galleries, giving access to the balcony. The two foyers are 34 ft. by 24 ft. The auditorium provides accommodation on the parterre level for 1,400 persons; and the balcony accommodates 1,200. There are two exits from the balcony and four from the parterre. A platform has been arranged in front of the screen. The heating and ventilation are a combined system, whereby filtered and humidified air is forced into the building, heated in winter and cooled to 15 deg. below outside temperature in summer; the whole of the air in the building is changed four times every hour.

Messrs. P. J. Stienlet & J. C. Maxwell, of Newcastle-on-Tyne, are the architects. General building and reinforced concrete work, W. T. Weir, Howdon-on-Tyne; terra cotta, granite, sanitary fittings, Leeds Fireclay Co.; steelwork to roof, H. T. Newbigin, Ltd.; plumbing, tiling, mosaic, J. Rowell & Son; heating and ventilation, Cleworth Wheal & Co.; kitchen fittings, &c., R. Crittall & Co.; asphalt work to walls, concrete floors and roofs, Limmer Asphalt Co.; seating, J. Edgerley; rubber flooring, Victory Rubber Co.; parquet flooring, Turpins' Parquet Flooring Co.; granite columns, Emley & Sons; canopies, casement gates, &c., Haywards, Ltd.; staircase casements, Crittall Manufacturing Co.; pavement lights, fibrous slab, &c., J. A. King & Co.; vacuum cleaning, British Vacuum Cleaner Co.

"Central" Cinema, Bury St. Edmunds.

This cinema is in course of erection for the Central Cinema Co., Ltd. The windows in the auditorium will be made to open for ventilation and sunlight when the theatre is closed, and also for light when cleaning; roller shutters will be arranged outside each window and the glass will be illuminated by electric lights behind, the glass being deep blue cathedral glass from Messrs. Pilkington.

The contractor is Mr. F. R. Hipperson, Norwich and London, and the sub-contractors are: Steelwork, Messrs. Boulton & Paul, Norwich; heating, lighting and ventilating, Messrs. Allen & Son, Cambridge; plasterwork, Mr. R. Green, King's Lynn; metal windows, Messrs. Crittall, Braintree; asphalte roofing, Messrs. The London Asphalte Co.; asbestos tiling, Messrs. The British Fibrocement Works, Ltd.; sanitary fittings, Messrs. J. Bolding & Sons, London; marble steps, Messrs. Anselm, Odling & Co., Ltd., London; furnishings, Messrs. Beck & Windibank, Ltd., Birmingham.

Mr. A. T. Latham, 21, Bedford-row, London, is the quantity surveyor, and the architect is Mr. L. E. Cole, A.R.I.B.A., Newmarket.

The "Savoy" Cinema, Hull.

The "Savoy" Cinema, Hull, has been under the promotion of Messrs. The (Hull), Ltd. The erection of the b was commenced in October, 1922, and opened on October 29, 1923. The whole has been executed from the designs of Blackmore, Sykes & Co., architects, of chambers, Scale-lane, Hull, under whose vision the work has been carried out.

The site is a rectangular one, with fr to Morrill-street and Holderness-road, a whole area is occupied by the theatre subordinate rooms. In addition to the the scheme embodies two shops and a hall with twelve tables. The building signed in the Neo-Greek style, and the tions have been executed in narrow san bricks, white pointed, and with stone dre

The entrance has been made the feature of the front elevation, and imme over the entrance is a large central ste dow, extending through two stories. central elevation is 55 ft. high, above is surmounted the central lighting st extending a further 14 ft. in height, and is completed with an electric light of candle power. The entrance opens i entrance foyer, 30 ft. by 30 ft., architec treated in fibrous plaster and with p oak-block flooring. From the foyer two entrances to the auditorium and t staircases leading to the crush hall balcony. Ladies' and gentlemen's lav are located on respective sides of the and are approached by concealed ent The operator's box, re-winding roo attendants' room are situated betwe foyer and the auditorium. The ge room is below the operator's box. Th torium is 80 ft. in width, and the projec 75 ft. to the screen. Ground floor modation is provided for 950, with exc ally large gangway provision, so as to the exit of the audience in comfort. Th five exit doors on the ground floor.

A special feature has been made orchestra platform. The screen "Surbrite," of size 21 ft. 9 in. by 18 f is covered by electrically operated c with special lighting effects. The balc the hall provides accommodation for comfort. The balcony has a span of terminating with boxes. The balcony tered from a crush hall 80 ft. by 26 ft. a large and central fireplace recess and a ceiling. The floor is laid with polishe block flooring. The seating throughc hall is arranged so as to give an uninte view of the screen from every seat.

Spaciousness is to be noted throughc scheme; under the balcony there height of 17 ft. The ventilation building is carried out by electric conveying the air through trunks arra the roof space, from the ceiling grids, system is such as to give a complete of air in the hall six times per hour heating is on the low-pressure hot-wat tem, and is provided with an electric and pump to give rapid acceleration circulation. The electric lighting theatre has many special points, s subdued reflected light, coloured tone and "dimmer" operation. The scheme throughout is effected with s designed silk-covered fittings in blue ar The main ceiling fittings are in the lighted Grecian urns, suspended fr ceiling with silken cords attached to t coloured handles of the urns. The light ing the pictures is so arranged that the ga and the access to all seats can be d seen, and the necessity for the attenc carry hand torches is obviated.

The general contractors were Messr Greenwood & Sons, Ltd., of Hull. specialist works were executed by the ing firms:—Balcony and roof ste Messrs. Arch. D. Dawney & Sons Battersea, S.W.11; general steelwork:

wn, Son & Co., Liverpool; fibrous
: Messrs. W. J. Wilson & Son,
joinery: Messrs. R. Finch & Co.,
mbing and glazing: Mr. C. F.
ull; stonework: The Hull Concrete
Ltd., Hull; electrical installation:
Electrical Co., Ltd., Hull; seating:
olmes & Moore, Ltd., Hull; general
: Messrs. Wm. Harland & Co.,
l; organ builders: Messrs. H. S.
Co., Sunderland; oak-block floor-
s. Hollis Bros. & Co., Ltd., Hull;
nd composition flooring: Messrs.
& Co., Hull; heating: Messrs.
Russell, Ltd., Leeds; ventilation
Iessrs. Chas. Raine & Sons, Ltd.,
rnal decorating: Messrs. W. Gar-
o., Hull; slating works: Messrs.
Townesley & Co., Ltd., Hull;
ork: Northern Asphalte and Roofing

" Cecil " Theatre, Hull.

e is at the corner of Brook-street
by-road, and adjoins the Para-
n of the L.N.E.R., and is adjacent
val Station Hotel. The new build-
eplace the present Theatre de Luxe
eing entirely pulled down, and the
site which itself is nearly twice the
e present Theatre de Luxe is being
the building site for the proposal.
esign of the building generally,
ines are being followed, and the
o Brook-street and Anlaby-road will
d in two-inch sand-faced bricks,
ted, and with stone dressings, pilas-
cornices. The base of the structure
rried out in granite. The entrances
lding are located at the angle where
structed on the arc of a circle.
tion of the building extends to a
53 ft. above the pavement. The
are broken with windows to the
and foyers.

rance to the building opens into a
oyer with a domed ceiling, the
g finished in marble mosaic and
carried out to the frieze level in a
reatment. In the entrance foyer
cated a ticket office, passenger elec-
or the conveyance of the patrons to
y and crush hall, and adjacent to
the balcony staircase. Doors also
the entrance foyer into the audi-
yer, where it will be so arranged
limination of outside queues can be
for. At the far end of the audi-
er is another staircase giving access
lcony crush hall. The operators'
erator room, and re-winding room
uated below the balcony level so as
e the best projection possible.
ng accommodation on the ground
,004, and there will be seating in
y for 696, giving a total of 1,700
hole building. Every seat in the
give a full view of the picture, and
be no columns or other obstructions
rt of the hall. A special feature is
le for the seating for this building.
of the seats from back to front is
le greater than is provided generally
s.

cony is divided into two levels with
de gangway giving 286 seats to the
ony and 410 seats for the upper bal-
building is 85 ft. in width, and will
ers of seats. The balcony seating is
l from a large crush hall 70 ft.
and which in itself is approached
ge lounge. The crush hall is being
o as to obviate the patrons for the
aving to queue up outside the build-
ding roof over a portion of the area
l so as to allow direct fresh air to
building and assist in obtaining the
le atmosphere in the theatre itself.
e ventilation system is also being
n such a manner as to give a com-
ge of air in the whole building six
y hour.
ting will be on the low pressure hot
em, provided with an electric motor and pump to give rapid acceleration to the system. Ladies' and gentlemen's lavatory accommodation is provided at each end of the building. Spaciousness will be in evidence throughout the entire scheme, and the underside of the balcony is being kept at a high level so as to entirely obviate any possibility of a depressing effect which is sometimes felt under the balconies of picture houses. Special features will be made of the electric lighting to the theatre, so as to obtain subdued electric lights, coloured tone effects with dimmer operation. The lighting during the showing of the pictures will be provided in such a manner that the gangways and access to all seats can be distinctly seen without any necessity for attendants to carry hand torches. The picture screen to be adopted for the theatre, in view of the width of the theatre, will be one of the largest in the country. Electrically operated curtains will cover the screen and special lighting effects will be provided in connection therewith. The skeleton construction of the building is of steel. The balcony, accommodating 700 people, is carried by a 20-ton main girder, 85 ft. span, without any intermediate supports in the auditorium, and by the other secondary girders and cantilevers. The roof construction is specially designed to assist in the rapid construction of the building, and is mainly carried by stanchions in the walls, enabling a large portion to be erected without waiting for the brickwork to be completed.

Messrs. Con. Greenwood & Sons, Ltd., De Grey-street, Hull, are the contractors, and following is a list of the sub-contractors:—Joinery, Messrs. John Taylor & Son, Saner-street, Hull; plumbing and glazing, Messrs. W. G. Padgett & Son, 89, Great Thornton-street, Hull; stonemasons, Messrs. The Hull Stone Co., Ltd., Lorraine-street, Hull; fibrous plaster, Mr. George Dobson, Saynor-road, Leeds; painting and decorating, Messrs. Lightowler & Son, 87, Beverley-road, Hull; slaters, Messrs. Dawber, Townsley & Co., Ltd., The Metropole, West-street, Hull; constructional steelwork, Messrs. Archibald D. Dawnay & Sons, Ltd., Steelworks-road, Battersea, S.W.11; heating, Messrs. Rosser & Russell, Ltd., 21, Aire-street, Leeds; ventilating, Messrs. Charles Raine & Sons, Ltd., 1, Cleveland-street, Hull; terra-cotta, Messrs. Alfred Whitehead, Ltd., Prudential-buildings, Park-row, Leeds; electric lift, Messrs. Gimson & Co., Ltd., Vulcan-road, Leicester; asphalte, The Northern Asphalte and Roofing Co., Hull. The contract for the organ, furnishing, and seating has not yet been let.

Messrs. Blackmore, Sykes & Co. are the architects.

The " Beau Nash " Picture House, Bath.

This Picture House was erected in 1920 in one of the main thoroughfares of the city, with a frontage of 58 ft. to the street. Owing to the exigencies of the site, the four main entrances and exits had to be arranged on this frontage only, the building being hemmed in by surrounding property on three sides.

The auditorium accommodates 532 and the balcony 212. The balcony is framed and constructed in concrete with two main steel girders with a span of 58 ft. The steelwork for this and the roof trusses was supplied by Messrs. Redpath, Brown & Co. The contractors were Messrs. J. Long & Sons, Ltd., builders, of Bath. The internal decorations were carried cut by the Stratford-on-Avon Applied Arts Company, and the architect was Mr. Alfred J. Taylor, F.S.Arc. Cost, £13,000.

The " Victory " Picture House, Bath.

This cinema is situated in a populous suburb of the city, and was erected in 1921. The site was a large one and there were no restrictions with regard to exits. The auditorium is 91 ft. by 49 ft., accommodating 594, with a balcony constructed in reinforced concrete on two concrete beams with a span of 49 ft. The balcony accommodates 192. The heating and ventilation was efficiently carried out by Messrs. G. N. Haden & Sons, Ltd., of Trowbridge; the reinforced concrete work by the Indented Bar Co., and the decorations by the Applied Arts Company, Stratford-on-Avon. Mr. Alfred J. Taylor, F.S.Arc., was the architect. The general contractors were Messrs. J. Long & Sons, Ltd., of Bath. Cost, £15,000.

" Rivoli " Picture Theatre, Worthing.

The architects of this cinema, which has a seating capacity of 1,900, are Messrs. Birdwood & Mitchell. Messrs. Ashford Builders, Ltd., are the general contractors. The electrical installation is by Messrs. E. C. Sparkes & Co.; fibrous plaster and decoration by Messrs. P. E. Marels & Co., Ltd.; electric light fittings, Messrs. Peyton & Peyton, Ltd.; marble work, Messrs. Fenning & Co., Ltd.; Plenum heating and ventilation, Messrs. G. Geffreys & Co., Ltd.; steel work, Messrs. Hawkins, Baxter & Co., Ltd.

LONDON AND ITS BRIDGES

MR. W. R. DAVIDGE, member of the Council of the London Society, recently lectured on this subject at the English-speaking Union's rooms at Charing Cross. Brigadier-General Sir Henry Maybury, Director-General of Roads, Ministry of Transport, presided.

With the aid of old picture maps, illustrated on the screen, the development of London from Roman times was demonstrated, beginning with the earliest in existence, that appearing in Geoffrey of Monmouth's Chronicles, and it was seen how London formed round the intersection of the old Roman roads and near the most suitable fords of the Thames and its tributaries; hence the names Old Ford, Ilford, Stratford, Romford, Brentford, &c. The lecturer mentioned the following interesting historical facts: The old West Bourne river was banked up to make the Serpentine. In 1561 the spire of St. Paul's Cathedral, which stood 100 ft. higher than the top of the present dome, was destroyed by lightning. London has had its Building Acts since 1189, and in 1212 it was decreed that there should be no projection on newly-built houses of more than 2 ft. 6 in., presumably in order not to interfere with passing knights. The fine was 40s. The prohibition and fine were still retained in Building Acts, showing the continuity of tradition.

After the Great Fire it was decreed that there should be three classes of buildings of varying sizes and heights, according to the zone. London Bridge was for centuries London's only bridge, with houses and later without houses. Old Westminster Bridge was the second (1750), and twice as much Portland stone was used in it as in the whole of St. Paul's Cathedral. In 1769 followed Old Blackfriars Bridge.

ARCHITECTS' AND SURVEYORS' ASSISTANTS' PROFESSIONAL UNION

A VERY successful smoking concert was held recently by the Architects' and Surveyors' Assistants' Professional Union at Carr's Restaurant, Strand. Amongst those present under the chairmanship of Mr. J. A. Gould (chairman of the London branch) were Messrs. H. H. Creasey, W. H. Beckett, C. McLachlan, A.R.I.B.A., P. W. Farmer, T. P. Bennett, F.R.I.B.A., J. Mitchell (General Secretary), W. S. Dalton (organiser of concert), C. Adamson, E. Sandford Freeman (Messrs. Crittalls, Ltd.).

Mr. Gould, in a brief speech, said the benevolent fund was an urgent matter, and owed its existence entirely to the work of Mr. Harvey Sayer.

Mr. McLachlan said they had great enthusiasm for the A.S.A.P.U., and it was recording excellent results. It was, however, necessary to increase their membership from the respective professions. He would make an appeal for their Benevolent Fund, which not only helped members in a sudden emergency, but assisted students in the pursuit of their studies.

It is proposed to hold a dance on January 29.

LAW REPORT

Architect's Action for Fees.

MR. RICHARD MOUNTFORD PIGOTT, A.R.I.B.A., architect, practising at 35, Bedford-row, W.C., brought an action recently in the King's Bench Division, before Mr. Justice Talbot, against the Wandsworth Borough Council to recover £1,270, the balance of fees he alleged to be due to him in connection with the housing scheme of the Council which was commenced in the year 1920. The defence was a denial of liability.

Mr. Barrington Ward, K.C., for the plaintiff, said the question raised was the construction of a contract, a Government Department having instructed payments to be made on one basis and the Council on another. The figures were not in dispute, assuming that the basis contended for by the plaintiff was the right one. The plaintiff in 1919 got into touch with the defendants, who had three separate and distinct housing schemes for the district of Wandsworth, and the plaintiff was appointed to the first of the three schemes—the Magdalen Park scheme. The defendants by their defence alleged that all the three estates were part of one building scheme for housing purposes, but they were all three distinct and separate. The one the plaintiff was to carry out was an estate where the Council bought the houses completed, the second and third were building in the ordinary contract way. In August, 1919, the plaintiff was appointed as architect under the terms of the Royal Institute of British Architects' Housing scale. Then a memorandum known as No. 4 came out from the Ministry of Health, and the plaintiff was asked if he would make his fees in accordance with that, and in the result the memorandum was incorporated in the contract. Plaintiff then proceeded with the work and he appointed and paid his own clerk of works. The plaintiff's case was that the only scheme which the plaintiff was connected with was the Magdalen Estate, but the Council were instructed by the Ministry of Health to pool the fees of the three architects of the three schemes, so that the remuneration the plaintiff got for doing more work would be reduced.

Mr. Pigott gave evidence and said when he was appointed as the architect for the Magdalen scheme the other two schemes had not been decided upon.

Mr. W. R. Davidge, F.R.I.B.A., F.S.I., gave evidence to the effect that he was commissioner for the London Area for housing at the Ministry of Health, and that there were three separate schemes for Wandsworth—the Magdalen Estate, the Watney Estate, and the Furzedown Estate, and each was distinct. The architect's work on each of the three was similar; but the basis of each scheme was different.

Mr. Wingate Saul, K.C., for the defendants, contended that under the Memorandum No. 4, although several architects could be engaged on the work of a housing scheme, their fees were to be pooled on the basis of 5 per cent. on the first 12 houses, 2½ per cent. on the next 60, and 1½ per cent. on the remainder of the contract. That was irrespective of the number of architects engaged, and was to be based on the total number of houses in the three schemes.

Mr. Justice Talbot, in giving judgment, said that Mr. Pigott was retained for the building of 376 houses, and although the Ministry of Health suggested that the maximum should be 250, it was perfectly plain he was retained to supervise the building of the larger number of houses, and on the terms of the contract. He did not think that the proper way to fix the remuneration was that contended for by the defendants. The word "Scheme" referred to in the General Housing Memorandum No. 4, in his opinion, could not be interpreted in the broad sense as used in the Housing Act of 1919, and must be construed as referring to this particular scheme and not treating the three schemes the Council had in hand as one scheme. He did not think that was the true construction of the document, and he accordingly gave judgment for the plaintiff, Mr. Pigott, for £1,270 and the costs of the action.

[It should be pointed out that, although the action had to be taken against the Wandsworth Borough Council, they were not in any way responsible for withholding the balance of fees due, and, on the contrary, they had offered £1,100 after the first refusal of the Ministry to pass £1,270, the balance claimed.

The judgment given is a very important one, as there are probably other architects who are in a similar position.]

THE SURVEYORS' INSTITUTION

SIR EDWIN SAVILL, O.B.E. (President), in his opening address before The Surveyors' Institution, last Monday, said in the course of his remarks that some idea of the problems which faced a surveyor might be gathered from the syllabus of their examinations, in which it would be found that an attempt was made to divide the subjects under four main heads, viz., land agency, valuation, building and quantities, and mining.

To a candidate who had passed all the examinations which, under these four categories, comprised no less than forty-three subjects, it was a little disappointing to find that, with the qualifications which he had so arduously obtained, he was in competition with others having no qualifications at all. There was nothing to prevent anyone calling himself a surveyor; he was merely debarred from calling himself a chartered surveyor or using the letters F.S.I., denoting Fellow of The Surveyors' Institution, or P.A.S.I., Professional Associate.

There was, perhaps, no profession which touched at so many points the interests of the public, both individual and collective, as that of the surveyor. The health of both town and country dwellers depended largely on their scientific knowledge of and regard for sanitation, lay-out, sewage disposal, water supply, and management of house property. Indeed, attention to these matters by well-qualified persons had been responsible for a reduction in the death rate to a degree almost equal to that attributable to medical knowledge and research. Upon their careful and experienced management of country estates the economic production of home-grown food and timber largely depended. The good relationship between owners and occupiers of all classes of property also depended to a great extent on the tact, capacity and foresight of the agent in charge; and, also, the financial success or otherwise of the many and various transactions to which both urban and rural property were subject, and on which the well-being of both owners and occupiers so largely hung. Those of them who had had an opportunity of seeing the difference between an estate, whether urban or rural, managed by a qualified person and one managed by an unqualified person would have no hesitation in saying that the happiness and welfare of millions of people depended to a large extent upon the qualifications which they were at such pains to acquire.

Economic building, with which the possibility of letting houses and other premises at reasonable rents was intimately connected, depended to a large extent on the surveyor in respect of accurate and readily understood quantities, experienced supervision of the work in course of erection, and care and knowledge in dealing with builders' accounts on completion.

Surveyors for the last fifty-five years had been doing their best to improve their efficiency by careful and arduous study, with the object of safeguarding the interests of the public and promoting the general interests of the profession. It was for these particular purposes that their fathers formed the Institution, and he thought the time had now come when the vast efforts that they had made should be recognised, and that it should not be possible for men who had no recognised qualifications to compete with those who had spent years of their lives and considerable sums of the endeavour to render themselves out the public and professional du were likely to fall upon them.

In 1922 he was appointed chairman Committee of The Surveyors' Insti Auctioneers' Institute, and the Lan Society, for the purpose of preparing the registration of those practising in three professions. The Bill had carefully drafted under the best a as was usual in such cases, it protecte who, whether tinker, tailor, cowboy were practising or carrying out work they in the three societies specially They would all have the right to regist examination, so that no one who earning his living by work similar would suffer in the smallest degree. after the Bill became an Act, howev would be able to register who had no by the passing of an examination ap a board representative of the profess the Government departments concern would in no way be compelled to join promoting societies. To him there a be no hardship in this. They were that all those who were now practisi continue to practise, but that in t others who intended to practise sh render themselves qualified to do so.

One would have thought that such would have met with the hearty ap kindred professions and of others wh the present position. He was sorry t was not so. The Bill was meeting siderable opposition, the most strenuo from an unexpected source, namely, profession. This was the more di understand as special provision was m Bill to allow members of the legal p architects, engineers, and other pr men possessing recognised qualifica continue to carry out any duties wh had at present the right to engage in that right being removed or restricte proposals contained in the Bill.

A Bill like theirs could be succes if it were made popular by reasoned and propaganda. It was in the in the public that the Bill should be and as their President, he asked e of the 6,000 members of the Insti do their utmost to bring its fairnes advantages before the public and be Members of Parliament (they covered country), and to use all their weigh suading those with whom they had in help it on in every possible way. It hoped that the Government departm whom they mostly came in contact w them their support. They recogn legislation was not easy to secure unde conditions, and some considerable ti possibly elapse before their aims wer The time, however, must largely dep the profession itself, and the manner its members were able to influence t to understand how intimately their were concerned.

AUCTIONEERS AN REGISTRATION

The Incorporated Society of Auctio Landed Property Agents recently had cation for incorporation without the word "Limited" granted.

Sir R. Woodman Burbidge is Presid Society, and it was until a short t known as the National Society o Property Practitioners, formed in 19 purpose of opposing the proposed R Bill affecting auctioneers and survey organisation has, we understand, a co membership, and its council is cor practitioners under the chairmansh E. K. House (Messrs. William White Secretary is Mr. Methuen A. Fh the office is at 42, Finsbury-square.

CHITECTS' AND LDERS' INQUIRY BUREAU

d to give questions and answers but cannot sibility for contributed replies, especially on

peal to our correspondents to submit their per of a size easily filed, and written as sible, or better still, in typescript?—ED.

Hollow Walls.

a house recently built there has been f damp working through at fairly ervals. The walls are in cavity work, hell being in 2 in. bricks and the inner y 3 in. common bricks. It looks as s of damp may occur where the wall been built in, though there are whole rows that appear all right. The ties a very usual twisted galvanised iron Can any of your readers suggest a ne phenomenon, which is quite beyond

"CAVITY."

Cinder Tracks.

Y TO "SPRINT," OCTOBER 31.]

cinder track should consist, first, oundation, composed of 6 in. of broken imilar material; second, a drainage n. of coarse clinkers, and then succeed- of finer clinkers graded from 1 in. n to ¼ in. do.; with a final dressing uff, composed of two parts ashes to of flue dust. The track should then vith a light roller to produce an even, surface, after which the heavy roller pplied to finally consolidate. I trust be sufficient information for your dent.

"ROAD-MAKER."

Communal Laundries.

PLY TO "SUDS," OCTOBER 31.]

here are several housing schemes in . area where communal laundries are and much appreciated by the tenants. tter of organisation to prevent friction ite periods in each week for the indi- nants should be allotted and sufficient vided to ensure that the roll can be ach week, not forgetting vacant time laundry can be cleaned out.

"CITIZEN."

Filter Beds.

Y TO "SANITAS," OCTOBER 31.]

our correspondent will find a great ent in his experience if he adopts destructor clinkers for the material r bed. There is far less fouling with rial than with ordinary coke breeze, val, though necessary at intervals, is a very much less frequent need.

"SEPTIC"

ewage Contaminated Water.

"YOUNG BUILDER," OCTOBER 31.]

ithout attempting to give a legal n the point raised by your corres- I should express the opinion that t ground for compensation from the rities, if the contamination of the e proved to be due to a fault in the er. The suggestion that the sewage k along the branch drain is very r the filling round drains has of be lightly rammed to avoid fractur- pes, and is, consequently, the least d of the ground round about, and orous. It would be well to ask the rity for a test upon the suspected ewer, and it is only just to agree to t of such test if suspicion has been A very frequent point of fault is onnection with the sewer where it is ult to make an absolutely water- This brings one to another point. ral rule, a public sewage system ublic water supply, and if it is the case here that there is a public water supply, I should strongly advise your correspondent to avail himself of it. His well is far too close to soil drainage to be safe, and there are evils following the drinking of contaminated water that cannot be compensated for in terms of money. There will also always be the risk of faults occurring in his own drain, which is only 6 ft. away.

"HEALTH FIRST."

Zinc Gutters.

SIR,—I shall be glad if any of your readers could recommend some material that can be used for painting over zinc valley gutters over bay windows, the usual small perforation having taken place through the wet weather.

E. H. DASHWOOD.

Made Ground.

[REPLY TO "CONFIDENT."]

SIR,—Safe loads to be placed on earth are a matter of personal judgment, and should be settled by inspecting the soil on site. Good made ground would bear ½ to 1 ton per ft. super. Compact earth (vegetable soil being removed) 1½ to 2 tons per ft. super. The proportion of loading depends largely upon the configuration of the surface, and the position of the site, &c. Surface clay ought not to be built upon. The weight of the superstructure must be in accordance with the carrying power of the soil.

A. SOUTH.

Wire Bells.

[REPLY TO "OLD-FASHIONED, OCTOBER 24.]

SIR,—In reply to your correspondent, I consider that the best specification for wires for hanging bells is, one part pure tin to three or four of copper, and wires of Nos. 16 to 19 B.W.G. are suitable. The wires should be well stretched before hanging, as otherwise use will destroy the tension.

"LIVE WIRE."

Rendering Accounts.

[REPLY TO MESSRS. GARBUSIL, LTD., OCTOBER 31.]

SIR,—I am very pleased to amplify my letter upon the above subject. The omission of a specific percentage was intentional, and to emphasise the necessity of basing an estimate of establishment charges upon the actual figures of experience. In saying that this estimate would serve as a useful guide as to the good or bad organisation of the business, I still did not have in mind any arbitrary figure, but rather meant that the builder who found year by year from his own figures that the percentage he had to allow for such charges was decreasing in spite of the expansion of his business, could congratulate himself that things were going well. A progressive increase should, on the contrary, give him furiously to think as to what branch of his business was not functioning properly. Pressed for a figure by your correspondents, I should say that 6 per cent. is a good mean, and that 5 per cent. and under for any length of period would indicate a business run on economical lines, and 7½ per cent. and over one run on extravagant lines. I repeat however that the point of importance is the progression or degression of the individual case.

"ARCHITECT."

The Therm.

SIR,—It seems rather late in the day to ask the question, but I should be very interested to have the meaning and purpose of the "therm" explained in simple unofficial language.

"CONSUMER."

Brick Footings.

SIR,—I am proposing to build a block of flats in the London area upon a wide spread of reinforced concrete foundations, owing to the nature of the sub-soil. The L.B.A. demands brick footings under all walls, which in such a case as this are obviously not necessary. Can you inform me if the District Surveyor has power to exercise his discretion in a case like this, or, if not, if there is any relief?

"PROVINCIAL."

Covering Power of Enamel.

SIR,—Would you kindly inform me what area per gallon should be covered by a good quality enamel?

"DECORATOR."

Running Cost of Electric Lifts.

SIR,—I should be glad to know what would be the probable running cost in London of an electric passenger lift, with a travel of about 50 ft. and car for six people.

"STATISTIC."

BUILDING COMMITTEES

IT will be remembered that on October 11 the Minister of Health announced that in pursuance of undertakings given when the Housing (Financial Provisions) Act of 1924 was before the House of Commons, he had taken steps to appoint committees of the building industry and of the manufacturers and suppliers of building materials to advise and assist him in carrying out the scheme embodied in the Act, particularly as regards the development and co-ordination of the supply of labour and materials for house building.

The Building Industry Committee, whose primary function is to assist in the augmentation of the supply of skilled labour, is at present composed of representatives of employers and operatives, but representatives of the manufacturers and suppliers of building materials will be added when nominated by them. Two meetings of this committee have already taken place, the first on October 16 and the second on October 20. Meetings of various sub-committees have also been held in the meantime, including a meeting in Glasgow of the Scottish Advisory sub-committee whose representatives cordially associated themselves with the policy of the main committee.

The committee has issued a circular letter to local organisations of employers and operatives throughout Great Britain drawing attention to the proposals for securing the necessary increases in the skilled ranks of the building industry contained in the report upon the building industry by representatives of employers and operatives issued in April last, asking for the appointment of local joint apprenticeship committees throughout Great Britain in order to help in carrying out these proposals and urging the desirability of complete co-operation in all steps proposed to secure the desired end. Pending the formation of these local committees the building Industry Committee is considering the machinery which should be set up for carrying out the other recommendations made in the report.

The College of Estate Management.

The following is the programme of special lectures for the winter session 1924–5. All lectures commence 5.30 p.m. (Tuesdays):—1924: November 18, "Tithe Redemption," Mr. P. W. Millard, LL.B.; November 25, "Building Contracts," Mr. W. T. Creswell, Barrister-at-Law, Lic.R.I.B.A.; December 2, "Compulsory Acquisition of Land," Mr. E. W. Eason, F.S.I., F.A.I.; December 9 and 16, "Rating of Special Properties and Public Undertakings," Mr. C. Dalgliesh, F.S.I. 1925: January 6 and 13, "Some Forest Insect Problems," Dr. J. W. Munro, D.Sc.; January 20, "Management of Landed Estates," Mr. F. G. Burroughes; January 27, to be arranged; February 3, "Organisation of a Professional Office," Professor Lawrence R. Dicksee, M.Com., F.C.A.

Books Received.

ENGINEERING ABSTRACTS. Edited by W. F. Spear. (London: The Institution of Civil Engineers.)

TALKS ON TOWN PLANNING. By H. V. Lanchester. (London: Jonathan Cape, Ltd.) Price 4s. 6d.

THE BUILDING TRADE

ESTIMATING FOR SMALL BUILDERS

By J. H. BARNS, F.I.O.B.

HARDWOOD FOR JOINERY.

THE purchase of hardwood for joinery is even more complex than deal, as each variety has many qualities and methods of measurement.

MAHOGANY.

This is usually imported into this country in logs and sold either to the large merchants direct or to other timber dealers by public auction. The sales are usually advertised in *The Builder*. Mahogany is sold in the log at what is known as brokers' measure, which seems to consist of a rule by which 12 in. is charged as 10½ in., with an allowance for faults and defects, and this would mean in practice that about 25 per cent. less is charged for the wood by brokers' measure than for actual contents, so that it would pay a timber merchant to sell the mahogany at the same price per ft. super as he himself paid for it, if he were allowed to charge the actual contents of the log, instead of the usual brokers' measure. After the mahogany is cut and seasoned, it is then sold by board measure, by which the actual contents of the board are measured and charged. It is usual to mark the superficial area of each board on the board itself to facilitate checking.

HONDURAS MAHOGANY.

The price of this mahogany varies considerably with the qualities of the wood. In the log it would cost from 9d. to 2s. 6d. per ft. super as 1 in. If bought properly seasoned from a timber merchant it would cost from 1s. 6d. to 4s. per ft. super as 1 in., the price depending upon the width and length of the boards and the general quality, figure of the wood, and freedom from defects. An ordinary width of a board cut from a log is 18 in., and for this the lower price may be charged; but for greater widths up to 3 or 4 ft., higher prices are charged. If special boards are allowed to be selected from a log they may be charged at about 2d. per ft. extra.

½ in. mahogany, 1/– per ft. upwards.
¾ in. „ 1/3 „ „

Some of this wood is imported sawn to different widths and thicknesses, with a square edge and of an average length of about 10 ft., and about 6 in. to 18 in. wide. This of course saves considerable loss, which is incurred by straightening the board cut from the log and ripping off the sappy edges and defects. The price is correspondingly higher for prime wood and for second quality stuff the price is much lower.

CUBA MAHOGANY.

This is imported in small quantities and the price would be within the range of figures mentioned for Honduras, except for selected parcels, the price of which would depend on the amount of figure in the boards. In some instances of exceptionally finely figured boards they have fetched up to 26s. per ft. super as 1 in.

AFRICAN MAHOGANY.

This is usually imported from Cape Lopez, Lagos, Benin, Grand Lahou, and Grand Bassam, in logs, and is mostly of excellent quality. Cape Lopez wood usually arrives in comparatively short lengths, and is of light colour. Lagos and Benin woods are of long lengths (from 20 to 30 ft.) and great widths (24 in. to 42 in.), but are sometimes a little dark in colour. Some of the wood has a grain very much like cedar. The Grand Bassam wood as an average seems to be the best mahogany imported, both in length, width, colour, and general texture of the wood.

The price of African mahogany in the log would be from 9d. to 1s. 6d. per ft. super as 1 in., and if seasoned would fetch from 1s. 3d. to 2s. per ft. super as 1 in. Nicaraguan mahogany is imported in round logs often about 18 in. diameter. It is of light colour and the price is about equal to African mahogany, similar quality and size.

While it may be easy to distinguish between different samples of Honduras, African, or Cuba mahogany, one frequently meets with some African mahogany which it is almost impossible to distinguish from Honduras, and Honduras mahogany which it is almost impossible to distinguish from African or Cuba. Honduras mahogany has few of the lightning or "falling" shakes. These are not infrequently met with in African mahogany, and where they occur the board would readily split into pieces 2 ft. long, so much so that it is almost impossible to work it by machine, and the log is more or less useless, at any rate, for builders' purposes. A piece of nice even grain African or Honduras mahogany would machine almost as easily as deal, but not infrequently one meets with a piece of stuff which is woolly, and this considerably runs up the cost of working.

OAK.

Wainscot oak billets are imported from Austria and Czecho-slovakia, &c. If purchased in the billet, these are usually sold by calliper measure, by the customs fund measurer. The calliper is used to take the sizes of the log, which is measured at the widest part, and therefore by calliper measure you will be paying for 25 per cent. to 30 per cent. more timber than is actually in the billet; in other words, you are making 25 per cent. to 30 per cent. loss on measurement. This would also apply to some birch logs. Some of the highest grades of wainscot come from the Austrian districts. Prices from 2s. to 4s. per ft. super as 1 in.

JAPANESE OAK.

This is now imported sawn to different sizes as scantlings and graded either as plain (*i.e.*, straight grained) or figured. When cross cut, some of the cheaper qualities have a caney appearance on the end section. The quality is usually very good, and the price, which will depend upon the length, width, and general quality, is from 1s. 6d. to 2s. 6d. per ft. super as 1 in.

AMERICAN OAK.

As now imported, this is often of low grade, but for equal quality the price is about the same as Japanese. A cheap kind of sa imported in planks and called "W It has a strong reddish colour. Whe develops shakes and splits. The pr 8s. to 10s. per ft. cube.

TEAK.

This is usually imported from Rangoon, and Moulmein, and is sa ferent sizes and very carefully gra prime quality is usually perfectly defects. A fair average length for be 9 ft. For anything over this the considerably. The prices are from 2s. 6d. per ft. super as 1 in., for ordin and lengths.

In selecting teak for joinery it is to be careful to get the milder woo those of the B.B.T.C.L., as they ar more easily worked than some of brands, such as "Steel." No doub nary purposes the harder brands employed.

PRIME AMERICAN WHITEWO

1 in. thick by 8 in. and upwards per ft. super.
1 in. thick by 18 in. wide, 1s. 1d. pe
Other thicknesses at *pro rata* price
Planed whitewood same prices.

Eng. and Yang.—Sometimes use substitute because of its reddish bro

This wood develops splits and sh drying. While not perhaps poisonou it gives off an objectionable smell w cut. Price about 9s. per ft. cube.

AMERICAN WALNUT.

This costs about the same price as mahogany for similar quality and wood. Before the war American w largely used for furniture, being o cheapest of the imported hardwoods that the price has gone up the fa changed, less walnut seems to be in

KILN DRYING.

It is not unusual nowadays when cut to put it in the kiln to have the v by some hot air system. This proce takes about three to four weeks, an is about 1s. 6d. per ft. cube.

The following are the prices for sa woods, &c. :—

PRICE LIST OF TIMBER SAWING.

	Width.	Under 1¼ in. per 100 ft. super.	1¼ in. per 100 ft. super.	Pl
Cedar, Honduras and Cuba	under 24 in.	9/3	11/–	
Oregon, Kawrie, Pitch Pine, Wainscot, American Ash, Whitewood, Satin Walnut, and Japanese Oak	„ 24 „	10/–	11/9	
Mahogany—Honduras, African, Gaboon .. Cedar, Borneo .. .. Birch and Maple (square)	„ 24 „	10/9	12/6	
American Oak and Black Walnut ..	„ 24 „	11/6	13/3	
Burma Teak	„ 24 „	13/9	15/9	
Walnut, Italian and French	„ 24 „	16/8	18/9	
Hewn Teak	„ 24 „	17/6	20/–	
Spanish and Cuba Mahogany, over 15 and	„ 24 „	13/–	15/–	
„ „ „ 15 in. and under	.....	.. 15/–	17/–	
Yellow Pine	„ 24 „	8/6	10/–	

(The prices of all woods, excepting whitewood and satin walnut, rise 1/9 per 100 ft 24 in., and under 36 in. deep; 36 in. and above, an additional 1/9 for every 6 in.)

Flatting hardwoods, 1¼ in. and under, 2/9; over 1¼ in. and including 2 in., 3/6; and including 4 in., 5/6; over 4 in. and under 8 in., 7/9; 8 in. and under 12 in., 12/6 per

One cut in planks and boards charged as two cuts.

English Oak, Walnut, Beech, Sycamore, Planetree, Fir, Elm, Ash, Chestnut and Limetree	all depths	17/6	20/–	6
Foreign Round Ash	under 24 in.	15/–	17/6	o
„ Round Elm and Hickory ..	.. ..	17/6	20/–	
English and Foreign Hornbeam	.. ..	20/–	23/–	7

aring an estimate for hardwood would proceed on similar lines as eal joinery, and add a percentage on rease due to labour and materials rdwood in lieu of deal. Hardwood rorth from about three to five times the cost of deal. The waste on due to conversion into joinery is 30 per cent., and will necessarily the quality and relative freedom s of the wood being manufactured, er stuff sawn from logs is used, ils considerable waste to cut off the es, wormy parts, and other defects, known as "rags and bones," or nported square-edged prime wood the waste would be less than for from logs.

PLYWOOD.

is now largely used for a variety both for joinery and wall coverings. ill depend upon the kind of wood, usually stated in millimetres), size nd whether sanded on one or two re are six or seven different qualities nd and thickness.

Average size of Board (approx.).	Thickness.	Price per 100 ft. super.
60 in. x 36 in.	3 mm (⅛ in.)	8/6 to 15/–
,,	4 mm (5/32 in.)	10/– to 19/–
,,	5 mm (3/16 in.)	14/– to 24/–
,,	6 mm (¼ in.)	17/– to 27/–
,,	8 mm (5/16 in.)	25/– to 38/–
,,	9 mm (⅜ in.)	27/6 to 40/–
,,	3 mm ..	10/– to 24/–
,,	4 mm ..	12/– to 25/–
,,	5 mm ..	13/– to 35/–
,,	6 mm ..	18/– to 38/–
,,	8 mm ..	20/– to 38/–
,,	4 mm ..	46/–
	5 mm ..	50/–
	6 mm ..	55/–
,,	4 mm ..	76/–
	5 mm ..	80/–
	6 mm ..	85/–

ices do not include for delivery.

dity.—This would be prime of one oth sides and both faces clear of sanded both sides.

uality.—Would be machine jointed e, &c.

ality.—Face side machine jointed, knots and some small splits.

uality.—Some knots and splits on but not large knots.

ality.—Large knots and splits on

ities are not numbered as mentioned are marked with letters or the me.

Maximum Cost of Housing.

ster of Health in a recent letter to Rural District Council (Warwick- tioning the completion of a scheme tion of 276 houses, states: "It is t in the administration of the scheme l are exercising a discrimination rd to the value of the houses or with a view to ensuring that certi- ssued only in respect of houses for classes and not in respect of houses here is a market without the grant . In this connection I am to state derable number of local authorities for purposes of administration a re of cost varying from £600 to maximum all, in cost (including lits) for houses for which they will y. The Minister would anticipate of the type contemplated by the e erected at amounts not in excess res, and while he appreciates that of a maximum figure to be adopted rpose must to some extent be y local conditions, and he is pre- ave a certain discretion to local n this point, it is considered that uld not be promised in any case t cost to the purchaser or owner- eeds £600."

NEW BUILDINGS IN LONDON

Holborn, New Premises.

Messrs. Constantine & Vernon, F. and A.R.I.B.A., inform us that they have no connection whatever with the scheme of Messrs. F. W. Woolworth & Co., at these premises.

Tooting.—"The Fox" public house at Tooting, S.W., is being partially reconstructed and extended by the owners, Messrs. Watney, Combe, Reid & Co., Ltd., of Westminster, S.W. The new building will be of three floors, and will be erected in brick. The front elevation will be carried out in best quality stock brick, whilst the roof, pitched, will be tiled. The window casements will be of wood. The floors will be of wood, whilst granolithic will also be used. The whole of internal woodwork, such as bars, counters, panelling, partitions, &c., will all be carried out in oak or mahogany. The plans have been prepared by Mr. M. T. Saunders, the owners' staff architect. The builders are Messrs. E. A. Roone & Co., Ltd., 7, Urswick-street, London, E.9.

Fenchurch-street.—A new block of buildings is being erected in Fenchurch-street, E.C., to provide accommodation for office purposes. The premises will be of six floors with basement, and will have an ornamental terra-cotta front, supplied by Messrs. Shaw's Glazed Brick Co., Ltd., of Whitebirk, Darwen, and 12, Buckingham-street, Strand, London, W.C.2. Fireproof floors will be installed, whilst the roof will be covered with concrete and slates. The access to the upper floors will be reached by a main entrance and lobby, from which a lift will serve. The contractor is Mr. C. W. Ward, Fenchurch Buildings, E.C.3, whilst the steelwork has been supplied and erected by Messrs. Redpath, Brown & Co., Ltd., of 3, Laurence Pountney Hill, E.C.4. The architects are Messrs. Richardson & Gill, of 41, Russell-square, London, W.C.1. The consulting engineer is Mr. S. Bylander, 26, Old Burlington-street, London, W.1.

Threadneedle-street.—An extensive reconstruction is being carried out at the branch Post Office in Threadneedle-street, E.C. In order to cope with the large volume of business, an entirely new building is to be erected, to the designs of H.M. Office of Works, of Storey's Gate, S.W.1. The new building will be of seven stories, with fireproof floors, walls, &c., throughout. The front elevation will be of Portland stone, whilst the Mansard roof will be covered with green Cumberland slates. Two entrances will be provided—one leading to the Post Office and one to the upper floors which will be divided into offices. A complete system of heating, electric lighting, ventilating, telephone and pneumatic tubes will be installed. Lifts will also be provided, serving all floors. In the basement will be provision for books and stationery stores, strong room, heating chamber, fuel, &c. The general contractors are Messrs. Arthur Vigor, Ltd., of Knightsbridge, S.W.1., the principal sub-contractors being as follows: Steelwork, Messrs. H. Young & Sons, Ltd., Thorneycroft House, Smith-square, London, S.W.1; lifts, Messrs. Marryatt & Scott, Ltd., 57A, Hatton-garden, London, E.C.1; lift, Messrs. Aldous & Campbell, Ltd., 21, Lower Bland-street, London, S.E.1; marble and granite decorations, Messrs. Anselm, Odling & Sons, Ltd., 132, New North-road, London, N.1; masonry, Messrs. Frank Mortimer, Ltd., Samudas Wharf, Manchester-road, London, E.15; plumbing, Messrs. A. Gent & Sons, Dalston, E.

Soho-square.—New buildings are to be erected in Soho-square, W.1, for use as head offices for Messrs. Crosse & Blackwell, Ltd. The premises will be of considerable size, being eight stories in height, and large basements. The Mansard roof is to be covered with Cumberland slates, with asphalted and concreted tops. The building is being erected on a steel framework, and faced with Portland stone. The principal entrance is flanked by large ornamental windows, carried out in bronze, and lined with marble. The roofs will be concrete, reinforced on the "Truscon" system. All the windows will be of the steel casement type. Lifts will serve all floors, whilst electric light and power installations, heating and ventilating systems will be provided. The rear of the building will be extensively lined with white glazed bricks, and loading bays, &c., will be constructed. The general contractors are:—Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W., whilst the principal sub-contractors are as follows:—Steelwork, Messrs. Dorman, Long & Co., Ltd., 3, Central Buildings, Westminster, S.W.1, and Middlesbrough; stoneware, Messrs. The South Western Stone Co., 1, New-road, Battersea, S.W.8; sanitary fittings, Messrs. Adamsez, Ltd., 23, Old Queen-street, London, S.W.1; floor and wall tiling, Messrs. Carter & Co., Ltd., 29, Albert Embankment, London, S.E.11; rain water fittings and sanitary castings, Messrs. The Carron Co., Upper Thames-street, London, E.C.4; lift, Messrs. Express Lift Co., Ltd., Greycoat-street Works, Westminster, S.W.1; steel casements, Messrs. Crittall Manufacturing Co., Ltd., High Holborn, W.C., and Braintree, Essex; decorative plastering, Messrs. Carline Co., Acre-lane, Brixton, S.W.2; flooring, Messrs. Trussed Concrete Steel Co., Ltd., 22, Cranley-gardens, South Kensington, W.; asphalting, Messrs. The Ragusa Asphalte Co., Ltd., 25–27, Oxford-street, London, W.1; heating and ventilating, Messrs. J. H. Nicholl & Co., Ltd., 95, Southwark Bridge-road, S.E.1; electric light and power installation, Mr. F. H. Wheeler, 39, Victoria-street, Westminster, S.W.1. The architects are Messrs. Josephs, of 2, Paul's Bakehouse-court, Cannon-street, London, E.C.4.

Edgware, Middlesex.—The National Provincial Bank, Ltd., have bought a piece of land on the corner of Penshurst-gardens and Hale-lane upon which to build a new branch. Plans are being prepared under the direction of the chief architect, Mr. F. C. R. Palmer, F.R.I.B.A.

Finchley.—The Finchley Memorial Hospital in North Finchley, N.12, is to be extended by the erection on an adjoining site of buildings to comprise maternity wards, nurses' and domestic quarters. The additions will be built of brick with a slated or tiled roof, patent composition floors, central heating, electric lighting, &c. The hon. architect to the Hospital is Mr. Ernest A. Woodrow, F.R.I.B.A., of Ravenswood, High-road, Finchley, N.20.

Peckham Rye.—A new billiard hall and a row of shops are to be erected on the vacant site at the junction of Peckham Rye and Nunhead-crescent, London, S.E.15. A two-story building is proposed, constructed of brick, with ornamental artificial stone dressings. The shops will be on the ground floor, whilst the billiard hall will be on the first floor. The principal entrance will be at the apex of the site. The hall will be finished plain and distempered. The architects are Messrs. Dowton & Co., of 166, Rye-lane, London, S.E.15.

Empire Memorial Hostel for Sailors.

It was because of the urgent need for a home to house the 16,000 sailors from all parts of the world who sought shelter in the Port of London that it was decided to erect a lasting memorial hostel to the men—more especially those of the Merchant Service—who fell in the war. In 1917 the scheme was suggested by the Dowager Lady Dimsdale, who, in 1922, laid the foundation stone of the building which now stands opposite the Limehouse Town Hall. On Tuesday last week the hostel, which has been erected through the efforts of the Ladies' Guild, was formally opened by Princess Marie Louise. The house, for which Mr. Thomas Brammall Daniel, F.R.I.B.A., is the architect, contains 250 "cabins" simply furnished, giving private accommodation to each man; a spacious dining hall in which is erected a marble memorial tablet to the memory of those who died; recreation rooms, and a good library in which is hung a portrait of Seaman Drury, R.N.R., the first member of the Mercantile Marine to win the Victoria Cross.

LANDLORD'S FIXTURES

AN interesting point as to the repair of landlord's fixtures has been decided in the recent case, Boswell *v.* Crucible Steel Co., of America (*Weekly Notes*, November 1). By a lease made in May, 1912, certain premises to be used as a warehouse and offices were let by the plaintiff to the defendants for a term of ten years, this term having subsequently been extended for a further term of five years. By the terms of the lease, the defendants, the lessees, covenanted "to keep the inside of the premises, including all landlords' fixtures, in good decorative repair . . . and once in every three years to paint the outside of the window-frames and doors of the demised premises"; whilst the lessors covenanted to "repair, cleanse, maintain, and amend the demised premises with all necessary reparations, cleansing, and amendments, except such repairs as are hereby agreed to be executed by the lessees."

The premises fronted on two streets and practically the whole of the sides fronting these streets consisted of plate glass windows. In August, 1923, seven of these plate glass windows had been broken by some mischievous person outside, and the plaintiffs had given the defendants notice to repair them, contending that they were "landlord's fixture" within the above covenant. The defendants had refused, and in an action brought against them in the County Court the Judge had held the windows to be landlord's fixtures and had given judgment for the plaintiffs. A Divisional Court had affirmed this decision, but on appeal to the Court of Appeal these judgments were reversed. The Court of Appeal held that, as the windows formed part of the structure of the house, notwithstanding that they were affixed to the freehold, they were not "fixtures" in the legal sense and the lessee's covenant did not extend to them. The Court defined "landlord's fixtures" in a lease as meaning those things which, not being portions of the structure of the house itself, have been brought on to the premises and affixed thereto under such circumstances that they are not removable by the tenant. The case is at present only reported in the form of a head-note, but it gives a useful definition of the term "landlord's fixtures." In one of the well-known leading text-books, landlord's fixtures are defined as articles annexed by the tenant during the tenancy not falling within the exceptions of tenant's fixtures, "as well as all articles, whether of the excepted classes or not annexed at the commencement of the tenancy, notwithstanding they may have been annexed by a tenant and not removed during the previous tenancy." This, no doubt, means by a former tenant.

LAND FOR GREAT WEST ROAD

Sir Anker Simmons, K.B.E., Official Arbitrator, sitting at the Middlesex Guildhall, Westminster, heard a claim by Messrs. Dorey Brothers, Ltd., against the Middlesex County Council, regarding the Council's acquisition of the freehold interest in No. 81, Windmill-road (house, garden and sheds), and No. 83, Windmill-road (house and garden), at Brentford, for the purpose of the Great West-road.

Mr. S. G. Turner was counsel for the claimants, whilst the Hon. R. Stafford Cripps was counsel for the acquiring authority.

Mr. B. I'Anson Breach (of Messrs. Farebrother, Ellis & Co., auctioneers, surveyors and estate agents, of Fleet-street, E.C.), giving evidence for the claimants, valued No. 81 at £1,321, and No. 83 at £1,456.

On behalf of the County Council, Mr. Leslie R. Vigers (senior partner of Messrs. Vigers & Co., surveyors and estate agents, of Frederick's-place, Old Jewry, E.C.), valued No. 81 at £680, and No. 83 at £760.

The Official Arbitrator has since issued his award as follows: (1) The Acquiring Authority to pay to the claimants as compensation for their freehold interest the sum of £1,666; (2) the Acquiring Authority to pay the fees on this award; (3) all other costs to be paid by the respective parties.

RATES OF WAGES IN THE BUILDING TR

Every endeavour is made to ensure accuracy, but we cannot be responsible for er

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Lab
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam.(Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London :—								
Within 12 m. rad us	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	
From 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 801.

CONTRACTS, COMPETITIONS, &c.

me contracts still open, but not included in this List, see previous issues. Those with an asterisk rtised in this number. Certain conditions beyond those given in the following information sed in some cases, such as that advertisers do not bind themselves to accept the lowest or any that a fair wages clause shall be observed; that no allowance will be made for tenders; and osits are returned on receipt of a bona-fide tender unless stated to the contrary.

te given at the commencement of each paragraph is the latest date when the tender, or the names illing to submit tenders, may be sent in; the name and address at the end is the person from whom here quantities, forms of tender, &c., may be obtained.

ILDING AND PAINTING.

ER 17.—**Batley.**—EXTENSION.—For mason's, plumber, heating engineer's, plasterer's, painter's, and electrical engineer's work the erection of extensions to the hospital, mmittee. Messrs. W. Hanstock & Son, hon.

ER 17.—**Bristol.**—WALL.—For erection of a wall and railings at Greenbank Cemetery, or the T.C. Mr. L. S. McKenzie, City Engi- urveyor, 63, Queen-square.

ER 17.—**Hendon.**—HOUSES.—For erection es, including certain road and sewer works, .C. Mr. H. Humphris, Clerk to the Council, . Deposit £3 3s.

ER 17.—**Liverpool.**—ALTERATIONS.—For and additions to premises in Primrose-hill noy-street, for the T.C. Mr. W. Moon, , Municipal Buildings. Deposit £2 2s.

ER 17.—**Wakefield.**—ADDITIONS.—For ad- aundry at the West Riding Mental Hospital, ital Board. Mr. W. E. H. Burton, architect er. Deposit £1.

ER 17. — **Whitehaven.**— HOUSES.— Erection s on the Moesby Park site and 50 houses on hill site, for the R.D.C. of Whitehaven. l J. Good, M.Inst.M.C.E., Engineer and o the Council, Union Hall, Whitehaven. 2s.

ER 18.—**Bessbrook.**—ADDITIONS.—For al- ld additions to Bessbrook R.U.C. Barracks, nagh, for the Ministry of Finance. Mr. W. R. Assistant Secretary, Ministry of Finance,

ER 18.—**Blaydon.**—HOUSES.—For erection of at Bleach-green, Winlaton, for the U.D.C. Mulcahy, Solicitor, Clerk, Council Offices, -Tyne. Deposit £2 2s.

ER 18.—**Carperby.**—HALL.—For work re- he erection of a village hall. Messrs. F. n, architects, 10, Houndgate, Darlington.

R 18.—**Castletownberehaven.**—PAINTING— g the oil tanks, &c., at the Admiralty eal Lough, for the Commissioner of Public r. J. J. Healy, Secretary, Office of Public le Atha Cliath.

R 18.—**Dublin.**—HOUSES.—For erection 0 temporary dwellings on ground situate Keogh Barracks area, for the C.B. Mr. J. J. wn Clerk. Deposit £1 1s.

R 18.—**West Riding.**—ADDITIONS.—(1) For additional class rooms, &c., at Adwick-le- Council school; and (2) fittings required in ion of Burley-in-Wharfedale Town school as subjects centre, for the E.C. Education , County Hall, Wakefield.

R 19.—**Belfast.**—SCHOOL.—For erection of mentary school at Templemore-avenue, for Borough. Mr. R. Meyer, Town Clerk. 2s.

R 19.—**Bushey.**—BATHS.—For construction air swimming bath and contingent works George Recreation grounds, for the U.D.C. C. Payne, Clerk to the Council, Council eposit £2 2s.

R 19.—**Hornchurch, near Romford.**— For the supply and erection of about 494 ft. fencing at the Cottage Homes, for the f the Parish of Saint Leonard, Shoreditch, y Smith, F.R.I.B.A., Parliament Mansions, et, Westminster, S.W.1.

R 19.—**Swinton.**—HOUSES.—For erection of r the U.D.C. Mr. H. Birks, Engineer and ouncil Offices, Swinton, near Rotherham. s.

R 20.—**Altrincham.**—COTTAGES.—For erec- cottages on the Oldfield Brow Housing ncham, for the U.D.C. Mr. W. S. Stokoe, Council, Town Hall. Deposit £2.

20.—**Broadstairs and St. Peter's.**— .—For construction of engine foundations tions to buildings and other works, at mping station, for the U.D.C. Mr. L. A. k, Pierremont Hall, Broadstairs. Deposit

20.—**Essex.**—DWELLING HOUSES.— orkmen's dwellings houses as follows:— 1, Great Stambridge, 18 houses; No. 2, houses; No. 3, Rochford, six houses, for Rural District Council. Surveyor of the A. C. Madge, at his office at Rayleigh.

20.—**Hipperholme.**—WORKSHOP.—For d in the erection of a large engineers' r. M. Hall, architect, Harrison-road,

20.—**Ipswich.**—HOUSE.—For erection of house and ladies' and gentlemen's con- t. Matthew's Church-lane, for the T.C. Borough Engineer and Surveyor, Town t £2 2s.

20.—**Leeds.**—ALTERATIONS.—For struc- ns to premises in Alexander-street, for W. T. Lancashire, City Engineer, Muni- s.

20.—**London, W.**—PAINTING, &C.— at the Western District Post Office, , W., for the Commissioners of His ice of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 20.—**Manchester.**—For the construction and erection of concrete coal bunkers, retaining walls, abutments and bridges, &c., on the site of the proposed new gasworks at Partington, for the Corporation. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

NOVEMBER 20.—**Wallasey.**—CONVENIENCE.—For erection of a public convenience at Leasowe-road, for the T.C. Mr. Geo. Livsey, Town Clerk, Town Hall. Deposit, £2 2s.

NOVEMBER 21.—**Bognor.**—WALL.—For construction, completion and maintenance of about 810 lin. ft. of sea wall and promenade, for the U.D.C. Mr. J. Jubb, Clerk to the Council, Council Offices. Deposit £5 5s.

NOVEMBER 21.—**Cardiff.**—EXTENSIONS.—For erection of additional classrooms at the Canton Secondary School, for the T.C. Mr. J. J. Jackson, Director of Education, City Hall.

NOVEMBER 21. — **Chelsea.** — PAINTING. — External painting at the Royal Hospital, Chelsea, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 21.—**Essex.**—COUNCIL SCHOOL.—Erection of an elementary school at Dagenham for 1,050 children at Arnold-road, Dagenham, for the Essex County Council. County Architect, Mr. John Stuart, F.R.I.B.A., Springfield Old Court, Chelmsford. Deposit £2 2s.

NOVEMBER 21.—**Lewisham.**—HOSPITAL BUILDINGS.—Erection of buildings in connection with the extension of the Lewisham Hospital, consisting of two ward pavilions, each three stories high and containing 270 beds in all, operations department, and sick nurses' wards for eight beds, and the usual offices and sanitary annexes, &c., also additions of one story on the existing lunacy wards, and sundry alterations to the same; power station and chimney shaft, disinfecting pavilion, corridors, covered ways, subways, drains, roads and paths, for the Guardians of the Lewisham Union. Mr. Louis Jacob, F.S.I., quantity surveyor, 39, Bloomsbury-square, W.C.1. Deposit £3 3s.

NOVEMBER 21.—**Liverpool.**—ADDITIONS.—For building additional story at the municipal offices, for the T.C. Mr. W. Moon, Town Clerk, Municipal Buildings. Deposit £4 4s.

★NOVEMBER 21.—**Merthyr Tydfil.**—HOUSES.—For the erection of 126 houses at Treharris, for the Corporation. The Borough Architect, Town Hall, Merthyr Tydfil. Deposit £1.

NOVEMBER 21.—**Penybont.**—HOUSES.—For (1) erection of 12 parlour and 12 non-parlour houses at Pyle; 4 parlour-type houses at Sarn; and (3) six non-parlour-type houses at Sarn, for the R.D.C. Mr. R. H. Parr Cox, Clerk, Council Offices, 8, Wyndham-street, Bridgend. Deposit £2 2s.

NOVEMBER 22.—**Buxton.**—DECORATION.—For painting and decoration of the Town Hall entrance, corridors, staircase, &c., for the T.C. Mr. H. G. Curtis, Town Clerk, Town Hall.

NOVEMBER 22.—**Buxton.**—DECORATIONS.—For internal decoration of the Fairfield Infants' School, Queen's-road, for the T.C. Mr. F. Langley, Borough Engineer, Town Hall.

NOVEMBER 22.—**Feltham.**—WALL.—For executing the work, comprising brick walling, stone coping, iron railings and gates. Mr. H. W. A. Carter, Surveyor, Council Offices.

NOVEMBER 22. — **London, W.C.** — PAINTING. — External and internal painting at Somerset House, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 22.—**Rotherham.**—ALTERATIONS.—For alterations and repairs to the property situate in Fitzwilliam-road, for the B.G. Mr. W. C. Harrison, Clerk to the Guardians, 26, Moorgate-street.

NOVEMBER 24.—**Barnsley.**—PAINTING.—For work required in cleansing, painting and decorating the news room of the Free Library, the Harvey Institute, for the T.C. Mr. A. D. Mason, Town Clerk.

NOVEMBER 24.—**Carlisle.**—HOUSES.—For erection of houses on the Blackwell-road and Wigton-road estates, for the T.C. Mr. H. C. Marks, City Engineer and Surveyor, 18, Fisher-street.

NOVEMBER 24. — **Donington.** — ADDITIONS. — For alterations and additions to the Grammar School, for the Cowley's Charity. Mr. G. Smith, Clerk to the Governors, Donington. Deposit £2 2s.

NOVEMBER 24. — **London, S.W.** — DEMOLITION WORK.—Demolition work at the Ministry of Pensions buildings, Burton court and Cheltenham-terrace, Chelsea, S.W., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 24. — **London, S.W.15.** — HOUSES.— Completion of sections IV and V of the Roehampton Estate, Putney, S.W.15, as follows:—Section IV: Comprising the erection of 217 houses and administrative buildings, together with fencing, open spaces and other incidental work in connection therewith. Section V: Comprising the erection of 205 houses, including fencing open spaces and other incidental work, together with roads and sewers, for the London County Council. Architect to the Council, The County Hall, (Room No. 3), Westminster Bridge, S.E.1. Deposit £5 (payment to the Cashier).

NOVEMBER 25.—**Durham.**—SCHOOLS.—For builders work in connection with the alterations and improvements to Annfield Plain infants' school, and builders' work in the adaptation of existing buildings into an elementary school to accommodate 300 boys at Elisabethville school, for the C.C. Mr. A. J. Dawson Director of Education, Shire Hall.

NOVEMBER 25.—**Glasgow.**—VARIOUS.—For works required in connection with the proposed erection of 155 houses at Langlands, Govan, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers.

NOVEMBER 25. — **Greenwich, S.E.** — CHEMICAL LABORATORY.—Erection of a new Chemical Laboratory at H.M. Fuel Research Station, Greenwich, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 25.—**Margate.**—PAVILION.—For erection of a steel and timber bathing pavilion on the Marine-terrace sands, for the T.C. Mr. E. Brooke, Town Clerk. Deposit £5.

NOVEMBER 25.—**Newhaven.**—WALLS.—For erection of boundary walls, oak park fencing, entrance gates and piers, with formation of access roads to the extension of the Cemetery, for the U.D.C. Mr. C. G. Mainwood, Clerk to the Council, Newhaven. Deposit £2 2s.

NOVEMBER 25.—**Richmond (Surrey).**—OFFICE.— For erection of an office at the Cemetery Lodge, Grove-road, for the T.C. Mr. H. Sagar, Town Clerk, Town Hall, Richmond, Surrey. Deposit, 10s. 6d.

NOVEMBER 25.—**Tonbridge.** — HOUSES.— Erection of 40 houses (comprising eight parlour and 32 living-room types) in Snipbourne-road, Tonbridge, for the Urban District Council of Tonbridge. Mr. W. Laurence Bradley, Engineer and Surveyor, The Castle, Tonbridge. Deposit £2 2s.

NOVEMBER 26.—**Altrincham.**—ADDITIONS.—For erection and completion of additions to classroom building and new manual instruction and art-room block at the County High School for boys, for the Chester C.C. Mr. H. Beswick, County Architect, Newgate-street, Chester. Deposit, £1 1s.

NOVEMBER 27.—**Brierley Hill.**—HOUSES.—For erection of about 200 houses, in blocks of two, three, four, and six, on sites at Broadfields, Springfields, Mill-street, Brierley estate, for the U.D.C. Mr. E. W. Waldron, Clerk to the Council, Council Offices, 45 High-street. Deposit, £3 3s.

NOVEMBER 27.—**Cork.**—OFFICES.—For erection of new municipal offices on the site at Albert quay, for the Corporation. Mr. W. Hegarty, Town Clerk, Town Clerk's Office, School of Art. Deposit £2 2s.

NOVEMBER 27. — **Coventry.** — TELEPHONE EXCHANGE.—Erection of a Telephone Exchange at Foleshill, Coventry, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 28.—**Norfolk.**—REPAIRS.—For repairs to Marsh Farm premises, Great Winkle Level, Burgh St. Margaret, Norfolk. Mr. V. Playle, County Land Agent, Shirehouse, Norwich. Deposit £1 1s.

★NOVEMBER 29.—**Conway.**—COUNTY COURT.— Erection of county court and other extensions at the Guildhall, for the Conway B.C. Messrs. Douglas, Minshull & Muspratt, architects, 6, Abbey-square, Chester. Deposit £2.

★NOVEMBER 29.—**London, W.1.**—ALTERATIONS AND REPAIRS.—Tenders are invited for the following works: (1) Alterations, repairs, &c., Guardians' Offices, Northumberland-street, W.1.; (2) sundry alterations, repairs, &c., to the receiving wards, St. Marylebone Home, Northumberland-street; (3) repairs to chimney stack, Hospital, Rackham-street, W., for the St. Marylebone Board of Guardians. Messrs. Constantine & Vernon, architects, 82, Mortimer-street, W.1. Deposit £1 Treasury Note.

NOVEMBER 29.—**Sligo.**—EXTENSIONS.—For erection of a cattle loading bank, over 700 ft. long and 25 ft. wide, together with the necessary railway siding and connections, also extension of an existing siding, at their Collooney Station, in the county of Sligo. Mr. S. C. Little, Secretary, Head Office, Enniskillen. Charge, 10s.

NOVEMBER 29. — **Thomastown.** — REPAIRS. — For carrying out certain new works and repairs to cottages in Scheme No. 6, for the Sailor and Soldiers' Department. Mr. R. E. Beckerson, Sailor and Soldiers' Department, 30, Fitzwilliam-street, Dublin. Deposit £1 1s.

★DECEMBER 1.—**Tottenham, N.**—DWELLINGS.— Erection of 70 three-story dwellings in Lordship-lane, on the White Hart-lane Estate, Tottenham, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit, £2 (payable to the Cashier of the Council).

★DECEMBER 3.—**Hove.**—TELEPHONE EXCHANGE.— For the erection of telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NO DATE.—**Carlisle.**—PAINTING.—For painting work, &c., proposed to be executed at the Grammar School. Mr. H. E. Ayris, architect, Carlisle.

★NO DATE.—**Hertford (Herts).**—COTTAGES.— Erection of 200 cottages in the parish of Welwyn Garden City, in the county of Hertford, for the Welwyn R.D.C. Mr. P. Elton Longmore, Clerk to the Council, 24, Castle-street, Hertford, Herts. Deposit £2 2s.

NO DATE.—**Royston.**—HOUSES.—For work required in the erection and completion of 48 non-parlour and eight parlour type houses, on ground situate off Station-road, for the U.D.C. Mr. J. Raley, Clerk to the Council, Regent-street, Barnsley.

NO DATE.—**Sudbrooke.**—HOUSES.—For erection of 12 villas. Mr. W. H. Woods, architect and surveyor, Long Eaton, near Nottingham.

FURNITURE, MATERIALS, etc.

NOVEMBER 17.—**Norfolk.**—MATERIALS.—For supply of granite, gravel, flints, marl, chalk, and sand, for the C.C. Mr. S. H. Warren, County Surveyor, Shirehouse, Norwich.

NOVEMBER 17.—**Romford.**—GRANITE.—For supply of about 7,000 tons of broken granite, for the R.D.C. Mr. T. W. A. Greenhalgh, Clerk to the Council.

NOVEMBER 17.—**West Hartlepool.**—MATERIALS.—For supply of footpath and road materials, sewer pipes, metal castings, Portland cement, for the C.B. Mr. F. Durkin, Borough Engineer, Municipal Buildings.

NOVEMBER 20. — **Stockport.** — MATERIALS. — For materials required in excavating, sewering, forming, paving, curbing, and flagging Vicarage-road, Willis-road, Beech-road, Haslam-road, &c., for the C.B. Mr. H. Hamer, Borough Surveyor, Town Hall.

★NOVEMBER 21.—**Aldershot.**—MATERIALS FOR HOUSES.—Supply of the necessary materials required for the construction of 50 houses by direct labour, for the Corporation of Aldershot. Borough Surveyor (Mr. James Neave), Municipal Buildings, Aldershot, marked "Housing."

NOVEMBER 21.— **West Sussex.** — GRANITE. — For supply of broken granite quartzite, for the C.C. Mr. H. W. Bowen, M.Inst.C.E., County Surveyor, County Surveyors' Office, Southgate House, Chichester.

NOVEMBER 25.—**London.**—WOOD BLOCKS.—For the supply and delivery of about 30,000 creosoted yellow deal paving blocks, for the Islington B.C. Mr. C. G. E. Fletcher, Town Clerk, Municipal Offices, Tyndale-place, Upper street, N.1.

ENGINEERING, IRON AND STEEL.

NOVEMBER 20.—**Chile.**—HARBOUR WORKS.—For harbour works in the port of Lebu. Chilean Legation, 22, Grosvenor-square, W.1.

NOVEMBER 22.—**Great Holland.**—RECONSTRUCTION. —For reconstruction of Gt. Holland Bridge and other works on the Kirby Cross-Clacton-road for the Essex, C.C. Mr. W. H. Morgan, County Surveyor, Old Court, Chelmsford.

NOVEMBER 22. — **Selby.** — BRIDGE. — For works required in the construction of a ferro-concrete bridge, together with the necessary approval works, for the West Riding C.C. Office of the Clerk of the C.C., County Hall, Wakefield. Deposit £1.

NOVEMBER 22.—**Warth.**—BRIDGE.—For construction of a large skew masonry bridge over the River Irwell and a smaller bridge over Bealey's Goit, for the Lancashire C.C. Mr. G. Hammond Etherton, Clerk of the County Council, County Offices, Preston.

NOVEMBER 24.—**Malton.**—BRIDGE.—For construction of a reinforced concrete footbridge alongside the existing bridge over the River Derwent between Malton and Norton, for the N. & E. Riding County Councils. Mr. J. Bickersteth, Clerk of the East Riding C.C., County Hall, Beverley.

DECEMBER 1.—**Egypt.**—TOWER.—For erection of a water tower at Init Ghamr, for the Ministry of Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 5.—**South Africa.**—SEWERAGE.—For erection of a pumping station and some machinery and cast-iron rising mains, for the City Council of Port Elizabeth. Messrs. Davis & Soper, Ltd., 54, St. Mary-axe, E.C.3, or Mr. W. How, Town Clerk, City Hall. Deposit £2.

DECEMBER 6.—**Dewsbury.**—TANKS.—For construction of percolating filters, humus tanks, and other appurtenant works in connection with the construction of sewage disposal works at Mitchell Laithes, for the T.C. Mr. Holland Booth, Town Clerk, Town Hall. Deposit, £2 2s.

DECEMBER 20.—**Egypt.**—RESERVOIR.—For construction of a steel reservoir, for the Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

NOVEMBER 15.—**Birmingham.**—ROAD.—For reconstruction of a part of Duddeston Mill-road, including granite sett paving on concrete foundation, granite kerb, granolithic slab paving, and other incidental works. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2.

NOVEMBER 17.—**East Barnet.**—ROADS.—For construction of builders' roads and sewers on their Long-street housing estate, for the U.D.C. Mr. H. York, Engineer and Surveyor, Council Offices, Station-road, New Barnet. Deposit £1 1s.

NOVEMBER 17.—**Holywell.**—SEWER.—For providing and laying about 1,200 lin. yds. of 6 in. stoneware pipe sewers, &c., for the U.D.C. Mr. J. Kerfoot-Roberts, Clerk to the Council, Town Hall.

NOVEMBER 17.—**Hornsey, London, N.**—ROAD AND SEWER WORK.—Sewering, levelling, paving, metalling, kerbing, channelling, and making good of various roads for the Borough of Hornsey. Mr. E. J. Lovegrove, Borough Engineer and Surveyor, Town Hall, Highgate.

NOVEMBER 17.—**Margate.**—MAINS.—For supplying and laying the water mains, sluice valves, hydrants, &c., approximately 558 lin. yds. of 8 in. main; 2,479 lin. yds. of 6 in. main; and 199 lin. yds. of 3 in. main, in the roads now in course of construction on the Palm Bay Estate. Mr. E. Brooke, Town Clerk, 13, Grosvenor-place.

NOVEMBER 17.—**Margate.**—SEWER.—For supplying about 999 yds. of 48 in. by 32 in. egg-shaped intercepting sewer, 428 yds. of 21 in. concrete tube sewer, and 252 yds. of 15 in. cast-iron sewer, for the T.C. Mr. Edward Brooke, Town Clerk, 13, Grosvenor-place.

NOVEMBER 17.—**Morpeth.**—SEWERAGE.—For execution of works of sewerage, including sea outfall, for the R.D.C. Mr. H. W. Sample, Clerk to the Council, Council Offices, 15, Bridge-street. Deposit £2 2s.

NOVEMBER 17.—**Romford.**—ROADWAY.—For construction of a footpath and the making-up of roadway in Broad-street, Dagenham, for the R.D.C. Mr. W. Lapwood, Highway Surveyor, 16a, South-street, Romford.

NOVEMBER 17.—**Romford.**—WIDENING.—For widening a portion of the Brentwood-road adjoining the Hare Hall estate, including the construction of surface water drainage and other works, and laying about 400 yds. of 12 in. and 9 in. stoneware pipe sewer in Chase Cross-road, Collier-row, for the U.D.C. Mr. F. G. Beaumont, Surveyor Deposit £1 1s.

NOVEMBER 17.—**Ruislip-Northwood.**—STREETS.—For making-up Kingsend-avenue, Ruislip, Oaklandsgate, Northwood, from Council Offices to Wesleyan Church, for the U.D.C. Mr. E. R. Abbott, Clerk to the Council, Council Offices, Northwood, Middlesex. Deposit £1.

NOVEMBER 17.—**Steyning, East.**—SEWER.—For construction of about 2,080 yds. of stoneware sewers, 9 in. and 6 in. diameter, with manholes, &c., for the R.D.C. Mr. H. G. Gravett, Clerk to the Council, Union Offices, Ham-road, Shoreham-by-Sea. Deposit, £2 2s.

NOVEMBER 18.—**Acton.**—ROADS.—For making-up and reformation of Grasmere-avenue and Westbourne-avenue, and construction of an 18 in. concrete pipe sewer at Northfields-road extension, for the B.C. Mr. Wm. Hodson, Town Clerk, Municipal Offices.

NOVEMBER 18.—**Birkenhead.**—SEWER.—For construction of a supplementary sewer in Borough-road, comprising about 700 lin. yds. of reinforced concrete sewer formed with 24 in., 27 in., and 30 in. diameter pipes, together with all manholes, gullies, and subsidiary works. Mr. E. W. Tame, Town Clerk, Town Hall. Deposit £3 3s.

NOVEMBER 18.— **Hampton Court.** — ROADWAY AND PATHS.—Re-surfacing of roadway and paths at Tennis Court-lane, Hampton Court, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Secretary).

NOVEMBER 18.—**Hemsworth.**—PIPES.—For laying and jointing 4,777 yds. of 6 in. cast-iron water mains, from Shafton Two Gates to Havercroft, for the R.D.C. Mr. E. A. Winder, Clerk, Rotherham-road, Hemsworth, near Pontefract.

NOVEMBER 18.—**Loughborough.**—MAINS.—For execution of works required in providing, carting, excavating and laying about 790 lin. yds. of cast-iron and other mains in Park-road &c., for the T.C. Mr. A. H. Walker, Waterworks Engineer, Town Hall. Deposit £3 3s.

NOVEMBER 18.—**Prestwich.**— ROADS.—For making-up Albert-avenue, approximately 500 yds., and Back George-street, approximately 250 yds. Mr. F. H. Ashton, Clerk to the Council, Town Hall. Deposit £1 1s.

NOVEMBER 18.—**Rochester.**—SEWER.—For construction of about 6,390 yds. lin. of concrete sewer culvert, for the Rochester & Chatham Joint Sewerage Board. Mr. E. B. Lee, Clerk to the Board, Town Hall, Chatham. Deposit £5 5s.

NOVEMBER 19.—**Birmingham.**—ROADS.—For reconstruction and widening of Wharfdale-road, Tyseley, between Redfern-road and Stockfield-road, for the T.C. Mr. H. R. Humphries, City Engineer and Surveyor, The Council House. Deposit, £2.

NOVEMBER 20.—**Hebburn.**—PRIVIES.—For conversion of 283 privy box-closets into water-closets, for the U.D.C. Mr. Thos. Stuart, Clerk, 2, Coquet-street, Hebburn.

NOVEMBER 21.—**Folkestone.**—SEWER.—For construction of about 280 yds. of concrete sewer. Mr. A. F. Kidson, Town Clerk. Deposit £3 3s.

NOVEMBER 21.—**Willesden.**—LEVELLING.—For formation of a level sports ground at King Edward VII Recreation Ground, Harlesden, for the U.D.C. Mr. E. A. Pratt, Clerk of the Council, Town Hall, Dyne-road, Kilburn, N.W. 6.

NOVEMBER 22. — **Deal, Kent.** — EARTHENWARE PIPES.—Renewing 2 ft. diameter earthenware pipes and extending two 18 in. cast-iron storm relief outfalls, all work practically above ordinary low-water mark, for the Borough Council of Deal, Kent. Borough Engineer and Surveyor's Office, 18, Queen-street, Deal.

NOVEMBER 22. — **Garstang.** — ROAD. — For reconstruction of the main road between Kirkland-bridge and Kettle-lane, for the Lancashire C.C. Mr. C. Hammond Etherton, Clerk of the C.C., County Offices, Preston.

NOVEMBER 24.—**Chesterfield.**—MAINS.—For construction of six main intercepting sewers with all necessary manholes and subsidiary works, consisting of 2,317 yds. of stoneware pipe sewers and 429 yds. of cast-iron pipe sewers, for the T.C. Mr. V. Smith, Borough Engineer and Surveyor, Engineer to the Scheme, Borough Engineer's Office, 2, Gluman-gate, Chesterfield. Deposit £2 2s.

NOVEMBER 24.—**Chesterfield.**—SEWAGE WORKS.— For construction of a sewage disposal works, for the T.C. Mr. V. Smith, Borough Engineer and Surveyor, Engineer to the Scheme, Borough Engineer's Office, 2, Gluman-gate. Deposit £5 5s.

NOVEMBER 24.—**Exmouth.**—SEWER.—For (1) excavation, roadmaking, and other contingent work in connection with the widening of Hulham-road for a distance of approximately 460 yds; (2) excavation, laying, &c., of a 9 in. sewer in Littleham-road, for the U.D.C. Mr. S. Hutton, Engineer and Surveyor, Council Office.

NOVEMBER 24.—**Lichfield.**—TUBING.—For provision and laying of about 3,000 yds. of 1¼ in. diameter galvanised tubing water service, from Hilliards-cross to the Woodend Hospital, Curborough, with appurtenant works, for the T.C. Mr. W. Brocksom, Town Clerk, Guildhall.

NOVEMBER 24.—**Oxfordshire.**—ROAD provements to the London-Oxford-road Bucks County boundary at Stokenchur combe, for the C.C. Mr. A. E. Cocke Surveyor, 8, New-road, Oxford. Depos

NOVEMBER 25.—**Waltham Cross.**— construction of about 535 yds. of 24 concrete pipe surface water sewer, toget necessary manholes and other works, fo Mr. J. E. Sharpe, engineer and surv House, Cheshunt. Deposit £2 2s.

NOVEMBER 29.—**Glasgow.**—ROADS.—F ing about two miles of roadway, forming road, at a higher level than the former ro north side of Loch Katrine, including the c eleven bridges with their ironwork comp accessory works, &c., for the T.C. Mr. Town Clerk, City Chambers, Glasgow £2 2s.

NOVEMBER 29.—**Tilbury.**—FOOTWAYS. in connection with the reconstruction in a paving and re-bedding and levelling of k ways on both sides of 22 unclassified roa for the U.D.C. Mr. A. W. Buckner, Clerk o Council Offices. Deposit £2.

NOVEMBER 29.—**Tilbury.**—ROAD.—Fo connection with the reconstruction i concrete, portion of Calcutta-road, for Mr. A. W. Buckner, Clerk of the Cou Offices. Deposit £1.

DECEMBER 2.—**Kensington and Ham** SEWER CONSTRUCTION.—For the constr 9 ft. 6 in. internal diameter sewer in c concrete lining, of a total length of about 9 6 ft. internal diameter sewer in cast-iron, lining, of a total length of about 2,375 ft., Chief Engineer of the Council, Old County gardens, S.W.1. Deposit £10.

DECEMBER 3.—**Stevenage.**—OUTFALL construction of the outfall works, for Mr. W. O. Times, Clerk to the Council, Co Stevenage. Deposit £3 3s.

Competitions.

(*See Competition News, page*

Auction Sales, Tender

NOVEMBER 18.—**London, E.C.2.**—Messs Cooper & Co. will sell, by order of the own longer require this section of their exte (unless previously disposed of privately) more lots, the valuable freehold property Brifco, Ltd., at Ashtead, on an enclosu 17 acres of land, mainly walled in, and co extensive modern blocks of buildings, machinery. Auctioneers, 35, Old Jewr E.C.2.

NOVEMBER 18.—**London, S.E.18.**—Mr. will sell, without reserve, at The Boy's Ho hurst-road, Plumstead, S.E.18 (L.C.C. car 36, 38 and 40), timber hutments, timber a materials (new and second-hand). Auctio way Wharf, York-road, Wandsworth, S.W

★NOVEMBER 18.—**London, S.W.**—Mess & Yates will sell, without reserve, at 23 road, S.W., a large stock of capital timber building materials. Auctioneers, 365, No S.E.27.

NOVEMBER 18.—**London, S.W.1.**—Messrs & Sons will sell, at the St. James's Estate St. James's-square, S.W.1, freehold building as No. 70, Drayton-gardens, South Kensing a frontage of about 64 ft., and containing about 6,600 sq. ft. Auctioneers, 20, St. Jam S.W.1.

NOVEMBER 19.—**London, S.E.**—Messr & Yates will sell, without reserve, to "Seaton Lodge," 225, Beckenham-road, building materials from demolition of the dence. Auctioneers, 365, Norwood-road, S

NOVEMBER 18 and 19.—**Middlesex**— G. Gulliver will sell, by order of Messrs. who are retiring from business at the premi End, Middlesex, No. 259, High-street, the valuable stock, plant, and machinery merchant and saw mills, stock of timber. 45, High-street, Ponders End, and 318, Edmonton, N.9.

★NOVEMBER 19.—**Peckham, S.E.15.**— Clark will sell, without reserve, at Ro Canterbury Bridge, Peckham, S.E.15. timbers. Auctioneer, Beddington House, near Croydon.

NOVEMBER 19.—**Sussex.**—Messrs. F. sell, without reserve, at Crowborough C timber and corrugated iron buildings, timb ing materials, timber, asbestos sheeting, lights, guttering, bricks, baths, ruberoi tioneers, Railway Wharf, York-road, S.W.18.

NOVEMBER 20. — **East Ham.** — Mes Hibbard & Sons will sell, without reserve the Trustee, Mr. E. F. Eyres, under a D ment, *re* J. M. Hinton, deceased, upon No. 332, Barking-road, East Ham (10 East Ham Station, District Railway), sto and builders' merchant and housebreaker. 15, Newington Green, London, N.16.

★NOVEMBER 20 AND 21.—**London.**— Veryard & Yates will sell, without reserve road, E.2 (close to Cambridge Heath St easy distance of Liverpool-street), us materials, from demolition of Colman's Auctioneers, 365, Norwood-road, S.E.27.

★NOVEMBER 25.—**London, E.C.**—Mr Beard will sell, at Winchester House, Old E.C., the important freehold business pr as Nos. 5, 6, and 7, Gray-street, Duke frontage 100 ft., workshops, cellarage, being about 4,200 sq. ft.; estimated £1,200 per annum. Auctioneers, 109, street, Bedford-square, W.C.1.

EMBER 26.—**Colnbrook, near Staines.**—Messrs. wer & Co. will sell, by order of the Receiver Debenture Holders, at the Railway Hotel, equipped sand, gravel and ballast pit situate rook, three miles from Staines, having a total about 23 acres. Auctioneers, 35, Sackville-iccadilly, W.1, and 122, High-street, Staines.
EMBER 2 AND FOLLOWING TWO DAYS.—**London,** rs. Joseph Hibbard & Sons will sell, without by order of the Liquidators, Messrs. E. Hight Liverman, *re* Price & Low, Ltd. (in voluntary on), at the two depots at 118, Hoxton-street Hackney-road, stock of timber and various ems. Auctioneers, 15, Newington Green, London, N.16.
BER 9.—**East Kent.**—Messrs. Hampton & Sons at the St. James' Estate Rooms, 20, St. James'-S.W.1, freehold residential and building of over 14¼ acres, to be offered in one or six lots. ers, 20, St. James'-square, S.W.1.
EMBER 12.—**Weymouth.**—Messrs. Fuller, Sons & Cassell will sell in lots at the White-rpedo Factory, Weymouth, building material, ts, angles, steam piping, roof trusses, glazing nber, &c. Auctioneers, 11, Billiter-square,

Public Appointments.

BER 17. — **Bromley, Kent.** — Builder's required by the Bromley Rural District to take charge of the completion by direct of the Council's housing scheme on three sites, where houses are in different stages of Mr. Leonard O. Wall, Clerk to the Council, m-lane, Park House, Bromley, Kent.
BER 18. — **Leicester.** — Clerk of Works in connection with a large housing scheme by sing and Town-Planning Committee of the eicester. Mr. J. S. Fyfe, A.R.I.B.A., Housing , Wyggeston House, 18, Highcross-street, endorsed "Clerk of Works."
EMBER 19.—**Bournemouth.**—Senior Architec-istant required on the temporary staff by the Borough of Bournemouth Council. Mr. F. P. , F.S.I., Borough Engineer, Town Hall, outh.
BER 19. — **Twickenham.** — Architectural required by the Twickenham U.D.C. in the ' Department ; duration of the appointment twelve months. The Surveyor to the Council, ll, Twickenham.
EMBER 20.—**Lancashire.**—Quantity Surveyor at once in the County Architect's Department ncashire County Council. The County Archi-Ribbledale-place, Preston.
EMBER 20.—**Leamington Spa.**—Architectural required in the Borough Engineer's Depart-the Corporation of Royal Leamington Spa. J. Kennan, Borough Engineer, Town Hall, on Spa, endorsed "Architectural Assistant."
BER 20. — **Wigan.** — Architectural Assistant y qualified, required in the Borough Engi-partment by the County Borough Council of Mr. William Henry Tyrer, Town Clerk, Buildings, Library-street, Wigan.
BER 21.—**Brixton, S.W.4.**—Visiting Teachers and Joinery and Geometry. (1) Instructor evening and Assistant Instructor for two weekly. (2) Assistant Instructor for two even-kly. (3) Assistant Instructor for one evening (4) Joiners' Machine Work Instructor for one eekly. (5) Painting and Decorating Assistant for three evenings weekly. (6) Architectural and Design Instructor for one evening weekly, by the L.C.C. at School of Building, Ferndale-ducation Officer (T.1a). (Stamped addressed nvelope necessary.)
EMBER 21.—**Essex.**—Appointment of tem-aff in the County Architects' Department: rectural Assistant; (*b*) Quantity Surveyor, by the Essex County Council. Mr. John R.I.B.A., County Architect, Springfield Old elmsford.
MBER 21.—**Middlesex.**—Architectural Assis-red in County Architect's Department by the Council of Middlesex. County Architect, Guildhall, Westminster, S.W.1.
BER 22.—**London, N.W.3.**—Borough Engi-Surveyor, at an inclusive salary of £1,000 per War Bonus), for the Borough of Hampstead. ur P. Johnson, Town Clerk, Town Hall, k Hill, London, N.W.3.
MBER 29. — **Birmingham.** — CLERK OF Clerk of works required for housing schemes. rt H. Humphries, City Engineer and Surveyor utive Officer for Housing Schemes, The ouse, Birmingham.
MBER 29.—**Cheltenham.**—CLERK OF WORKS. works required to supervise the construction pre-filters, ferro-concrete tanks (Hennebique nd concrete block filter and engine house bout £8,000), for the Corporation of Chelten-J. S. Pickering, Borough Engineer, Muni-s. Cheltenham.
MBER 1.—**Rochester.**—CLERK OF WORKS.—orks required for a large sewerage scheme o be begun in the near future, for the City n of Rochester. City Surveyor, Guildhall,

ATE.—**Llandudno.**—ARCHITECTURAL ASSIS-nporary architectural assistant wanted at bout three months, to prepare designs for ng scheme. Engineer and Surveyor, Town ludno.
TE.—**London, S.W.1.**—A limited number of or officers (men) in the Prisons and Borstal s will be filled during the next few months. of pay and conditions, with application form, warded on application to the Secretary, mission, Home Office, S.W.1.

PROPOSED NEW BUILDINGS & OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; and B.E. for Board of Education.

AMERSHAM.—The R.D.C. approved plans:—Two cottages, Winchmore-hill; house, Grange Estate, Chalfont St. Peter; cottage, Botley, near Chesham; sub-station for electric light, Amersham house, Orche Hill-avenue, Chalfont St. Peter; house, Woodside-avenue, Chesham Bois; house, Amersham; cottage, Dean Way, Chalfont St. Giles; cottage, Three Households, Chalfont St. Giles; house, Gold Hill-lane, Chalfont St. Peter; bungalow, Orchard Leigh, Gold Hill; four semi-detached houses, Pyghtle estate, Chalfont St. Peter.

AUDENSHAW.—The U.D.C. passed plans: House, Delta-road, for Mr. A. Hopkinson.

BARMOUTH.—The D.C. has asked the M.H. for sanction to borrow £10,000 for repairs to the promenade.

BASINGSTOKE.—Plans passed by T.C.: House, Worting-road, for Mrs. Markey; house, Crossborough-hill, for Mr. Hailstone; bungalow, Merton-road, for Mr. G. Boughey; house, Hawkfield-road, for Miss Twining.

BATH.—Plans approved by the T.C.: Bungalow, Newbridge-road West; bungalow, Grosvenor Bridge-road.—Mr. A. J. Pictor, F.R.I.B.A., has been engaged to confer with the manager of West Tiverton Council School, with regard to increasing the accommodation in the boys' and girls' departments.

BATLEY.—A proposal to extend the town hall is under the consideration of the Corporation.

BENTLEY.—The U.D.C. decided to prepare plans for additions in the form of a pavilion, refreshment room, and other improvements to the Central Recreation Ground, at a cost of £2,000.

BILSTHORPE.—Preparations are being made for sinking a new colliery, which will entail the building of a large mining village, and the Notts County E.C. has decided to provide an elementary school for 1,000 children.

BILSTON.—The U.D.C. are considering the purchase of sites for about 600 houses, and have schemes well in hand for the erection of between 300 and 400.

BIRMINGHAM.—The Corporation are to purchase at £4,500 part of Harborne Golf Course.—Preliminary plans have been prepared for the erection of a school to accommodate 516 girls, and the total capital cost is estimated at £42,500, at King's Norton, which includes all fencing and preparation of playing fields, as well as a caretaker's house.—The Horton's Estate, Ltd., are to sell to the Corporation, for public improvements and market extensions, property with frontages to Gloucester and Upper Dean-streets, for the sum of £8,000.—The Governors of King Edward's Grammar School have sold to the Corporation, for public improvements and market extensions, property, for the sum of £12,000.—The proposed provision of rest rooms for the unemployed has been approved; the cost will be £1,000.—The T.C. proposes to extend the electricity supply to the rural districts of Solihul and Meriden, where building developments are taking place.

BORTH.—The Surveyor has been requested to consider the application to extend the culvert and enquire into the position regarding the G.W.R. Co.

BOURNEMOUTH.—Plans approved by the T.C.: House and shop, Seabourne-road, J. Drewitt & Son; house, Kimberley-road, Mr. L. Rose; house, Bemister-road, Mr. W. Roberts; house, Glenmoor-road, Mr. A. Barnes; house, Oates-road, Mr. S. Gidlow; house, Chigwell-road, Mr. C. Williams; house, Rowena-road, Mr. C. Coul; house, Pine-road East, Mr. T. Wareham; house, Muscliffe-road, Mr. G. Newman; two houses, Court-road, Mr. J. W. Moore; house, corner St. Luke's and Stokewood-roads, Mr. A. Barnes; house, St. Luke's-road, Mr. A. Barnes; house, Ophir-road, Mr. A. D. Lambert; two houses, Namu-road, Mr. B. J. Watts; pair of houses, Droxford-road, Messrs. Bolus & Clarke; house, Arnewood-road, Mr. H. G. Mills; two houses, St. Alban's-road, Mr. S. G. Ward; house, Castlemain-avenue, Mr. G. R. Harrison; house, Mayfield-road, Mr. E. Stacey; two houses, King George-avenue, Mr. H. P. D. Barnes; two houses, Green-road, W. Mabey & Sons; house, Green-road, W. Mabey & Sons; house, Egerton-road, Mr. F. W. Burton; two houses, St. Luke's-road, Mr. C. K. Habgood; house, Horsa-road, Mr. G. Witt; house, St. Ledgers-road, Mr. J. F. Ellen; house, Stamford-road, Mr. P. H. Hayden; house, Egerton-road, Mr. H. P. Ward; house, Stokewood-road, Mr. J. W. Davis; house, East-avenue, Mr. A. Barnes; house, Edgehill-road, Mr. A. G. Waygood; house, Edgehill-road, Mr. F. Cash; house, Queen's Park West-drive, Mr. A. Harris; two houses, corner Queen Mary-avenue and Mayfield-road, Mr. L. Gardiner; house, Boscombe Overcliffe-drive, Mr. R. J. M. Nabney; house, Brackendale-road, Mr. J. Welstead; house, Victoria-avenue, Mr. A. L. N. Rees; house, Lascelles-road, Mrs. Budden; house, corner Victoria-avenue and Pickford-road, Mrs. W. Sheppard; seven houses, corner Somerley and Bishop-roads, Mr. H. Barnes; house, Queen's Park-avenue, Mr. H. Tomlins; four houses, Palmerston-road, Mr. W. Hayward: nine houses, Wilson and Windham-road, Mr. W. Hayward; house, Woodland-avenue, Mr. J. F. Ellen; three houses, Victoria-Park-road, and 25, Norton-road, Mr. A. J. Seal; house, corner Victoria Park and Norton-roads, Mr. A. J. Seal; house, Southbourne Overcliffe-drive, Mr. T. J. Hancock; block of four flats, rear of 56, Beaufort-road, Mr. S. Adams; two flats, 78, Beaufort-road, Mr. S. Adams; two pairs of houses, Stamford-road, Messrs. H. B. and E. Mudge; house, Bishop-road, Mr. H. Barnes; house, Victoria-avenue, Mr. S. E. Biles; house, Egerton-road, Messrs. F. W. Burton & Sons; four houses, Danesbury-avenue, Messrs. Cox & Clark; house, Prince of Wales-road, Mr. J. Medley; house, Egerton-road, Mr. G. E. Dolman; house, Southbourne-road, Mr. W. R. Blakely; house, Scotter-road, Mr. A. Scott; house, Dunkeld-road, Messrs. C. A. Barnes & Co.; house, corner of Ravine and College-roads, Mr. H. Solomon; 15 houses, Middleton and Delhi-roads, Mr. J. T. Rowley; three houses and shops, Highfield-road, Mr. J. T. Rowley; house, Albemarle-road, Messrs. Rumsby & Rodd; 10 houses, Victoria-avenue, Mr. W. Noble; house, Penrith-road, Mr. G. Wallet; house, Cross-roads, Southbourne, Mr. W. Gibson; 10 houses, Grafton-road, Mr. C. K. Habgood; house, Muscliffe-road, Mrs. Edwards; house, Horsa-road, Messrs. Burton & Walsh; three houses, Norton-road, Messrs. S. J. & V. R. Sheppard; two houses, Ophir-road, Messrs. G. E. & W. R. J. Lambert; two houses, Ashton-road, Mr. H. C. Barnes; house, Kimberley-road, Mr. Bendal.

BRADFORD.—The Electricity Committee of the Bradford Corporation have made application for sanction to borrow £6,747 for the purpose of electricity extensions in the Dudley Hill and Tong districts, included in the scheme are the erection of a switch house and transformer chamber for which tenders are about to be invited.—The M.H. has sanctioned a scheme for the demolition and clearance of the White Abbey area and to erect on the site a new housing scheme. The area to be dealt with exceeds fourteen acres, and the new housing scheme allows of 55 houses to the acre. The total cost of the scheme is £235,766.

BRIDGE.—The R.D.C. approved plans: Cottage, Seaton, for the Ecclesiastical Commissioners; bungalow, near Bekesbourne Aerodrome, for Mr. Mercer; bungalow, Cherry Garden-road, Canterbury, for Mr. Clark; bungalow, Mill-lane, Harbledown, for Miss Broughton; bungalow, Allotment-gardens, Littlebourne, for Mr. Moat.

BRIGHOUSE.—Plans passed by the T.C.: W. Rushforth, house, Laverock-lane.

BRINSLEY.—The Notts County E.C. has prepared revised plans for the enlargement of the Council school at an estimated cost of £2,600.

BRISTOL.—The T.C. has let a site at Nore-road to Mr. A. H. Scott, for the erection of a bungalow.—It is proposed to spend £3,000 to make fit some of the houses on the Berkley-street unhealthy area.—The T.C. has made contracts for the erection of 96 houses at the Knowle site, at a total cost of £39,630.

BROMLEY.—Approval has been given by the M.H. for the erection of 50 houses, for which tenders are to be immediately invited, Provisional approval has also been given to 150 for the R.D.C. Plans passed: New bank premises at High-street, Farnborough, for the Bank of Liverpool and Martins, Ltd.—Recommended for approval by the T.C.: Mr. H. R. Latter, house, Nightingale-lane; Mr. A Frampton, eight houses, Alexandra-crescent; Mr. H. R. Latter, 14 cottages, Canon-road; Mr. A. Frampton, four semi-detached houses, Alexandra-crescent; Mr. G. S. N. Stone, two houses, Southlands-road.

BROMSGROVE.—The R.D.C. has decided to apply to the Ministry for sanction to a further twenty-five houses.—Plans passed: Bungalow, Mr. Merry, Alvechurch; house, Mr. Morton, North Redditch; house, Mr. Edwards, Pedmore; house, Mr. Jackson, Clent; bungalow, Mr. Payne, Alvechurch; 2 bungalows, Mr. Turner; house, Mr. Wagstaff, Clent; house, Mr. Ilsey, Hagley; 2 houses, Mr. Corbett, Wythall; 2 houses, Redditch Land Development Co., Webheath; house, Mrs. Palmer, Stoke Prior; 3 houses, Messrs. Bridgwater, Hagley.

BURTON LATIMER.—The U.D.C. propose to widen the Finedon-road bridge at a cost of £780.

BUXTON.—The B.C. has recommended that, pending further negotiations for the purchase of land at Fairfield and Burbage, a further twenty-four houses be erected at Heath Grove.

CARLTON (NOTTS).—Blyth and Cuckney R.D.C. has made application to the M.H. for sanction to borrow £18,840 for works of sewerage and sewage disposal, for the parishes of Carlton-in-Lindrick and Hodsock.—An extensive housing scheme is being carried out for the Firbeck Main Colliery Co., Ltd., and a large sewage disposal scheme has been designed and will be carried out in instalments as the new houses are constructed. The first instalment will consist of works sufficient to deal with approximately one-third of the anticipated ultimate population of 5,000.

CARMARTHEN.—It is proposed to convert the prison into a county museum.

CHELTENHAM.—The T.C. has resolved that tenders be invited for the erection of from 10 to 15 pairs of semi-detached non-pariour houses. Messrs. Chatters, Smithson & Rainger have been instructed to submit lay-out plan for the erection of these houses on the vacant frontages in Byron and Milton-roads.

CHESTERFIELD.—Plans passed by the T.C.: House, Newbold-road, for Mr. H. Barker; four houses, Newbold-road, for Messrs. J. Collis & Sons; house, Tapton View-road, for Mr. A. B. Short; house, Brookside-bar, for Mr. F. Wilkins; house, Whitecotes-lane, for Mr E. Revill; house, Baden Powell-road, for Mr. Geo. Money.

CROYDON.—Plans approved by the T.C.: Croydon (North) Town-planning Scheme, Crown-lane, 2 houses; Green-lane, 10 houses; and Croydon (South) and Beddington (South) Town-planning Scheme, Haling Park-road, house; Blenheim Park-road, house; J. Brooks, house, Blenheim Park-road; Thorn & Co., 2 houses, Crown-lane; P. Richardson, 5 shops and houses, Thornton-road; Rees & Archer-Betham, 4 shops, Beckford-road; G. & A. Parris, house, Haling

Park-road; A. Sykes, shop and domestic premises, 30 & 30A, High-street; F. W. Milton, 10 houses, Green-lane; J. W. Walker, house, Ham Farm; P. Richardson, 5 houses, Howard-road; W. Hards, 3 houses, Alderton-road; A. Hobbs, house, Ham Farm; F. C. Stoneman, 2 houses, Milner-road; F. W. Cattermole, 10 houses, Stanford-road; Paish, Tyler & Crump, 1 houses, Ashburton-avenue and Compton-road; Paish, Tyler & Crump, 2 houses, Sefton-road; J. E. Trimble, 7 shops with houses, London-road, Welford's-parade; A. H. Chatfield, house, Bedford-park; L. White, 8 houses, Gonville-road; J. G. Cooper, house, Pollard's-hill North.—The T.C. recommend the alterations and improvements to the North Park Council school, Princess-road, as follows: (1) The Long-lane site—(*a*) erection of an elementary school of two departments (i) senior mixed, 405 children, and (ii) junior mixed, 405 children, £17,000; (2) The Winterbourne School—(*a*) conversion of the present boys' and girls' departments at the School for use as Day Central Schools to accommodate 320 boys and 320 girls; (*b*) erection of an elementary school, to accommodate 315 boys and 315 girls, on the vacant land adjoining the school, £12,000; (3) North Park School—(*a*) erection of new infants' school for 250 children on present boys' and infants' playground; (*b*) improvements to present school buildings in order to provide a school hall, &c., for boys' department and to release part of workshop from use as a class-room; (*c*) removal of temporary building from Ecclesbourne School and rebuilding in boys' playground for use as handwork room, £6,200.—The T.C. have had under consideration an offer from the Waddon Residents Association for the purchase of a piece of land in Stafford road, forming part of the housing estate, for the purpose of the erection of a hall.

DEWSBURY.—Plans passed by the T.C.:—J. Crossley, un., six houses, South-street.

DONCASTER.—The R.D.C.'s Sanitary Committee reported that plans had been approved for 50 houses at Awkley, in connection with the new colliery.

DUBLIN.—The reconstruction of the General Post Office in Sackville-street is to be proceeded with immediately.—Plans passed by the T.C.: High-street, premises, for Mr. O'Connor; Seafield-road, Clontarf, house, for Miss Lyons; Gracepark-avenue, house, for Mr. Taaffe; Seafield-road, 2 houses, for Mr. J. Navagh; Frederick Court, concrete wall to new factory, for Mr. J. O'Keeffe.

EAST HAM.—The Borough Engineer submitted plans and estimates for the proposed new office and laboratory at the sewage works, and also plans and estimates amounting to £125 for the alterations to the superstructure of the Barking-road convenience, which the B.C. approved.

EYESHAM.—The T.C. propose borrowing from the Public Works Loan Commissioners £24,000 for the erection of houses.

FINEDON.—The county bridge carrying the Wellingborough-Peterborough main road over the River Ise is to be widened by the Northampton C.C. at a cost of £4,000.

GLAMORGAN.—The Central Miners' Welfare Committee has decided to contribute £30,000 for the establishment of mining laboratories or institutes in the Glamorgan C.C. area. The institutes will be erected at Gowerton, Neath, Bridgend, and Caerphilly or Ystrad Mynach.

HASTINGS.—Plans passed: House, St. Matthew's-gardens, for Miss Philpot; bungalow, Old Top-road, for Mr. W. G. Cotton; bungalow, Bexhill-road, for Mr. Sadler; house, Filsham-road, for Mr. H. J. Richardson.

HAVANT.—Miss K. Standing is desirous of obtaining about 100 ft. on Cross Way for the purposes of erecting a War Memorial Cottage Hospital, from the U.D.C.

HOUGHTON-LE-SPRING.—The R.D.C. has received sanction from the M.H. to borrow £21,613 for the erection of 50 houses.

HULL.—The T.C. passed plans: G. T. Spruit, eight houses, Newcomen-street; C. T. Simmonite, 16 houses, Summergangs-road; J. M. Barnett, four houses, Cottingham-road; R. Ashton, eight houses, Southcoates-lane; G. T. Spruit, four houses, Victoria-avenue; G. T. Spruit, house, Etherington-street; R. Boddy and H. Jaram, four houses, Southcoates-avenue; G. Overton, four houses, Beverley High-road; G. T. Spruit, six houses, Southcoates-lane; Lawrence Bros., 19 houses, New Rosmead-street; W. Pinder, two houses, Aberdeen-street; W. Garbutt, eight houses, Desmond-avenue.

JERSEY.—The Jersey Commercial Association are to build a modern pavilion on the site of the Triangle Park.

KIDDERMINSTER.—The M.H. has approved the T.C.'s scheme for the extension and improvements of the Wholesale Markets at a cost of £9,000.

LANCASTER.—The T.C. passed plans: House, Palatine-avenue, for Mr. F. W. Smith; house, Lincoln-road, for Mr. W. Waites; house on Hall Park estate, for Mr. E. Lodge; house, The Ramparts, for Mr. J. T. Atkinson; office, Grove-street, for Barraclough & Saunders; house, Bowerham-road, for Mr. H. Lawson; house, off Palatine-avenue, for Mr. H. Mackarel; house off Palatine-avenue, for Mrs. Heap.

LEYTON.—The U.D.C. approved plans: Jacob Bros., five houses, Cromer-road; C. Thear, two shops, Essex-road.

LLANDYSSUL.—The R.D.C. is applying to the Cardiganshire C.C. for a grant towards the erection of the new bridge over the River Hawen, near Pontgarreg Shop, Llangranog.

LLANELLY.—The B.C. is to proceed with provision of additional school accommodation for boys at Stebonheath School, and for girls at Coleshill-terrace School.

LONDON (BALHAM).—A new and larger synagogue is under consideration.

LONDON (DEPTFORD).—The B.C. has received approval from the M.H. for the construction of the first section of the new public baths, Evelyn-road, North Deptford. The total cost will be £72,769.

LONDON (PADDINGTON).—Plans approved: Urinal at the Grand Junction Arms.

LONDON (SOUTHWARK).—The B.C. proposes the acquisition of land at a cost of £1,750, for the extension of the Longfield depot.

LOUTH.—The Governors of the Grammar School have decided to proceed with the erection of a new school to accommodate 200 boys.

MANCHESTER.—The Libraries Committee of the T.C. recommends the erection of a library on a site at Withington, at a cost of £15,500.

MARKET HARBOROUGH.—Plans passed by U.D.C.: House, Burmill-road, for Mr. J. Grant; electricity substation, Adam and Eve-street, for Kettering U.D.C.

MONMOUTHSHIRE.—The County E.C. is to erect, immediately, a new school at the Tranch, Pontypool. In addition, the building programme to be carried out by the Committee is as follows: Two new classrooms, each for 40 scholars, to be added to George-street Infants' School, Pontypool; a new school at Cwmffrwdoer, for 250 children; a new two-story school at Park-street, Blaenavon, for 250 boys and 250 girls, the existing building to be pulled down and the site cleared for lay-out as playground; a new infants' school, for 250, at Dukestown; a new school at Markham on site now being acquired; laboratory extension and three new class-rooms at King Henry VIII Grammar School, Abergavenny, and a new school at Llanover, plans for which have been approved by the B.E. at an estimated cost of £3,000. A new school is also to be erected at Cwmbran.

NEWBIGGIN (NORTHUMBERLAND).—The U.D.C. has decided to proceed with the immediate erection of 66 houses on the Cresswell Estate.

NEWMARKET.—The U.D.C. propose purchasing Laureate paddocks for housing, at a cost of £2,000.—The M.H. has sanctioned the borrowing of £6,400 for the 12 houses in the Rows.

NEWPORT (I.O.W.).—The T.C. is seeking a loan of £8,760 for the erection of 18 houses on the Trafalgar estate.

NOTTS.—The Standing Joint Committee has allocated £2,000 for the erection of police houses.

OLLERTON.—In view of housing developments taking place in the neighbourhood of the new colliery which is being sunk by the Butterley Co., Ltd., the Notts County E.C. proposes the erection of a school for 1,000 children.

OSSETT.—The T.C.'s architect has prepared plans for the new elementary school at Gawthorpe. The school is estimated to cost £12,500.

OTLEY.—The U.D.C. is to raise a loan of £3,860 for the purchase of a housing site at Carr Green.

OXFORD.—Plans approved by the T.C.: New ward to the Eye Hospital, Walton-street, for the Committee; six houses, Fairacres-road extension, for Simmonds & Watts; two houses, Victoria-road, Summertown, for H. F. Hunt & L. Dixon; brass foundry, abutting on St. Sepulchre's Cemetery, for W. Lucy & Co., Ltd.; Simmons & Watts, six houses, Fairacres-road extension; Symm & Co., two houses, Victoria-road, Summertown; H. Capel, house, on the north side of Lonsdale-road; H. F. Hunt, two houses, Victoria-road, Summertown.

PETERBOROUGH.—The R.D.C. are to erect 138 houses.

POTTERS BAR.—Sheepwell House, Potters Bar, is to be converted into a boarding school for girls. A new school block is being erected, and a dining room is being added to the house. The school block is 250 ft. long, containing class rooms, music rooms, dormitories, cloak rooms, &c. The new building, with the alteration to the house, has been designed by Mr. G. Spencer, of 79, Gresham-street, E.C. The work is being carried out by Messrs. Ekins & Co., Ltd., of Hertford.

PRESTON.—The T.C. passed plans: Messrs. Heales & Gaunt, two houses, Woodlands-avenue; T. Johnson, two houses, Queen's-road; R. Place, bungalow, Fishwick-view; H. Heaton, two houses, Lytham-road; R. Cornall, house, Addison-road; V. B. Norton, bungalow, Lytham-road; J. M. Seed (Preston), Ltd., three houses and six bungalows, Blackpool-road and off Miller-road.

ST. EDMUNDS.—Plans have been approved for the new college buildings. The new college is to be erected in very pleasant grounds, containing about 1¼ acres, and situated on the corner of Princes-road and Devonshire-road. The architect is Mr. Roland Stubbs, M.S.A.

SCARBOROUGH.—The Corporation have had plans submitted to them for the improvements and extensions proposed to be carried out at the Spa. The plans include a café, dance hall, and shops at both ends of the Spa.

SEAHAM HARBOUR.—The U.D.C. is to consider a scheme for the provision of additional houses. A committee is discussing with the L.N.E.R. the question of widening Ropery-walk bridge. The subsidy has been promised for the erection of houses to Mr. Robinson, 32, Viceroy-street; Mr. Laws, Viceroy-street; Mr. Irving, 55, Henry-street; Mr. J. Lynn, Adolphus-place, and Mr. J. W. Claxton, for Dawden Colliery Recreation Committee

SHEFFIELD.—Plans approved by the T.C.: Two houses, Richmond-road, for Messrs. G. Savage and B. Allen; bungalow, Short-lane, Stannington, for Mr. G. Rogers; two houses, Hessle-road, for Mr. B. F. Glossop; two bungalows, Redmires-road, for Mr. J. Broomhead; house, Greystones-road, for Mr. G. Brownlow; two bungalows, Folds-crescent, for Mr. A. J. Mackenzie; 10 houses, 12 shops, 2 warehouses, &c., Stubbin-lane, Hucklow-road and Crescent-road, Firth Park, for Mr. S. Taylor; house and public-house, Hatfield House-lane and Sheffield-lane, for Messrs. Jno. Smith's Tadcaster Brewery Co., Ltd.; bungalow, Richmond-road, for Mr. M. S. Hukin; two bungalows, Dalewood-avenue, for Mr. W. Bingham; two bungalows, Worksop-road, Handsworth, for Messrs. J. Clarke and W. J. Booth; bungalow, School Green-lane, for Mr. G. Credland; two houses, Richmond-road, for Mr. A. Tate; bungalow, Brincliffe Edge-road, for Mr. A. Brealey; house, School Green-lane, for Mr. J. Samuel; house, Bents-road, for Mr. J. D. Renwick; two houses, Prince of Wales-road, for Mr. T. Hinchliffe; two houses, Montgomery-avenue, for Messrs. Dy[illegible] house, Abbey-lane, for Messrs. Gillam & Co[illegible]

SHENLEY.—Herts E.C. is to secure a tw[illegible] between London Colney and Shenley for t[illegible] of an elementary school.

SHREWSBURY.—Shropshire C.C. and the S[illegible] T.C. purpose carrying out a great scheme fo[illegible] the approaches and reconstruction of th[illegible] bridge. The total cost is estimated at £9[illegible]

SKIPTON.—The U.D.C. has decided to [illegible] additional 100 houses on the Carleton-road s[illegible] to the approval of the M.H.

SOUTHEND-ON-SEA.—Plans approved by T[illegible] houses, Hadleigh-road, for S. F. Johnson; [illegible] Fleetwood-avenue, for R. Thompson; t[illegible] Holyrood-drive, for A. & F. G. Doe; fo[illegible] North-avenue and Ely-road, for W. T. Cus[illegible] and shop, London-road, for Picken Bros.; [illegible] lows, Station-road, Leigh, for G. Wood; [illegible] Madeira-avenue, for M. Kempen; four houses[illegible] grove, for E. Luck; three houses, The Ri[illegible] Tompkins & Smith; six houses, Mar[illegible] Hambro estate, for S. F. Johnson; bungal[illegible] road, for G. P. Harrison; bungalow, Bu[illegible] close, for F. W. Goldsworthy; house and sho[illegible] road, for A. D. Martin; three houses, Eato[illegible] Miss L. Lewis; three houses, Northview[illegible] F. A. Eastty; four houses, Tunbridge-ro[illegible] Davey; three shops and houses, Hamste[illegible] W. A. Thornton; shop and flat, Westbe[illegible] for E. G. Moore; three houses, Fairleigh-d[illegible] Butt; two houses, Rockleigh-avenue, for S[illegible] Elsom; two houses, Tyrone-road, for J[illegible] house, The Grove, for W. J. Brewer; house, [illegible] for E. Salmon; two houses, Marine-aven[illegible] for Kerry & Ford; three bungalows, Stirli[illegible] for J. Wood & Sons; two houses, Stirling-[illegible] J. Wood & Sons; two houses, Harley-street[illegible] Robinson; two houses, York-road, for J. [illegible] house, Westcliff Park-drive, for H. C. Sou[illegible] houses, Pall Mall, for W. Widley; bungal[illegible] avenue, for W. A. Siney; two houses, Lon[illegible] avenue, for E. A. Annereau; bungalow, [illegible] avenue, for A. Butt; two shops and house[illegible] road, for H. G. Gray & Co.; two houses, Bu[illegible] road, for H. Norman; shop and house, Elm[illegible] Nowell & Nowell; three houses, Eaton-road[illegible] Jay; bungalow, Carlton-drive, for W. Je[illegible] houses, Lonsdale-road, for P. Stanton; hou[illegible] den-road, for Miss C. E. Atkins; three [illegible] George's Park-avenue, for A. G. Smith & [illegible] galow, Fairleigh-drive, for W. Dawes; house[illegible] esplanade, for W. L. Head.

SUTTON BONINGTON (NOTTS).—The gov[illegible] the Midland Agricultural College have pr[illegible] scheme for centring all the branches of the[illegible] of the College at Sutton, where it is propose[illegible] dairy buildings and a hostel for women st[illegible] additional buildings at Lodge Farm, at a cost[illegible]

SUTTON COLDFIELD.—The T.C. passed plan[illegible] Birmingham-road, for Mr. J. Shaw; fo[illegible] Birmingham-road, for Mr. W. J. Davis; fo[illegible] College-road, New Oscott, for Mr. Eldred; [illegible] baths, Chester-road, for Princess Alice Ou[illegible] bungalow, Fox Hollies-road, for Mr. C. [illegible] bungalow, Fox Hollies-road, for Mr. E. [illegible] pair of houses, Green-lanes, for Mr. W. [illegible] bungalow, Jockey-road, for Mr. A. Bach; [illegible] Penns-lane, for Mr. F. J. Judd; house, Penn[illegible] Mr. W. H. Green; bungalow, Penns-lane, [illegible] Loat; house, Penns-lane, for Mr. W. Knight[illegible] low, Penns-lane, for Mr. F. Walker.

SWANSEA.—Plans passed by the T.C.: R[illegible] and dwelling, Glanmor-road, for Mr. J. [illegible] houses, Glanmor-road, for Mr. J. Pye; [illegible] Riversdale-road, West Cross, for Mr. Bart Bee[illegible] West Cross-lane, for Mr. Lloyd Williams; s[illegible] West Cross, for the Electricity Committee[illegible] West Cross-lane, for Mr. A. V. Hopkins; [illegible] Norton-avenue, Mumbles, for the Gower Cons[illegible] Co.; house, Pardwern-road, for Mrs. Andr[illegible] houses, Myrtle-crescent, for Jones Bros.; s[illegible] Tycoch estate, for Jones Bros.; 27 houses, [illegible] for the Swansea Vale Garden Village, Ltd.

SWINTON.—The U.D.C. has decided to ap[illegible] M.H. for sanction to complete the Brookefie[illegible] scheme by the erection of a further 57 hous[illegible]

TAFF'S WELL.—The Caerphilly U.D.C. Cardiff R.D.C. are jointly to erect a new [illegible] over the river at Taff's Well, at an estimat[illegible] £2,150.

TOTTENHAM.—The L.C.C. recommend th[illegible] ment of 13 acres of land near the north-east [illegible] of the White Hart-lane estate together [illegible] triangular sites in Waltheof-gardens and [illegible] Tower Gardens-road be approved for housing

TRECEFEL.—The Cardiganshire C.C. h[illegible] mended the erection of a new bridge in accor[illegible] the plans approved by the M.T. The Sur[illegible] been authorised to obtain tenders for the v[illegible] scheme is estimated to cost about £5,000.

TYNEMOUTH.—The T.C. approved plans: [illegible] house, Trevor-terrace, F. R. N. Haswell; [illegible] R. M. Smith; new shops and houses, Bur[illegible] Percy Main, Mr. J. R. Wallace, for Mr. H. I[illegible] shop and warehouse, Old Brewery, Tynem[illegible] Mr. J. R. Wallace, for Mr. J. T. Richards; [illegible] detached houses, The Crescent, Kenners D[illegible] Mr. A. K. Tasker, for Mr. H. D. Burton; en[illegible] Queen Alexandra-road, and Osborne-gar[illegible] A. K. Tasker, for Mr. H. D. Burton; t[illegible] Hotspur-street and Syon-street, Mr. Wm. [illegible] for Messrs. G. Peel & Co., Ltd.; 18 sem[illegible] houses, Hunt-hill and Hawkey's Hall estat[illegible] G. A. Leck; amended plan of two houses [illegible] and Hawkey's Hall estate, Mr. J. R. Walla[illegible] J. Carruthers; 10 semi-detached houses, [illegible] and Hawkey's Hall estate, Mr. W. Stockdale, [illegible] B. Peel, Ltd.

UXBRIDGE.—The U.D.C. approved pl[illegible] Franklin, bungalow, Cleveland-road; L. H[illegible]

ws, Mead-road.—Plans passed by the se, Swakeleys estate; bungalow, Hillingstate; bungalow, Warwick-road, West use, South Hill-avenue, South Harrowroad, Uxbridge Common.

TH.—Plans passed by the B.C.: Messrs. Ltd., 3 houses on Dover House estate, house in Crestway, Dover House estate, ssrs. R. Bilham & Son, 7 houses, Grovem South: Mr. G. Ansell, 12 lock-up nd at rear of houses on northern side of -road; Messrs. J. Potterton & Sons, ing "Blenheim," Streatham Common ham; Messrs. W. Willett, Ltd., house on ver House estate, Putney; Messrs. W. H. Ltd., pavilion; Messrs. Chapple & Fulin Streatham-vale, and 2 houses, Wood-Streatham; Mr. W. H. Davies, 4 houses, hill, Streatham; Messrs. W. J. Marston & West Hill-road, Southfield.—The B.C. hat the L.C.C. be requested to prepare ning scheme on land at Streatham.—pproved of the additional office accomuired for the staff at the Council House. he District Joint Hospital Board are scheme for the extension of the Wath al at an estimated cost of £10,000.

—Plans passed by the B.C.: Mr. R. Dora-road, Mr. J. C. Walker, Cottenham Ir. A. Victor Farrier, house at the junction ad with The Ridgway; Mr. A. Victor ist's shop and dwelling, The Ridgway.

R.—The R.D.C. recommend approval of Sandy-lane, Fair Oak, E. J. Boardman; oney-lane, Weeke, A. Davis.

-Th. R.D.C. passed plans: Gardener's use, Sunninghill, for Mr. Ronaldson; Ascot, for Mr. Spackman.

MPTON.—The T.C. approved plans: houses, Richmond-road; H. Cresswell cox, 2 houses, Compton-road; The Crane Ltd., foundry building, Horseley Fields; of the Windsor Unionist Club, new pre-road; Housing Committee, 22 houses, eer, 44 houses, Gorsebrook-road, 136 ridge Estate, 156 houses, Willenhall-uses, Birches Barn Estate; 6 shops, Estate; Health Committee, 76 houses, l.

—The T.C. adopted a scheme for the he parade and esplanades westwards for le to Wallace-avenue, at a cost of £18,000. ovision for a new public pleasure ground and the lay-out of the Marine Park building estate on town-planning lines.—The T.C. passed plans: Three houses, Homefield-road, for Tickner, Martin & Francis; house Forest-road, for A. V. Scudamore; two houses, Eton-road, for D. S. Barclay; nine houses, St. Thomas's-road, for S. E. Merredew; house, Brooklyn-avenue, for A. N. Farries; house, Brooklyn-avenue, for A. N. Farries.

YEOVIL.—A new branch bank is to be built at Yeovil by the Westminster Bank, Ltd. A brick building of three stories, with a stone frontage to the ground floor and stone dressings above, is to be erected. The banking hall will be on the ground floor, whilst accommodation for letting as offices will be above. The architects are Messrs Petter & Warren, FF.R.I.B.A., of Princes-street, Yeovil.

YNYSDDU.—The Mynyddislwyn U.D.C. has been requested by the M.H. to forward plans of the proposed and sanctioned new bridge Pontgarn, Ynysddu.

YORK.—Plans passed by T.C.: Two houses, Huntingdon-road, for Messrs. Lofthouse & Metcalfe; two houses, Hull-road, for Mr. Tesseyman; premises, Coney-street, for Saxone Shoe Co., Ltd.; house, Moorgate, for Mr J. Elliott; two houses, Terry-street, for Mr. West; nursing home, Heslington-road, for Friends Retreat; house, Layerthorpe, for Mr. H. Watson. The T.C. is to confer with North and East Riding authorities as to the provision of accommodation for mental defectives. The B.E. has agreed to the scheme for adapting the public library buildings for technical school purposes. Sanctions have been given to loans of £2,120 for a concrete wall by the side of the river Foss.

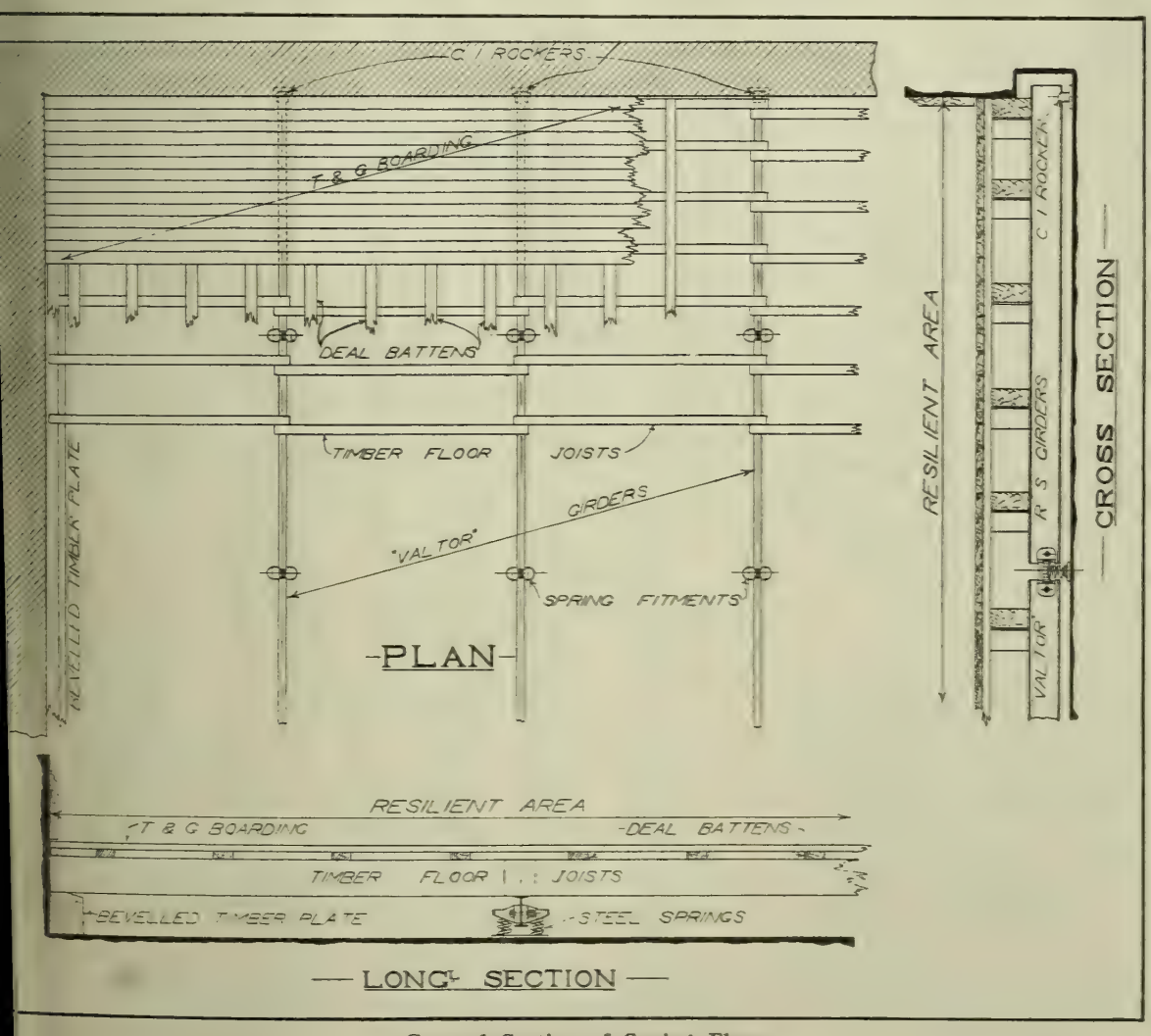
FIRE.

BURTON-ON-TRENT.—Damage estimated at £30,000 was caused by a fire which destroyed one of the warehouses of the English Grain Co.

SPRING FLOORS

An installation of the patent "Valtor" spring system of resilient floors consists of rows of light steel "Valtor" girders lying across the room under the floor, each line being divided into short lengths coupled together by the patent spring fitments. In each spring fitment there are two helical springs carried upon cast-iron bases and supporting two cast-iron casings bolted to the "Valtor" steel girders. Where depth permits, the timber floor joists are cut into short lengths spanning each bay, and rest loosely upon the top flanges of the "Valtor" steel girders. To the tops of the joists are nailed deal battens, and to these, in turn, is secured the boarding, which, in a resilient floor, is recommended to be in straight, narrow widths $\frac{7}{8}$-in. finished thickness, tongued, grooved and secretly nailed to the battens. The whole structure of the floor is tied in each direction by the boards and battens respectively, and rests entirely upon steel springs, there being no dead point anywhere over the resilient area.

The general sections of a floor of the above character, of which Messrs. Francis Morton, Junior & Co., of 22, Laurence Pountney-lane, E.C.4, are the proprietors, are illustrated on this page. In floors where depth from finished floor level to supports is restricted for structural reasons, Messrs. Morton's have other methods of dealing with the problem. By the use of tee-section "Valtor" girders and closer spacings of the spring fitments, the necessary depth can be reduced to as low as $6\frac{5}{8}$ in. The automatic locking gear, by which a floor can be rendered rigid or resilient as required for various purposes, and which was invented by the present head of the firm some years ago for a floor in one of the large London hotels, is adaptable with the patent "Valtor" system in most situations and, from recent developments, can be brought into play in a floor where the total available depth from floor to supporting concrete is only $8\frac{1}{2}$ in. In situations where it is necessary to distribute the weight of the floor as much as possible, Messrs. Morton's have other designs with both elliptical and helical springs, which, however, there is not room to illustrate on this occasion.



General Section of Spring Floor.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fletton, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire brick:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends	32 10 0
Headers	22 10 0	Two Sides and one End	33 10 0
Quoins. Bullnose and 4½ in. Flats	29 10 0	Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	14 9	" "
Thames Sand	15 6	" "
Best Washed Sand	15 6	" "
⅜ in. Shingle for Ferro-Concrete	14 0	" "
½ in. "	15 0	" "
⅝ in. Broken Brick	10 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to 51/- alongside at Vauxhall in 80-ton lots. £3 3 6

Ferrocrete per ton extra on above	0 10 0
Super Cement (water proof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4

Do. do. delivered on road wagons at above stations, per ft. cube 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks. Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. ditto "	2 1½
2 in. self-faced random flags. Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	26 0	3 × 9	26 0
3 × 8	24 0	2½ × 9	26 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	23 0	3 × 4	24 0

PLANED BOARDS.

1 × 11	£34 10	1 × 9	£32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
⅝	16/6
¾	20/-
1	25/-

BATTENS

Inches	s. d.
⅞ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 6

Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2 6		
¾ in. do.	0 1 6	to	0 2 0		
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6		
Cuba Mahogany	0 3 0	to	0 3 6		
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0	to	—		
American Whitewood planks, per ft. cube	0 12 0	to	0 14 0		
Best Scotch Glue, per cwt.	4 10 0	to	—		
Liquid Glue, per cwt.	4 7 0	to	5 10 0		

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley	5 12 6
Staffordshire district	5 17 6
Ditto hand made ditto	6 2 6
Ornamental ditto	0 9 6
Hip and valley tiles (per dozen) Hand made	0 9 0
Machine made	

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work "	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ½ in.	13 10 0
⅜ in.	14 10 0	⅝ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up.	Fittings. 1"to1½"	Flanges ¾"&up. inclusive.	Flanges 1"to1½" inclusive.
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28¾ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0¾	3½d.
4 in.	1/4	1/1¾	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7¾	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2¾	3½d.
3½ in.	1/6½	1/2¾	3½d.
4 in.	1/7¾	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1¾	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5¾
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11¾	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 3
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

	£ s. d.		£ s. d.
IRON— Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..
Hoop iron, basis price	16 10 0	..
" Galvanised	31 0 0	..
Soft Steel Sheets, Black— Ordinary sizes to 20 g.	14 10 0	..
" " " 24 g.	15 10 0	..
" " " 26 g.	17 10 0	..
Sheets Flat Best Soft Steel, C.R. & C.A. qua		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 0 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..
Sheets Galvanised Flat. Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..
Best Soft Steel Sheets, 26 g.	26 0 0	..
Cut Nails, 3in. to 6 in.	20 10 0	..

(under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pa coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	

NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. a cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s.

Old lead, ex London area, at Mills ..... per ton	35 0 0 ..
Do., ex country, carriage forward ..... per ton	36 0 0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2
29/-	45/-	76/-	153/-	246/-	510

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588

NEW RIVER PATTERN SCREW DOWN MAIN

¼ in.	⅜ in.	1 in.
39/6	60/-	116/6 per d

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per

NEW RIVER PATTERN CROYDON BALL VALV

¼ in.	⅜ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

	1¼ in.	1½ in.	2 in.	3
8 lbs. P. traps	33/-	41/-	56/-	101
8 lbs. S. traps	35/-	45/-	66/-	126

COPPER—	£ s. d.
Strong Sheet per lb.	0 2 3 ..
Thin " "	0 2 4 ..
Copper nails "	0 2 3 ..
Copper wire "	0 2 4 ..
TIN—English Ingots ..	0 2 6 ..
SOLDER—Plumbers' ..	0 1 2 ..
Tinmen's ..	0 1 4 ..
Blowpipe ..	0 1 5 ..

PAINTS, &c.

Raw Linseed Oil, in pipes ..... per gallon	
" " " in barrels	"
" " " in drums	"
Boiled " in barrels	"
" " in drums	"
Turpentine in barrels	"
" in drums (10 gall.)	"
Genuine Ground English White Lead, per to (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's "Spedol" and other best brands 14 lb. tins) not less than 5 cwt. lots per ton deliver	
Red Lead, Dry (packages extra)	per t
Best Linseed Oil Putty	per cw
Filocol	per ca
Size. XD Quality	lb

[*Continued on next page.*

* The information given on this page has compiled for THE BUILDER and is copyright this list is to give, as far as possible, the of materials, not necessarily the highest or and quantity obviously affect prices—a fact be remembered by those who make use of th

RRENT OF MATERIALS (contd.)

GLASS.

EET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
..	3½d.	32 oz. fourths	8½d.
...	4½d.	32 „ thirds .....10½d.	
..	5d.	Obscured Sheet, 15 oz.	4d.
...	6½d.	„ „ 21 „	5½d.
..	6d.	Fluted 15oz. 6½d.,21oz.	9½d.
...	7½d.	En'lled 15oz. 5½d.,21 oz	7½d.

ording to size and substance for squares
ck.

LLED PLATE IN CRATES OF STOCK SIZES. Per Ft.

e	4½d.
d	5½d.
d	5½d.
lled. Baltic, Ocean ic, Arctic, Stip-	
d small and large Flemish white..	6½d.
tinted	9d.
et	6d.
el Cathedral	5½d.
do.	7½d.

te is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
riage	ditto	1 4 0
.....	ditto	1 12 0
.....	Inside	0 18 0
er	ditto	0 18 0
inet	ditto	1 2 6
tting	ditto	1 0 6
ak.....	ditto	0 18 0
ring Oak	ditto	0 19 0
nish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
id Size		0 10 0
oan		0 10 6
any Stain (water).....		0 12 0
k.....		0 7 6
.....		0 14 6
nt)		1 5 0
ush Polish		0 17 0
n Terebine.....		0 9 0
name.....		0 7 0

HALL.—Operations have com- nnection with the erection of a new ear Ashton U.F. Church. A site en at Ladybank.

THS.—The question of providing washhouse has again been revived mmittee of the Baths and Wash- ittee have gone into the matter. ecided to visit several suggested nection with the scheme.

THE SCOTTISH BUILDER

SCOTTISH ROADS

It is interesting to note, in view of the big scheme to drive a road between Edinburgh and Glasgow at a cost of about three million pounds, that part of this route is over the ground where road-making on a big scale, for the period, was done for military purposes by General Wade, nearly 200 years ago. General Wade will perhaps be best remembered for his roadmaking activities in the Highlands. At the time it was written :—

"Had you seen these roads before they were made,
You would lift up your hands and bless General Wade."

In 1726, General Wade commenced the construction of the Highland roads with the aid of the soldiers under his command. The task was pushed on rapidly for eleven years and nearly 250 miles of good roads and about 40 bridges were built. A main route, "The Great Highland Road," connected Inverness with the south, going *via* Dunkeld and Blair Atholl. This was joined by a subsidiary line from Perth and Crieff. Another ran by the south side of Loch Ness and connected Fort William, Fort Augustus and Inverness.

A branch from the Great Highland Road was driven across the alpine slopes of Corrieyairack to Fort Augustus, and though to-day it lies grass-grown and decayed, it remains an impressive memorial to the skill of Wade's engineers. General Wade is commemorated in Westminster Abbey by a monument, the work of the sculptor Roubiliac. This is situated over the Canon's door.

Smokeless Fuel.

Plant for the manufacture of smokeless fuel is being erected at Dalmarnock Gasworks, belonging to Glasgow Corporation. This is the first instalment of Glasgow's effort to replace raw coal in domestic use by a smokeless form of fuel. A paper on the subject was read at the Smoke Abatement Conference in Manchester recently by Mr. Robert Maclaurin, manufacturing chemist, Glasgow, the inventor of the process.

New Tweed Bridge.

Messrs. Holloway Bros., London, have secured the contract for a new bridge over the River Tweed at Berwick, at a cost of £122,900.

Steel Houses.

The East Lothian County Council recently had before them the views of a deputation who recently inspected steel houses at Glasgow. Sir A. Buchan-Hepburn, Bart., spoke favourably of Lord Weir's house, which, he said, was given at a definite moderate price, and included foundations. He thought they might try the experiment of purchasing two of the houses for the Eastern district to be used for workmen. Bailie Fish, Dunbar, from the point of view of an engineer, said that the oxidation and corrosion of the foundations were serious matters, and might in the course of a few years affect the strength of the houses. Further consideration was remitted to the Housing Committee.

Greater Edinburgh Lecture.

The success of the lectures on Greater Edinburgh, arranged last winter by the Education Authority, has led to the arrangement of a similar course this year. Mr. Stuart Pilcher, Tramways Manager, will speak on "Some Transport Problems in Greater Edinburgh"; Mr. Ernest A. Savage, Principal Librarian, on "Some Possible Library Developments in Greater Edinburgh"; Mr. Horsburgh Campbell, Director of Housing for Edinburgh, on "Housing: Its Social, Civic, and Educational Relations"; Dr. Blaikie on "King Arthur in Scotland"; Professor Hannay on "Edinburgh and the Scottish Parliament"; and Sir John Lorne MacLeod will give a sketch on "The Making of Edinburgh." The last lecture will be delivered by Professor Grierson, his subject being "Greater Edinburgh, an International City."

Roslin Housing Scheme.

A meeting of the Lasswade District Committee of Midlothian County Council was held recently in the County Rooms, Edinburgh, Mr. Charles Buchanan presiding. The Housing Sub-Committee reported that the Scottish Board of Health had granted an extension of the time within which the Roslin housing scheme could be completed for such period as might be found necessary on condition that the local authority continued to use every endeavour to ensure that the work was completed expeditiously. They reported that the work was now well advanced, though the painter work and fencing had still to be executed. As regarded the roadmen's houses, it was reported that there had been considerable delay owing to the difficulty in obtaining bricks, and now owing to the scarcity of plasterers, but that the architects anticipated that the houses would be all completed by the end of the year, or early in January.

Bricks from Germany.

It has recently been stated that the Works Committee of the Hull Corporation has placed an order, accounts vary from one-half to one million for German-made bricks, to enable them to proceed with their housing schemes, which have been retarded, it is reported, owing to the inability of British makers to cope with national requirements. Two hundred thousand of these bricks have arrived.

According to the Hull City engineer the German bricks purchased cost 50s. per thousand, but British manufacturers state that by the time they have reached the housing sites they will have cost 80s. per thousand. A manufacturer within fifteen miles of Hull states that in July last he offered the Corporation a million bricks at an average price of between 63s. and 65s. per thousand, rail or wharf. Stress is laid on the alleged inferior quality of German bricks.

DING TRADE WAGES IN SCOTLAND.*

ing are the present rates of wages in the building trade in the principal towns of very endeavour is made to ensure accuracy, but we cannot be responsible for errors cur :—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Labourers.	Plasterers' Labourers.
....	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½		
....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3		
....	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½		
....	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3		
....	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3		
....	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3		
....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½		
....	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½		
....	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½		
....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2		
....	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½		
....	1/8	1/8	1/8	1/8-1/6½	1/6	1/6	1/6	1/2		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½		
....	1/5	—	1/4½	1/4	1/5	1/5	1/4	1d. to 1/2		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½		
....	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3		
....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½		
tern										
....	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½		
....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½		

tion given in this table is copyright. The rates of wages in the various towns in England and
n page 794.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0	
Do. joists	" "	5	6	
Do. roofs, floors and partitions	" "	6	0	
Do. trusses	" "	8	6	

	¾″	1″	1¼″	2″
Deal rough close boarding per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers "		50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.	¾″	1″	1¼″	1½″
Deal edges shot per sq.		44/6	53 -	60/6
Do. tongued and grooved "		49/-	57/6	65/-
Do. matchings "	45/-	51/-		
Moulded skirting, including backings and grounds per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS	1½″	1¾″	2″
Two-panel square framed per ft sup	2/1	2/4	2/6
Four-panel Do. "	2/5	2/8	2/11
Two-panel moulded both sides "	2/8	2/11	3/2
Four-panel Do. Do. "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	per foot cube		
		1″	1
Plain deal jamb linings framed	per ft. sup	1/7	
Deal shelves and bearers	"	1/4	
Add if cross tongued	"	2d.	

STAIRCASES.

	1″	1¼″	1½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9
Deal strings wrot on both sides and framed	1/8	2/-	2/2

Housings for steps and risers	
Deal balusters, 1 in. × 1¼ in.	per ft. run
Mahogany handrail; average 3 in. × 3 in.	" "
Add if ramped	" "
Add if wreathed	" "

FIXING ONLY IRONMONGERY (INCLUDING SCREW

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges letting in to floor	
Casement stays	1/2	making good	
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per
Plain compound girders	
Do. stanchions	
In roof work	

RAIN-WATER GOODS.

		3″	4″
Half-round plain rebated joints	ft. run	1/11	2/4½
Ogee Do. Do.	"	2/4½	3/1
Rain-water pipes with ears	"	2/9	3/7
Extra for shoes and bends	each	4/4	5/11
Do. stopped ends	"	1/11	2/4½
Do. nozzles for inlets	"	2/2	2/7

PLUMBER.

Milled lead and laying in flashings and gutters	per c
Do. Do. in flats	
Extra labour and solder in coated cesspools	eac
Welt joint	per ft
Soldered seam	"
Copper nailing	"

	½″	¾″	1″	1½″	2
Drawn lead waste per ft. run	1/2	1/9	2/0	3/4	4/
Do. service "	1/8	2/2	2/7	3/10	
Do. soil "					3/
Bends in lead pipe each					
Soldered stop ends "	1/2	1/8	2/1	2/10	3/
Red lead joints "	11d.	1/-	1/3	1/11	2/
Wiped soldered joints "	2/10	3/6	4/-	4/11	6/
Lead traps and cleaning screws "				14/7	19/
Bib cocks and joints "	6/4	9/7	15/4	41/-	
Stop cocks and joints "	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard s	
Do. Do. Sirapite	"	"
Do. Do. Keen's	"	"
Add sawn lathing	"	"
Add metal lathing	"	"
Portland cement screed	"	"
Do. plain face	"	"
Mouldings in plaster	per l girt	
One-and-a-half granolithic pavings	per yard	

GLAZIER.

21 oz. sheet plain	per foot
26 oz. Do	" "
Obscured sheet	" "
⅛ in. rolled plate	" "
¼ in. rough rolled or cast plate	" "
¼ in. wired cast plate	" "

PAINTER.

Preparing and distempering, 2 coats	per yard
Knotting and priming	" "
Plain painting 1 coat	" "
Do 2 coats	" "
Do 3 coats	" "
Do. 4 coats	" "
Graining	" "
Varnishing twice	" "
Sizing	" "
Flatting	" "
Enamel	" "
Wax polishing	per foot
French polishing	
Preparing for and hanging paper	per piece

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s 6d per £100 for Fire Insurance. The information given on this page is copyright.

TRADE NEWS

formed that P.P.P. Flooring (" Per-Parquet ") is being extensively used important cinemas and other public " P.P.P." is made in panels, 2 ft. 1 ¼ in. prime Austrian oak, and can laid by builders' own workmen. and samples may be obtained from Messrs. Morner & Co., 54A, Parlia-, S.W.1.

received from Messrs. William Sons, Ltd., Milkstone, Rochdale, heir " Shepherd's N.E.W.S." No. 9. ment that never have road matters arnestly debated by Parliament, Press cannot be denied. Not only tter been debated, however, but a amount of practical work has been d. In this connection Asphaltic is an improved and scientifically aration of slag tarmacadam, manu- Messrs. Shepherd & Sons, can fairly ve taken an important part. On Page, we give, from the same te on Scottish roads.

received from Messrs. Ruston & d., Lincoln, a particularly attractive aling with their Vertical Oil Engine. ue itself, apart from the scientific its details, is admirably produced. on from South on the first page: ledge drawn from experience is other kind from that which flows lation or discourse," correctly e point of view of those who have ace of the Ruston Engine. On the here is a quotation from Locke: particular matter of fact is vouched ncurrent testimony of unsuspected here assent is unavoidable." We ove upon this apt quotation.

received from Messrs. John Bolding ., Grosvenor Works, Davies-street, opy of their new illustrated cata- itary equipment. As an example catalogue production, containing index which is both clear and com- t is one of the most successful we r some time. It is extremely well In a catalogue which comprises 370 little difficult, with such a range of o make individual comment. The ties of cast-iron parallel rolled edge ordinary, shower and spray, show a efficiency together with a complete- ic finish comparable with any other description. There are also illus- es of white painted, and Porcelac airs, which, together with their table and " Cabriolet " tables, are he best types of this form of equip- he smaller scale the medicine toothbrush and tumbler holders ly ingenious affairs. The high eir various forms of pedestal closets oo well known to need comment.

Builders' Estates.

Hughes, of Llwynfryn, Brompton- yn Bay (net personalty, £660),

rth Jones, of Cartrefle, Alexandra- Bay, Denbigh (net personalty, 17.

t William Roberts, of Bryn nmaenmawr, Carnarvon (net ,303), £6,299.

Tellam (56), of Bedford Villa, e, Plymouth (net personalty, 2.

Villiam Boothroyd (59), of Wor- Almondbury, Huddersfield (net 472), £5,690.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

AMMANFORD.—For erection of buildings for the Amman Valley Intermediate School, for the Carmarthenshire C. C., Mr. J. HowardMorgan, F.R.I.B.A., Carmarthen :—

Lewis Davies, Penrygoes, Llanelly	£34,900	0
Williams & Davies, Caerphilly	32,200	0
Mercer & Sons, Llanelly	34,995	0
C. Thomas & Co., Llandilo	34,598	0
*W. Evans, Ammanford	31,244	10

Subject to the approval of the E.C. and M.H.

ANNESLEY.—Repairs to Council School, for Notts C.C. :—

*Rogers & Crooks, Mansfield £739 10

BATH.—For internal decoration work at Lampards-buildings and Dolemeads :—

*Bishop & Son £248 11

BELFAST.—For erection of a new wing to the Queen's College, Physiology Department :—

*H. Laverty & Sons, Belfast.

BERWICK.—For erection of a ferro-concrete bridge over the Tweed :—

*Holloway Bros., Ltd., London £122,900

BISHOPSTOKE.—For alterations at The Mount, for the Hants. C.C. Mr. A. L. Roberts County Architect, The Castle, Winchester :—

*J. F. Gamble, Lyndhurst £3,619 15 10

BOURNEMOUTH.—For repairs and redecorations, &c., at the various schools, for the T.C. :—

*Grounds & Newton—Westbourne Council school	£269	0
*Bailey & Sons—Bournemouth school	263	10
*Jenkins & Sons, Ltd.—Moordown C. of E. Girls' school	195	0

BOURNEMOUTH.—For addition to bowling pavilions (*a*) Winton pleasure ground; (*b*) King's Park ground, for the T.C. :—

*J. Drewitt & Son ..... (*a*) £385 (*b*) 459

BRADFORD.—For construction of banking premises at the junction of Marlborough-road and Manningham-lane, for the Bank of Liverpool and Martins, Ltd. Messrs. B. D. Fairbank & Son, architects, Bank-street, Bradford :—

Masons' work—*M. Booth & Sons, Bradford.
Joiners' and bank fittings—*Wilkinson & Dawson, Bradford.

BRISTOL.—The following contracts have been made for the erection of houses on the Knowle Estate, for the T.C. :—

A. W. Norris— 18 non-parlour—12 at £380 each, six at £385 each; 18 parlour at £430 each	£14,610
A. J. Miller— 12 parlour at £420 each	5,040
Leonard & Thompson— 10 parlour at £420 each	4,200
C. Malone— 18 non-parlour—10 at £395 each, eight at £400 each: 20 parlour at £430 each. Extra for foundations over site of pond, £30	15,780
Total	£39,630

BROXBOURNE.—Rebuilding bridge over the New River, for Herts C.C. :—

W. & C. French, Buckhurst Hill	£2,369	16	3
P. R. Paul, Waltham Abbey	1,977	2	2
*A. E. Farr, London	1,705	11	6

BURNTWOOD.—For erection of two pairs of houses, for the Mental Committee :—

*J. Morgan & Sons, Stafford £3,074

CAERPHILLY.—For erecting a ferro-concrete footbridge over the Rhymney River at Pontypandy-terrace, Caerphilly :—

*Watkin Williams, Caerphilly £350

CHELTENHAM.—Construction of meter house, ferro-concrete tanks, and other works, for T.C. :—

*Wm. Drew £3,788 10 4

CLIPSTONE.—Erection of school, for Notts County E.C. :—

*A. Eastwood & Sons, Warsop £17,150

CROYDON.—For erection of 34 houses and 14 double tenements in Thornton-road, for the T.C. :—

†Walter Jones & Co., Ltd., London £31,959

DEWSBURY.—For the construction of 14 percolating filters and construction of equalising tanks at Mitchell Laithes Sewage Works, for the Corporation :—

*Provincial Construction Co., Ltd., Sunderland £7,099

GUILDFORD.—Pewley-hill improvement, for the T.C. :—

*Streeter & Co. £9,049

GUNTHORPE.—Formation of embankments for the southern approach road to the proposed new bridge, for the Notts. C.C. :—

*H. Coxhead & Co., Middlesbrough .. £15,761

HARWICH.—Erection of electricity sub-station, for the T.C. :—

‡Fisher & Woods £700

HAVANT.—For repairs to the Town Hall roof, for the U.D.C. :—

*Rogers Bros. £115

HERTFORD.—Alterations at Shire Hall, for Herts C.C. :—

*F. Hitch & Co., Ware £1,495

HUNSDON.—Erection of elementary school for 120 children, for the Herts County E.C. :—

*Rooke & Son. Saffron Walden £4,179

ILKLEY.—For erection of 24 houses, parlour type, for the Ilkley U.D.C. :—

*W. J. & R. Turnbull & Sons, Leeds: £575 per house.

LEEDS.—Extension of circulating pumphouse at generating station, for T.C. :—

*H. Atkinson & Son £13,234

Steel work—
*Samuel Butler & Co., Ltd. 825

LEEDS.—For erection of Baptist Chapel at Southparade, Headingley. Messrs. Jones & Stocks, architects, Park-row, Leeds :—

Mason—*T. Ullathorne & Sons, Selby.
Asphalter—*Tunstall's Rock Asphalte Co., Ltd., Leeds.

LONDON.—For constructing an underground convenience at the foot of Blackheath Hill, for the Greenwich B.G. :—

Griggs & Son, Westminster	£3,495	0	0
Wm. Mills & Sons, Ltd., Blackheath	3,389	0	0
H. Kent, Hither Green	3,190	0	0
G. B. Farrar & Co., London	3,158	0	0
B. Finch & Co., Ltd., Lambeth	3,059	0	0
Douglass, Halse & Co., Ltd., Woolwich	3,034	6	7

[Having regard to the amounts of such tenders, the Committee has again considered the report of the Borough Engineer as to the cost of carrying out the work by direct labour, in which the opinion is expressed that a fair figure for this purpose would be approximately £2,200.]

LONDON.—For repairs and reconstruction of premises 50, 52, 54 and 56, Sirdar-road, for conversion into 12 flats :—

T. W. Heath, Ltd.	£6,892	0
W. Nash	6,261	0
G. N. Watts, Ltd.	5,968	0
J. Poole & Son	5,919	0
*B. Colley & Sons, Ltd.	5,863	7

LUTON.—For erection of an administrative block and cubicle block at the Infectious Diseases Hospital, for the T.C. :—

†E. Pryer £7,529

MANCHESTER.—Construction of "Unicorn" Hotel, in connection with Church-street improvement, for T.C. :—

*H. Matthews & Sons, Manchester.

MERTHYR.—For extension of No. 6 female ward at the Infirmary, for the B.G. :—

J. Williams & Sons, Merthyr	£3,594	14	8
D. Jones & Son, Dowlais	3,325	9	10
N. Moss, Merthyr	3,192	0	0
E. P. Davies, Dowlais	3,120	0	0
*J. T. James, Merthyr	3,030	10	0

The architect's estimate is £2,950.

MEXBOROUGH.—For erection of 40 houses, for the U.D.C. :—

*G. W. Meanley & Son, Ltd. £18,280

MIDDLESEX.—For proposed alterations and additions at Court House and Polytechnic, Tottenham, N., for the County Council of Middlesex, from plans prepared by Mr. H. G. Crothall, F.R.I.B.A., County Architect :—

W. J. Maddison, Ltd., Minories	£3,026
C. J. Newby & Bros., Southgate	3,014
A. Fairhead & Son, Enfield, N.	2,934
G. Groves & Son, Tottenham	2,906
W. Lawrence & Son, Ltd., Finsbury-square, E.C.	2,905
H. Knight & Son, Tottenham, N.	2,880
G. Godson & Sons. Ltd., Kilburn-lane, W.10	2,809
A. Porter, Ltd., Tottenham, N.	2,793
A. Monk, Lower Edmonton, N.	2,735
‡J. Stewart & Sons, Tottenham	2,682

NETHERFIELD.—Provision of lavatory accommodation at elementary school, for Notts C.C. :—

*G. T. Tegerdine £300 15

NEWPORT (ISLE OF WIGHT).—For erection of two pairs of houses, for the T.C. :—

A. P. Williams	£918 per pair
E. I. Hayles	900 ,,
T. E. W. Phillips	810 ,,
*H. E. Day & Sons, Cowes	798 ,,

PORTRUSH.—For erection of 10 houses, for the U.D.C. :—

†J. Frizzell, Portstewart	£3,650
Surveyor's estimate	3,500

PRESTON.—For erection of 50 houses in Miller-road, for the T.C. :—

*W. Markinson, Ltd., Horwich—			
Two houses	each	£475	0
Eight houses	,,	472	10
*Levi Yates, Preston—			
Two houses	,,	470	0
Eight houses	,,	460	0
*J. C. Barnes—			
Ten houses	,,	481	0
Twenty houses	,,	475	0

ROTHERHAM.—For erection of 200 houses, for the T.C. :—

†T. H. Barker & Sons, Loughborough.

SHEFFIELD.—For the erection of transformer sub-station in Crookes, for the T.C. :—

*H. C. Hornbuckle £1,037 3

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Charles Wright & Son, Langford	£757 0 0
Redhouse & Son, Stotfold.....	749 0 0
*Seymour Bros. & Tookey, Stotfold	709 17 4

WARWICK.—Erection of 32 parlour-type houses, for the T.C. :—

*Standbridge & Parker.

WATFORD.—Widening bridge at Hamper Mill-lane, for Herts C.C. :—

Clifford & Gough, Watford	£1,031
‡A. E. Farr, London	800

WEAVERTHORPE.—For erection of a teacher's house, for the East Riding E.C :—

*W. Elcock, Cawood £796 5

WINESTEAD.—For alterations and additions to the Teacher's house, for the East Riding E.C. :—

*L. & E. Kirkwood, Patrington.. £209 19 6

WORKSOP HAGGONFIELDS.—Erection of school, for Notts County E.C. :—

*Richmond & Sons, Retford..... £7,646

YORK.—Alterations at Guildhall, for the T.C. :—

‡A. Heppell £239 18 1

YORK.—Erection of mess room, &c., in Rougier-street, for the T.C. :—

‡Wm. Usher £511 1

Department of Overseas Trade.

The commercial secretary at Athens reports that tenders will shortly be invited for the building of a theatre, restaurant and other works in Salonica and the demolition of certain old buildings there. United Kingdom firms desirous of obtaining further particulars should apply to the Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

Chalk-Brick Houses.

Mr. A. T. O. Quick, of 60, Bardon Chambers, Infirmary-street, Leeds, writes drawing our attention to the possibilities of chalk-bricks for house building, and has sent some photographs of the buildings erected with this material in France on the pin and panel system, with hollow bricks, 10 in. by 10 in. by 2 in. The bricks are made of chalk and cement in the proportions of 12 to 1, and we are informed have a crushing strength of 2,110 lbs. per sq. in. Mr. Quick says: "What was done in France can be done in England. In the chalk areas of chalk-and-cement bricks could be great success to help to overcom difficulties and provide work for a la of unskilled men in preparing the Chalk-brick houses with steel fra provide houses pleasing in appearanc proof and considerably under the cost day houses."

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

L.—No. 4268. NOVEMBER 21, 1924.

THE PALACE OF ART, WEMBLEY

THE large numbers who visited this exhibition helped to show that there is a real interest for art in the general public, and it is instructive in an exhibition so comprehensive to consider what are the prevailing impressions to be gained from it. In the art of ast we perceive that each great period has received its us from the prevailing beliefs of the time, and after the nation the home, the civic life and domestic art occupied lace of the earlier more ecclesiastically-inspired inter- ions. In the multitudes of examples shown in the of Art it was difficult to connect the expression, or subject , with any such governing impulse, and its eclecticism s distinguishing feature, while its attachments to life elief were not of much account. This raises issues of reat moment in considering the present state of Empire There has been, over a considerable number of years, a ning of the scope of subject matter, to include in it new logical manifestations—abnormality as well as the ugly. ere is, however, another view of the matter which claims s the active principle in religion is beauty, so this applied creative arts finds their beauty to lie in the right com- n of things themselves beautiful. When that attitude ceased to govern, it was gradually replaced by repre- on, and the externals of craftsmanship applied to the ation of things not in themselves beautiful. The field entation thus gained in variety what it lost in direction. on, therefore, becomes of paramount importance and e determined by what we find best in life. For the of art is not that of nature, though reached through its tion; and it appears to us that only in exceptional and there were certain notable exceptions—was there riation in this exhibition from the level of naturalistic g. in which nature is seen to be the raw material for ftsmanship rather than for our affection. In the sculp- lleries we saw, however, another influence, less desir- hat of the grandiose, the endeavour to lift the common- f unendowed approach by violent exaggeration of action. ce through this gallery revealed sculpture figuratively g on its head, in a violent commotion of strained bodies, nd arms, much in need of the drill sergeant. And it nost as though we entered into another world, to find all this hurricane, a figure so tranquil, so charming, and noble as the statue of a girl (bronze) by David MacGill. was more comprehension in this one statue (for does it lude the type of all noble maidenhood ?) than endless t or narrative could embody, and it may be regarded as sonification of an ideal—but it was more than this: it eek, Italian, modern, in that it gathered up all that at e has been included and so belongs to all time.

as been so truly said, the artist always paints himself— nobility, his own affections, his own character—and it e more noticeable that so large an amount of the work hardly revealed him at all. It was seen so vividly in the galleries that we were looking at the craft of painting nd that the art was somehow not there.

e passed to the galleries representing Indian Art, we o statues, "To the Temple" (plaster) and "To the (plaster), by S. G. Mhartri: the former in its own way and beautiful as Mr. MacGill's statue was in another, the latter embodied a more developed culture in that er beauty becomes reincarnated from the physical, dominates more in Mhartri's work. There was a quite able significance in this little figure at a time when the Europeanising of Indian art is proceeding, and it exemplified the fundamental differences of national character in the preservation of which, whether for England or India, is contained the security for art. And the difference was not one of technical resources, for the Indian sculptor was as capable of realisation and had as complete mastery of his material as Mr. MacGill. The result, however, emerged in a form as different as is the palm tree from the elm.

The problem of the evolution of the arts, and the preservation of type within them is thus exemplified in a very interesting way. Cosmopolitanism, which reacts with similar effect as has the industrial revolution on industry, tends with disintegrating force to override national characteristics. The patriotic idea replaces nationality, and grasping only at externals like the over-insistence of the State, it submerges individuality: national characteristics and political patriotism being often found, their ideas being destructive of each other, in complete antagonism. There was no evidence of Indian characteristics in the painted frieze recently reproduced in a daily paper by the Indian Society, and what is left where these are superseded ? It has not the virtues of Occidental tradition, and is divorced from its own. Only where this racial identity is preserved can the arts be said to retain any real life. In the Burmese Section the picture "Industry," Burmah, by B. A. Nyan, which might have been the work of any Academy student, exemplified in a startling way the consequences of Europeanising native arts at a time when its industrialism has obscured the true issues. Art can only be encouraged when the spiritual is enthroned above machinery.

The ecclesiastical exhibits were shown in a church built in the Basilica form, so as to provide a setting for the various exhibits. The restless competition of stained glass and altars where there is no co-ordinating idea to unite them, took away the repose that should belong to such surroundings, and was opposed to the objects it had to serve, and it may be doubted whether under such circumstances the best interests of religious art are at all well promoted. It was all, however, on the whole very orthodox, though hardly corresponding in its inwardness with the new spirit in the Church to-day; the emphasis resting on craft with very little compelling human interest. We felt in such surroundings that with any entrance of a more vital spirit, there would go up the cry once again, "Great is Diana of the Ephesians," against new interpretation and life force which threatened its security. The craftsmanship, so far as it went, was all complete enough—if only that were enough—but we are looking to-day for new interpretations to rekindle the life spirit and relate it all to human welfare.

The Bishop of Liverpool, when speaking in the Cathedral on a recent occasion, declared it open to "all men of good will without regard to creed or manner." There was only too evident in the examples shown an over-emphasis of manner at the cost of content. While there has been so much talk in recent years of craft ideals, how many, we wonder, of the stained glass windows were painted by the artist himself ? Yet how slight is the hold on intimate expression where this is not the case, and treatment is so little regarded that it can be delegated in such a way. It is not a question of what was done in the past; the present age calls for a conviction, deepened and strengthened from what has gone before, if art is to do its part, and there is danger lest the craftsman should disregard this new spirit in the Church itself which finds life more than art, and the only force worthy to inspire it.

NOTES.

Labour in the Building Trade.

THE *Times*, on the 17th instant, published extracts from an article by Mr. George Hicks in the *Labour Press Service* which contains a defence of building operatives who, he says, are loyally co-operating with the responsible authorities in an endeavour to carry out existing schemes successfully. He complained of "ignorant and often spiteful criticism" of the building operatives, and says that in many minds it is almost an article of faith that building union rules and slackness on the part of bricklayers are jointly responsible for the building shortage, but no attempt is made to bring the objectionable rules to light, and the charge of slackness is repeated in defiance of employers' admissions that production is well up to pre-war standard. We have yet to see the admission of any employer that output is up to the level of what could easily be attained. Mr. Hicks, however, goes on to say that the facts that lend colour to the above charges are the rejection of dilution and changes in building methods that have varied the proportion between skilled and unskilled labour. He approaches this question of dilution at first in a more business-like manner, declaring that the partially-trained man is uneconomic in the building industry, which is the farthest of all big industries from being adaptable to extreme sub-division of labour, and contends that so far as certain kinds of unskilled help might be found economic it is adequately provided by the apprentice. But he soon lays aside this more statesmanlike attitude and goes on to say that obviously the trade union objection to dilution is that it creates a floating reserve of half-trained men who could be "made do with," at a loss, in times of industrial dispute, when the small employer and his sons might carry on with such aid, and dilution is, in fact, a form of union smashing, and is of little use for anything else.

The Public Need.

THIS latter argument rather lets the cat out of the bag, and explains the very narrow view taken by the unions of the national necessity. What could be more futile than such an argument? We have an industry which cannot meet the demand for the product it is engaged upon, there is a certain and increasing demand for what it could produce, and it is under-manned, yet its ranks are not to be increased or any step to be taken to meet the demand except by the slow process of training apprentices! And for what reason? Because in case a labour dispute should arise the men in course of training might not be subject to union discipline! Mr. Hicks concludes his article with a sort of threat to the public: "If the public need is exploited in the interests of a barefaced union-smashing campaign, the reaction will be as calamitous as it is prompt," but Mr. Hicks must use a stronger argument than he has done if he wishes to convince the public who are waiting for houses that the building trade operatives are playing their part. As we have pointed out before, the building operatives are playing a very dangerous game as regards their own real interest in standing in the way of developing a trade for which there is a public need. Other methods will be discovered and the building operative will be superseded, and the union smashing will be not that which Mr. Hicks anticipates and fears, but the smashing of the industry itself by the unions, who are failing to take a long view of things and are concentrating on the reactionary policy themselves. They are living in a fool's paradise, for no nation would submit to their dictation and go without houses to please them, and other men and other methods are certain to be adopted and the building operative must inevitably suffer.

Higher Buildings Again.

LIBERTY, it has been said, is the reward of eternal vigilance, and if the London we know is to retain its traditions of character and not to be violently uprooted from the past, the pressure now being brought to bear will need to be carefully watched. If for no other reason—and there are reasons enough—there are very strong objections to using for further business and residential purposes the centre of London, already so congested. To add to the pressure already existing by attracting many more people to the centre appears to us not to solve any traffic problems, but rather to add to them, and to contradict the aim of those who looked to reduce the pressure on the capital. To coop more and more people up in the congested central area of London, at a time when we believe there is a strong reaction from the belief i high buildings in New York and C on account of the congestion they the reduction of air and sunlight, wi sequent loss of health, is somethin than a prejudice "against the ad development of Central London doubt, on a money computation such buildings would pay; but th other considerations besides pr additional security "upon which cipal loans can be raised." A gre claims from us an outlook of enlightened character if we are t what is owing to tradition and th We trust that the County Counci have shown their appreciation of a view than that of providing "add security for loans," will make hast slowly in this matter, realising tha are other considerations than those utilitarian to be included, whic against the proposals rather th favour of them.

Housing Dangers.

A CORRESPONDENT v "We are accustom recognise the trut cutting our coat a ing to the amount of the cloth, we cannot afford cloth to fall ba fustian. Ideals in building which p us from building, or throw it in arms of the mass producer, hardly the purpose of those who desire us freed from the standardising is so unsightly. The courage to cheap houses may be a better thin the idealism which, in present fi embarrassment, may prevent us building any. We have in mind a h scheme carried out by a local aut which is subject to criticism by arc because the wood-work is very th the construction is not such a secure centuries of existence for it the houses themselves have none t something human and habitable i



Photo: Mr. C. L. Gill, F.R.I.B.A.

Doorway in Rome: Entrance Front Via Sistina.



Mr. C. L. Gill, F.R.I.B.A.
ance to Vatican Gallery, Rome.

eristics, as a man may appear becomingly dressed in clothes that ot fabricated in Savile Row. We t desirable to press this point of g cheaply—and, therefore, rather arily—and yet not in an altogether ly way. If architects will yield leals for building to the necessities ime, we may be saved the mechan- tandardisation of our housing now threatens us. We seem to little more initiative in the pro- to meet us on rather lower ground he heights of architecture—if it is round—and we may then find that a quality to be found in cheapness, en it is directed by a mind adjusted difficulties of the present time. s real danger that mass production tervene and capture the ground, the architect can offer an alter- at a cost which will enable his appreciation of housing amenities ail."

No itect red."

Mr. Geoffrey Watson, writing in the *Times* of the 17th, reminds us that "No architect, no skilled labour, is required to build cottage y, and never was employed, until thorities stepped into the arena of culative builder." We do not know he speculative builder will say on old that he, who generally worked is own hands, was not skilled. n hardly think of anyone more And as to the non-employment itects, we can only lament that atson should be ignorant of the ion between "building" and ecture," and should fail to realise cottage that is architectural (in ords, comely and pleasing) need more than one that is ugly and monotonous; that the ugly houses of twenty-five years ago, which Mr. Watson seems to admire, were demoralising because of their ugliness; and that the architect's contribution in cottage design is therefore vital to the moral welfare of the community.

St. Dunstan's.

The architect's waste-paper basket must be ample and receptive. Every day it engulfs the obliging money-lender and a dozen patents. Many hands must, however, have hesitated to consign to destruction the circular issued during Armistice Week by St. Dunstan's, asking architects to recommend the door mats being made by 800 ex-soldiers who were blinded in the war. "Every house, factory, warehouse, and building," we are reminded, "requires a mat." St. Dunstan's is peculiarly British; it touches not only the sentiment of patriotic sympathy, but the practical worth of self-help turning out good things. We make no apology for this reminder to those who may too hastily have thrown away the appeal. If they have not the opportunity to recommend the door mats, they may need a new waste-paper basket, and these St. Dunstan's, if we are not mistaken, can also supply.

Road Names.

We note that the Housing Committee has recommended to the London County Council that the reconstructed estate at Hickman's Folly, in Bermondsey, should be called "Dickens' Estate." The principle of giving streets and dwellings names in some way connected with the history of the district is a good one, and will, no doubt, lead to monographs in the distant future on our 1924 inventions. The fact that the estate at Acton Wells was built on a golf course is commemorated in such street names as "Long Drive" and "Brassey-avenue." Just as a name may make or mar a play, so the importance of good street naming should not be overlooked. "Twenty-first-street" and "Twenty-second-street" may be examples of business-like method, but there is little of interest or romance in such titles. Even "Daisy-street" and "Dandelion-road" would provide more character, although haphazard and sentimental naming indicates a sad lack of imagination.

Acoustics.

Mr. Hope Bagenal's researches on acoustics, some aspects of which he outlined in his paper read before the Royal Institute of British Architects on Monday, should be of great value to the architectural profession, for the problem is not confined solely to schools, churches, concert halls, and such-like buildings, but the comfort of the occupants of offices and houses on busy and noisy roads can be increased if the principles of acoustic design be applied. The extent of the acoustic difficulties in the Law Courts was brought home by Mr. Bagenal when he related an incident which happened when he was a visitor there: Complaints had been made of the echo in the room, and the judge mentioned that on a previous occasion the clerk to the court, in taking down evidence, had actually added the echo to the original sentence. It is interesting to remember that the whole of the competition designs submitted for the Law Courts were Gothic, which, Mr. Bagenal said, is the worst possible form of building for carrying the human voice, although the long reverberation often adds to the effect of church music.



Photo: Mr. C. L. Gill, F.R.I.B.A.
Remains of Roman Bridge over Tiber.

GENERAL NEWS

Professional Announcement.

The Smethwick T.C., after interviewing seven candidates for the appointment of architect, has appointed Mr. Seth Stephens, of Birmingham, to the position.

Obituary.

The death has taken place, at Herne's Nest, Bewdley, in his 57th year, of Mr. Mark Round, a retired timber merchant. He was for several years a member of the Old Hill Urban District Council.

The death was announced recently of Mr. Thomas Simpson, 78, builder, of East Dulwich, who was responsible for restorations at St. Saviour's Cathedral, Southwark, the Royal Naval Hospital, Bancroft Grammar School at Woodford Green, and King's College Hospital.

Town Planning in the Malay States.

We have received the third annual report of the Government Town Planner of the Federated Malay States. Part I gives general remarks and illustrations on town planning progress in the Federated Malay States, and Part II particulars of work and development during 1923.

Architects' Estates.

Mr. Frederick Meakin (84), of Windlesham-gardens, Brighton, and late of Martin's-lane, Cannon-street, E.C. (net personalty, £20,813), £24,991.

Mr. John B. Jones, Alexandra-road, Colwyn Bay. Net personalty £1,535; gross, £39,117.

Lectures on Christian Arts.

A free University (Iolscoil na-h Eireann) has, in spite of political divergencies, been established in Dublin. Its programme includes several subjects not dealt with by the other Irish Universities. Count Plunkett, Hon.A.R.I.B.A., the former Director of the National Museum, has already started his course of lectures on Christian Art in the Iolscoil.

Labour Shortage.

Mr. E. D. Simon, speaking recently on housing at the National Liberal Club, London, said that from the day of the Armistice the shortage of skilled labour in the building trades had been the chief difficulty that counted in connection with the housing question. They could build 100,000 houses a year, and the extra 100,000 necessary for meeting the minimum national requirements could not be provided, although there were over a million people unemployed. The question of apprenticeship would have to be dealt with as a business proposition, and he suggested that the matter should be made the subject of a special inquiry.

LABOUR FOR HOUSING

MR. JAMES RANSOME, F.R.I.B.A., of 21, Suffolk-street, London, S.W. 1, writes:—"From the time when the Addison fiasco was first mooted, I have openly expressed my conviction that no solution of the housing problem is possible which does not embrace: (1) the protection and extensive employment of unorganised, untutored and unfettered labour; (2) the suspension of legislation inimical to the natural development of building enterprise. Although this conviction seems to be shared by a great majority of those with whom I have discussed it, I understand that it is not held by some eminent architects whose views have undoubtedly influenced the abortive housing policies of three successive Governments. Insistent pursuit of this ideal is," states Mr. Ransome, "obstructing the building of houses in which men and women could live in comfort, health and decency," and he invites members of the profession who may share his views to communicate with him.

EXHIBITION NOTES

FINE ART SOCIETY.

QUITE head and shoulders in interest above the ordinary kind of exhibition is that of big game paintings and etchings by Mr. Kuhnert at the Fine Art Society. We do not suppose there is another living artist who, with the trained knowledge and experience of first-hand study, can make excellent pictures of big game in its natural haunts in the way these are presented. Though there is a quite dramatic quality in many of the pictures, we do not feel that the representation of real life and character is in any way sacrificed to theatrical effect, and in his telling landscape of "Cyclone Approaching" (17) we feel that the artist has envisaged the real spirit of the desolating storm which is approaching and causing the fright of the terrified skulking lions in the foreground. The little picture of "Roaring Lions at Night" (11) is an excellent piece of tone and colour, which is an additional quality to the fine portrayal of wild life. "Kaffir Buffaloes on the Steppe" (9), "Old Rogue Elephant" (5), "Approaching Thunderstorm" (50), and "Hippopotamus" (51), with the wonderful picture of giraffes (18), might be named as examples of the variety and skill of these paintings, which should be of intense interest and pleasure to all lovers of animal life. The etchings are no less a success than the paintings, and show in many cases a rare combination of virility and refinement.

WALKER GALLERY.

A small collection of etchings by May Shelly includes some successful and interesting work, such as the "King's Lodging, Caudebec-en-Caux" (7) and "The Cloister, Winchester College" (23). One would expect this etcher to be capable of very good work indeed if a certain hardness of effect were less apparent. In the subjects we have referred to this feeling is quite absent. A good show of water-colours by Mr. Romilly Fedden has just opened at Walker Galleries. Virile as much of the work is, we like the artist best in his more subdued subjects, such as Nos. 24, 46, 41, and 49. There is considerable charm of a decorative kind in these low-toned drawings. A good many subjects of architectural interest are included in the collection, one of which is a happy rendering of form and colour in the architectural values of St. Fiacre, Brittany (45).

Housing at Becontree.

The Housing Committee of the London County Council has recommended the Council to proceed with the erection of about one thousand additional houses on the Becontree Estate, to be known as Dagenham (No. 6) section. Another portion of the estate, it is suggested, should be developed. The cost of the two schemes is estimated to be £600,000 each.

COMPETITION NEW

Coventry Wall Tablet.

Designs are invited for a wall tablet placed in the large hall of the King Henry School, Coventry. Sending-in day, Decemb Full particulars from the Headmaster. advertisement this week.)

Leeds Library.

Designs are invited for a library to be e at the Compton-road estate. Mr. Pe Worthington, F.R.I.B.A., is the assessor premiums of £35, £20 and £15 are o respectively.

Argentina.

The Argentine Government offers priz 10,000, 6,000, 4,000, 3,000 and 2,000 Arg gold pesos for the best architectural desig a National Institute for the Blind. F particulars are available in the Enquiry at the Department of Overseas Trade, 3 Queen-street, Westminster, S.W.1.

New Church and Hall.

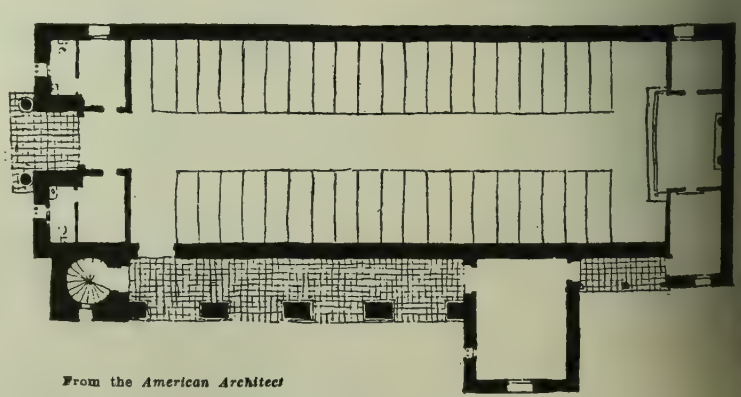
The assessor, Mr. Stanley Hall, F.R.I. has placed the design by Mr. W. M. Keesey, A.R.I.B.A., of the firm of Messrs. K Fleming & Keesey, first in the compe for a new church and classrooms at O street, Leicester-square. We illustrate design this week.

Valletta Lay-out Competition.

Designs are invited for the lay-out o open spaces and fortifications between Va and Floriana and those encircling Flo Applications for particulars, with a depo £5, to be made to the Minister of Public W Public Works Office, Valletta, Malta, not than December 1. Premiums of £1,000 and are offered to the first and second compe respectively. An indemnity of £100 wi awarded to three other designs showing spicuous merit. Sending-in day, June 30, Conditions can be seen at this office. assessors in this competition are Mr. Warren, F.S.A., F.R.I.B.A., and Pro Patrick Abercrombie, M.A., A.R.I.B.A.

Other Competitions.

Other competitions still open includ following (the dates given are, first the send date, and second the issue of *The Buil* which full particulars were given):—M Hall (May 1). Manchester Art Gallery (Fe Aug. 22). Essays on Ventilation (no se in day announced; Oct. 31). Offices at bi (Feb. 28, 1925; Nov. 7). Barrow Hill —banned by R.I.B.A. (no sending-in Nov. 7). Jugo-Slav Landscape (Dec Nov. 7). Church at Southport (no send date; Nov. 7). Southend School (no send date; Nov. 14).



From the *American Architect*

Memorial Chapel, Los Angeles.

MR. ALFRED EICHLER, Architect; MR. H. W. BISHOP, Supervising Architect.





American Architect.

Memorial Chapel, Los Angeles. Mr. Alfred Eichler, Architect; Mr. H. W. Bishop, Supervising Architect.

ARCHITECTURAL EDUCATION.—I

By W. S. PURCHON.

The First International Congress on Architectural Education, organised with such outstanding success by the Royal Institute of British Architects, is over, but if we take the right view its work is surely just about to begin. One of its greatest achievements is surely the fact that it has imbued us with a spirit which will not let us rest satisfied until we have completed our investigations, found the weak points in our methods, and set about the task of putting our schemes into thorough order. If we are prepared to consider that the Congress started a great work which we shall be proud to complete by patient effort, then indeed will its success be demonstrated to the full.

The investigation of schemes of architectural education is no easy task, not even for the youngest of us, requiring as it does such breadth of judgment, such philosophic detachment. Most of us tend to approach the problem with the methods of one school, or of one system of education, uppermost in our minds, and in judging the work or the schemes of others we may miss the finer points of their efforts entirely; that which we praise may, indeed, be just what those responsible would condemn.

In the notes which follow, the attempt has been made not so much to indicate a single solution to the problem, but rather to put forward points for and against a variety of methods, and to indicate various tendencies in diverse schemes of architectural education.

In attempting any sort of investigation of the varying methods of architectural education, it will surely be wise to decide first the nature of our aims. Much discussion in the past has lost a great deal of its value because of a failure to clear up this preliminary point. Nor are we helped much if told that the object of all professional architectural education is the production of architects, and that such an education should be continuous throughout the lifetime of the student, who on his deathbed will still, doubtless, be clamouring for information. It will, perhaps, save time if we decide to discuss, except for special purposes, the first five years of professional training, and to consider the sort of result we wish to achieve by the end of that time. Is it, for instance, our desire that after five years' work the student of architecture shall be of absolutely maximum immediate use as an assistant in an office? If so we should still desire to know whether he would be required to act as a sort of general utility man, or whether he would be wanted as a kind of specialist, as, for instance, in the preparation of competition drawings. Or it may be that we are thinking of turning out men who are as nearly as possible capable of running a small practice, and to that immediate end we might be prepared to sink all other considerations. Again, it may be necessary for us to cater for more than one type of student. Opportunities for specialisation are given in one at least of our schools, and it may possibly be that still further options should be available.

On the other hand we might, to use Browning's language, decline to "draw a circle premature, heedless of far gain," and decide on the attempt to produce men with a wider and richer general and professional culture, who would doubtless be less well fitted for immediate architectural responsibilities but who would be more able, after obtaining further practical experience, to hold their own among cultured men not only of their own but also of other professions, and to stand out, if necessary, against passing changes in architectural fashions. Such men would probably not specialise in their professional training.

It might, perhaps, be well to have such thoughts as these in mind in considering the relative advantages of school and office training, the varying methods of the schools, and the influence on the schools of the requirements of professional bodies.

Very closely connected with this question is that of general education for the architect. Years ago the Royal Institute of British Architects had a preliminary examination, and wisely they abandoned it, so that at the present time, in order to be registered as a probationer, the budding British architect must show that he has passed a recognised examination in certain subjects, or produce other evidence to prove that he has reached the required standard of general education. Entrance examinations conducted by the recognised schools are approved for this purpose, the subjects required being English, another modern language, mathematics (arithmetic, algebra, geometry), mechanics or physics, or chemistry or higher mathematics, history and geography, and elementary drawing.

The standard of examination accepted probably fluctuates slightly, but it may possibly be stabilised gradually at or about matriculation level. It is, of course, wise to have a generous number of optional subjects in such an examination, as the main thing to ensure is a reasonable level of general education, and the subjects taken in different secondary schools vary considerably. The main difficulties to be tackled will centre round the standard of the examination and the question of elementary drawing. On the former point there are those who would like to see our students obtaining an arts degree before starting professional education. There is, of course, much to be said for this. The objections are that it places architectural education at a disadvantage in comparison with that required for other professions, such as the medical, that very few could afford to give three years after matriculation to obtain an arts degree and then proceed to a five years' course in architecture, and that, with an arts course as normally arranged, the student leaving it for architectural education might be better fitted to appreciate certain aspects of the latter, but would probably have lost any facility he may ever have possessed with a pencil, and he might also have lost the power to acquire that facility. Similar arguments apply in a lesser degree to a course otherwise eminently desirable, that of staying at a secondary school until the level of the Higher Leaving Certificate has been reached. This normally means two years at school after matriculation. It brings the student to the level of the University Intermediate Examination, and there would be much to be said for it could it be combined with a reasonable training in the necessary elementary drawing.

From the point of view of the training of the architect, an investigation is needed of the art teaching in the secondary schools, and this is really one of the first things to be done. Most people would agree that students starting on a course of architecture need a certain facility in freehand and possibly in what used to be known as practical plane and solid geometry. To what extent are these and similar matters really essential, and to what extent is provision made for them in the normal pre-professional education?

It will, of course, be urged that schemes of architectural education must not be limited in scope to those students who have been able to obtain a sound preliminary education; that provision must be made to enable those whose early education was neglected, but who may, nevertheless, become worthy, or even great, architects, if given the opportunity. No special courses of instruction are arranged persons in, say, the medical profession may be that the best solution of a which certainly requires careful consi lies in the direction of giving such ca for the architectural profession speci ties for obtaining, at a later age, th sary general education, rather than in ing our schemes of professional educa their benefit.

It is certainly to be hoped that the or lack of system, which has allowed of youths to pass through a sort of tural training only to discover, wha to have been insisted on when they proached an architect, that they mu again and pick up some elements of education.

If, however, it is agreed that norm student will begin his professional e after reaching approximately the sta matriculation, and that in some way opportunities will be given him to acqu little facility in elementary drawin reaching that stage, the question may raised as to the necessity or otherwise to continue some form of general e side by side with his professional trai

In the old days the Universities ap felt that architecture alone did not p sufficiently broad education to warr award of degrees, a decision arrived sibly in the main because arts degre the ones normally sought. As a students in architecture had to purs tically the whole of a normal arts co their first year, and in some cases rangement still obtains. The disadva this method is the large amount of tim from the student's professional work first year, and the alternative of subs the study of one ordinary arts subject of the first two years of the course h suggested. Elsewhere, however, it h felt that a well-devised scheme of a tural training following matriculation education of adequate breadth, but th is certainly still open to discussion.

Opponents of the older scheme feel normal arts subjects by no means nec increase the breadth of a student's and it may be that the solution will b not in the addition of such subjects essential to professional efficiency, bu by the introduction of a course desi interest the students of architecture present-day manifestations of another ferably perhaps that of literature.

In that way the young architect only be learning something of another a living art, much as he would doubt those studying for another profession something of architecture, but he wo be put in the way of learning somet the changes which are coming over life, something of the great movement own times, something of the thought greatest minds. And these are which influence our architecture, ir perhaps, and without knowledge of th young architect is to some extent living in a backwater away from the m of human progress.

While dealing with this matter of education reference should also be m the necessity, or otherwise, of the study during the professional course subjects as higher mathematics and no tectural history with special reference and economic conditions in the past sent. It must, however, be clearly mind that the addition of subjects of culture type or of a pure science natur possibly eminently desirable, will in result in the lowering of the t standard reached by the student the first three years of his course consideration of this point is, the most important work immediately the attention of the experts in archi education.

CORRESPONDENCE

chester New Art Gallery Competition.

—I have noted with interest the paragraph ditorial notes of your number of Novem- with reference to the above competition, h mention is made of the "useless system ering" architectural drawings.

not help feeling that the object of render- wings is not understood by those who this strain. The object of rendering, I e, is primarily to explain the modelling of lding, and it certainly enables an assessor e much more accurately of the merits of ign in proportion and massing than do e drawings in which insignificant details '' as heavily as do the lines of main s. We are all familiar with the heavy ition style of line drawings in which the bars form the most interestlng pattern scheme, and the whole is pulled together ick black line several millimetres thick. architects of the past have used ed drawings almost entirely, and I do ppose that Sir William Chambers con- the rendering of his drawings of Somerset vas a useless proceeding.

egards this competition, one feels sym- vith competitors who are called upon to $\frac{1}{8}$ in. details and $\frac{1}{16}$ in. scale elevations. If hes are required surely sixteenth scale ns would be all that is necessary, and if scales are insisted upon the half-inches e omitted.

HOWARD R OBERSON.

Professor Moira on Architects.

—Professor Moira's charming and sug- lecture on "The Building, the Architect Craftsman," at the opening meeting Edinburgh Architectural Association, cently, dealt in a frank and friendly th the difficulties (under present day) of a successful co-operation between hitect, artist and craftsman. His long nourable record of association with our most eminent architects gives him t to express his opinions and gives any pinions great weight. His audience, y, expressed agreement as to the soundness and practicality of his views, but I would suggest that his proposal to adopt certain Swedish and Dutch methods in the education of the architectural student should be very carefully considered before being adopted.

Britain has ever been recognised as sane in its outlook in all matters relating to the arts, and a system which produced such men as Shaw and Bentley (to mention only two who studied extensively on the Continent) should only be superseded after the most careful investigation. Prof. Moira stated that architects did not understand the meaning of tradition as painters understood it, and inferred that most architects were too archæological and antiquarian in their outlook.

History has proved that not only is individual taste but national taste largely developed by the study of the great works of the past, and to suggest that students would acquire a profound knowledge of composition by playing a game of chess with the spacing of two windows and a door in a blank wall seems more than doubtful. The game would soon become standardised. The real solution of the problem seems rather to be for teachers to insist that old examples should not be merely copied but dissected and analysed to determine the structural and organic motives underlying their beauty and perfection. Men with no creative faculty are better inspired by fine old work than blundering into original monstrosities. Great art is great for all time, and can never be out of fashion. As Prof. Moira said, "Mind is what counts, not merely technique, and mind is eternal." We have several notable instances of the work of a revival surpassing in quality the work that inspired it. For instance, the eleventh-century Byzantine mosaics of the prophets in the aisles of St. Mark's, Venice, are, decoratively, finer than the original Byzantine mosaics at Ravenna. If the sculptor and painter took as much intelligent interest in architecture as the architect takes in sculpture and painting we should soon arrive at a greater harmony in the three arts.

Ghiberti, Brunelleschi, Michelangelo and the great men of the Renaissance all spent years studying the masterpieces of the past, and this system has produced the best men of our own time. In decorative work Prof. Moira's own work has something of the largeness of the Venetians with the technique of Velasquez. If decorative artists would follow the architects' lead in this study of old work and analyse the composition, scale, and technique of such men as Botticelli, Perugino, Pinturicchio, Benozzi Gozzoli, Mantegna, Pietro della Francesco, Tintoretto, Titian, Veronese, Leonardo, Puvis de Chavannes, Alfred Stevens and the other masters of the past, and sculptors study Nicolla Pisano, Donatello, Ghiberti, Verocchio, Michelangelo, Della Robbia, and the other masters in the plastic art, as studies in composition, line and scale, the dawn of a new Renaissance would soon appear. Many of our academicians have never seen an antique or an old master outside a museum. To understand such work it must be seen in its relation to architecture.

Architecture is certainly ahead of the sister arts to-day, and is slowly but surely coming into its own. Prof. Moira's great record of achievement makes him a worthy leader, and it is to be hoped that Scotland and Scottish architects in particular will realise the great importance of his appointment as official head of art education in the Northern capital. Scotland has a few decorative artists who understand the principles of design in this department of art, but Puritanism is not yet dead, and the Scots are a parsimonious people in the matter of art, so these men have never had a chance.

WILLIAM DAVIDSON.

Edinburgh.

MEETINGS

MONDAY, *November* 24.

Architectural Association.—Mr. E. J. T. Lutyens on the "A.A. Excursion to Spain." At 34, Bedford-square, W.C.1. 7 p.m.

TUESDAY, *November* 25.

Liverpool Architectural Society.—Mr. C. A. R. Swan on "Relation of the Liverpool Corporation Act of 1921 to Architects." At 13, Harrington-street.

College of Estate Management.—Mr. W. T. Creswell on "Building Contracts." At 35, Lincoln's Inn Fields, W.C.2. 5.30 p.m.

THURSDAY, *November* 27.

Society of Antiquaries.—Ordinary meeting. At Burlington House, W.1. 8.30 p.m.

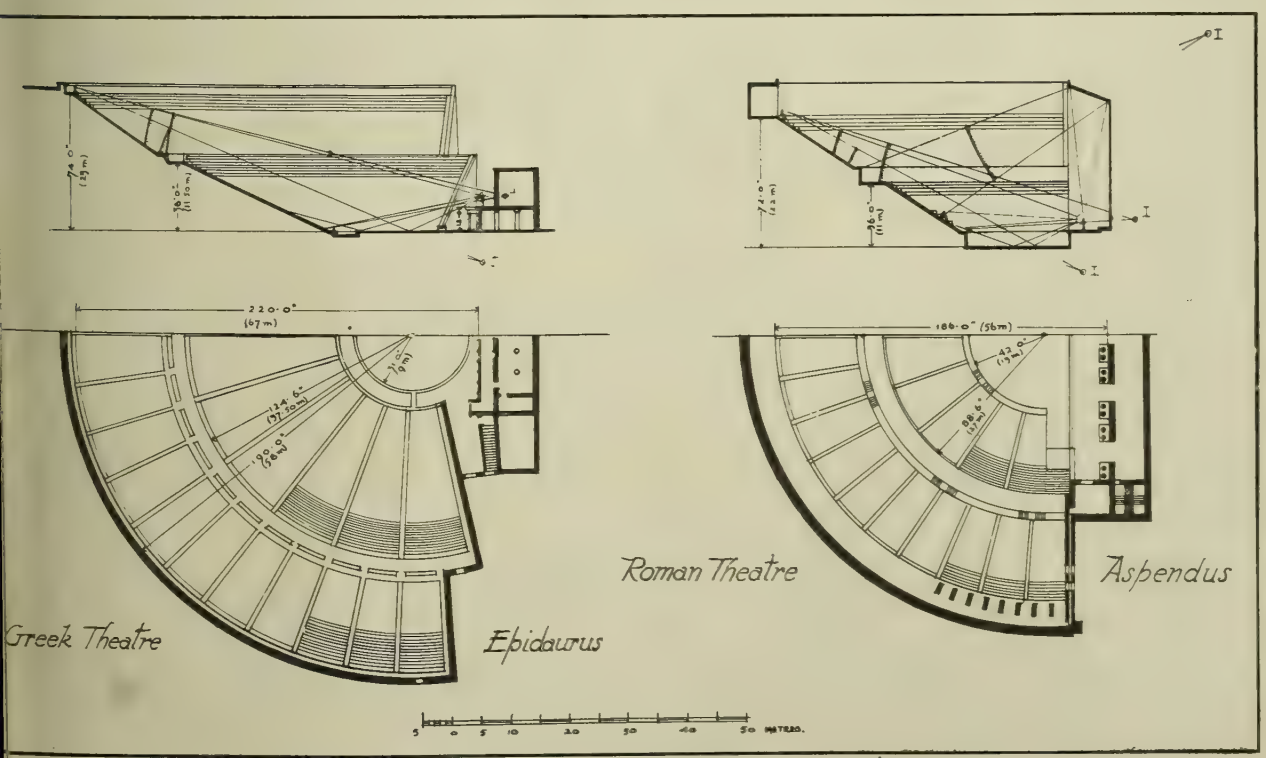


Fig. 1.—Acoustics of Greek and Roman Theatres. (*See p.* 812.)

Mr. J. Alfred Gotch (President) occupied the chair at a general meeting of the Royal Institute of British Architects, at No. 9, Conduit-street, W.1, on Monday evening.

Obituary.

After the minutes of the previous meeting had been confirmed, Mr. Arthur Keen (Honorary Secretary) announced the death of the following members:—E. Seward (Retired Fellow); W. Pywell (Fellow); W. E. Barry, F. A. Brewerton, J. W. Cockrill, F. E. L. Harris, R. B. Mather, T. J. Peters, A. S. Philp, E. H. Rowse (Associates); F. R. Bates, S. R. Bryce, H. Dyball, J. W. Lockhart, W. D. T. Munford, J. Perrault, W. Shaw, C. H. Slatter (Licentiates).

PLANNING FOR GOOD ACOUSTICS.

Mr. Hope Bagenal then read a paper entitled "Planning for Good Acoustics."

In the course of his paper, he said the classic theatre had many vital lessons in acoustic planning. The Greek type was a very highly developed acoustic instrument, the Roman was less excellent. The excellence of the Greek theatre was due to three contributing factors:—

(1) The sound was intensified near the source by a number of useful reflections.

(2) The passage from speaker to listener was kept clear and free from obstacles.

(3) The sound had a clear passage to the listener and reached him at a wide angle.

In Fig. 1 the Greek and the Roman theatres were compared. The characteristics of the Greek were the high, narrow *logeion* or stage platform (conceded to be 10 or 12 ft. high at Epidaurus and Priene); the skene wall behind this; and the large paved orchestra in front of it. The useful reflections from these surfaces were shown on the Greek section (Fig. 1). The small depth of the stage and, therefore, the nearness of the players to their back wall, ensured its efficiency as a reflector. The height of the stage above the orchestra level gave reflections at a useful angle from the paved area below. There was also the floor of the stage giving a less useful reflector.

The height of the stage also gave a wide angle of impact to the direct sound from player to audience. That was specially important when there were no reflections from the ceiling. Sound passing over human heads at a small angle was rapidly absorbed. Therefore, the wider the angle of impact the better. The plan of the classic theatre ensured an equal distribution of sound in all directions, and the section in the case of the Greek theatre was usually without reflecting surfaces likely to cause even local interference. Also, since there was no roof to the Greek theatre the reverberation was nearly as short as in the open air. But the fact that there was no reverberation meant that the energy condition was low. The size of the classic theatres was enormous, seating as many as sixteen to twenty thousand people. The rear seats were sometimes at a distance of more than 200 ft. from the stage. All possible reinforcements were therefore desirable. A method of reinforcing by resonance was probably secured by the following means. The wood floor of the stage in contact with the feet of the player acted as a resonating surface. In addition to the stage floor were the *pinakes* or wooden panels placed between stone columns in the supporting wall of the stage. Each wooden panel in this position would undoubtedly reinforce the sound if in contact with the wooden floor upon which the players stood. The declamation of the players was a kind of rhythmical shouting or chanting, and probably required considerable training. The frequent and sonorous vowel sounds of the Greek tongue, produced as musical tones, conveyed the sense to the remotest seats. Stage floor and *pinakes* together formed the sound-box. The players performed not only upon the *logeion* or stage platform, but upon the *theologeion* above and upon the orchestra below.

These points in acoustic design had a direct bearing upon modern problems. A hard rear wall some 10 ft. behind the speaker might make considerable difference to audibility in the case of a large hall or in the case of a pulpit. The usefulness of the stage floor as a reflector was one of the factors which made the difference between the opera house and the concert room. A concert room would be improved by a clear hard floor space round the singer or solo instrument. It was bad design to bring orchestral instruments or platform seats close up to solo performers. A clear orchestra area immediately in front of the Albert Hall platform would increase the useful sound to galleries.

Wood surfaces could also be used advantageously as resonators. They should be in contact with the singer or instrument. The wood surface of the platform floor should be jointed to the front of the platform, which would then act like the Greek *pinakes;* and the same principle could be applied to the wood panelling of the platform recess. A powerful singer was really an instrument in contact with the floor. Resonating surfaces increased his power: and they were specially useful for musical instruments like 'cellos and double basses.

In the Roman theatre the stage was lower and was brought forward so that the orchestra became a semi-circle. The great width of the classic stage of this shape must have constituted a danger. Echoes would certainly be returned from wing walls. In these walls the *periakti* might have been placed—a series of prisms, triangular on plan, rotating upon an axis and providing three sets of scenery. If the line of these *periakti* was placed at an angle of 45 deg. to the stage, the actor's voice would be reflected out into the hemicycle. In the Roman theatre the orchestra space was frequently used for seats. The reflecting surface thus sacrificed was partly compensated for by the extra floor area of the stage. But an important addition occurs in the Roman theatre from an acoustic point of view, namely, the roof set at an angle above the stage, yet the reflections from this roof would not have given "the consonance" recommended by Vitruvius. The lesson of the classic theatre was: that reflecting plus resonating surfaces *near the source of sound* will work wonders.

After treating on the acoustics of churches, the lecturer dealt with the English Legislative Chamber. The House of Commons, he said, had in course of time produced its own style of utterance, and it illustrated better than any other one important aspect of acoustic design. Its basic principle was debate: and debate had requirements very different from the requirements of stage plays or intoned liturgy. The nature of that kind of oratory was bound up with the building in which it took place. It was necessarily a small building—a college chapel in character. Apparently it was not until the year 1800 that plans for a new chamber were called for by a Select Committee in 1831. But after the fire of 1834 all these schemes were forgotten. The old Painted Chamber was fitted up for the Lords and the old Court of Requests prepared for the Commons. This Chamber in the old Court of Requests was larger than the Chamber in the St. Stephen's Chapel. It was 80 ft. by 38 ft., and in the engraved view given by Brayley and Britton in 1836 it looked some 40 ft. in height. This would have meant a longer reverberation, and acoustic complaints mus occurred, for alterations were undertake view of the interior of the House of Co published in 1841 showed what appeared the same room lined with wood and low ceiling of a special shape. That was as "the temporary House," and famous for its good acoustic qualities. lowness of the ceiling was apparently the ideas of Dr. Reid, the ventilation in whose opinion "the cubic content filled by the voice should be as small consistent with the necessary accommod For that reason he had the ceiling of th porary House made very low, so that should be not much space filled."

Since St. Stephen's Chapel had a ch beneath it, it was apparently necessary that all succeeding Houses should hav same. The chamber beneath the tem House was made to communicate wit chamber above by means of holes drilled wooden floor. The acoustic excellence room, thus transformed, undoubtedly the adverse criticism that occurred whe Parliament assembled in 1848 in Sir C Barry's new House. The conclusio members were quite right. What was at was that facility for rapid debate which not exist with a long reverberation. Reve tion (other factors being equal) varied di with volume, and volume with height o ing. In 1850 a new ceiling similar in to Smirke's (though the effect of the shap probably not understood) was inserted an result was a great improvement. Ba House of Lords maintained its original ce Tradition said that the House of Com before the new ceiling was inserted, was than the House of Lords. After the alte to the Commons all were agreed and were agreed that the Commons was good, wh the Lords was bad.

In the Commons the old habit of debate at conversational pitch was ren easy by the new ceiling. Complaints, ever, arose and still arise from membe the back benches for the following rea The English legislative chamber was not an auditory but also a machine of bus Its excellence in this respect was four analysis (Select Committee House of Com Arrangements, 1868) to consist in the fac Ministers in charge of Bills were nea Speaker (or the chairman of committee) near the Press gallery. A great deal business of the House was done in a vo conversational pitch across the table, Ministers addressing the chair could be heard by the Press gallery immediately the chair. The importance of the Pres obvious. But in addressing the chair the front benches, a speaker had a larg of his audience behind his back. I English system the Speaker was the onl manent audience, and any member's might become a source of sound—unlil Continental system, where every speaker come to a tribune. Hence the periodic mands in modern history to have the and the Ministers with it, moved dow floor to a more central position. By this also the Treasury and Front Opp benches could be increased from the n adequate sixteen seats to twenty-two or t four. The effect of the splayed ceiling concentrate sound on front benches, and the important business of the House w ried on there, this was an advantage; did not help members in the back be The reflected beams of sound from the s portions of the ceiling were shown in concentrating on the front benches and ing the back seats and the galleries. The from the centre level portion covered or seats in front of a speaker. Seats front bench speakers were, therefor provided. This ceiling was construc wood and glass, and was, therefore, efficient a reflector as if it were of hard I If this were the case, and if the slopes ceiling were adjusted, the room could b nearly perfect. The total volume of th

nly 127,000 cu. ft., which was very con-bly less than the French Chamber of ies, 277,000 cu. ft., and the Washington e of Representatives, 409,000 cu. ft. M. Barry, son of Sir Charles, designed a House of Commons at the request of the Committee of 1868. The evidence of Committee was not lost upon him. He ved the shape of the ceiling and actually ed its height. The action of the splay M. Barry's design was more valuable n the existing House. It provided useful of sound from front benches to seats in rear (see Fig. 2). If at any time the of Commons were to be rebuilt, this nt design should be carefully studied. the designing of modern parliament ers, the problem was to provide a plan ircular or semi-octagonal in shape to modern states of opinion, and yet still o dispense with a tribune position for the r. The advantage of a tribune was two-First, a speaker had all his audience in of him, and, therefore, useful reflecting es could be designed to his right and nd secondly, a single direction was given voice, to which he became accustomed. rge Continental parliament houses, all at height, were indeed acoustically work-nainly because a central tribune position ed. Since without a tribune front bench rs had a large number of listeners ir back, the ceiling should always be as a reflector normal to every seat in use; that was to say, flat, and not more 35 ft. in height. A semi-circular or ctagonal plan could be made to supply eflecting surfaces along the diameter the chairman. The requirements of ess should also receive special attention. ve all, it was necessary to design for the eration. As a rule in a legislative cham-e number of persons present was always ely small in proportion to the air volume building. That meant that large areas nanent absorbing material must be pro-in suitable positions in order to com-e for this lack and reduce the reverbera-a figure suitable to the speaking voice. requirements for a good absorbing l were: 1. Cleanliness. 2. Durability. bsorbents available for architects at fell into two classes: first, soft ls requiring a canvas screen; and plaster and tiles. Although he yielded e in his admiration of the American results, direct experiments upon English materials and fittings were most important. The results of the Building Research Board experiments upon British materials fixed exactly as an architect would have them fixed, had already been most valuable. These experiments were undertaken at the request of the Indian Government, at the suggestion of Mr. Herbert Baker, on account of the work at Delhi. The experiments were carried out by Mr. P. W. Barnett, A.R.I.B.A., assisted by Mr. W. H. Glanville, B.Sc., and other members of the staff of the Building Research Station under the direction at first of Mr. H. O. Weller, and now of Dr. R. E. Stradling, M.C., Ph.D. The tests were made to cover the musical scale at octave intervals. Some of the many results obtained could be stated briefly as followed:—

The most powerful absorbent of all (for pitch C4) which an architect could use was slag wool behind wire netting. The efficiency of this absorbent declined rapidly above C5—that was, for higher notes.

The next most efficient absorbent for C4 was Cabot quilt. This material was easy to apply and was hygienic and not harmful to the touch like slag wool. It was slightly resonant. It improved the speaking voice conditions, but would not give the best results for chamber music owing to unequal reinforcing of tones. It was fixed in two layers on 2 in. by 1½ in. battens, 2 ft. 8 in. apart, and had thus a 1½ in. air space behind it.

The next most efficient absorbent was 1 in. hair felt. Felt was found at Harlesden to make, in conjunction with wood, the best conditions for chamber music. But if felt were to be widely used in England it must be made really moth-proof and fire-proof. The felt was also fixed on 2 in. by 1½ in. battens. All these three materials required canvas screening. Of the wall panellings, cork 1 in. thick framed in wood with an air space behind gave fairly high absorption for C4. "Celotex" board was found to be an efficient absorbent and to give excellent results for chamber music. Of the permanent flooring materials rubber carpet 3-16 in. thick was found to be the most efficient.

Owing to the courtesy of Professor Paul Sabine of the Geneva Laboratory, Illinois, experiments were undertaken upon an acoustic plaster using his recipe as a basis. These experiments produced interesting and useful results, and were still in progress. An acoustic plaster was developed causing for C4 at least 20 per cent. reduction in the reverberation of the room. (This figure must not be taken to represent a Sabine co-efficient.) A surprising result of the experiments in this class was the efficiency of coke breeze blocks 2 in. thick. It was shown by the experiments that coke breeze slabs having a finishing coat of acoustic plaster made a very efficient absorber.

The Director of Building Research, Department of Scientific and Industrial Research (Dr. R. E. Stradling), in proposing a vote of thanks to the lecturer, said the Building Research Board owed a great deal to the work of Mr. Bagenal, to whose keenness was due the starting of the investigations of the Board. The work of the National Physical Laboratory and of the Harlesden Laboratory also had a certain bearing on the architectural acoustic problem. The Department of Scientific and Industrial Research had called together a committee of those interested in acoustics to take charge and direct the work on that specific subject, and had been very much encouraged by the visits of the Science Standing Committee of the R.I.B.A.

In seconding the vote of thanks, Dr. Alex. Wood said Mr. Bagenal had contributed more to the development of the study of acoustics than anyone else in this country.

Mr. G. A. Sutherland said the architect must conform to the laws of acoustics in designing a building, and not expect to design a hall which a physicist could make acoustically correct. He suggested that assessors in architectural competitions might lay down some simple acoustic properties which a building should possess, and not accept a design with hopeless acoustic properties, and then try to improve them.

Dr. G. W. C. Kaye said the National Physical Laboratory had taken up the question of acoustics, and it was their intention, with the support of the R.I.B.A., to throw themselves with the utmost vigour into the work.

Mr. Maurice Webb said in the case of large buildings he believed amplifiers had eliminated half the acoustic difficulties; at Liverpool Cathedral there were amplifiers in the ceilings which easily got over acoustic troubles.

Mr. Raymond Unwin said amplifiers were used in the Council Chamber of the League of Nations, and it was almost impossible to discern in the gallery whether the sound came from the speaker or the amplifier.

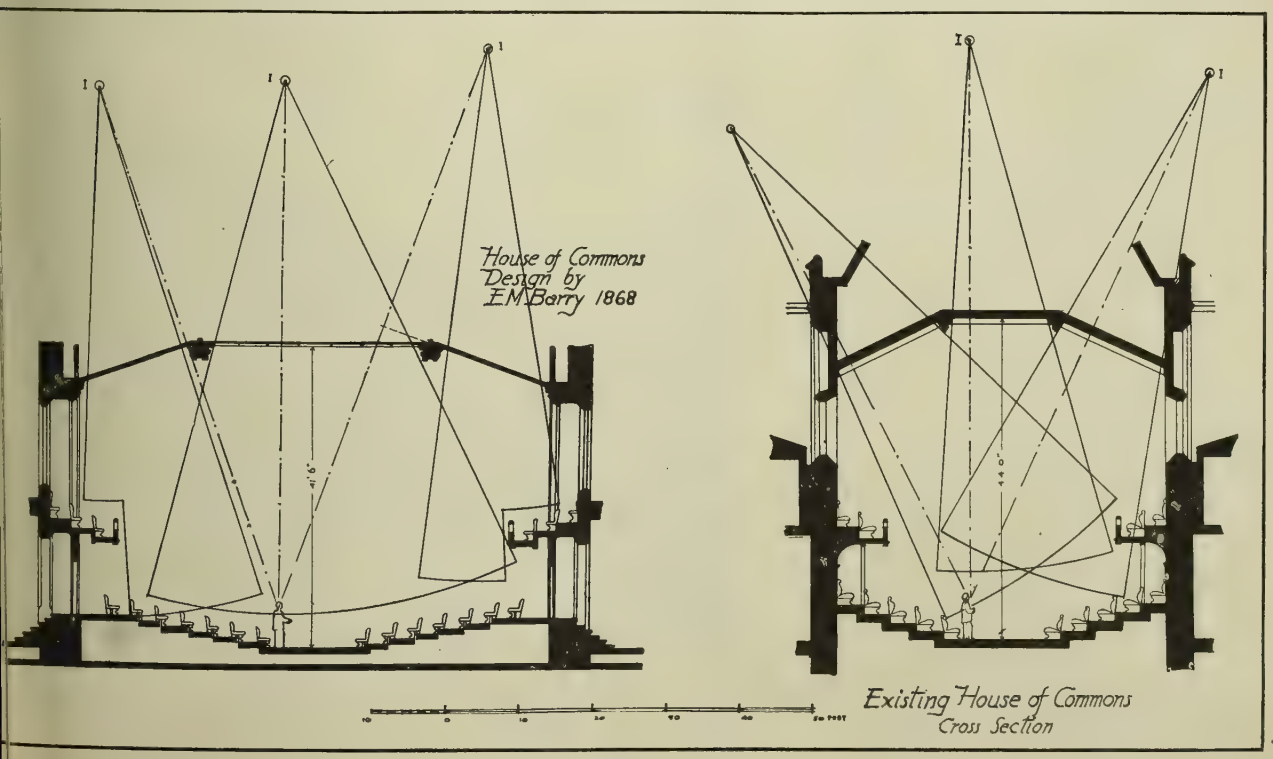


Fig. 2.

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ILLUSTRATIONS

Entrance Hall to St. James' Park Station.

A description of the entrance hall to offices recently built at St. James' Park Metropolitan District Railway Station, is given on p. 825. Messrs. Richardson & Gill, FF.R.I.B.A., are the architects.

New Science Building, Mill Hill School, N.W.

This drawing shows the building recently opened by H.R.H. the Prince of Wales to house the Science Departments of Mill Hill School. Laboratories are provided for the various branches of science, with workshops for handicrafts, and special provision has been made for experimental work in wireless telegraphy. The structure generally is of brick with hollow block floors, the walls externally being finished in stucco to match the Monks Park stone used in the main entrance. The roof is covered with dark brown tiles. The general contractors for the work were Messrs. Miskin & Son, of St. Albans and London, and the following sub-contractors were also employed: Messrs. Rudd & Co., plaster work; Richardson & Co., iron balconies; Jas. Gray, Ltd., heating; Hendon Electric Supply Co., electric light; Haywards, Ltd., roof lights; Halstead Bros., laboratory fittings. The enrichments to the main entrance door were modelled and carved by Mr. P. G. Bentham, of Stamford Bridge Studios. The bell tower shown in the drawing has not yet been erected, but it is hoped to carry out this work as a memorial at some future date.

The building was designed and carried out under the supervision of Mr. Stanley Hamp (Collcutt & Hamp), 126, Wigmore-street, W.1; the perspective drawing is by Mr. Kenneth Anns.

Houses on Barker Estate.

These houses, the first of a series of groups of different designs, have been completed on some of the front sites adjoining Upper Richmond-road. The whole of this estate is to accommodate over three hundred houses of this type. The brickwork is generally in grey Sussex stocks, with dark sand-faced tiling for the roofs, whilst the windows are in metal casements and leaded lights in stout frames. The builder was Mr. Oliver Kennard, of Cecil House, Westwood-road, Sydenham. The second group, consisting of twenty houses, is now in course of erection at another part of the estate, and the third group under preparation for procedure. Mr. Sydney E. Castle, M.S.A., of 40, Albemarle-street, Piccadilly, W.1, is the architect to the estate.

Competition for a Church and Hall, Leicester-square.

We also illustrate this week the design, placed first, by Mr. W. M. Keesey, A.R.I.B.A., of Messrs. Kieffer, Fleming & Keesey, for a new church, hall, &c., in Orange-street, Leicester-square. The front elevation, Orange-street, has been slightly enlarged from the original scale in order to give a better view of the detail.

ARCHITECTS' FEES UNDER HOUSING SCHEMES

ARCHITECTS are having a good deal of trouble in ascertaining the fees they are entitled to under Housing Schemes. Only last week we published the report of a case where the point was raised under Memorandum No. 4 whether, when more than one architect was engaged on schemes by the same authority the several schemes were to be pooled for the purposes of calculating the remuneration, and a further case, Elkington *v.* Wandsworth Borough Council (the same Council as in the case referred to) is reported in *The Times*, November 13 and 14. As in Mr. Pigott's case (that reported last week), it seems to have been agreed after the first contract that the remuneration was to be governed by Memorandum No. 4 under which the remuneration is to be 5 per cent. on the first 12 cottages, 2½ per cent. on the next 60, and 1½ per cent. on the remainder, and the Memorandum suggests that as a rule one architect should not be entrusted with more than 250 houses.

In this case, Mr. Elkington had been engaged to undertake a scheme involving 400 houses, of which 153 had been completed and 247 had been abandoned. He had been paid certain sums, but was suing for a balance of £3,215 10s. Two contentions appear to have been raised in the case; (1) the plaintiff had claimed the 5 per cent. on those houses for which contracts had been first signed in point of time and these houses happened to be the most expensive; (2) he contended that as regards the abandoned houses, although the Memorandum provided no scale for these, yet it incorporated the memorandum of the Royal Institute of British Architects which construed with Memorandum No. 4 gives the scale, and therefore the remuneration which the plaintiff was entitled to was a question of contract and not a *quantum meruit*, and he claimed two-thirds of what he would have been entitled to had the work been completed.

The contention for the defendants was that under Memorandum No. 4 the proper method of calculating the remuneration was to t whole number of houses built and b several percentages on them. Thus in t the average cost was £737, and it was co that this figure multiplied by 12 would 5 per cent. basis, and multiplied by 60 per cent. and so on.

The Court held that the defendants' co was right on this point. On the secon the Court held that the memorandum Royal Institute of British Architects incorporated in Memorandum No. 4 ordinary sense of that term and the tru pretation of Memorandum No. 4 was t memorandum of the Royal Institute n looked at to ascertain what the condi engagement were, but the scale must be t down in No. 4, and as in that memorandu was no scale for abandoned work the plai entitled to payment on a *quantum meru* the parties were unable to agree to th the matter would be sent to an official

It seems very unfortunate that the randum should have been so obscurely w to leave parties in doubt as to their rig liabilities thereunder, and even the judg reported on the second point does not make the construction of the two do very clear to the lay mind, but it appe point cannot arise in subsequent cas memorandum dealing with claims for aba schemes has since been issued. This before us, but we hope it deals with th important point in clear terms on a sc nothing can be less satisfactory than ha determine the amount of remuneration principle of a *quantum meruit*. It is dis to both parties to be forced to litigate q which should be clearly dealt with in th ments regulating such engagements.

The above is only a very short sumn the arguments and the judgment deliv this case.

Corrections.

The correct description of this buil the Eastman Theatre and School of and not as given in our issue of last w

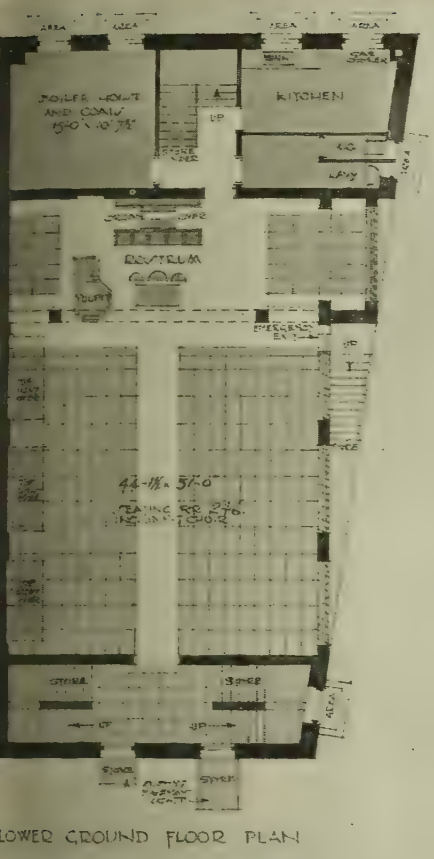
We omitted to state last week, in cor with our notes on Dorland House, that E. J. & A. T. Bradford were responsible stone carving.

We regret that in our list of sub-con for the Shepherd's Bush Pavilion in our l the name of Messrs. The Trussed Concre Co., Ltd., was not mentioned, although, o their material, "Hy-Rib," was used to siderable extent.

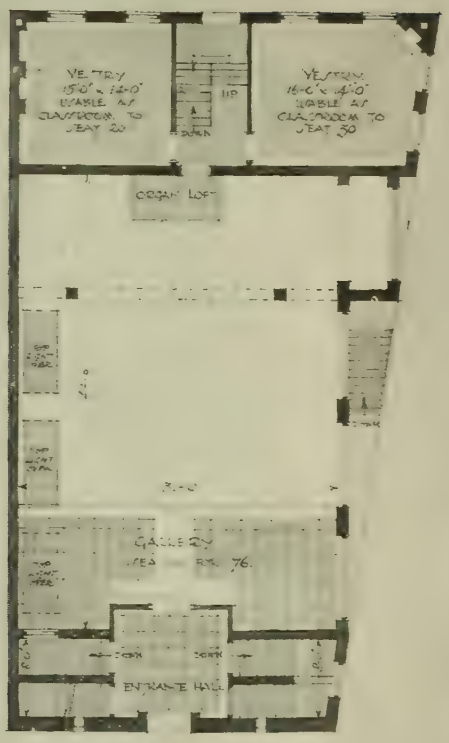


Entrance Hall to Offices at St. James' Park Station.

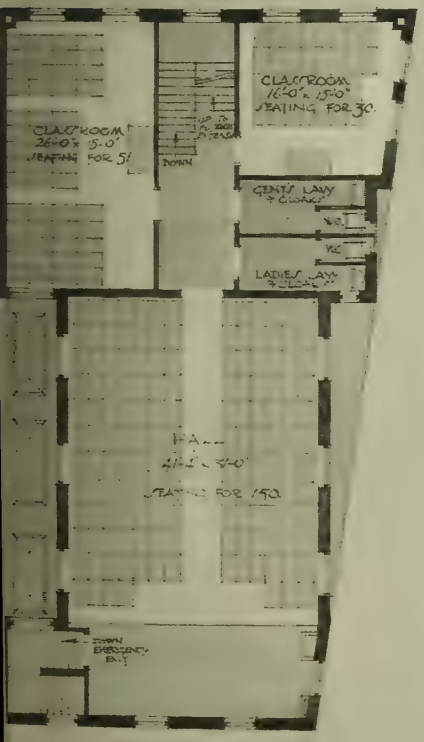
MESSRS. RICHARDSON & GILL, FF.R.I.B.A., Architects.



LOWER GROUND FLOOR PLAN



GROUND FLOOR PLAN



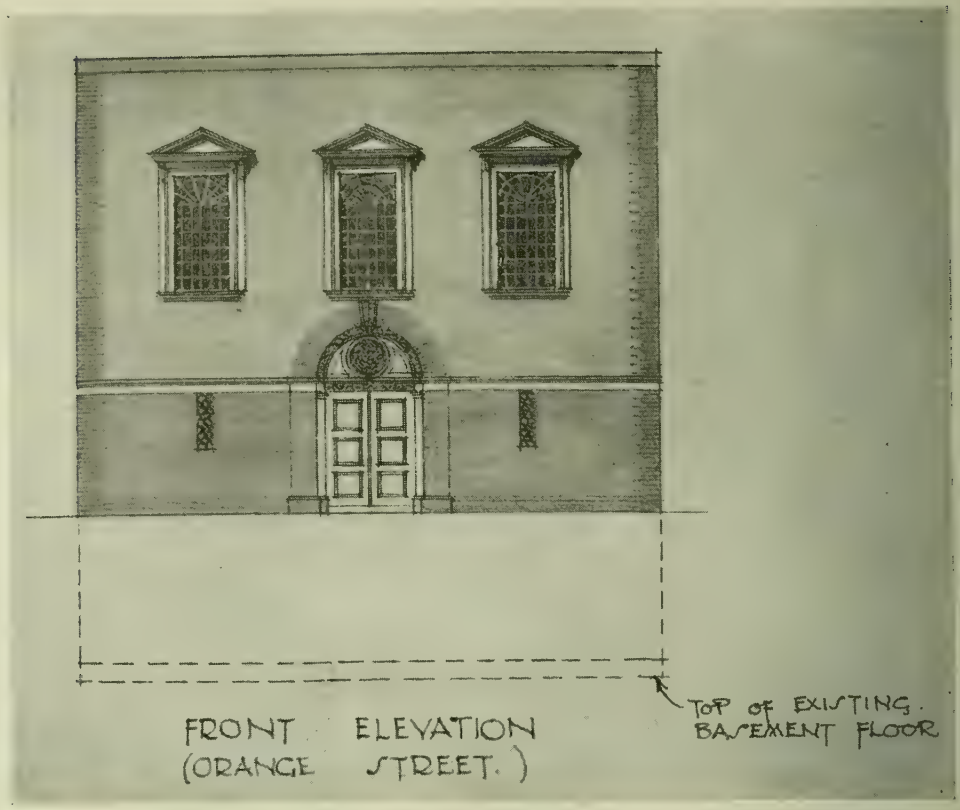
FIRST FLOOR PLAN

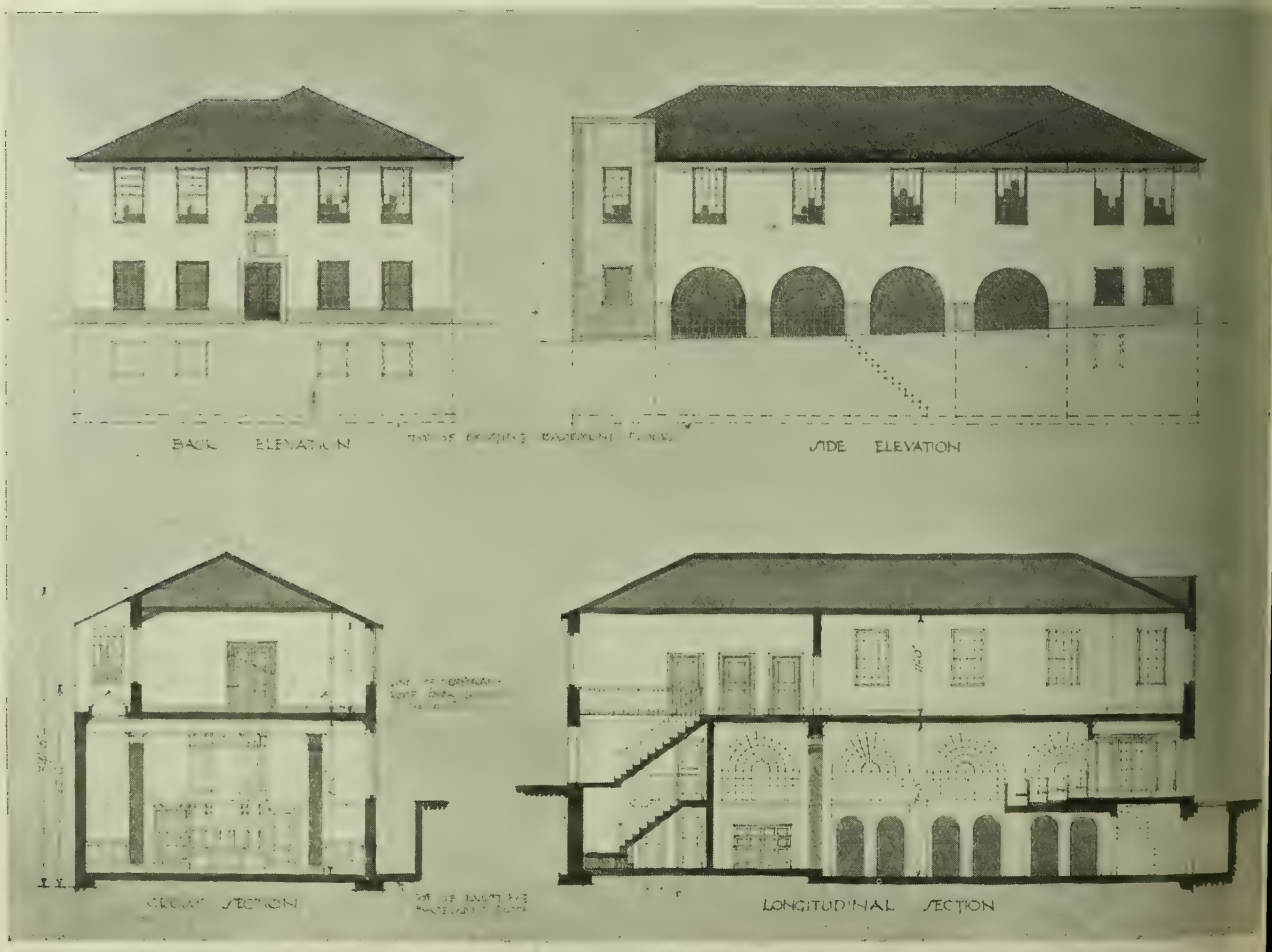


SECOND FLOOR PLAN
(FUTURE EXTENSION)

Competition for Church and Hall, Leicester-square.

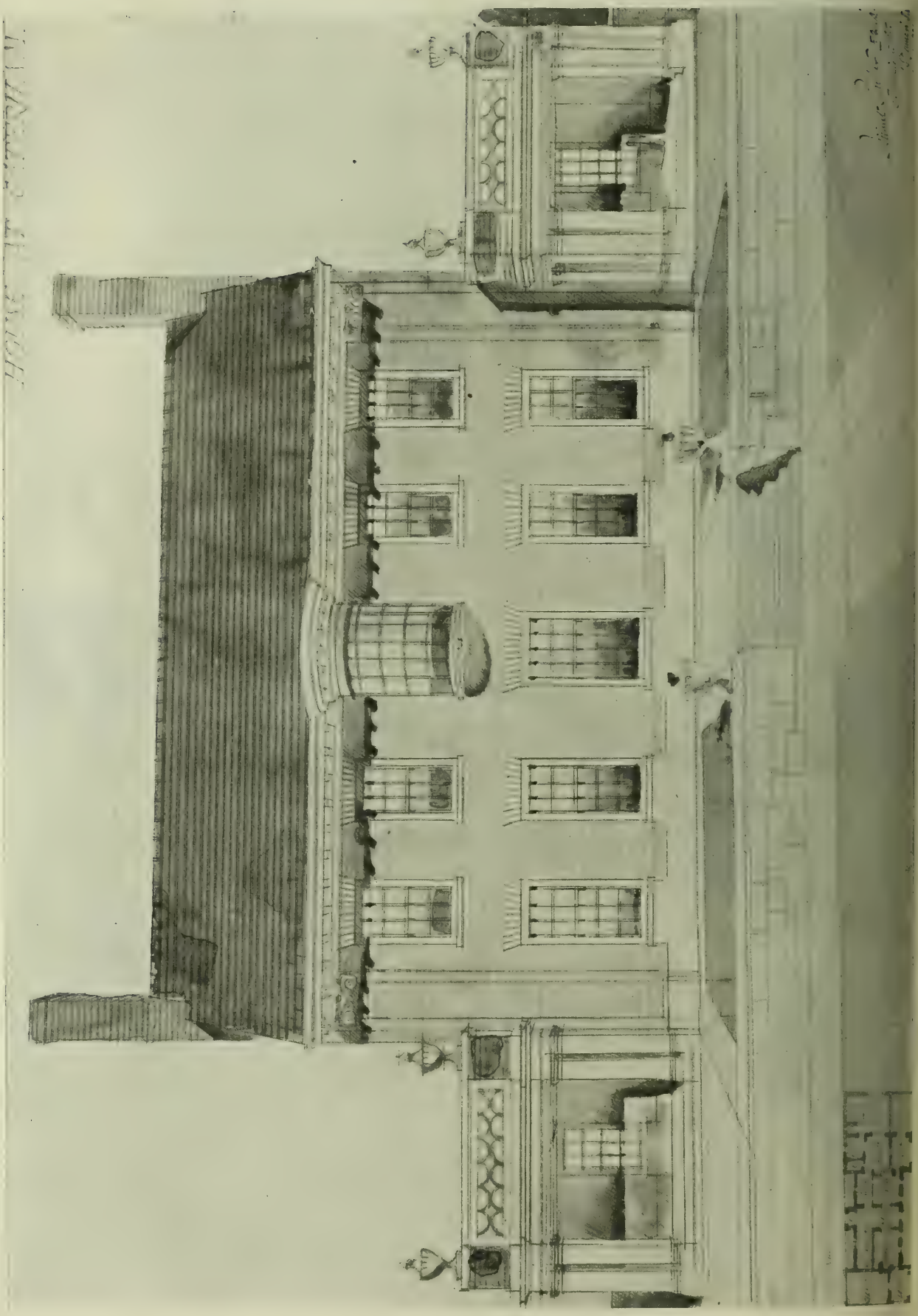
Design placed first: By Mr. W. M. Keesey, A.R.I.B.A.





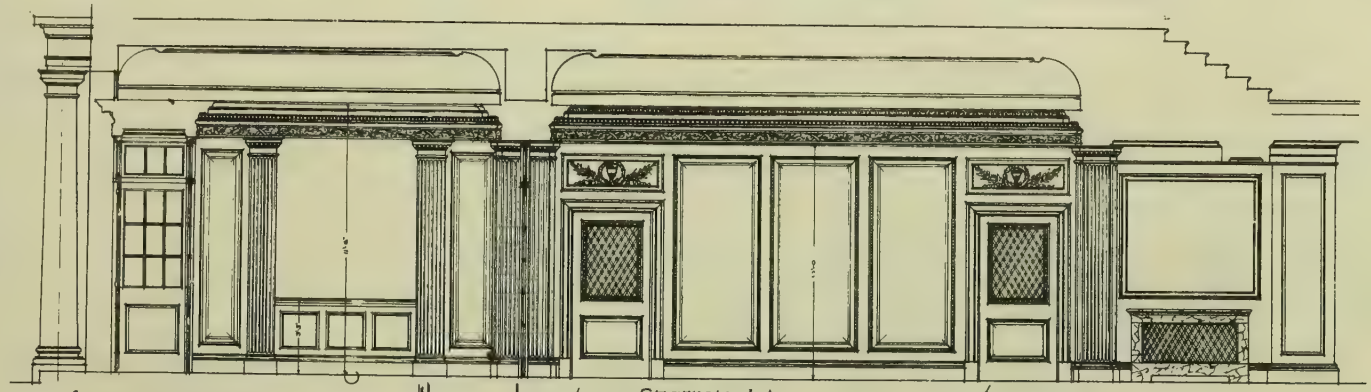
Competition for Church and Hall, Leicester-square.

Design placed first: By MR. W. M. KEESEY, A.R.I.B.A.



METROPOLITAN DISTRICT RAILWAY ST. JAMES' PARK STATION

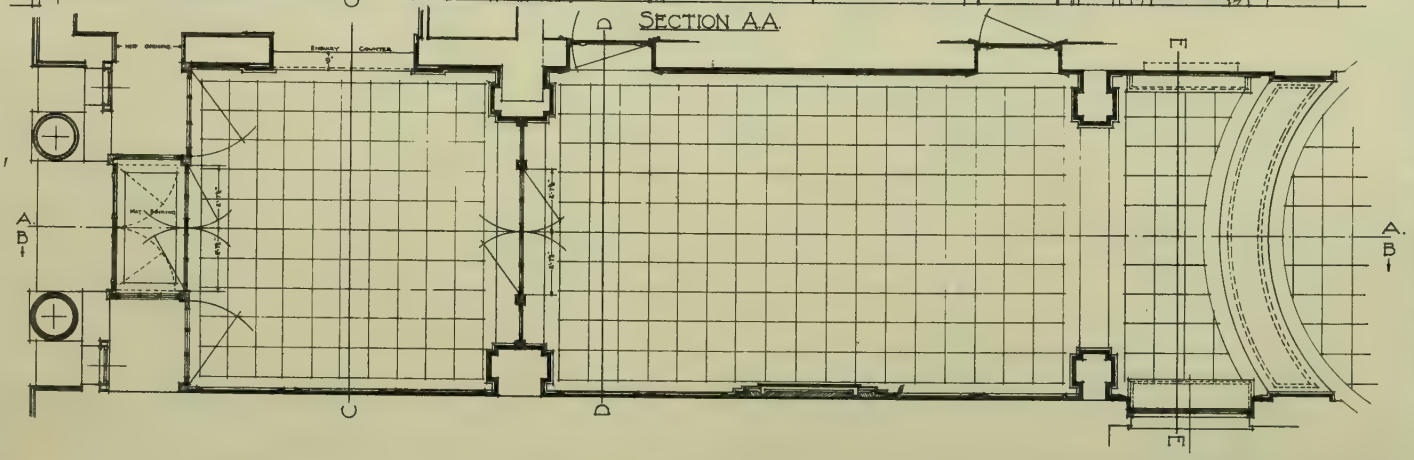
ENTRANCE HALL TO NEW OFFICES

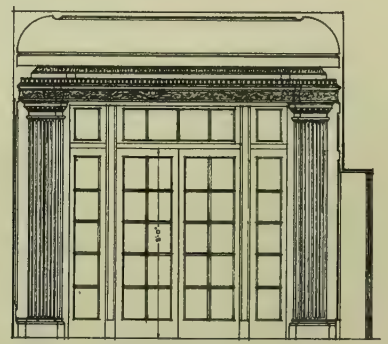


SECTION AA

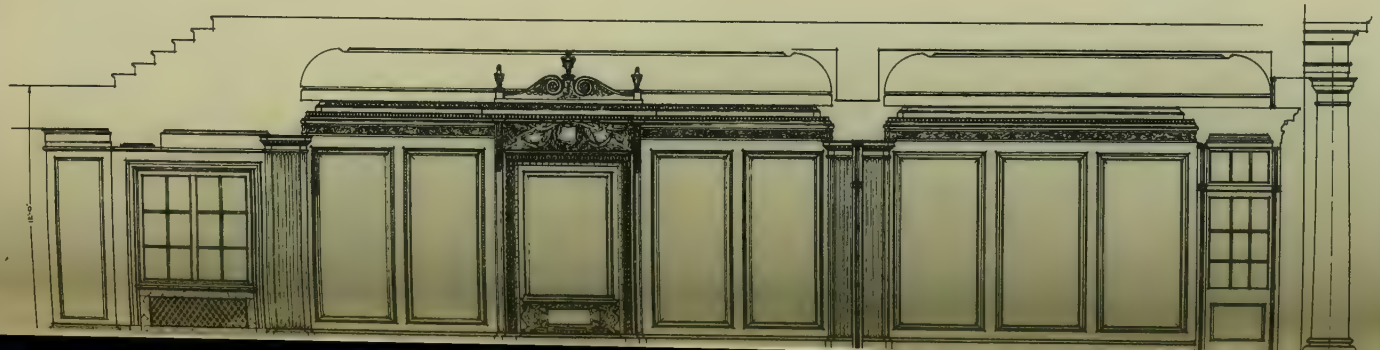


SECTION C.C.





SECTION D.D.





THE BUILDER, NOVEMBER 21, 1924.

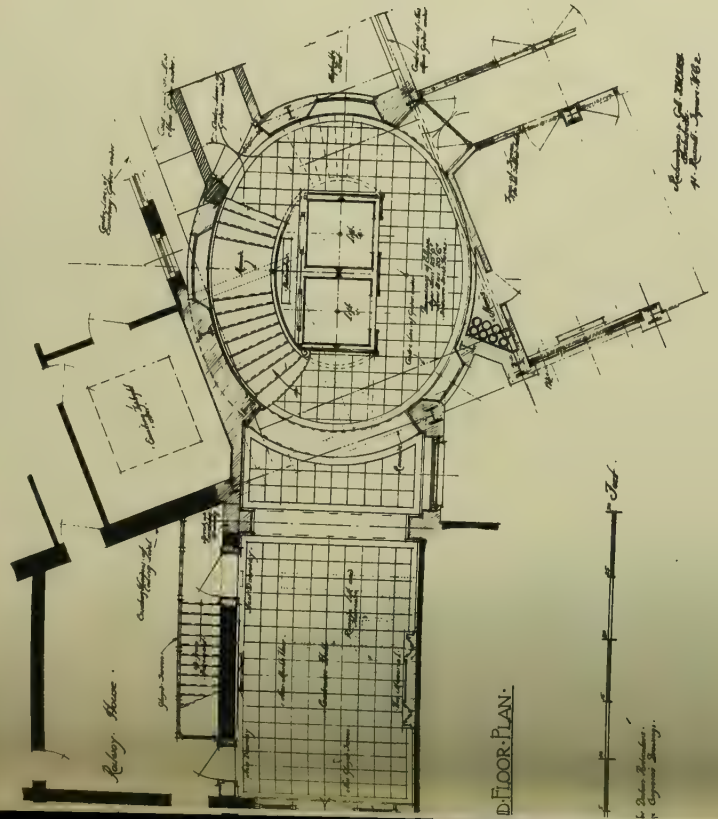
METROPOLITAN · DISTRICT · RAILWAY.

NEW · OFFICES · OVER · STATION.

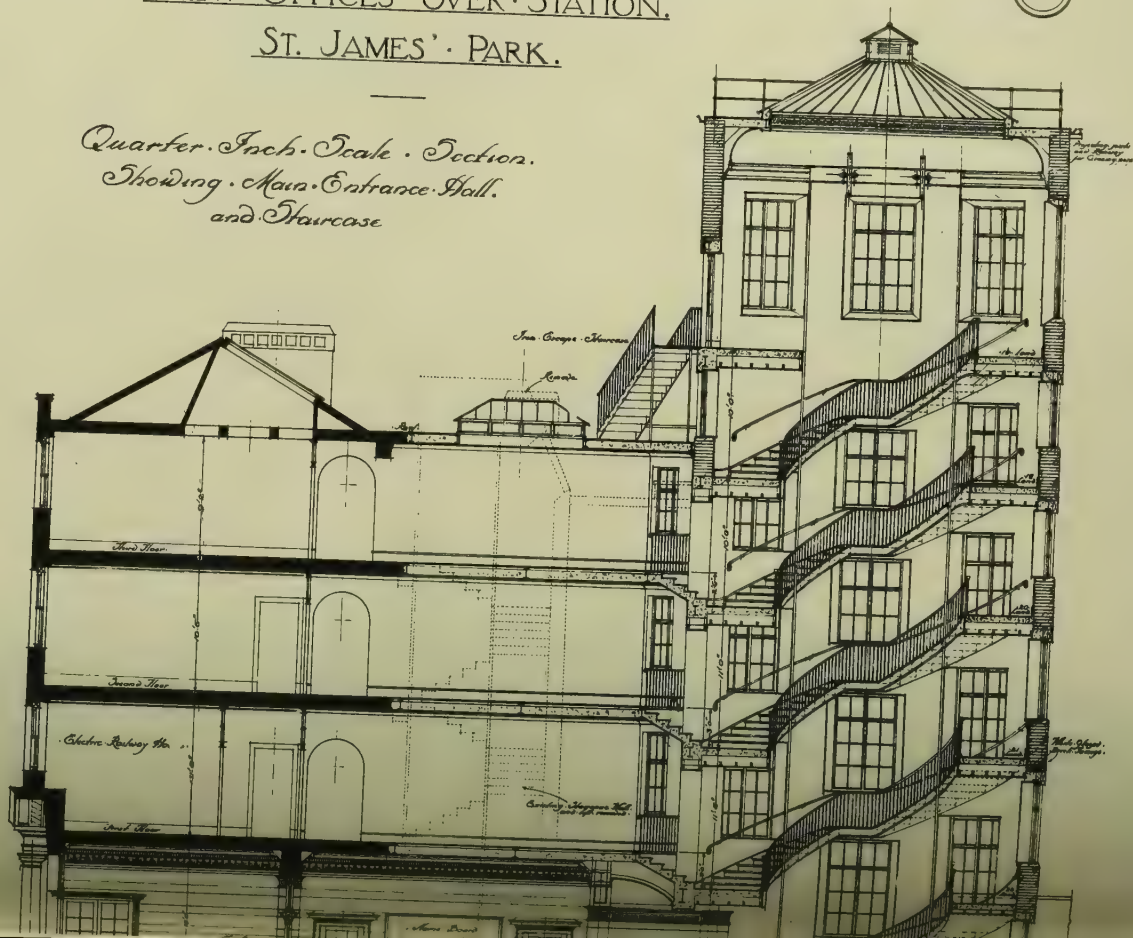
ST. JAMES' · PARK.

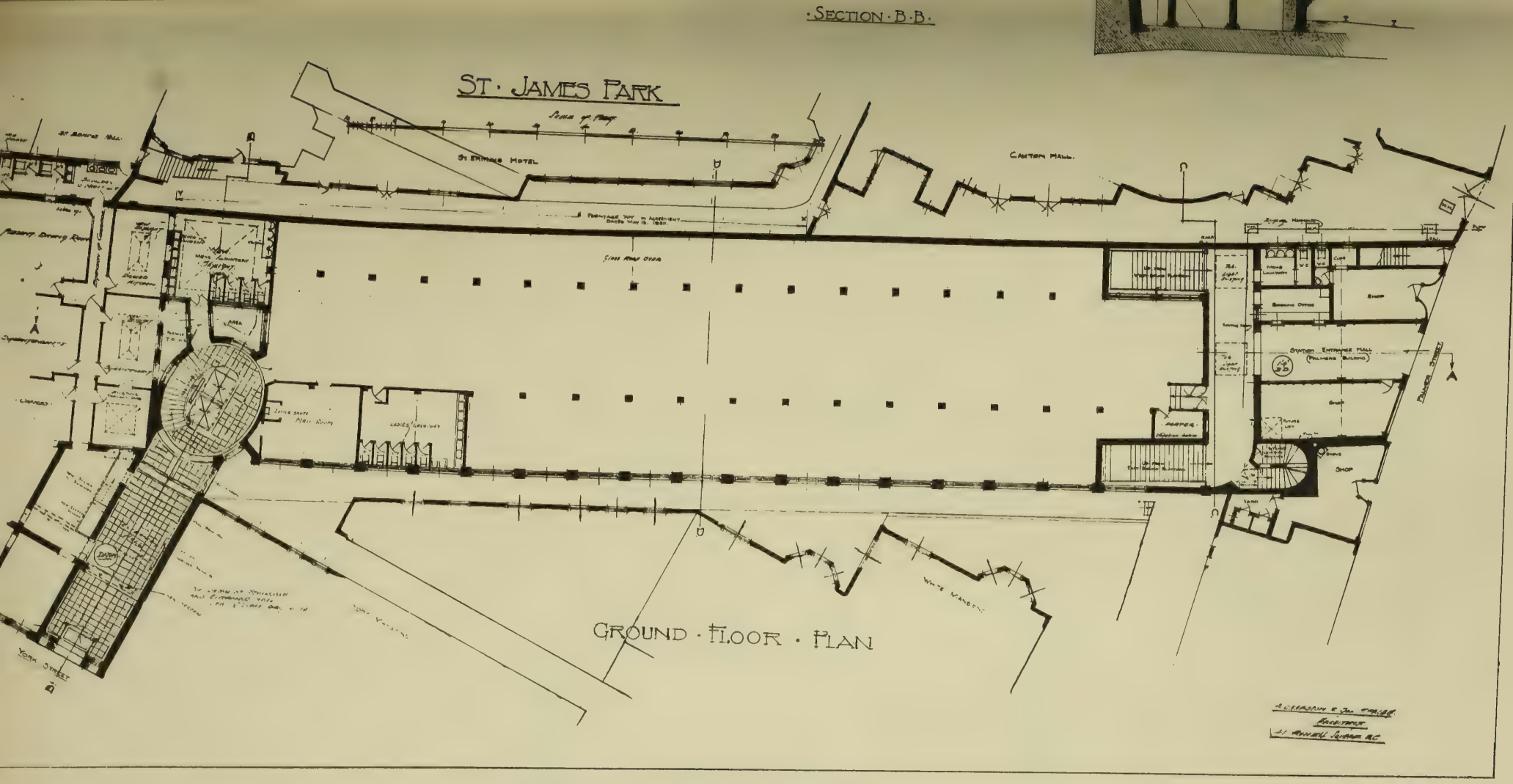
12.

Quarter · Inch · Scale · Section.
Showing · Main · Entrance · Hall.
and · Staircase

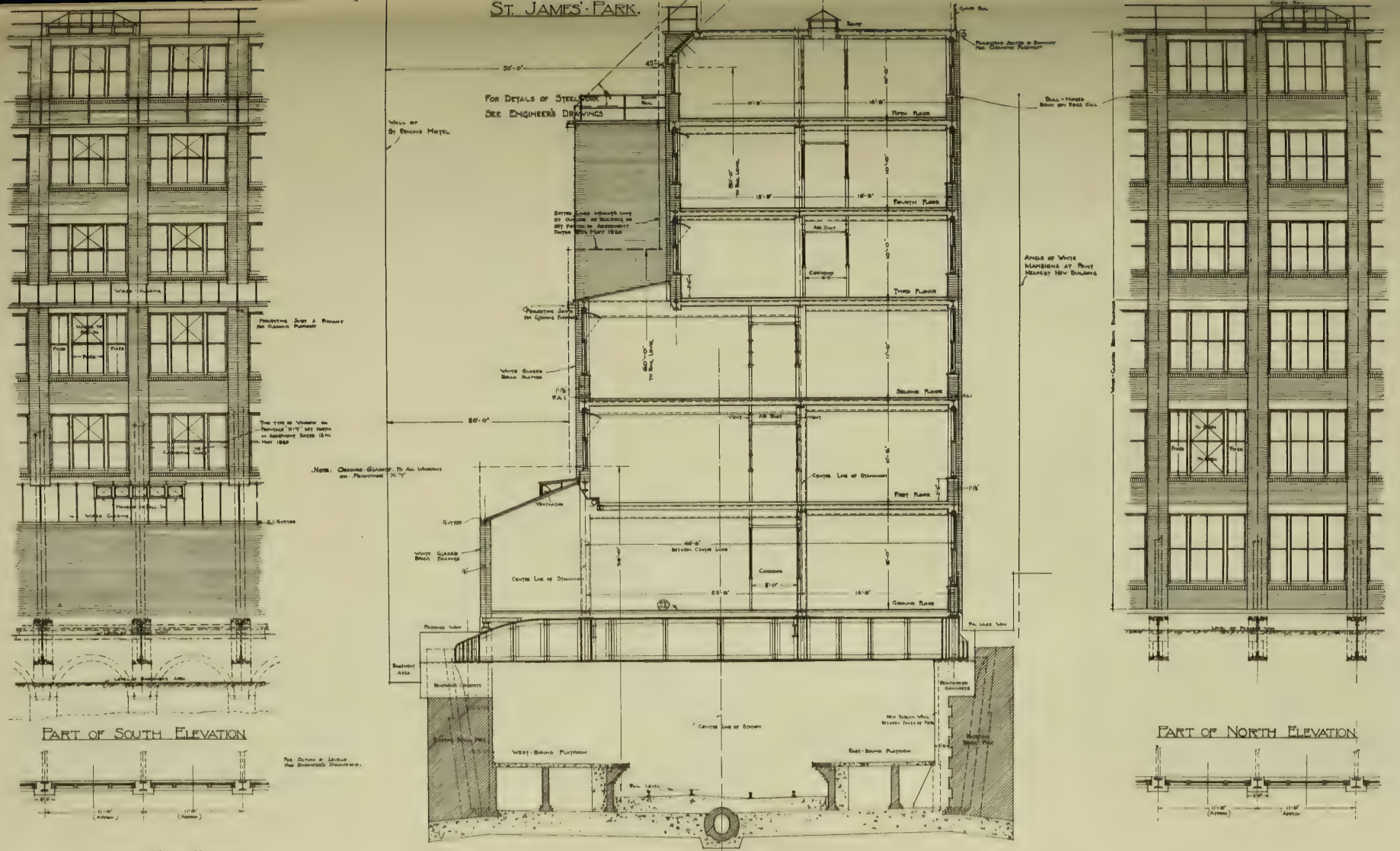


D. FLOOR · PLAN ·





MESSRS. RICHARDSON & GILL, FF.R.I.B.A., ARCHITECTS.



TYPICAL CROSS SECTION
LOOKING WEST, TOWARDS PALMER STREET.

RICHARDSON AND GILL FFRIBA
ARCHITECTS
41, RUSSELL SQUARE

MESSRS. RICHARDSON & GILL, FF.R.I.B.A., ARCHITECTS.



New Science Building, Mill Hill School.

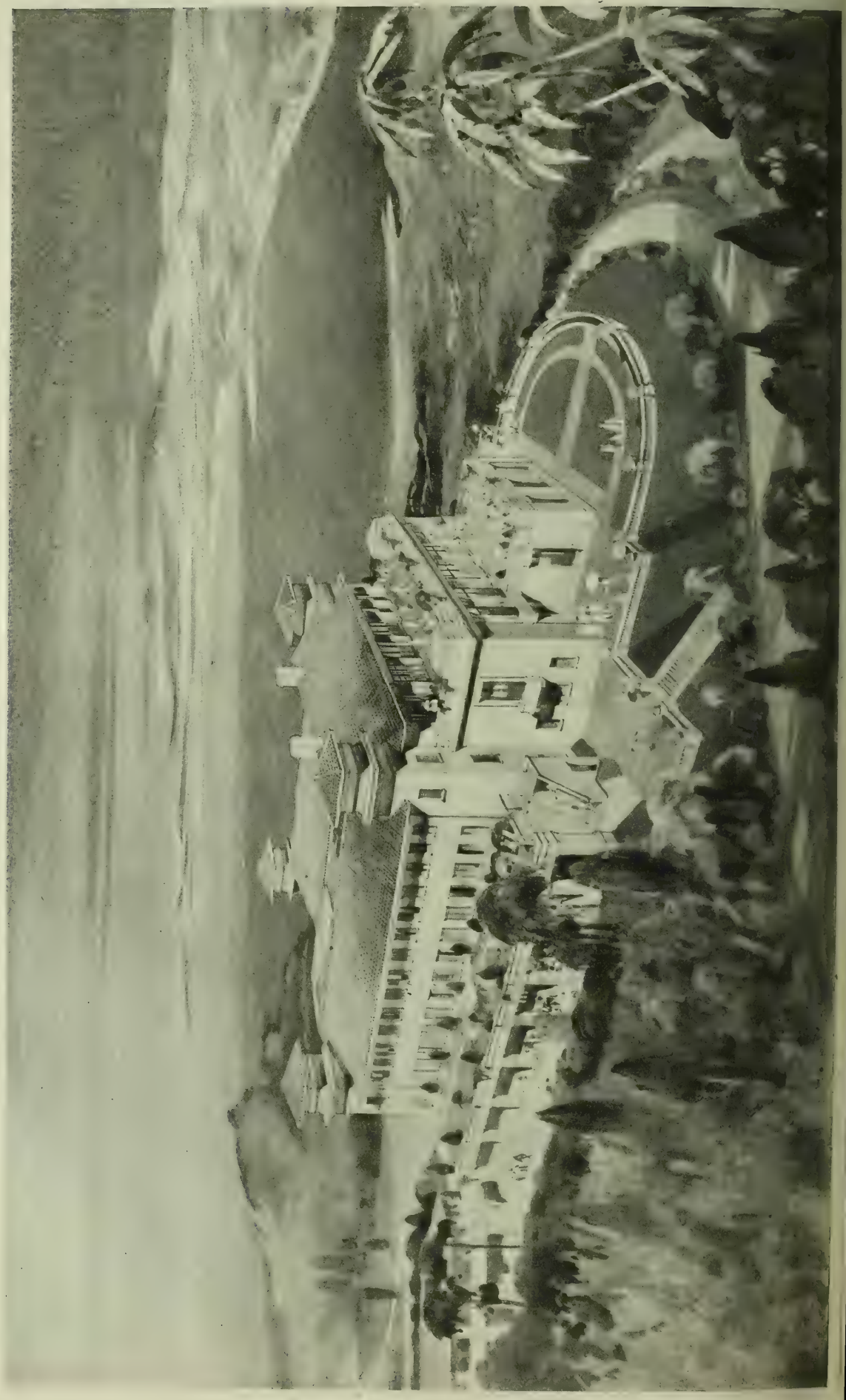
Mr. Stanley Hamp, F.R.I.B.A. (Messrs. Colcutt & Hamp), Architect.

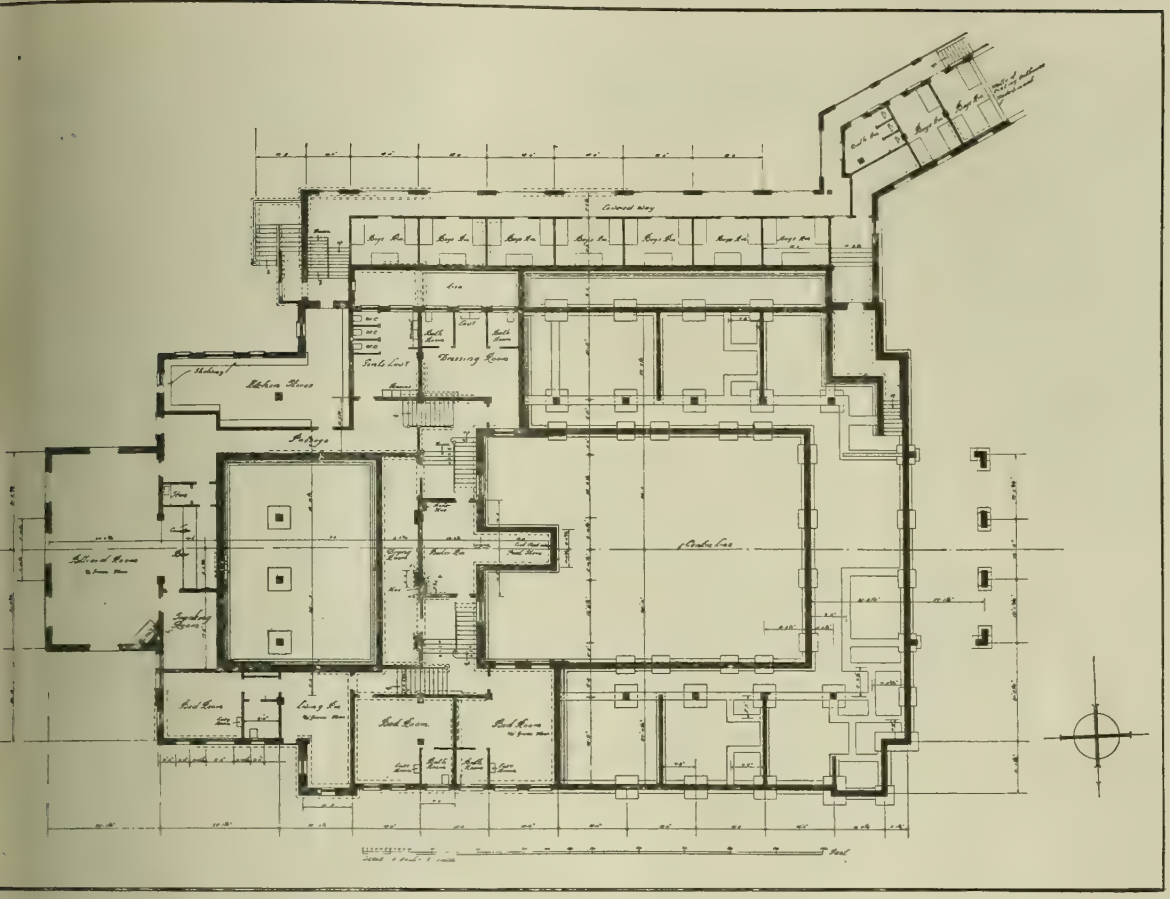


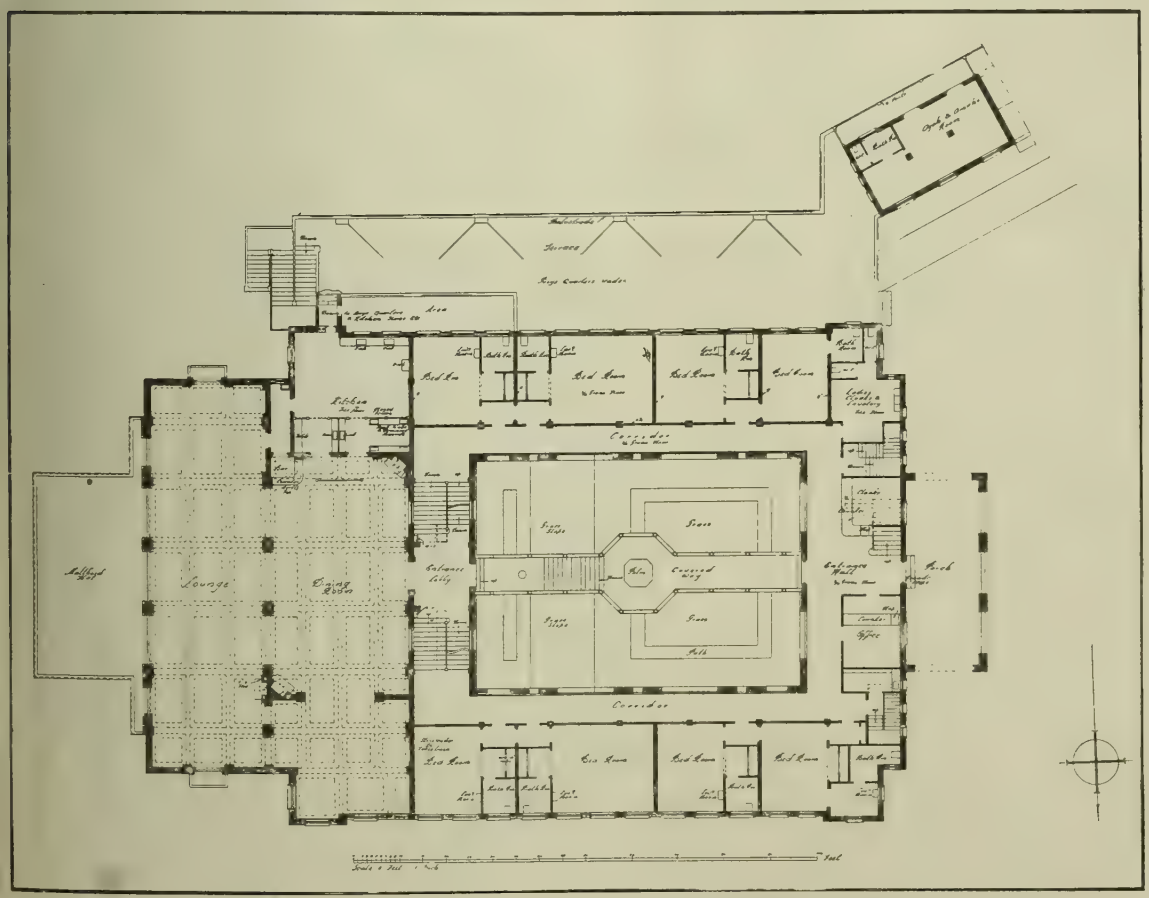


Entrance Hall to Offices, St. James' Park Station.

MESSRS. RICHARDSON & GILL, FF.R.I.B.A., Architects. (*See p.* 825.)



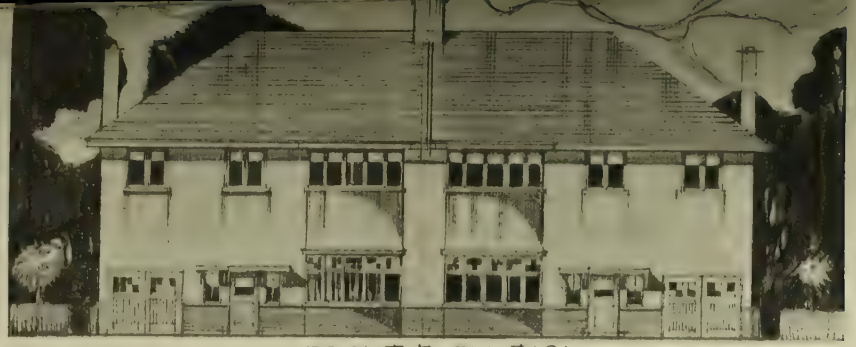




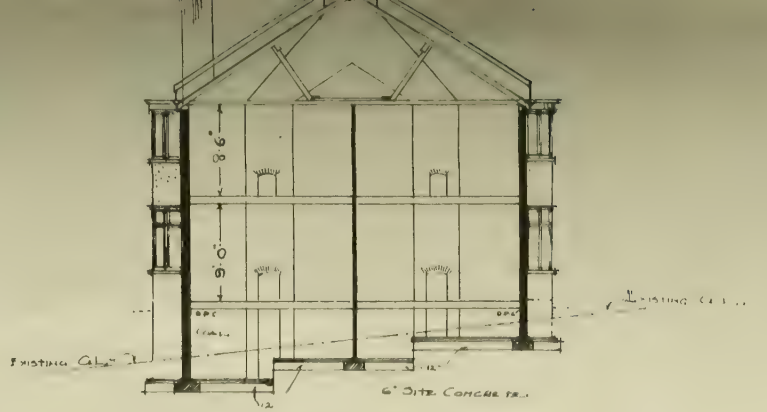
Proposed Hotel, Penang Hill. MAJOR HUBERT KEYS, D.S.O., F.R.I.B.A., Architect.

This hotel was designed to provide accommodation proposed by the Committee especially appointed to carry out this work. Twenty bedrooms, with dining accommodation for 200 people, drawing rooms, billiard rooms, &c., are provided.

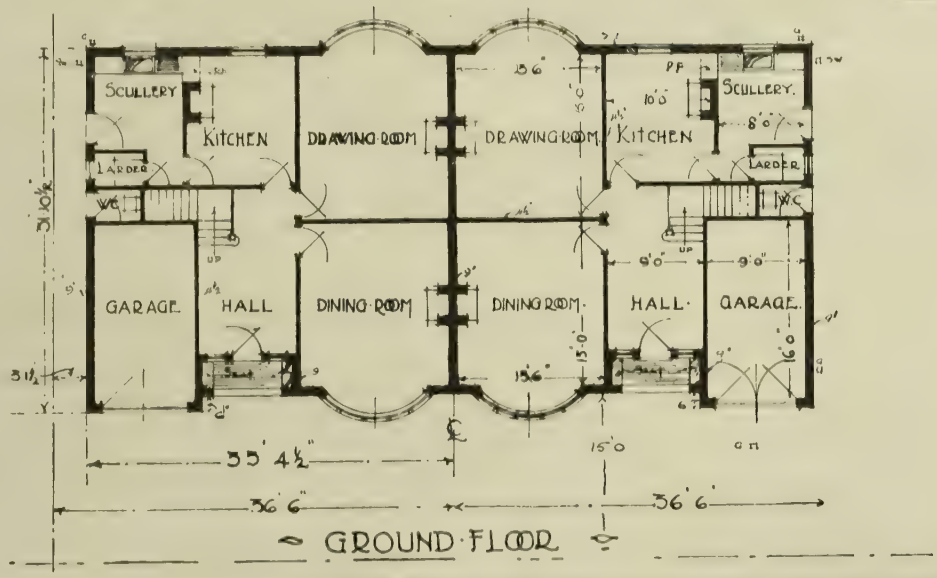
Bedroom
Bath Rm.
W.C.
Bedroom
14'0 x 12'6
Bedroom
14'6 x 14'0
Bedroom
9'0 x 13'0
Hall
Sitting Room
14'6 x 14'0
Kitchen
Scullery
UP
Dining Room
14'0 x 12'6
FIRST FLOOR.
GROUND FLOOR.



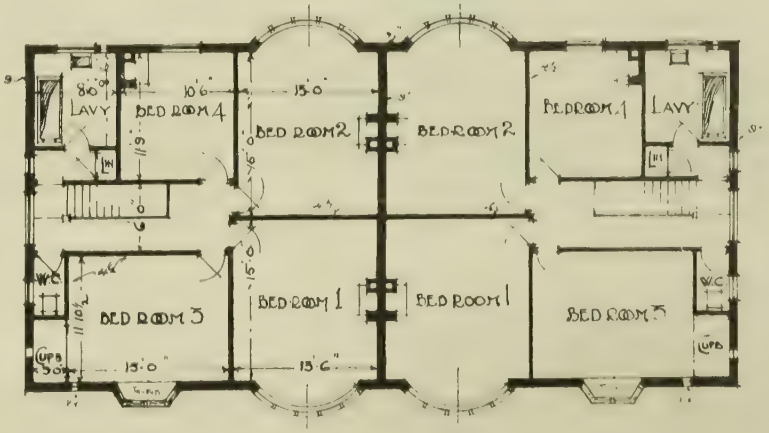
FRONT ELEVATION



SECTION



GROUND FLOOR



FIRST FLOOR

Houses on Pages-lane Estate, Muswell Hill. MR. VERNON A. BROWN, Architect

[The Pages-lane Estate will comprise about 60 houses, semi-detached and detached, of three to five bedrooms, garage, &c. The houses are of brick, and in some cases faced with rough-cast. The estate agents are Messrs. Sydney Bowyer & Co., Muswell Hill, and the builders are Messrs. Ellyatt & Co, Colney Hatch.

WESTMINSTER ABBEY RE-EXAMINED—IX

By W. R. LETHABY.

SCULPTURE AND COLOURING.—II (*Continued from p.* 729).

Whitening, gold, and colour.—The purpose of these chapters is to understand and "see" as far as possible how the church was built and what it looked like in its first freshness; sharp, unencumbered, light and undirtied. We must try to gain some idea of the fairness of the exterior—mostly as white as flour, but here and there touched with colour and gilding. From the wide spaces of the interior we must banish the terrific modern monuments, many screens, and the seating which hides the columns as they rise from the once shining floor. We must hold in mind the fact that the church was flooded with light passing through glass which was not only transparent but glittered.

Besides these main conditions the internal effect depended on the large use of polished marble in varying tones of grey; on the whitening and red lining of the whole of the masonry where not otherwise decorated; on a lavish use of gilding; and on the assembling of specially splendid objects such as the gold shrine, the exquisite retable, and the polished porphyry floor—like glass mingled with fire.

At Westminster the remnants of the original decoration are so few and small that it would hardly seem possible to find sufficient evidence for the original scheme, but comparison with St. Albans, Salisbury, and other great churches prepares us in such a way that the merest hints allow of large conclusions. The schemes of decoration of a dozen great churches might now be worked out in quite a trustworthy way. Some who are not well acquainted with these results, when they hear of the tale of white and vermilion, azure and gold, hasten to say that they would not "like it." But the people who did it loved bright things, and students who have come to see just a corner of this field of gleaming beauty are likely to tell us "We like it very much indeed, thank you."

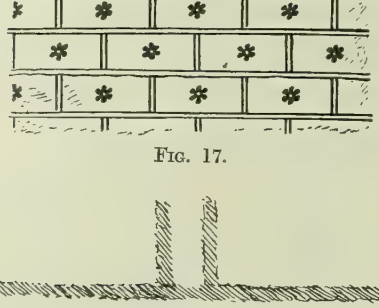
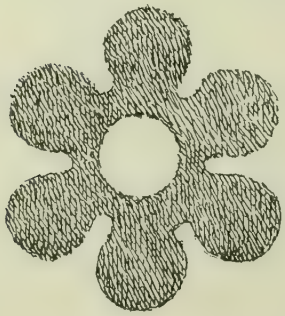


FIG. 17.





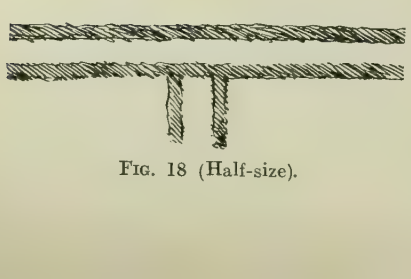


FIG. 18 (Half-size).

Parts of marble columns which have been protected here and there yet retain some of the original polish. A window recess now blocked at the end of the wall passage around the southern apsidal chapels had still, when I saw it some dozen years ago, the stonework covered with the original whitening, red lining, and roses, a precious remnant of the general decoration of the wall surfaces (Figs. 17 and 18). From many orders of Henry III we know that it was the common fashion of the time to whiten walls and divide them up with red lines into spaces of the shape of large bricks with sometimes a simple flower in each. This was called pointing, quarrying, or illuminating. To the roses we have more than one allusion. In 1240 the King ordered that the Queen's chamber in the Tower should be "thoroughly whitened internally and painted with roses." The wall whitening at the Abbey was being done in the year 1253 by Adam the *dealbator* and his mate. Scott knew of the wall decoration. His son, G. G. Scott says: "The interior was whitened and stoned in red lines. The diaper work of the triforium was gilt on a red ground; the sculptured bosses were gilt and coloured."

I have not found any direct proof that the diaper of the triforium was coloured and gilt, except that the diaper in the eastern arcade of the Chapter House still shows traces of gold and red. I have little doubt, however, that the diaper of the apse and presbytery was at least intended to be gilt. Gilding of the interior was one of the ideas taken from the Ste. Chapelle, where the whole interior recalled a goldsmith's shrine.

There are traces here and there that the wall-arcade was painted; in a protected part behind a big tomb in St. Benedict's Chapel the capitals are copper-green and the roll mouldings red. In the bay over the mosaic tomb in the south ambulatory the capitals are gilt, but the painting here seems to be later work. In several places red remains in the spaces under the arches. The shields of arms in the wall-arcade of the Choir must have been painted from the first, as they are at present.

The ribs and bosses of the high vaults of the presbytery and choir are gilt and this has certainly been so from ancient time. Keepe (1683) writes: "The vault whose arches dividing themselves into several squares compose a most stately roof, wrought with divers figured stones [bosses], and in some places curiously gilt with gold." Hatton (1708) says: "The next thing remarkable in the ornament is the gilding of the arches over the chancel, done in gold, which has been of many years' continuance." Wren, in his report on the church, says: "The vaulting of the Quire, though it be more adorned and gilded, is the worst performed." Crull (1713) writes: "You may still perceive that the arches of the roof of this Quire have been richly gilt and are at this time adorning with new gilding as well as the cross aisle [transept] on the south side."

The new gilding was done during Wren's great work of restoration, begun in 1698. In 1700, Samuel Clothier and David Legge, painters, were engaged "painting upon stone in imitation of Sussex marble in the ribs of the two bays and face of the great arch over the choir . . . being first thoroughly soaked in oil." Other items are "Raffled leaves round the 5 roses"; "for laying 5,550 of double gold upon capitals, ribs and roses." The roses are the bosses, the raffled leaves are borders round them on the field of the vault. The latter and bands up the sides of the ribs may be over old painted work. The account for gilding is followed by "The gold beater's bill." Large surfaces of the interior seem to have been covered paint and this may be what was "painting in imitation of Sussex

The sculptures of censing angels the south transept were fully painted is evidence for all the spandrel car 1910 I examined the angel on the a ladder and found red in the crea drapery. On the upper garment was of three spots distributed at interva The right-hand angel had stars on th which are plainly recorded in the Fig. 3. I also have a note of trace Patterning of draperies in this way wa in paintings of this time (see recen "Life of St. Alban"). There was red little lion below the angel on the lef graphs of the angel spandrels at Lin in Prior and Gardner's "Sculptur that they too were coloured and ha square-diaper backgrounds that appe been adapted from the carved square Westminster.

The tombs of the interior, lately clea what the painted sculpture was like. T and ladies had bright eyes, flushed c coloured garments. The effigy of Aveline was painted all over, she had and green mantle lined with blue. was diapered with coats of arms, w painted in transparent varnish colours Crouchback's effigy had a red surcoa with a pattern imitated from the on the front of it was a big coat of a flesh was painted, the cheeks flushe eyes had blue circles. The little ang head were fully coloured, and their hai On the edge of the slab could be r gist Emon Fiz [Henri jadis Roi d'Angle

The weepers had red cheeks an garments—in some cases at least th to have been in varnish colour over g ornamental painting of these two t so elaborate that no description wo without full illustration. Little pa inlaid with glass over pattern-work other parts were in raised gesso gilt, little knight in the gable of Crouchba had red cheeks and he rode a dapple

The wooden sedilia opposite were in the same way; the carved heads on pies were like "waxworks." The Aymer de Valance also followed the sar scheme, but it was simpler. There much gilding on the prominent moul the carvings, so that the general aspec of a gilded work. Panels, hollows of and other plain spaces, were coloure green with smaller quantities of black to clear and harmonise the whole. with little angels and the weepers coloured. The weepers stood agai grounds alternately scarlet and gree with gold; the small pillars betw patterned alternately gold and black and red with hollows at the side green and red (Fig. 19). The chamf panels and the delicate tracery abo fair ivory white with gilt fillets. Th the little shafts and the plinth moul

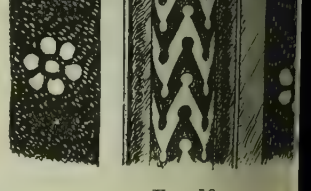


FIG. 19.

"marbled"—an innocent little spot ing, but still marbling.

The tomb of Queen Eleanor was Purbeck marble, with gilt carving h with the gilt bronze figure. Recen showed traces of the brightest red railings, which appeared to be origi

rded that there was painted pattern
n the railings of Henry V's Chantry.
cloister, so far as built by Henry III,
inted like the church. The sculptured
e to the Chapter House was brilliant
and colour. In Allen's "History of
" (1828) is this description: "One
of the mouldings [of the arch] contain
scrolls [of foliage], which have been
d the depths coloured black and another
; a third is divided into small niches
ed scrolls, and within these are twenty
statues—the Blessed Virgin and infant
nd David, much broken. Fragments of
nt and gilding yet adhere on various parts
, enough to show their former splendour.
this doorway, the vaulted roof [which
than the doorway] has a greater number
than the rest, and some of the keystones
es] are rich in carving and gilding. The
der of the divisions on the east wall
cloister] have a string of gold once
3 in. broad, horizontally about 3 yds.
ne pavement. The wall was painted a
lour, on which are a number of white
" (Compare Ackermann.) One of
plates shows this band in the cloister,
ad a scroll pattern.
eneral original ground wash would have
nite with red lines struck on it. Many
f such a treatment exist in the cloister
bury Cathedral.
arison with the façades of Wells and
d and the great porch at Lincoln shows
e sculptured portals at the Abbey would
en painted and gilt. Masonry within and
was not properly completed until it was
over and "illuminated." This tra-
treatment, as Burges remarked, was
necessary protection to stone work.
climate we must paint or it will rot.
was founded in necessity, however,
l, under the magic hands of mediæval
en, into fairy beauty.
work shows the same liking for gay
The small chapel, usually called after
smus but properly Little St. Mary's,
the tomb of Aymer de Valance, and
by his widow, Mary de St. Pol, preserves
louring which has recently been better
by cleaning (March, 1923). In a
niche fronting the door is the general
t by the removal of a carved image;
head of this long rays radiate over the
nd. The vaulting is starred in red
nite ground, ribs have barber's pole
nd rosettes; the boss is a pretty little
ion of the Virgin. The walls are
over with pine-shaped units on each of
s a fleur-de-lys. This pine-shaped
was very popular in the latter half of
teenth century; it appeared in St.
s Chapel, and is found on existing
paintings (Fig. 20). The wood door
gaily painted. In the Muniment room
en partition (*temp.* Richard II) painted
ed and powdered with white stars



Fig. 20.

eenth-century altar-screen was fully
in colour, and some traces still
the east side. The backgrounds
t red and blue. The soffits of the
re carved into a delicate network of
he interstices of which are red and



Fig. 21.

blue. Above the canopies the space in the centre is red while the rest was blue. According to Neale there was much gilding and raised patterns which would have been in gesso.

There are still traces of Catherine wheels of gesso on the elaborate tomb of Lord Bourchier which forms a screen to St. Paul's Chapel; as Neal says, they were "thickly powdered" over the monument and gilt. His engraving shows them and also the band of angels above each holding a pair of painted shields and having gilt wings. This tomb also has lately been cleaned. The cornice and battlement

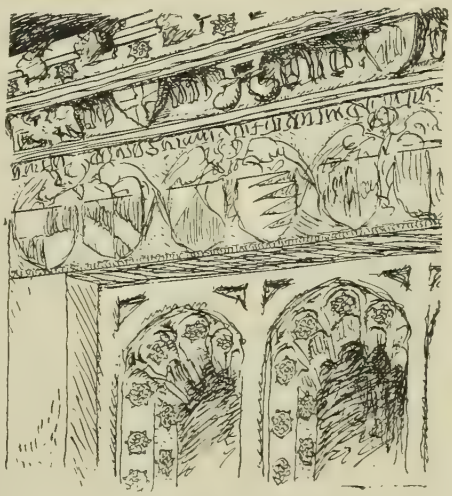


Fig. 22.

were blue picked out in gold, as apparently was the whole work. In the hollow of the cornice between the arms and badges was an inscription in big gold letters: "Non nobis dñe non nobis sed nñi tuo da gloriam," some of which can still be read. Below, on two deep bands, several of the shields can be distinguished with traces of the angels' wings. The bands were edged at the bottom with a fringe like the vallance of a funeral hearse. There was further lettering over the shields, in white on black, which is given in Keepe's MS. as "+ L'onnour a Dieu a nous Merci + " and "+ Learne to Dye to live ever+." These were several times repeated. According to Keepe's drawing the big flags and the Lion and Eagle which support them on either side of the monument were fully coloured and traces of this can still be seen. The sides of the tomb proper have quatrefoil panels with red and green fields alternately, the colours counterchanged on the chamfering. Keepe gives twenty-two shields of arms which he says were of "the nobility both of England and of Henault, viz., Robsert Bourchier, Swinford, Chaucer, &c." (Fig. 22).

The chapels on the east side of the north transept were dedicated to St. John Evangelist on the south, St. Michael in the middle, and to St. Andrew on the north. The Chapel of St. John had a screen which Keepe says was "adorned with several carvings and coats of arms, by John Estney Abbot, painted and gilt with gold, who lies on the south side with his effigies engraven on brass; he died 1438." Dart says the screen was wood finely carved and gilt. The middle chapel still has the ruin of a fine late Reredos. A sculptured figure of the Virgin and Child painted and gilt, a fragment of which now rests in the St. Erasmus panel in the north ambulatory, may have belonged to this Reredos. According to Keepe "the screen of St. Andrew's Chapel was adorned with imagery work of birds, flowers, cherubim, devices, mottoes, and coats of arms." A drawing (dated 1722) of this screen, which Dart says had been destroyed, has lately been presented to the Abbey from the Gardner Collection.

It was of stone tracery with a central door in the spandrels of which were two big crowned eagles holding inscribed labels; above was a blazing sun or rose, and a long inscription on either side of it (Fig. 23). On a handsome carved cornice were arms with trees and inscription ribbons between. Rising from the cornice were two pinnacles. In Keepe's MS. collection in my possession are further details and a copy

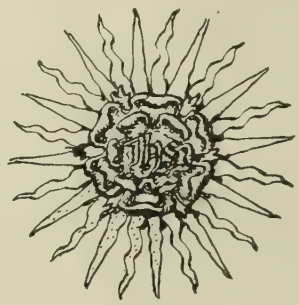


Fig. 23.

of the inscription. The sun surrounded a red rose on the heart of which was inscribed I H S; it was a symbol of the Virgin—*flos florum*. The inscription (Fig. 24) ended with the date 1467. Thirty shields of arms are given; the one in the centre bore the device of the Trinity, two others were the ordinary Abbey arms and the keys of St. Peter impaled with the Confessor's Cross. The birds in the cornice were gilt eagles and black ravens holding labels inscribed *Kyrie Eleson*, doubtless Kirton's motto. (In giving a sketch of this in 1906 I understood the carving to be a wooden cresting, but as now said, it was part of a stone cornice.)

There was much painting of later date in the cloister. Keepe says that at the entrance towards the west was a crucifix with the Virgin and St. John "curiously painted and very pitiful to behold." Round the cloisters were other paintings "with variety of verses alluding to the history of the foundation and the figures." Opposite the walls were "windows of tinctured glass" [in the tracery only]. The description by Allen quoted above goes on to say that the north-west bay of the cloister "has been painted with orange-coloured sprigs on a dark

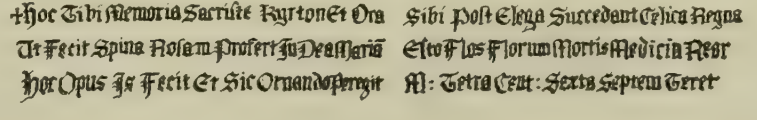


Fig. 24 (Rose was in centre).

ground." In the south-west bay above the entrance are "fragments of black-letter inscriptions on serpentine labels."

A fragment of this lasted on until Micklethwaite's time, who says that above the door, "on the wall just below the vault are a few mouldering elements of a picture" [the Crucifixion ?]. All that can now be made out is part of a ribbon with an inscription in letters of about 1500, which Mr. J. T. Fowler has read with some hesitation, "*in s'cla s'clorum. Amen.*"

As lately as October, 1923, colour was found on the ribs of the cloister vault in the south-east bay—red on the rolls, fair blue in hollows, and a morsel of gold on the boss. It is clear that the whole cloister was as clean and bright as paint could make it.

Feckenham, the restored Abbot, accomplished a considerable work in refitting and redecorating the church. In 1557 the Confessor's coffin was put back in, rather than on, the marble basis. A quite pretty shrine-like structure of wood—recalling in its form the old shrine proper—was set above the basis where it yet remains. The

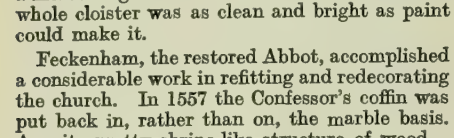


FIG 25.

marble work received an additional cornice, and large spaces, where the mosaics had been picked out, were filled with plaster, and had the patterns completed by painting. A new inscription was painted around the frieze signed by the Abbot's monogram. Remnants of plaster filling are found on the mosaic tombs of Henry III and of Katherine. Several of the Royal tombs around the Confessor's shrine received new painted inscriptions which have recently been more clearly revealed by cleaning. The often-quoted words PACTUM SERVA on the tomb of Edward I, belong to this work. These inscriptions are in a good form of Roman letter (Fig. 25). The old sculptured coats of arms in the choir aisles were now repainted and inscriptions written over them in "Lombardic" characters. The continuation of the heraldry to the west end seems now to have been done

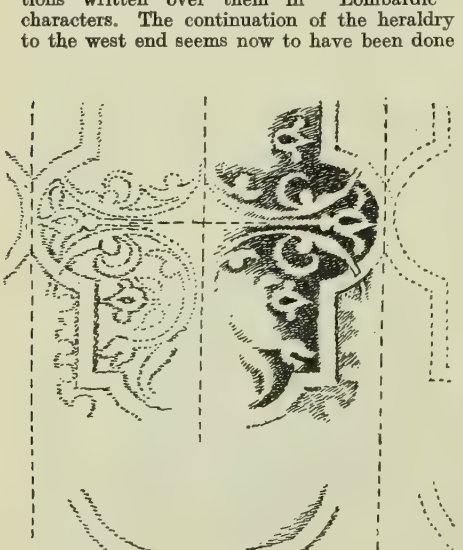


FIG. 26.

for the first time. The recess where the tomb of Katherine is also appears to have been painted at this time. Recently a fragment of wall-painting of Holbeinesque style, and very pretty, has been discovered in one of the Canon's houses (Fig. 26).

CAMBERWELL SCHOOL OF ARTS AND CRAFTS

ANNUAL EXHIBITION.

THE exhibition of work by students of this school, which closed last week, well repaid a visit from those who wished to acquaint themselves with the methods and direction of such teaching. For the doubts which some have felt as to the adequacy of this collective instruction in schools as an alternative to the old apprenticeship system, and that it would be lacking in practical character, would have been a good deal resolved by a visit. We have, in fact, to recognise the school method as definitely replacing the old one. Government schools of art have been subjected to some criticism, not always unjustly, and they no doubt differ in character, but under enlightened direction, such as guides the work in this school, it is difficult to sustain objection. Results go to show that the training is very practically conducted and likely to have a very healthy effect on the conduct of industry. Mr. Thorogood, who is in charge of the Camberwell schools, is himself an accomplished potter and brings an experience sufficiently associated with existing industrial methods to approach the matter in entirely practical ways, realising that we must work through a knowledge of present conditions and not in too detached and abstract a manner. We shall not achieve much by wholesale rejection of industrial methods; rather, with a larger apprehension of its needs and working through them and with them to better results, we shall do much more.

What, then, is the influence which such a school is bringing to bear on industry and the crafts? It appears to us that it must penetrate industry with more efficiency as the pupils trained in a better appreciation are absorbed into it. It is bound to do so if it has something better to offer. We are not inclined to believe that there is any unreasonable resistance to be found in industry itself, and the manufacturer who is sometimes misjudged, is not unwilling to be helped, when it is considered mutually. But this is not all: the better understanding of materials and the best use to be made of them, the fitness of design to purpose, combined with the freedom allowed to the student to develop his own nature, is fitting the best of them to work independently. Students who have been trained in this school have established their own independent practice in one or other of the crafts, such as pottery or bookbinding, forming on a small scale their own industry, and are assisting to spread local industries throughout the country. This is almost of national importance when the revival of village life and the decentralisation of industry is so desirable.

We were much interested, as showing the intimate nature and intelligence guiding the instruction, to learn that the student of pottery is encouraged, where available, to bring samples of clay or other material from the locality in which he lives that experiments may be made with it. We understand that one old student is at the present time carrying on successfully a pottery in a country district on the experience gained in this way of the local material when experimented with in the schools.

The exhibition was representative of the different classes and varying ages of the students, and it was surprising to notice the efficiency of the results even in one term of work. In the class devoted to costume making, some of the drawings were clever and graceful, though others showed their skilfulness in less agreeable ways. An announcement told us of work devoted to "commercial design, stained glass work, &c.," but it should be remembered that there is only design, and that rightly informed it is all of one nature, otherwise we are in danger of arbitrary distinctions, such as that which would differentiate "ecclesiastical" art from other art. Examples of embroidery shown were not very successful in colour. A very attractive part of the exhibition was that devoted to nature studies; examples of flower, leaf and seed cases were exhibited, very creditable to the students. In the second year Junior Art Course studies of bird life were equally commendable. In thinki the usefulness of such studies, it will have noticed how often the best work done in po is seen where the design and form are fou on the direct inspiration of nature, so notic in the most successful pottery executed b Martin Brothers. The value of such n study is that is intervenes to prevent the st from absorbing too early merely derivativ more standardised ways of ornament, impoverishes so much of the work done.

It is almost invidious to call attentic particular examples, when the general lev the work was so praiseworthy. But in the J Art Course for plaster work the little figu a girl with instrument, by B. Hodgkinson all the freedom and ingenuousness tha associate with Gothic work. That this should be preserved through the further stag the training so that it reaches the building u paired must be the desire of all who have to see how difficult it is to preserve a spi unsophisticated and natural. In this schoo craft practise is so thorough that in the po classes the students mix their own glazes study the properties of materials, beco acquainted with every stage of the craft; does this need a very lengthened trainin acquire. We were interested to hear this emphasised by the Principal, because putting the emphasis in the right place. exaggeration of view has gone to the subje craft training, in which really there is very mystery. The mystery is in the art. W train craftsmen pretty quickly, and these sc are doing so, but we cannot make artists the artist knows that the exaggeration o difficulties of the former obscures the real i suggesting that to be the end which is onl means. The arts only permeate life and fi when that is sound and pure. Craftsmans the threshold not the goal. The problem v be a relatively small one were we only conc with the latter, though it is most satisfacto see that the training in craftsmanship is on r lines, as at this school. The darkness is l from this era of industrialism and there is r to believe that we have left the worst behind.

COLOUR IN ITALIAN ARCHITECTURE

IN a recent lecture at the Central S of Arts and Crafts, Sir Banister Fle F.R.I.B.A., continued the study of C architecture in Italy, this time in the c and southern parts of that country. The C spirit, he said, did not appeal to these sou artists, who retained the rectangular eff classic architecture, and indulged in l splashes of colour in the façades, obt by the use of brightly-contrasted ma In Rome, basilican churches were suff and S. Maria sopra Minerva was the only church in the Eternal City. In Florence, o ever, a new monument arose in the Cat dedicated to S. Maria del Fiere, with its s and beautiful Giotto's Lily Tower, belov all great writers on art, and its baptistr its bronze gates—all vividly shown by t of lantern slides. More purely Romanes tradition was the austere pile of S. Frances a its monastic buildings at Assisi, built b friars on the death of the noble S. Fr their founder, the greatest and yet the hu son of that Italian town. This pile formed the most monumental monastic groups in and an outward sign of a devoted life.

Wellingborough School Memorial.

The Bishop of Peterborough visited W borough School recently to dedicate th memorial. The memorial, erected by pa present Wellinburians, has been design Mr. Talbot Brown, of Wellingborough a carried out by local craftsmen. The me is completed by an east window, depicti Michael, St. George, St. Joan of Arc, St. of Tours, and St. Alban, the work of Mr. Eden.

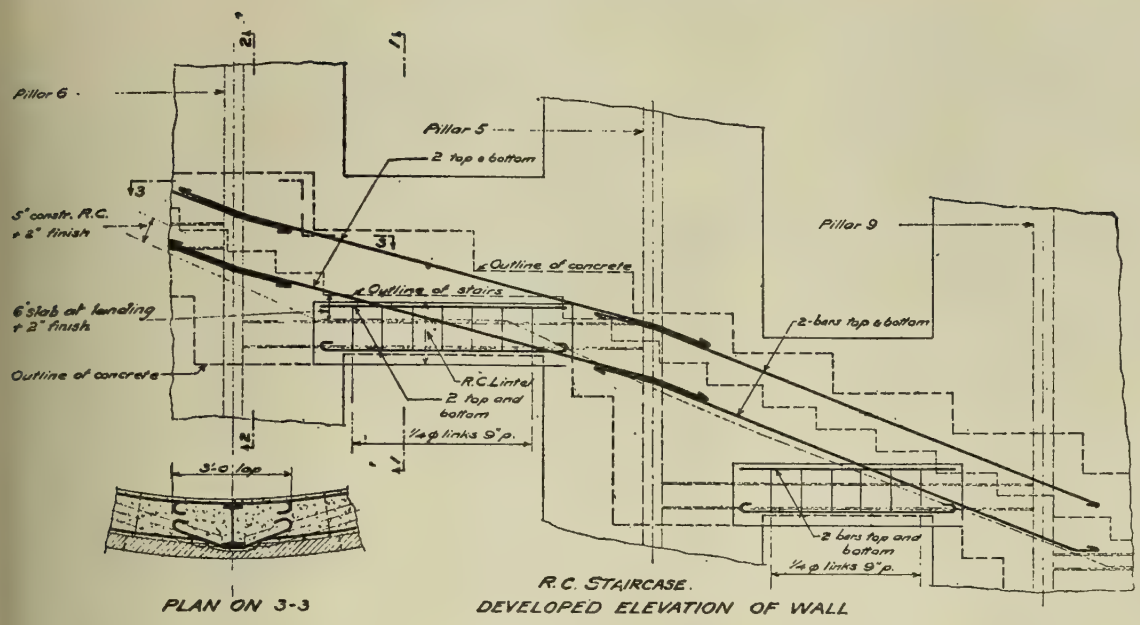


FIG. 4.

MODELLING OF ST. ES' PARK STATION

remodelling of St. James' Park with a block of offices over to form sion of the present offices, presented teresting problems to the architects, , and builders employed on the work. t procedure was the making of an survey in order to set out the steel ilding, which had to follow the curve racks.

emoval of the station roof and the of eighteen 20-ton girders of 53 ft. carry the new building over the station was the first problem to be d. No interference with the traffic wed, and platforms of not less than ld also to be kept clear. The plat- ere of hollow construction, and it ld necessary to cut holes through to rete below and to insert short lengths 12 baulk timbers to finish ½ in. above form level. These short lengths the cill of a very strong braced he full length of the station, the the gantry being kept some 6 in. e lever of the new girders. Across le width of the station rolled steel × 7½ were placed about 8 ft. aring on the wood gantry at each hese girders were erected in two y a crane working on the railway. deck of 3-in. timber covered in the the station, and over the platforms ted iron roof was placed under this protect passengers. Arrangements be made to preserve this iron roof completion of the building. This arrangement enabled the existing e taken down, oxy-acetylene being ut it down in sections.

After the old roof and parapet had been taken away the top of the brick piers were cut away and a reinforced concrete pad 3 ft. thick was constructed in one piece over the brick piers and the reinforced concrete enclosure, spreading the load from the main steel girder to the brick core as well as the reinforced concrete strengthening. This was done by a novel method of reinforced concrete enclosure to the piers, extending down to the footers and spread in the form of an inverted mushroom to obtain the necessary foundation area, both to support the new building and to take the earth pressure. This concrete enclosure covered three sides of the brick pier in the shape of a " U " on plan, and the bars of the " U " were secured by steel rods with three holes through the brick pier (see Fig. 1). Tests were carried out on the old bricks forming the retaining wall and the results obtained were interesting in that the perforated brick showed a higher crushing strain than the ordinary stocks.

Access to the building site was only obtained by a gap 5 ft. wide between two buildings, the girders being 4 ft. 6 in. deep.

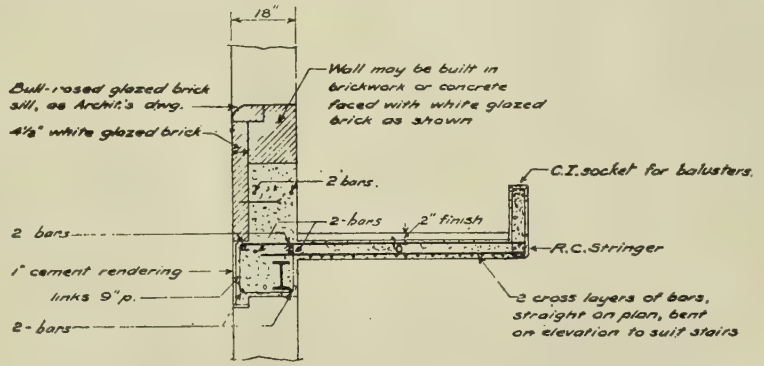


FIG. 5.

The method of placing these big girders in position was to place railway metals on top of the 24 × 7½ R.S.J. and directly over the gantry below, small trucks being used to carry the girders, and hand-winches with steel rope and pulley dragged the girders to their positions without placing any lifting pole or crane in the station; hydraulic jacks were used to up-end the girders on reaching their positions, packing pieces being

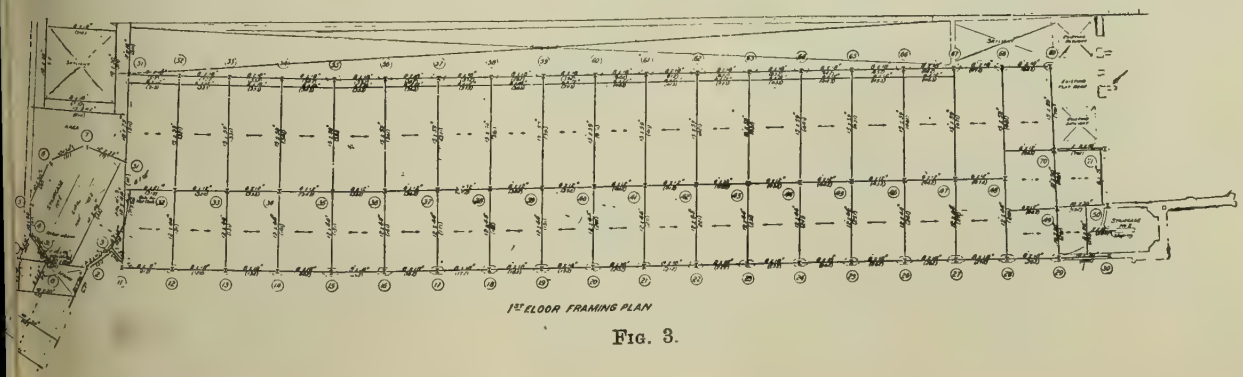
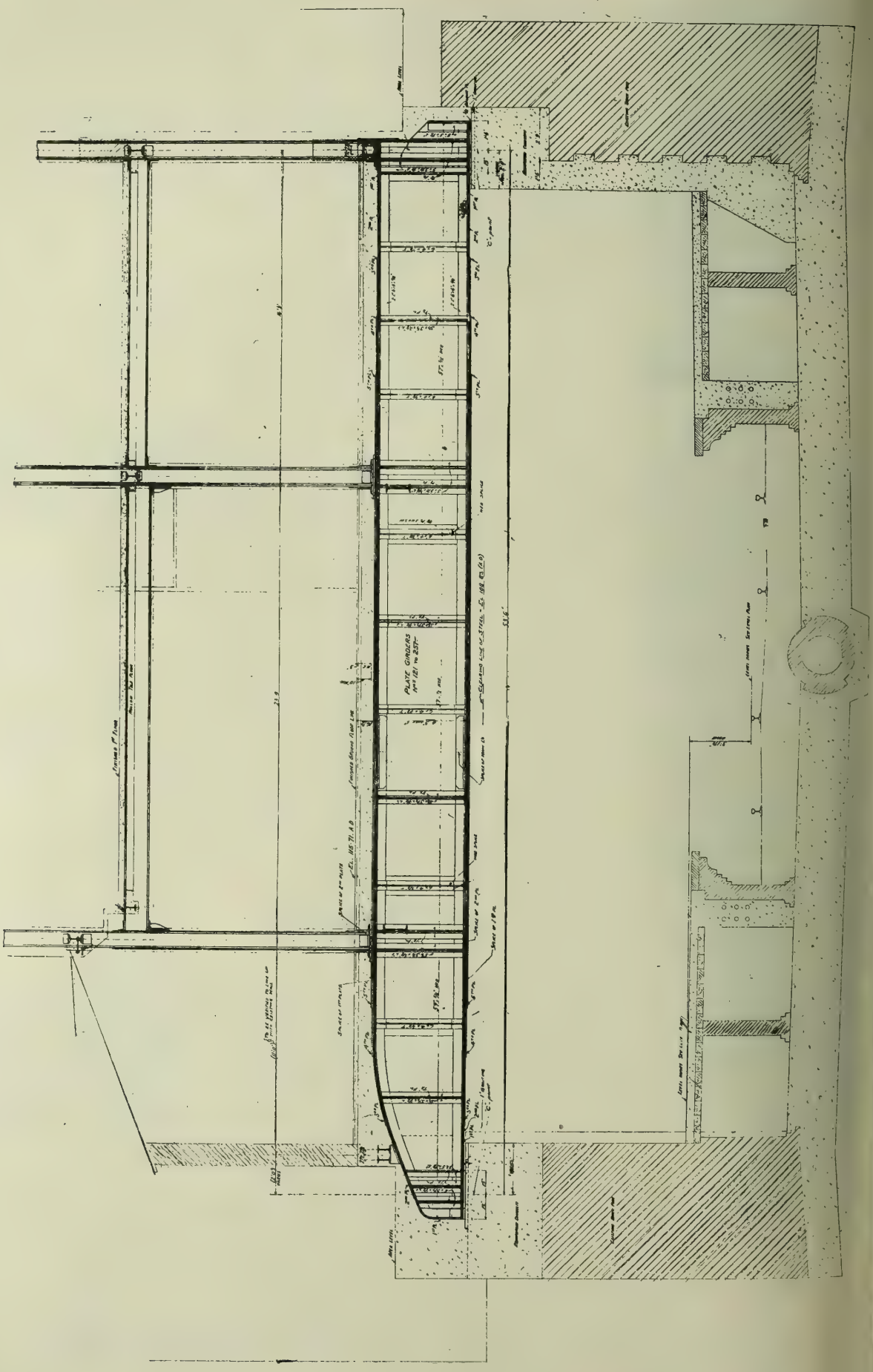


FIG. 3.


PLATE GIRDERS
No 121 to 230

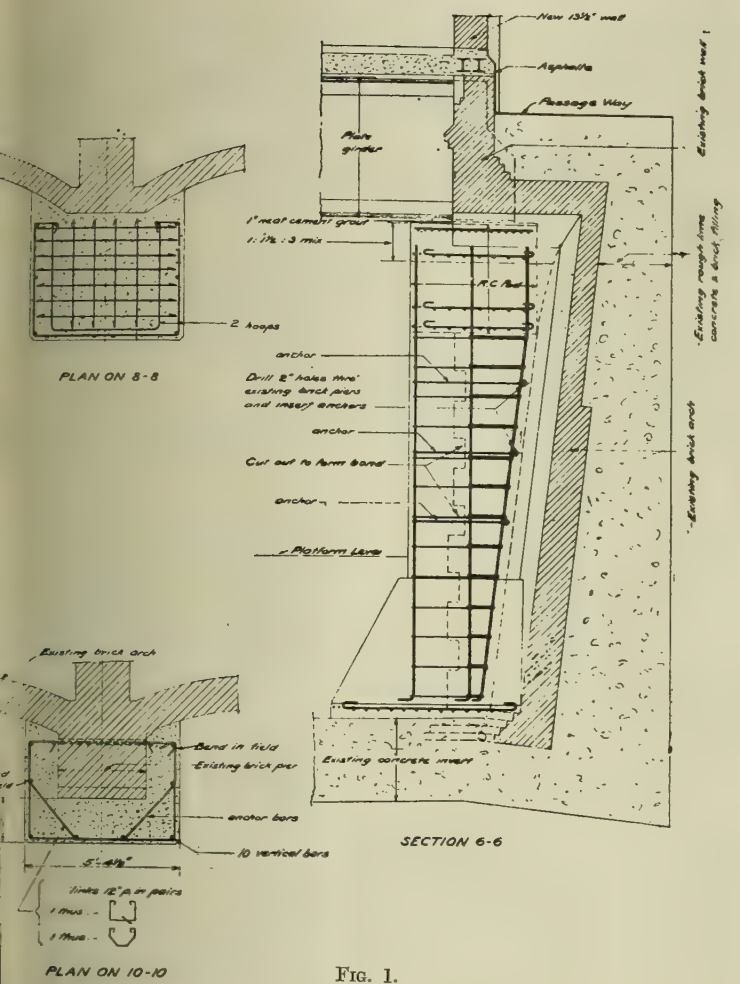


Fig. 1.

the bearing plates and gradually nd so lowered into position, one e temporary deck being removed A temporary boarded floor fixed e lower flanges of the large girders a working platform for riveting nd the construction of the strong concrete floor forming the ground new offices. This temporary floor ed the railway station below. steelwork was manufactured com- ne shops at Middlesbrough by rman Long & Co., Limited, and il to London and by special motor the railway station to the site of , and placed on a vacant plot of the back of the building. The ges of the girders are only some e the trains running below. The of the main girders was neces- t below the area level on the (Fig. 2). Dimensions to every oint were agreed on the plan ight base line from a fixed point , and dimensions from this base te the points by dimension, all angle with one another. This the C-points (centre or cross iers. The centres of pillars were mensioned and, in addition, the to c. of pillars adjoining were h dimensions were afterwards e details of the steelwork. By the steel could be manufactured iers were constructed, and before d be set out on the site for the nd some three months' time was d in the time of construction of acture, and particularly the manu- e main girders.

ing of the new building so as with the existing block of offices and with a small block of offices er-street end, also presented some nd exact levels were essential. lliptical staircase forms the junction between the old and new buildings, and accommodates the varying levels, as well as presenting a symmetrical appearance from the entrance hall.

Fig. 3 shows a typical framing plan of the upper floors and Figs. 4 and 5 show the special design of the elliptical staircase, the steps and landings being carried on the cantilever principle from the external walls, which are also elliptical. This stair provides a flowing soffit. The stringers stiffen the construction, but are not required to act as beams.

For lightness, hollow tile floors, with rods, were selected, the work being carried out by Messrs. Diespeker & Co., Limited. A concrete mixer with tower elevator on the American principle was used on an adjoining site, and the concrete fed by means of shutes on to site, the one disadvantage in the use of this feed being that the concrete delivered over a long distance became rather uneven in quality, and eventually this was abandoned and the concrete was taken in skips on rails to destination.

The lifts were installed by Messrs. Waygood-Otis, and are directly over the railway station. A heavy rolled steel joist bottom to the lift pit was constructed, bearing on the bottom flanges of the 4 ft. 6 in. girders; various safety devices were gone into as a precaution against the lifts breaking through into the station below, but the only additional precaution taken was to put safety gear to the balance weights.

Lift fronts were carried out by Messrs. Caston. The heating was carried out by Messrs Rosser & Russell. A new boiler-house has been built and equipped to heat the old and new buildings in the basement, access being obtained from the platform, the long horizontal runs necessitating the use of pumps to maintain efficient circulation. The tiles were supplied and fixed by Messrs. Van Straaten.

The entrance hall was enlarged by the removal of the old lift staircase, and has been panelled in English oak to form a war memorial to those men belonging to the railway company who lost their lives in the war. Some 1,400 names are inscribed on the oak panels. The panelling and marble work were carried out from the architects' designs by Messrs. Roberson, of Knightsbridge. The architects were Messrs. Richardson & Gill; consulting engineer, Mr. S. B. Bylander; contractors, Messrs. Huntington, Ltd.



Entrance to Offices, St. James' Park Station.
Messrs. Richardson & Gill, FF.R.I.B.A., Architects.

THE LONDON SOCIETY

On November 14 Dr. Septimus Sunderland lectured before the London Society on "The Spas of Old London and its Vicinity." The chairman, Mr. Carmichael Thomas, in introducing Dr. Sunderland, said he was a great authority on a subject which would appeal to every member of the London Society. Although their activities dealt with the future, it was desirable they should know something of Old London.

Dr. Sunderland, in the course of his remarks, said springs abounded not only on the north side of the river, but also in Southwark, Lambeth and contiguous neighbourhoods. As time went on, and as buildings were gradually erected over the outskirts of the old city, imperfect drainage and the construction of cesspools interfered with the purity of the springs and wells, many of which were gradually obliterated. The word "spa" was derived from a Walloon word, "espa," meaning "fountain," and took its origin from the town of Spa in Flanders, lying about sixteen miles south-west of Liege, very near the German frontier.

He would first call their attention to a little group of spas and spurious spas, to the number of eight, which existed in a small area, not one of them being more than a mile distant from the present King's Cross. These were: St. Chad's Well, King's Cross; Pancras Well, Bagnigge Well, Powis Spring (Great Ormond-street), and Islington Spa. The following he considered spurious: Sadler's Wells, Islington; London Spa; New Wells (Clerkenwell).

St. Chad's Well, in London, was situated opposite the present King's Cross. Pancras, or Pancridge Wells, flourished for a period of about 100 years from 1697, with intervals of comparative disuse, and were surrounded by a beautiful garden near the old church of St. Pancras. Bagnigge Wells were situated in Bagnigge Wells-road (now King's Cross-road), near the Fleet River. Islington Spa occupied part of the site of the present small public gardens (opened in 1895) known as Spa Green, Islington. Sadler's Wells (named from the man Sadler, who in the latter half of the seventeenth century established a music house in that part of Clerkenwell, afterwards for some time known as Sadler's Hollow, bounded on one side by the New River Head, near the present Rosebery-avenue), had some claim to have been a "Holy Well," used by the monks of St. John's Priory, Clerkenwell, before the Reformation. At anyrate, Sadler, digging in his garden, in 1683, came upon a flat stone covering a carved stone well of ancient date, which was found to contain a mild chalybeate water, and was considered to be the Holy Well referred to. He exploited this discovery and soon the public flocked in hundreds to imbibe the water with "capillaire" (a syrup flavoured with orange flower water), at 6d. the glass, or a guinea for a season's potations. Hampstead Spa enjoyed great popularity in the eighteenth century.

At Kilburn and Marylebone also there were spas and at Acton Wells, East Acton, about five miles from the Marble Arch, there was a spa fashionable during Queen Anne's reign. Several springs and wells, south of the Thames, near London, achieved a reputation in the eighteenth century, when there seemed to be a veritable craze for the foundation of spas. The first three he considered spurious—Bermondsey, Finch's Grotto Gardens, restoration of Spring Gardens—but St. George's Spa and Lambeth Wells were genuine. St. George's Spa, first mentioned in 1695, was situated about half a mile from Lambeth Wells in the grounds of the Dog and Duck Tavern, near some pools in the marshy lane of St. George's Fields. Lambeth Wells must be considered a genuine spa. Its two springs of mineral waters, situated in Three Coney-walk—now the crowded Lambeth-walk—near Lambeth Palace, were discovered late in the seventeenth century. A house was built over these wells and surmounted by a gilded ball. The usual amusements were inaugurated. The water was supplied to the neighbouring St. Thomas's Hospital and to other purchasers at a penny per quart, its chief use being for relief of affections of the liver and stomach. To the south of the river and more to the west, there were four spas whose waters had a great reputation, namely, Dulwich Wells, Sydenham Wells, Beulah Spa, and Streatham Spa. These were really country spas near London in the days when they flourished.

Beulah Spa, the last of the springs in the environs of London to be inaugurated as a spa, was the name given to the mineral spring at Upper Norwood, known to the residents of the surrounding districts in the latter part of the seventeenth century. Streatham Spa was one of the most important of the London spas. The existing Streatham Well is probably the only one of the medicinal springs of the environs of London where the water still remains uncontaminated and can be drunk with beneficial effect at the present day.

SOME ENGLISH CATHEDRALS AND STONE DECAY

Professor A. P. Laurie recently lectured to the students of the Royal Academy of Arts, Burlington House, on this subject. In the course of his remarks he said that for some years he had been making observations at the request of the Office of Works on the stone decay taking place in their ancient monuments. During this time he had collected a good deal of interesting information, and during the last summer he determined to visit some of their cathedrals with a view to collecting further facts. The cathedrals visited were Durham, Lincoln, Ely and Norwich, and in addition he re-examined the condition of the stone at Hampton Court and the Houses of Parliament, and paid a visit to Westminster Abbey.

Before speaking of these buildings he would refer to the ruins of Elgin Cathedral. In order to understand what was happening here and elsewhere it was necessary to classify the stones for building into three main groups:—The lime-stones, the sand-stones in which the quartz particles were united by calcite, and the sand-stones in which the particles were united by silica. This classification would be regarded by petrologists as wanting in detail and being somewhat diagrammatic in character, but it would be the most convenient for their present purpose, which was the injury caused to modern buildings by the presence of sulphur dioxide in the air produced by the burning of coal. The ordinary causes of stone decay did not require special mention, as they were well known to architects and builders; but the new and the main cause of the rapid decay taking place in modern buildings was the attack on the calcium carbonate of the lime-stone and of the calcite forming the binding material in sand-stones by sulphur dioxide in presence of air and moisture forming calcium sulphate. Calcium sulphate was slightly soluble in water, and therefore was being slowly dissolved in the rain and removed; but this was not the most serious cause of damage. Cases of rapid decay were found to be associated with the crystallisation of calcium sulphate inside the stone and the consequent breaking up of the stone. The lecturer showed micro-photographs of calcium sulphate crystals and magnesium sulphate crystals from Ely and from the Houses of Parliament respectively, and described experiments for producing the same effect in the laboratory.

Proceeding then to deal in detail with the stone decay taking place at Elgin, Durham, Lincoln and Ely, he directed the attention to the fact that in some cases where siliceous sand-stones had been used the source of lime must have been the mortar, the rain dissolving and washing the lime into the stone. He also showed from the analyses at remote places like Ely and Tintern Abbey that the destruction owing to sulphur dioxide was not the towns, but was spread over country districts. Finally he sta result of the evidence collected, th the best thing that could be done treat such stone surfaces with material depositing silica cement, a ally to wash down the building during the summer with a view t the excess of sulphate of lime diminish the danger of crystallisati it was not possible in the state of t knowledge to say whether such wa be safely applied to every variety of experiments in this direction were w in his opinion, of the serious consi architects.

THE DEVELOPMEN BUILT-UP AREA

Mr. William Haywood, F.R.I sixth town-planning lecture at University, on this subject, said the procedure usually adopted in resp provements in the built-up areas towns was so devised that negoti affected property and land might p as little interference as possible fr pulous action by speculators in la In those areas of boroughs which w built upon, however, this policy replaced by a procedure under t planning Acts, which protected the against such speculation; and it evident that built-up areas also brought within the Town-planning A given freedom in planning under the of a reasonable court of appeal against exploitation. Meanwhile, until thi similar protection was afforded, t the stimulating influence of public this most important and urgent pha planning activity; since scheme revision of their congested areas w far advanced towards adoption public was advised of them.

English methods differed mater American practice, which relied demand before official action was t where the bugbear of exploitation w before the adoption of a scheme, by of official approval, and was adju quently, by some form of better against benefited property, or by the of a legal tribunal. With respect to B the report of the "Housing Enq mittee," published in October, 19 mended that a plan for developing area of the city be put in hand im and the responsible City Departmen working at such a plan ever since; a the reason already given, their wo yet been made public.

In the comprehensive arterial r put forward by the Public Works and adopted by the city in 1917, th essential skeleton of their future with the exception of a small ce This area was shown on the map illu scheme, but was not included in for which special powers were the It was chiefly by the conditions in this centre that Birmingham, w 1,000,000 inhabitants, and a world- tation for municipal vigour, had h and found wanting in character. by the class of development in this the town that their capacity to ris indifferent provincialism in archit pression would be judged by future

Devon Road Scheme.

The Devon County Council will, shortly begin work on a road re and improvement scheme to cost over About 120 miles of road, out of a to in the county, will be dealt with, a will occupy a period of five years.

CHITECTS' AND BUILDERS' INQUIRY BUREAU

lad to give questions and answers but cannot nsibility for contributed replies, especially on s.

ppeal to our correspondents to submit their paper of a size easily filed, and written as ssible, or better still, in typescript?—ED.

Timber Markings.

ould any of your readers be kind let us know the most reliable post-war mber markings"?

G. BAINES & SON.

Old Beams.

quirer asks where he can get useful on on cleaning old beams and the of paint and the methods of restoring

Covering Power of Enamel.

TO "DECORATOR," NOVEMBER 14.]

pplied full, eighty yards super; out, up to one hundred yards super. nating requirements, reckon ninety he gallon, as no two painters lay the ntity on a given surface, some laying others, and *vice versâ*.

JOHN M. FIFE.

good enamel on wood should cover o 80 yards super, or up to 100 yards an undercoat of similar tone. The ower varies, however, with the quality mel used and the skill with which it is

"EFFICIENCY."

Brick Footings.

TO PROVINCIAL, NOVEMBER 14.]

our correspondent, "Provincial," can e that the District Surveyor will require ngs to all walls; if it were not so, the in Section 87, London Building Act, ld not have been inserted. Every have proper footings projecting as I did not always find it easy, but I it done.

HENRY LOVEGROVE.

e District Surveyor has no discre- wer under the L.B.A., and can only that Act as it stands. In modern London the section dealing with ngs is honoured more in the breach bservance, but in all cases the consent C.C. must first be obtained. The should be addressed to the Super- Architect of the L.C.C., at the County on foolscap paper. The section of the ned in the application must be stated, sons for which the application is made ounds under which the exception is reasonable. The application should anied by drawings on linen and in both of which will be retained. ld be no difficulty in obtaining con- case quoted by your corrrespondent.

"LONDONER."

Running Cost of Electric Lifts.

TO "STATISTIC," NOVEMBER 14.]

suming an average of 250 fully-loaded day, the probable running cost of a ion a travel of 50 ft. would be in the ood of £20 to £25 per year for current B.T.U., and to this must be added t attendant—say £100 per year—and amount almost negligible for the first , but an increasing amount with the ift.

"EXCELSIOR."

Thatching.

SIR,—I should be glad to be advised what is the best method of treating the eaves spouting in a thatched building. I believe in most old thatched cottages the rain-water was allowed to drip from the wide-spreading eaves, clear of the building, but now this will hardly do, although the ordinary rain-water casting is likely to look very thin and incongruous.

"OLD-FASHIONED."

Damp Walls.

SIR,—I would be pleased if you or any of your readers could suggest a remedy for damp house walls. The house faces east and the walls which are most troublesome form the corner near the fireplace in the front room on the ground floor. The damp wall is part of the frontage, *i.e.*, from the bay window to the wall of the adjoining house and also the inner wall which forms the partition wall between the two houses.

Under the room in question, there is an open cellar in which there are no signs of much dampness, and there is a constant ventilation through the gratings. I have tried removing the old plaster and having it replastered and coated with special dressings said to prevent dampness; however, within a few weeks the new paper was as wet as ever, and all its colouring destroyed. Any suggestion will be appreciated.

"HOUSEHOLDER."

Hollow Walls.

[REPLY TO "CAVITY," NOVEMBER 14.]

SIR,—The answer to the query by "Cavity" is probably that the wall was carelessly built, and that mortar droppings were allowed to lodge on the iron ties; the mortar thus acts as a bridge and conducts the moisture through the wall where the ties exist.

"MORTAR."

SIR,—The most probable solution to the mystery of the damp spots in the wall described by your correspondent is that the inner and outer shells of the wall being in courses of differing depth, some of the metal ties have been built in sloping slightly inwards, and so have conveyed the moisture from without, into the inner shell. It will be a difficult matter to cure, and some treatment whereby the inner face of the wall is sealed, or the outer face rendered, will have to be devised. The fact that there are entire rows of wall ties where the trouble has not occurred goes to confirm the above probable cause.

"LEVEL."

The Therm.

[REPLY TO "CONSUMER," NOVEMBER 14.]

SIR,—The therm is a unit of heating power. It is the equivalent of 100,000 B.T.U's (British Thermal Units), and one of the latter is the amount of heat required to increase the temperature of 1 lb. of water 1 deg. Fahr.

This new method of computing the charge for gas consumption is an overdue corollary to the introduction of incandescent mantels in the use of which the consumer is more concerned with the heating power of the gas which makes the mantel incandescent, than with the candle power of the raw gas flame. The amount of gas consumed to the therm will vary with the quality thereof, and this is determined and revised from time to time as a result of tests.

In any case the consumer has the advantage of knowing that he pays only for the work done, and that it is useless for the gas to ca' canny.

"MANTEL."

[The British Commercial Gas Co. inform us the "therm" system of charge was adopted by Parliament (in The Gas Regulation Act, 1920) on the initiative of the Board of Trade, acting on the recommendations of The Fuel Research Board. The "heat unit" in this country is known as the British Thermal Unit (= 1 B.Th.U.) This is the quantity of heat required to heat 1 lb. of water 1 deg. Fahr. A "therm" is the name for 100,000 B.Th.U.s. The "therm" system of charge provides that the quantity (*i.e.*, cubic feet) consumed, as measured and recorded by the meter, multiplied by the declared calorific value of the gas in B.Th.U's, shall be the basis of payment by the consumer. Assuming the calorific value declared by a company to be 500 B.Th.U.s, this means that each cubic foot of the gas supplied by that company will develop not less than 500 British Thermal Units when burned. A "thousand cubic feet," the old basis of charge, would therefore represent at least 1,000 × 500 = 500,000 heat units (B.Th.U.s). The new basis of charge, the "therm," is the name given to 100,000 heat units, so that 1,000 cubic feet would then be charged for as 5 therms. To convert "therms" into "cubic feet" in such a case all you need do is multiply the number of therms by 200.]

(Other replies on this subject have been received.)

SHEFFIELD SOCIETY OF ARCHITECTS & SURVEYORS

MR. E. W. B. SCOTT, A.R.I.B.A., lectured recently on "American Architecture as I Saw It," at Sheffield University. In the course of his remarks he said the position of architecture in America was a peculiarly interesting one. Perhaps for the first time in history they had a wealthy and highly complex civilisation in a new country almost without a past, but possessing and venerating the traditions of past ages in other lands. As a result they found them able and willing to build extensively, selecting the best from the traditions of Europe, while themselves unhampered by any archæological dead-hand. The American cities, like ours, were full of uninspired buildings of the last century; and they were pulled down ruthlessly to be replaced by better, while their cities were extending at a rate undreamed of over here.

The five weeks he spent in the States had not left on his mind the picture the late Mr. Bertram Goodhue drew at the R.I.B.A. when he described American architecture as undisciplined, aimless, chaotic and altogether inferior. His impression was rather that an art that knew most definitely what it was about; one that, making the fullest and frankest use of the work of other ages, was working out a manner in architecture which would interpret this complex civilisation. It seemed that sincerity and singleness of aim were teaching them to use the new materials and methods and to meet the new demands of this age better than was the case anywhere else.

In America vast wealth and opportunity had helped, so, undoubtedly, had the Beaux Arts; but it was the realising new conditions and the simple faith that they ought to be met in a rational manner that was their strength. Of course, this meant experiment; they were bound to cut new tracks in many directions in this pioneer work, and much work would be in the wrong direction. The man who never made a mistake never made anything. With reference to the work of Mr. Goodhue, he was, perhaps, best known for his Gothic churches, in which he had approached nearer to the spirit of the old mediæval builders, perhaps, than any man since the Renaissance, but he ventured to say, lovely as it was, that was not the work by which he would be longest remembered. He had another mood, a mood in which he broke away from tradition and reached forward into the future; disencumbering himself of Corinthian columns and Perpendicular windows, he attempted to get right down to the bones of architecture—to begin from the needs and requirements of the particular case and build, relying for his effect on almost stark simplicity and beauty of proportion. It was, therefore, future possibilities more than present achievements that he wished to look for in his views, and this applied not only to the public buildings but also to those which he went particularly to study—industrial buildings.

THE BUILDING TRADE

THE SHORTAGE OF SKILLED LABOUR

SOME NOTES BY "ESTIMATOR."

THE present shortage of skilled labour in the building industry is due to many reasons, the chief of which are:—(1) That numbers of men have gone into other occupations during the war and at other times and have evidently found their new sphere of work more congenial; (2) shortage of apprentices or learners.

To deal with the first point: As the men have left the industry, little can be done to bring them back to it, but care should be taken to remove any disadvantages under which the trade may unnecessarily suffer, and so stop further leakage. The wages paid in the building trade are at least as high as in most other industries, yet the sight of really skilled workmen going home in the evening all dirty and dusty would hardly attract recruits to the business in these showy times. Some simple form of convenience for washing, etc., should be provided on most works.

(2) Shortage of apprentices or learners.—The shortage of apprentices is popularly supposed to be due to the trade unions attempting to limit the number of apprentices admitted to the trade and the employers not taking sufficient numbers of apprentices. The trade unions do not want them and the employers do not take them. These obstructions will no doubt disappear in due course, and the progress of accepting apprentices may be hastened if some aspects of the case are considered.

The employer in the building trade finds that now the work in each trade is so carefully defined, the number of men he employs varies considerably, and if he engaged sufficient apprentices to suit his boom times he would, as soon as the various parts of the job were brought to completion, have no work for these youths. This might be overcome by some system of passing on the apprentice to other employers during a slack time, although there are many objections to such a course, as the divided authority and control of the apprentice would affect the discipline and training of the youth. Many of the objections of employers to apprentices are due to the conduct of the apprentices themselves, so much so that employers do not want to be bothered with them. In the case of boys leaving an elementary school and going direct to, say, a joiner's shop, they can only be given very elementary processes to do, and probably fill in their time making glue, or similar jobs, so that the course of training seems monotonous. The monotony of the training and the natural hostility to control sometimes leads the boy to kick over the traces, to the annoyance of the foreman or employer. The foreman objects to the boy and the boy objects to the foreman. Both youth and employer grow ill weeds. It is in the early years of the apprenticeship period that so many failures occur. This may be obviated by the trades concerned insisting on the proposed apprentice taking a two or three years' course of manual training in the workshop of one of the schools of building, which would ensure the lad having been under control during some of the susceptible years, and being well grounded in the elementary parts of the work and ready to use the tools, and fit to receive and benefit by any opportunity of working in his trade.

The other type of learner is one who drifts into the trade as an errand boy or general assistant, and takes every opportunity of using the tools and learning the trade, and many of our best craftsmen develop in this way. Such a boy must be civil, diligent and obliging, and on good terms with everyone, so as to get opportunities of advancement as they occur. The latter considerations, unfortunately, sometimes do not appeal to apprentices.

The weakness of the present phase of the apprenticeship question is that immediately the lad has "served his time" and is reinforced by a trade-union ticket, he may ask the full standard rate of pay and get it, at any rate in boom times.

It is not good for the industry for youths, immediately they have passed through some period of training, to be allowed to pass as full-blown mechanics, and secure the same rate of pay as an expert craftsman. Both employers and trade unionists should arrange some system of grading by which wages should be paid in accordance with the degree of skill exhibited, and it is only by some such agreement that it will be worth a man's while to become a highly skilled tradesman to equal the craftsmen of previous generations.

Will the present "workers' paradise" long continue?

BUILDERS' BENEVOLENT INSTITUTION

Annual Dinner.

THE seventy-second annual dinner of the Builders' Benevolent Institution was held on November 13, at the Hotel Victoria, the President, Mr. G. Perry Nash, F.I.O.B., presiding over a large gathering, amongst whom were Messrs. R. F. Foster, F.R.I.B.A., C. Dunch, M.S.A., F. M. May, F.I.O.B., J. W. Chessum, J.P., B.B.I., Major R. J. Holliday, M.C., F.I.O.B., B.B.I., J. M. Theobald, F.S.I., H. T. Holloway, F.I.O.B., P. L.M.B.A., T. S. Darbyshire, A.R.I.B.A., H. Tanner, F.R.I.B.A., W. Woodward, F.R.I.B.A., J. E. Drower, C.B.E., H. D. Searles-Wood, F.R.I.B.A., H. Austen Hall, F.R.I.B.A., F. Wheeler, F.R.I.B.A., F. Higgs, F.I.O.B., P.P. B.B.I., R. B. Brown, F.S.I., Dudley Bartlett, F.I.O.B., C. C. Trollope, F. G. Minter, F.I.O.B., S. G. Nash, A.I.O.B., W. Aumonier, Major Harold Bailey, F.R.I.B.A., F. W. Stratton, F.I.O.B., E. J. Reed, F.S.I., Guy Church, F.R.I.B.A., G. Grey Wornum, F.R.I.B.A., John T. Bolding, Major Troup, A. B. Falkner, F.I.O.B., R. H. Hellyer, A. H. Adamson, F.I.O.B., Andrew Mather, M.S.A., Thomas Thorne, F.I.O.B., L. Withrington, A.I.O.B., L. L. Withrington, A.M.I.E., G. S. Roberts, F.I.O.B., G. H. Parker, F.I.O.B., A. Smithers, F.R.I.B.A., J. J. Clark, A.R.I.B.A., Capt. Frank R. Shurmur, and Fred Thorne, J.P., F.I.O.B.

After the usual loyal toasts had been honoured, Mr. H. T. Holloway, in proposing the "Builders' Benevolent Institution and its President," said grave risks were attached to the building calling. A large number of their members fell on bad times, and it was to relieve their distresses that the Institution existed. It had now been established 72 years, and it was run mainly by a self-sacrificing committee who sat once a month at 48, Bedford-square. With reference to the recent strike Mr. Holloway said after seven weeks bitter struggle without precedent, they had, he thought, fixed up a peace which was not only eminently satisfactory, but would, he thought, be honoured by both sides. He hoped that wages were firmly stabilised until January, 1926, and he would suggest that the workmen were satisfied with the increase in London, and were settling down to work with a will. They were pleased with the way they had been treated. There was still grave trouble, however, the gravest being the shortage of skilled men, and that the employers hoped to tackle, and were tackling now. They hoped to get co-operation from the Trade Unions. Considerable modification had been made with regard to apprentices and he hoped the builders would take it seriously to heart. If the builders would only take on suitable candidates the industry would get rid of the throttle hold. A happy featu of them seemed to be what looked i of work ahead.

The President, in responding, regard to the activities of the I he would draw their attention good work which had been carrie over seventy years. Assistance rendered to hundreds of homes d period; they were carrying on with energy and usefulness. He would re that the object of the Institution w temporary relief and grant pensions sitous masters and their widows where They had forty-six pensioners, and i had been able to grant a gift of £5 at and Midsummer to each pensioner. I past year the committee had decided the scope of the Institution. At their ing it was decided to include master b and plasterers. It was, therefore, very they should secure increased suppor

Major R. J. Holliday, in proposing th tects and Surveyors," said he was conv it was fully realised that architecture greatest of the arts. It was the resp of architects to guide public taste, to many problems which occurred, and to r high standard of dignity. No other had a higher standard of integrity mercial honour than the architectura veying professions. A high standard was demanded from them, and the r which the profession carried out its d generally appreciated. Had they fully ated, however, the difference betwee of architecture and the other arts? Ma worked in the seclusion of the studi dissatisfied could destroy their work. so with the architect, however. Fi would urge a closer friendship bet architect and surveyor and the ger tractor.

Mr. Henry Tanner, in responding there was one subject on which the agree it was the subject of the B Institution. Major Holliday had asked co-operation between the architect, veyor, and the contractor. He would however, that the architect always tr his best for the contractor. They all put up good buildings and to get credit clients and the world in general. Th had to put up the building for the and on behalf of the architects he them.

Mr. J. E. Drower also responded and appreciated the troubles of the buil tractor. There seemed a continual labour, and the building contractor's li long struggle against circumstances. always the millstone of labour tro would suggest that the Builders' B Institution was the "Good Red Cros bound up the wounds of those who f way.

Mr. A. H. Adamson, in proposing th "The Vice-Presidents, Trustees, Comr Stewards, coupled with Mr. John T. said they had to thank the Vice-Pres putting the finances of the Institut sound basis. Little work would be g trustees if they responded to the prese The Institution was run on econom and a visit was made to the hom applicant. The builder's lot was a and they greatly appreciated the help the architects and surveyors. He w special tribute to Mr. J. T. Bolding, been connected with the Institution fo years. If they all worked together fo of the building industry, which was most important in the country, it wo the good of the industry as a whole. A the problem of the shortage of labour, the question of the importation material—bricks, tiles, slates, &c.

r. T. Bolding, in responding, said the Presidents were the main feature of the tion. They had no idea, however, of uble which was taken by the trustees, f ey attended one of their monthly meet- thly would be surprised.

e resident then announced that the total n which had been collected amounted ,6 19s. 6d.

arter, in proposing "The Visitors," Institution could not go on if it were not ce who came year after year. Mr. J. M. bd responded, congratulating the Insti- n the result of the appeal.

EIFIC PERFORMANCE

Preliminary Contract.

the days of house shortage the would-be a house often finds himself in some d; having found a house which he ay suit him he is anxious to close the immediately, but caution tells him not m himself definitely on a preliminary tin and without further inquiries, and as ul the preliminary contract, whether l informal, is rarely a definite contract ic specific performance will be decreed.

ent case—Lockett *v.* Norman-Wright—s n example of this difficulty, although s istance it was the buyer who broke ne tiations. The plaintiff was the c three floors in a house in Park- ad in two interviews with the defend- e ad expressed willingness to let the al fourth floors to the latter for a f ght years at a rent of £300 per annum, aintiff to execute certain alterations and . On February 26, 1924, the defendant, h telephone, told the plaintiff that he tee the flat and on the following day the ff received a letter from the defendant irming my conversation over the tele- ts afternoon, subject to suitable agree- bing arranged between your solicitor and an subject to your carrying out the tio s of the top flat at your house in Park- . I am prepared to take the flat for d f eight years at an inclusive rent of enannum, including all rates and taxes, . My solicitor is ——, with whom I bglad if your solicitors would communi- gding the agreement." On the same o tter was received the plaintiff acknow- itsaying he had sent it to his solicitors ws applying for permission to make the r alterations.

atter was taken up by the parties' rand on March 31 a draft lease had grd between them the term to begin om March 25. To this draft the f solicitors had appended a note that praises were not ready for occupation e l March 25, the landlord would hand letr stating that the rent was not to run he were so ready, and the defendant's rs ad noted they observed the note and o course, agreed that the alterations d ust be carried out to the tenant's bl satisfaction." On April 11 the ntefused to go on with the transaction. se only reported at present shortly and uns for this refusal are not stated, but int brought the action for specific per- e asing his claim (1) on an agreement ate by verbal message on the telephone dendant's letter of the same date, and nalely an agreement by the defendant olitor constituted by the said letter of y 6, the correspondence between the rs, nd the approved draft lease with the ieion.

Cout held, on the authority of Rossdale y 021, 1 Ch. 57; *The Builder*, Novem- 19), Coope *v.* Ridout (1921, Ch. 291), illigworth *v.* Esche (1924, 1 Ch. 97; *ild*, December 28, 1923), that there was ncon between the expression used in tenant's letter, "subject to suitable ent being arranged between your solicitors and mine," and the expressions used in those cases, "subject to formal contract," "subject to contract," and "subject to a proper contract to be prepared by the vendor's solicitor," and thus on that head the claim failed, for it has been held there is no enforceable contract where the execution of a further contract is stipulated for, as the law does not recognise a contract to enter into a contract, and on the alternative claim the Court held that there was no evidence that the defendant's solicitors were authorised to enter into a contract on his behalf or that such authority could be implied in the circumstances of this case. On the first point, perhaps one of the strongest cases is Coope *v.* Ridout, where the original offer was made "subject to title and contract," and where the Court came to the conclusion that assuming in the plaintiff's favour that all the terms founded on the correspondence and interviews had been settled on those interviews and letters, one by one, and all those terms had been embodied in the draft, one condition had still to be fulfilled, that it should take the form of a contract made *inter partes* and formally executed. This judgment received the approval of the Court of Appeal. Where, therefore, reference is made to a future document it seems useless to apply for an order decreeing specific performance.

On the second point, however, the case seems a hard one, as the defendant in his letter had accepted the flat "subject to suitable agreements being arranged by your solicitors and mine," and the draft represented such an agreement. Yet authority was held lacking in the solicitors to contract for the defendant. The law laid down in the cases illustrates the difficulties purchasers and vendors are placed in in coming to a binding agreement on which specific performance will be granted in the early stages of the transaction, for houses cannot be purchased like some other articles on a mere inspection, but other inquiries are essential; yet, when a purchase is arranged it would certainly appear that the law should compel a completion of the bargain when either party rides off on some reason not one of the matters left open by the preliminary contract for investigation. Damages, even if they can be obtained, for breach of the contract in many, if not most cases, would not afford any real remedy. It is extremely difficult to obtain any alteration in the law relating to real property, but this question of specific performance appears by the decided cases to have been narrowed down unnecessarily and to leave either party to a purchase too long at the mercy of the other party.

Part Performance.

A case, Rawlinson *v.* Ames (*Weekly Notes*, November 15), deals with another aspect of the law on this subject and should be noted in conjunction with the case we have referred to above. In this case the defendant had entered into a verbal agreement with the plaintiff to take the lease of a flat, and as in the other case it was agreed that certain alterations were to be made in the flat, presumably by the plaintiff, but the report, which at present is only in the form of a headnote, does not specifically state that fact. During the progress of the alterations the defendant frequently visited the flat and made suggestions for further alterations which were carried out by the plaintiff at her request. The defendant subsequently repudiated the contract and the plaintiff brought this action for specific performance of the verbal agreement and the question to be decided was whether the defendant could rely upon the Statute of Frauds as a defence to the action, or whether there had been sufficient acts of part performance to take the case out of the Statute.

In order that an Act may have the effect of part performance and take a case out of the Statute, which requires a memorandum or note in writing signed by the party to be charged, the Act or Acts relied upon must unequivocally refer to the parol agreement.

The Court held that the acts of the plaintiff were referable only to such an agreement as was alleged in this case, and on the authority of Dickinson *v.* Barrow (2904, Ch. 339), the plaintiff was entitled to a decree for specific performance. That case, the effect of which the Court said was correctly expressed in the headnote in the Law Reports, closely resembled the present case. There the defendant had entered into a verbal contract for the purchase of a site from the plaintiffs, who were to erect a house upon it. During the progress of the building she had frequently visited the site and made suggestions for material alterations and improvements in the building, which were carried out by the plaintiffs at her request. Subsequently, she had repudiated the contract and the plaintiffs had brought an action for specific performance, and the headnote, which the learned Judge approved, runs, "Held, that the acts done by the plaintiffs at the request of the defendant were acts of part performance taking the case out of the Statute of Frauds and that the plaintiffs were entitled to judgment for specific performance."

RENT INCREASED FOR REPAIRS

A CASE of some interest to property owners is Biddle *v.* Morris (1924 2 K.B. 490). The appellant was the owner of a dwelling house in Birmingham the annual value of which on the revaluation for the year ending April 5, 1924, was for the purposes of Schedule A £21 gross and £15 15s. net, during the year ending April 5, 1923. The premises were let on a weekly tenancy of 8s. 5d., which was made up as follows: 6s. net rent, 10¾d. the increase of 15 per cent. permitted under section 2 subsection (1) (*c*) of the Rent Act, 1920, and 1s. 6d. the increase of 25 per cent. allowed for repairs where the landlord is liable for the whole of the repairs under section 2 subsection (1) (*d*). Before 1923 the premises were assessed to income tax at £15 gross and £12 10s. net. The appellant contended that the gross annual value for the purposes of Schedule A was the net rent plus the 15 per cent. increase allowed under paragraph (*c*) of the Rent Act, but that the increase of 25 per cent. under paragraph (*d*) was no part of the annual value but a mere indemnity given to the landlord in respect of the increased cost of repairs.

The Court negatived this contention, holding that the 25 per cent. increase must be treated as part of the rent, as the landlord received the full amount even if he does not require to spend it on repairs. The Court said this increase was not an indemnity against the landlord's liability for repairs, but an increase in rent which he was allowed to make because, being under a covenant to repair, he must be allowed to exercise more freedom than is permitted under the Rent Act.

The Court, however, conceded that on the figures it might be hard upon the landlord that although the statutory increase allowed was 25 per cent. he was only allowed to deduct one quarter of that amount for taxation.

It is hard on the conscientious landlord as it is common knowledge that the 25 per cent. does not cover the cost of repairs at present prices, or even nearly so, and the Court admitted that even if the 25 per cent. represented the actual cost of the repairs the figures worked out hardly for the landlord, but said that if that were the case it was because the statutory allowance was not fixed high enough.

New Brighton's Promenade.

Wallasey Council has approved the draft of the Bill embodying the £750,000 scheme for the extension of the New Brighton promenade to a point on the Leasowe side of Harrison-drive, and it is hoped that it may be promoted in the next session of Parliament, and that the work will be begun in the spring of 1926. Seven years, it is stated, will be occupied in carrying out the improvement. The scheme provides for space for the erection in the Harrison-drive area, facing seawards, of private residences, boarding-houses, and an hotel or hotels.

NEW BUILDINGS IN LONDON.

Whitcombe-street.—NEW PREMISES.—Messrs. The Morris Westminster Guild, Morris House, Rochester-row, inform us that they were responsible for carrying out the metal windows for the Automobile Association, Ltd., and not as stated in our last issue.

Harrow.—The Governors of Harrow School have decided to put in hand the decoration of Harrow School Speech Room, which has been incomplete for many years. The internal decoration will be carried out mainly from a grant made by the trustees of the late Mr. J. G. Apear, and a scheme has been prepared by Sir Charles Nicholson, of New-square, Lincoln's Inn, London, W.C.2, and accepted. Outside a small building is being erected to contain a cinema apparatus for lecture purposes. In due course, if funds permit, it is proposed to complete the speech room by the addition of the tower, for which plans also have been prepared by Sir C. Nicholson.

Victoria-street.—A new block of offices are to be erected at the corner of Victoria-street and Allington-street, S.W. 1, covering a ground floor area of about 7,000 square feet. The building will be of six floors, equipped with a lift, heating on the low-pressure hot-water system, electric lighting, telephones, &c., and will be divided up into suites of offices according to the requirements of tenants. Accommodation will be provided for in the basement for strong rooms, stores, heating chamber, &c. The site has two street frontages of 60 ft. and 100 ft. respectively. A bank will occupy the corner site. The building will be erected on a steel frame with an elevation in brick and Portland stone. The floors will be of fireproof materials. The architect is Mr. J. Stanley Beard, M.S.A., of 52, Baker-street, London, W. 1. The demolition contractors are Messrs. F. Keen & Son, 469, Old Kent-road, London, S.E.

Royal Albert Docks.—Operations on the foundations for a new warehouse for the storage of tobacco at the Port of London Authority's Royal Albert Docks, E., are now in hand. The new bonded warehouse is to replace one destroyed by fire about twelve months ago. It will be of the single-story type and will have a storage capacity of 3,000 tons. The foundations are to be of concrete. The walls will be of brick and the roof will be supported on steel trusses, the total weight of steel being about 150 tons. The interior equipment will include overhead cranes and a heating and ventilating plant. The general contractors are Messrs. John Mowlem & Co., Ltd., Ebury Bridge-road, London, S.W. 1. Plans have been prepared by the Authority's engineering staff at Tower-hill, E.C. 3, under the direction of Sir Cyril Kirkpatrick, chief engineer.

Pentonville-road.—A large motor omnibus garage is being erected in Pentonville-road on a site adjoining Cleveland-square. The area to be covered has a frontage to Pentonville-road of 144 ft., and will be in plan in the form of a reversed "L," with the base running along the Pentonville-road. The main building will extend back parallel with Cleveland-square for 256 ft., and will be about 75 ft. wide. Steel frame and brick construction is being employed. The walls will be filled in with red brick with panels of stock bricks and a stone coping. Extensive glazing will also be used, a long row of metal casements being used. The floor will be of concrete. The steel work for the ground floor will be built up of three rows of stanchions spaced at 38 ft. centres, resting on a steel and concrete grillage. The height to the first floor will be 15 ft. The framework for the first floor and roof will be of 8 in. by 5 in. stanchions up to the eaves, 30 ft. above the ground. The roof will be supported by two rows of triangular principals, each of 37 ft. span. The outer covering will be of slates and asbestos-cement tiles, with a central glazed portion in the centre of each span. The floors will be of mass concrete. The Pentonville-road elevation will be in the form of a curve, which will be used as a run-in and for the installation of petrol pumps. The southern wing of the building will be devoted to the runway up to the first floor, stores, offices, lavatory accommodation, &c. The roof, in this case, will be flat, and fireproof doors will divide each building. The contractors are Messrs. Levy & Lester, of 32, York-road, King's Cross, London, N.1. The steelwork is being supplied and erected by Messrs. Measures Bros. (1922), Ltd., 105, Southwark-street, S.E.1; the metal casements by Messrs. Williams & Williams, of Sardinia House, Kingsway, W.C.2; and the tiles by Messrs. Turner Brothers Asbestos Co., Ltd., Rochdale. The architect is Mr. A. H. Lester, of 32, North-road, London, N.1.

Kensington.—The Council of the Royal Albert Hall, at Kensington, S.W., are appealing for funds to enable structural alterations to the hall to be carried out in conformity to the regulations of the London County Council. The work will include new decorations and heating and electric lighting improvements. The organ is also to be entirely reconstructed, the contract for this having been placed with Messrs. Harrison & Harrison, of Durham. The architect to the Albert Hall Council is Mr. R. Langton Cole, F.R.I.B.A., of 23, Throgmorton-street, London, E.C. 2.

Regent-street.—New premises are being built on the site of Nos. 92-94, Regent-street, W. 1, for Messrs. H. L. Brown & Sons, jewellers and diamond merchants, of London and Sheffield. The building is of seven stories and basements, and will be built on a steel frame with an outer façade of Portland stone. Green Cumberland slates will cover the Mansard roof. The builders are Messrs. Hall, Beddall & Co., Ltd., of Waterloo-road, London, S.E. 1. The architects are Messrs. Yates, Cook & Darbyshire, of 43, Great Marlborough-street, W. 1.

Cheapside.—An important site, covering Nos. 97-9, Cheapside, and 31-3, Lawrence-lane, E.C. 2, is to be developed on a building lease of 99 years. The new premises will have a frontage of 62 ft. to Cheapside, and 100 ft. to Lawrence-lane. The surveyors to the site, which has a total area of 5,238 ft., are Messrs. St. Quenton, Son & Stanley, of 34, Clement's-lane, London, E.C. 3.

Vauxhall.—A new office building is to be erected in Vauxhall Bridge-road, S.W. 1, with shops and showrooms on the ground floor. The new premises will consist of basement, ground, and three upper floors. They will be similar in design to the adjoining building, being carried out in brick, on a steel framework, with ornamental stone dressings. A Mansard roof of slates is to be provided. The floors will be of reinforced concrete. The window casements will be of steel. The general contractors are Messrs. Holliday & Greenwood, Ltd., of Stewart's-road, Battersea, London, S.W. 8. The architects are Messrs. Parnacott & Partners, of 93, York-road, Lambeth, S.E. 1.

Regent-street.—A large building of seven stories is being erected on the area at the junction of Regent-street and Glasshouse-street, W. 1, to the designs of Messrs. Yates, Cook & Darbyshire, of 43, Great Marlborough-street, W. 1. The premises are constructed on a heavy framework of steel, with extensive foundations, allowing for large basements. All the windows are of an ornamental cast-iron or steel type. The roof, of Mansard type, will be covered with Cumberland slates. The general contractors are Messrs. Thomas & Edge, of Station Chambers, Cross-street, Woolwich, S.E. 18, whilst the principal sub-contractors are as follows: Steel work, Messrs. Smith-Walker, Ltd., 33, Tothill-street, S.W. 1; Portland stone, Messrs. United Stone Firms, Ltd., 104A, Stewart's-road, Battersea, S.W. 8; fireproof floors, Messrs. F. Bradford & Co., 23, Coopersale-road, E. 9; asphalte, Messrs. Ragusa Asphalte Co., Ltd., 25, Oxford-street, W. 1; lifts, Messrs. Marryat & Scott, Ltd., 57A, Hatton-gardens, E.C. 1; casements, Messrs. A. Wootton & Son, 62, Chiswell-street, E.C. 1; pavement lights, Messrs. Geo. Wright (London), Ltd., 19, Newman street, W. 1; and sanitary fittings, Messrs. A. Goslett & Sons, Ltd., 27, Charing Cross-road, London, W.C. 2.

Wandsworth.—Large additions are made to the buildings of the Boling Hospital, at Wandsworth Common, S.W. The new extensions will principally cons new ear and throat departments, new n home, and the enlargement and alterati the present buildings. The new building vary in height from two to three stories. buildings will be erected in brick with dressings. Fire-proof floors will be introd finished off with patent surfacing. Heatin electric lighting systems will be ins The roofs will be flat, of concrete, wit asphalted covering. The general contracto Messrs. John Garrett & Son, of 83, Ba hill, Wandsworth, S.W. 12. The architec Messrs. Young & Hall, of 17, Southam street, London, W.C. 1.

Cheapside.—A new retail branch stores be opened in Cheapside by Messrs. Austin Ltd., outfitters, as soon as the necessary tural alterations and shop fittings are comp The work involves alterations to the groun first floor, with the provision of an oak sta interior alterations in plaster, installati electric lighting and central heating, an fitting of shop equipment and showcases display windows, in light polished oak. contractors are Messrs. Harris & Sheldon, of Wood-street, London, E.C. 2, and Bir ham. The architects are Messrs. P. J. West & Emberton, of 7, Adam-street, St W.C.2.

Charing Cross-road.—Premises have acquired by the Express Dairy Co., o Tavistock-place, W.C. 1, in Charing C road, W.C. 1, for fitting up as a branch resta and café. Structural alterations and fittings and equipment, redecorations, are to be carried out to the designs o company's chief surveyor. The contract Mr. F. G. Minter, Ferry Works, Putney, Lo S.W. 15; and 10, Davies-street, London,

Greenwich-road.—Extensive additions are made to the Miller General Hospital for S East London, at Greenwich-road, S.E. The show a new ward block, giving accommod for an additional 78 beds. Four stori height, three floors will be devoted to v each having one ward of 24 beds and two s bed wards. The remainder of the buildin be used for kitchens, stores, &c., and for n accommodation, including a large dinin and lecture room. The building will be e in brick with stone and artificial stone dres The roof will be of concrete, asphalted and will be flat. A start is also to be ma a proposed nurses' hostel, and the first p to be put in hand will consist of a build five stories, providing 73 bedrooms, s rooms, reading and recreation rooms A lift will be installed in the ward block. architects are Messrs. W. A. Pite, Son & weather, of 12, Carteret-street, Westmi The quantity surveyor is Mr. W. J. Falkne of 12, Carteret-street.

Regent-street.—The old premises at 129-131, Regent-street, W. 1, are to be r fresh leases having been granted by His Ma Office of Woods and Forests. The new pr will be erected to a design in conformity the Crown's scheme of reconstruction fo thoroughfare, and approved by Mr. Murray, F.R.I.B.A. Of seven stories in h the building will have extensive shop wi and showrooms on the ground and first and offices in the remainder. There w large basements, containing stores, h chamber, fuel, &c. The principal elevati be carried out in Portland stone, with ornat art metal fittings and window case A steel framework will support the main The floors will be of fireproof constru A lift will serve all floors. External fire-staircases will be provided. Heating central low pressure hot-water systen electricity for lighting and power will stalled. The roof will be of concrete, of M type, and covered with slates. The ar is Mr. Robert Atkinson, F.R.I.B.A., Bedford-square, London, W.C. 1.

W INVENTION

CONCRETE COTTAGE CONSTRUCTION.

system of concrete wall construc-n as the "R.C.C." system, has ted by Messrs. The Rogers Con-Co., Ltd., of 9, Park-place, St. W.1. The feature of this system forcement, which takes the form of of sheet steel from 26 to 30 gauge s shown in Fig. 1. The four tri-ieces in each of the forty-eight ampings in the steel sheet are bent rds and two inwards so as to form

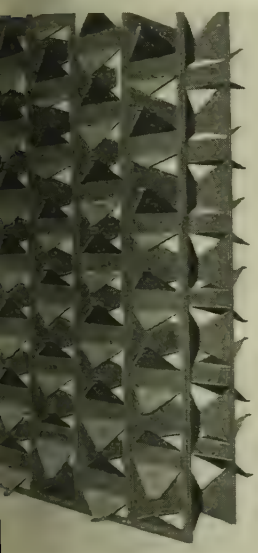


FIG. 1.

ion of Sheet of "R.C.C." Reinforcement.

wings, projecting from each face of Two of these sheets are then placed e and fastened together by clips tangs on each sheet where they juxtaposition.

ct of this type of reinforcement is 1) to impart tensile strength to the 2) to make it possible to release shuttering sooner because of the support given to the concrete by the tangs which are embedded in it, as shown in section in Fig. 2. It is also claimed that to a certain extent the reinforcement acts as a vertical dampcourse, and that any moisture which might penetrate the wall from the outside will be checked by the sheet metal in its centre and be conducted downwards. Any design may be followed with the reinforcement, as it may be readily cut on the site with shears.

The method of constructing walls with this reinforcement is as follows. The footings are laid with a longitudinal groove (1 in. in depth) in order to give a bond to the wall (see Fig. 2). Timber uprights are then placed at intervals around the building, as seen in Fig. 3, at distances apart according to the length of the shuttering units to be used, and as these are raised by hand a length of about 10 ft. is found convenient. These uprights are braced to be perfectly vertical, and serve as guides for the shuttering, thus ensuring the wall being built true. Similar uprights are erected on both sides of the wall. Those on the outside are built to the full height of the wall to be built. The uprights on the inside, if the building is to be of more than one story, are erected to the height of the first story only; they are then taken down and re-erected on the first-floor joists to continue the wall upwards, and so on for any number of stories.

After the footings and uprights, or shutter-guides, are in place, the shuttering is placed in position for the first pour. The shuttering used is of timber with a steel plate on the face to facilitate drawing it upwards and to obtain a good surface finish to the concrete. On each side of the uprights is a steel angle throughout its length, and inside this and resting against it outwardly the shutters are placed. They are not fixed in any way, the steel angles on the uprights preventing them from being forced outwards by the weight of the concrete, which also prevents them from falling inwards. The shutters are 15 in. in height, and are provided with a top board sloping inwards which guides the concrete down between them. Sheets of reinforcement are then placed in position in the middle of the shutters and concrete placed from each side simultaneously and tamped into the space between the two locked sheets of steel. In placing the reinforcement the sheets are erected alternately with one standing on end (6 ft. high by 2 ft. wide) and three superimposed one above the other on edge, filling an area 6 ft. by 6 ft.

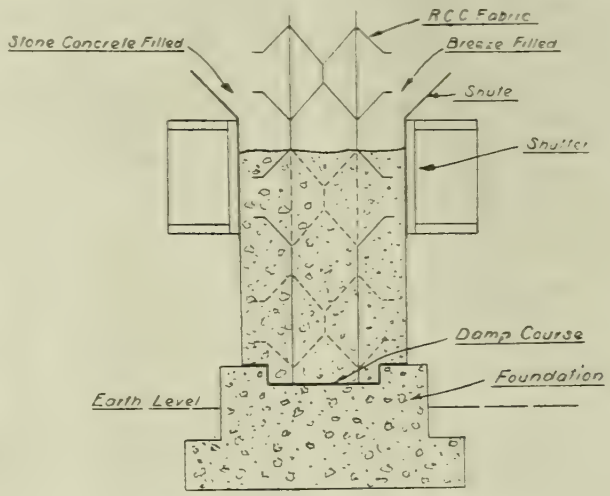


FIG. 2.

Section of "R.C.C." Walling.

It is possible for two men to fill shutters 10 ft. long by 15 in. deep in about 30 minutes. They then lift the shutters 6 in. higher and again fill them, and so on to the top of the wall. The concrete is thus left unsupported very soon after it is laid, and it is in making possible this rapid release of shuttering without waiting for the concrete to set that the chief advantage is claimed for the system, in that it is claimed that it is the support given to the concrete by the projecting tangs on the reinforcement which permits the shuttering to be removed so soon. This speedy removal of the formwork also makes it an easy matter to brush off the surface film of cement and expose the aggregate, and this method of surface treatment is adopted by the patentees for buildings erected on their system.

As will be seen, the reinforcement, being in the form of perforated sheets, practically divides the wall into two leaves. This is taken advantage of to form a wall of weather-proof gravel concrete on the outside and a breeze concrete, to avoid condensation, on the inside, and as the gravel and breeze concrete are placed simultaneously, and to a certain extent intermingled as operatives on each side of the wall tamp between the reinforcement, an excellent bond is obtained. Interior partition walls are built entirely of breeze concrete, with only one sheet of reinforcement.

This system obviates the necessity of searching for any skilled labour for the erection of the shell of a house, and, we are informed, works out at about 25 per cent. less cost than brickwork.

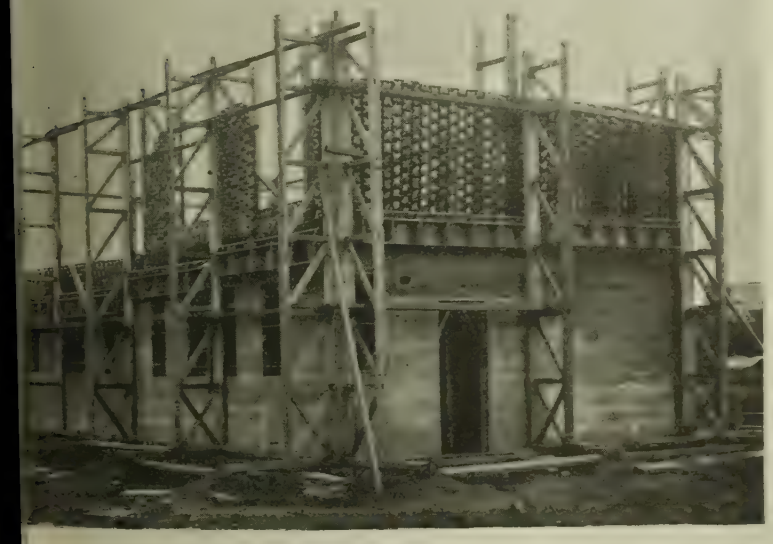


FIG. 3.

air of "R.C.C." Houses Three Days after Foundations are in.

LAW REPORT

Shoreditch County Court.

In the Shoreditch County Court, recently, before Judge Cluer, Messrs. Gibson's Furniture Factories, Ltd., of 164, Hackney-road, E., sued Mr. Godfrey Gratten, of 59, Westbourne-road, Addiscombe, Croydon, constructional engineer, to recover £13 6s. for bricks supplied. This was a side-line of the plaintiffs. The defence was that he, on July 31, gave an order for 30,500 bricks at 77s. per 1,000, according to the sample shown him, which was 4 in. by 8¾ in. by 2¾ in. Those delivered, however, were much smaller, measuring only 3½ in. by 8¼ in. by 2¼ in., with the result that he had been put to a very heavy extra cost for bricklayers, mortar, &c., due to the smaller bricks, and he counter-claimed £37 12s. 4d.

Mr. Bracknell Powell appeared as counsel for the plaintiffs, and Mr. G. Oakes, barrister, for the defendant.

Mr. George Cundell, director and secretary of the plaintiff company, said they admitted that the bricks supplied were not entirely in accordance with the sample, so accordingly he saw the defendant and made an arrangement that 1s. per 1,000 should be allowed, and that had been taken off. He agreed that as they were smaller they would cost more to lay.

Judge Cluer remarked the Romans built a beautiful aurelium wall round Rome with small bricks, and those of the Colosseum were smaller still.

In cross-examination, the witness denied that he ever agreed to make an allowance of 10 per cent. Some sample bricks were produced, and pointing to the smallest one, the defendant said that, "approximately the bricks supplied are the same size as that."

Mr. Gratten, in evidence, said that when they were delivered on the Saturday afternoon, or the first part of them, he saw they were wrong, and telephoned the plaintiffs to take them back. They asked him to accept them as they were on the road, and he had no alternative therefore.

Continuing, the defendant said that he never agreed to take 1s. a 1,000 less, but always said it was totally inadequate, because 75 of the bricks were small ones. He estimated the cost of labour and material cost him £30 extra.

In giving judgment for the plaintiff for £13 6s., and costs, Judge Cluer said the defendant had lost his case through not repudiating the letter of August 2, which made an arrangement for a reduction of 1s. per 1,000.

Proposed Ludgate Circus Overhead Roadway.

At a recent meeting of the Court of Common Council at the Guildhall, it was proposed by Mr. Walter Spyer that it be referred to the Improvements and Finance Committee to consider and report as to the possibility of providing an overhead roadway across Ludgate-circus from Farringdon-street to New Bridge-street, and the probable cost thereof.

Westminster Women's Housing Council.

Housing Councils were formed in different parts of the country in 1917, their policy being to co-operate with various housing authorities, to remove bad housing conditions, and to secure an adequate supply of healthy homes. At a meeting held at 10, Eaton-square, S.W., on Tuesday last week, Miss Berry (Secretary, Women's Local Government Society), spoke on the powers of local authorities to acquire new building sites and to assist landlords in the upkeep of their properties by paying for repairs and recovering the costs spread over a period of years. Mrs. Walter Runciman directed attention generally to the bad housing conditions in Westminster, where 6,914 basements are used for dwelling purposes. Mr. Keay (Professional Workers' Association) also addressed the meeting on the question of better accommodation, especially for less well-paid staffs who are often forced to work in basements of houses which have been taken over as business premises, without proper conversion.

RATES OF WAGES IN THE BUILDING TR

Every endeavour is made to ensure accuracy, but we cannot be responsible for erro

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labour
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8¼	1/8
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/6
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/5
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/6
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/4
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/4
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8¼	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London :—								
Within 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4
From 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/3
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/2
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/1
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/3
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/3
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

For rates of wages in the Building Trade in Scotland, see page 841

CONTRACTS, COMPETITIONS, &c.

ne contracts still open, but not included in this List, see previous issues. Those with an asterisk rtised in this number. Certain conditions beyond those given in the following information ed in some cases, such as that advertisers do not bind themselves to accept the lowest or any that a fair wages clause shall be observed; that no allowance will be made for tenders; and sits are returned on receipt of a bona-fide tender unless stated to the contrary.

e given at the commencement of each paragraph is the latest date when the tender, or the names lling to submit tenders, may be sent in; the name and address at the end is the person from whom here quantities, forms of tender, &c., may be obtained.

ILDING AND PAINTING.

ER 24.—**Barnsley.**—PAINTING.—For work cleansing, painting and decorating the news Free Library, the Harvey Institute, for the A. D. Mason, Town Clerk.

ER 24.—**Carlisle.**—HOUSES.—For erection on the Blackwell-road and Wigton-road the T.C. Mr. H. C. Marks, City Engineer yor, 18, Fisher-street.

ER 24.—**Chelmsford.**—COTTAGES.—For build- ages in Navigation-road, for the C.B. Mr. rd. Town Clerk, Municipal Offices, Rainsford

ER 24. — **Donington.** — ADDITIONS. — For and additions to the Grammar School, for s Charity. Mr. G. Smith, Clerk to the Donington. Deposit £2 2s.

ER 24.—**Ellington.**—SCHOOL.—For erection ncil school at Ellington, Linton, to accom- ut 350 scholars, for the Northumberland Williams, Director of Education, The Moot stle-upon-Tyne. Deposit £2 2s.

ER 24. — **London, S.W.** — DEMOLITION molition work at the Ministry of Pensions Burton court and Cheltenham-terrace, .. for the Commissioners of His Majesty's orks. Contracts Branch, H.M.O.W., King t, London, S.W.1. Deposit £1 1s. (cheques he Commissioners of H.M. Works, &c.).

ER 24. — **London, S.W.15.** — HOUSES.— of sections IV and V of the Roehampton ey, S.W.15, as follows:—Section IV: Com- erection of 217 houses and administrative gether with fencing, open spaces and other ork in connection therewith. Section V: he erection of 205 houses, including fencing, and other incidental work, together with ewers, for the London County Council. the Council, The County Hall (Room estminster Bridge, S.E.1. Deposit £3 the Cashier).

ER 24.—**Ogmore Vale.** — REBUILDING. — own and rebuilding of frontage of the Non- b. Secretary.

24.—**Tipton.**—HOUSES.—For erection of the Summerhill housing site and 32 houses Wash-lane site, for the U.D.C. Mr. Wm. H. neer and Surveyor, Public Offices, Owen- osit £2 2s.

25.—**Durham.**—SCHOOLS.—For builders' nection with the alterations and improve- nfield Plain infants' school, and builders' adaptation of existing buildings into an chool to accommodate 300 boys at Elisa- ool, for the C.C. Mr. A. J. Dawson, Education, Shire Hall.

25.—**Glasgow.**—VARIOUS.—For works nnection with the proposed erection of 155 anglands, Govan, for the T.C. Mr. J. n Clerk, City Chambers.

25.—**Gosforth.**—CONVENIENCE.—For public urinal at Haddrick's Mill Bridge, C. Mr. F. Kirby, Joint Clerk to the ncil Chambers.

25. — **Greenwich, S.E.** — CHEMICAL —Erection of a new Chemical Laboratory el Research Station, Greenwich, for the s of His Majesty's Office of Works. ranch, H.M.O.W., King Charles-street, .1. Deposit £1 1s. (cheques payable to oners of H.M. Works, &c.).

25.—**Margate.**—PAVILION.—For erection timber bathing pavilion on the Marine- for the T.C. Mr. E. Brooke, Town Clerk.

25.—**Newhaven.**—WALLS.—For erection walls, oak park fencing, entrance gates h formation of access roads to the exten- Cemetery, for the U.D.C. Mr. C. G. erk to the Council, Newhaven. Deposit

25.—**Richmond (Surrey).**—OFFICE.— f an office at the Cemetery Lodge, Grove- T.C. Mr. H. Sagar, Town Clerk, Town nd, Surrey. Deposit 10s. 6d.

25.—**Spalding.**—EXTENSIONS.—For new art room, cloak room, corridors, and existing buildings at the Spalding ol, for the Governors. Mr. L. C. Harvey, overnors, Spalding. Deposit £2 2s.

25.—**Swansea.**—HOUSES.—For erection houses on the Ffforest Fach Estate, for rough Architect's Offices, Guildhall, osit £3 3s.

25.— **Tonbridge.** — HOUSES.— Erection comprising eight parlour and 32 living- n Shipbourne-road, Tonbridge, for the Council of Tonbridge. Mr. W. Laurence neer and Surveyor, The Castle, Ton- sit £2 2s.

26.—**Altrincham.**—ADDITIONS.—For completion of additions to classroom new manual instruction and art-room County High School for Boys, for the Mr. H. Beswick, County Architect, Chester. Deposit £1 1s.

NOVEMBER 26.—**Dalton.**—REBUILDING.—For pulling down and re-erecting with additions, the lodge, Ravensknowle, for the Huddersfield C.B. Mr. J. Henry Field, Town Clerk, Town Hall, Huddersfield.

NOVEMBER 26.—**Fiddown.**—REBUILDING.—For re-building of Fiddown station buildings, co. Kilkenny, for the Great Southern and Western Railway. Mr. C. E. Riley, Secretary, Kingsbridge Terminus, Dublin. Deposit £1 1s.

NOVEMBER 27.—**Brierley Hill.**—HOUSES.—For erection of about 200 houses, in blocks of two, three, four, and six, on sites at Broadfields, Springfields, Mill-street, Brierley estate, for the U.D.C. Mr. E. W. Waldron, Clerk to the Council, Council Offices, 45, High-street. Deposit £3 3s.

NOVEMBER 27.—**Cork.**—OFFICES.—For erection of new municipal offices on the site at Albert quay, for the Corporation. Mr. W. Hegarty, Town Clerk, Town Clerk's Office, School of Art. Deposit £2 2s.

NOVEMBER 27.— **Coventry.**— TELEPHONE EXCHANGE.—Erection of a Telephone Exchange at Foleshill, Coventry, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

NOVEMBER 27.—**Tredegar.**—CONVERSION.—For conversion of shop premises at 10, The Circle, to a dental surgery and offices. Mr. W. Conway, 10, The Circle, Tredegar.

NOVEMBER 28.—**Norfolk.**—REPAIRS.—For repairs to Marsh Farm premises, Great Winkle Level, Burgh St. Margaret, Norfolk. Mr. V. Playle, County Land Agent, Shirehouse, Norwich. Deposit £1 1s.

NOVEMBER 29.—**Conway.** — COUNTY COURT. — Erection of county court and other extensions at the Guildhall, for the Conway B.C. Messrs. Douglas, Minshull & Muspratt, architects, 6, Abbey-square, Chester. Deposit £2.

NOVEMBER 29.—**London, W.1.**—ALTERATIONS AND REPAIRS.—Tenders are invited for the following works: (1) Alterations, repairs, &c., Guardians' Offices, Northumberland-street, W.1.; (2) sundry alterations, repairs, &c., to the receiving wards, St. Marylebone Home, Northumberland-street; (3) repairs to chimney stack, Hospital, Rackham-street, W., for the St. Marylebone Board of Guardians. Messrs. Constantine & Vernon, architects, 82, Mortimer-street, W.1. Deposit £1 Treasury Note.

NOVEMBER 29.—**Sligo.**—EXTENSIONS.—For erection of a cattle loading bank, over 700 ft. long and 25 ft. wide, together with the necessary railway siding and connections, also extension of an existing siding, at their Collooney Station, in the county of Sligo. Mr. S. C. Little, Secretary, Head Office, Enniskillen. Charge 10s.

NOVEMBER 29. — **Thomastown.** — REPAIRS. — For carrying out certain new works and repairs to cottages in Scheme No. 6, for the Sailor and Soldiers' Department. Mr. R. E. Beckerson, Sailor and Soldiers' Department, 30, Fitzwilliam-street, Dublin. Deposit £1 1s.

DECEMBER 1.—**Boston.**—ADDITIONS.—For additions to the grammar school, for the Holland E.C. Mr. J. R. McKnight, Director of Education, Holland Education Offices, Spalding. Deposit £2 2s.

DECEMBER 1.—**Chelmsford.**—PAINTING.—For repainting offices, Waterloo-lane, for the R.D.C. Mr. J. Dewhirst, Surveyor to the Council, Waterloo-lane.

DECEMBER 1.—**Salford.**—SUB-STATION.—For erection of a small electricity sub-station building in Weaste, for the C.B. Mr. L. C. Evans, Town Clerk.

DECEMBER 1.—**Tottenham, N.**—DWELLINGS.—Erection of 70 three-story dwellings in Lordship-lane, on the White Hart-lane Estate, Tottenham, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit, £2 (payable to the Cashier of the Council).

DECEMBER 2.—**Tipton.**—EXTENSION.—For extension of Bedford House Clinic, Horseley-road, for the E.C. Mr. W. J. Howell, Director of Education.

DECEMBER 3.—**Hove.**—TELEPHONE EXCHANGE.—For the erection of telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

✱ DECEMBER 3.—**Tooting, S.W.17.**—PLASTERING AND TILING.—Plastering and tiling works at Tooting Bec Hospital, extension works, Church-lane, Tooting, S.W.17, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 3.—**Welwyn.**—COTTAGES.—For erection of 200 cottages in the parish of Welwyn Garden City, for the R.D.C. Mr. P. Elton Longmore, Clerk to the Council, 24, Castle-street, Hertford. Deposit £2 2s.

DECEMBER 4.—**Southwell.**—SEWERAGE DISPOSAL.—For construction of a small sewage disposal works in the parish of Edwinstowe, for the R.D.C. Mr. J. Ellis, Clerk to the Council, Westgate, Southwell, Notts. Deposit £2 2s.

✱ DECEMBER 5.—**Hornchurch.**—REPAIRS.—External and internal repairs to the whole of the buildings, &c., at their Cottage Homes, Hornchurch, near Romford, Essex, for the Guardians of the Poor of the Parish of Saint Leonard, Shoreditch. Guardians' Architect, Mr. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, Westminster, S.W.1. Deposit £2.

✱ DECEMBER 5.—**Lambeth, S.E.**—STORES, OFFICES AND GARAGE.—Erection of stores, offices and garage at Lambeth, for the Receiver for the Metropolitan Police District. Mr. G. Mackenzie Trench, A.R.I.B.A., F.S.I., Police Architect and Surveyor, New Scotland Yard, London, S.W.1. Deposit £1 1s.

DECEMBER 5.—**Wortley.**—PAVILION.—For erection of a sports pavilion in Ecclesfield Park, for the R.D.C. Mr. J. Morton, Clerk to the Council, Council Offices, Grenoside. Deposit £2 2s.

✱ DECEMBER 6.—**Hove.**—HOUSES.—For erecting 22 small houses in Portland-road, and 70 at the Housing Estate in Old Shoreham-road, for the Borough of Hove. Borough Surveyor's Office, Hove. Deposit £1 1s.

DECEMBER 6.—**Westgate-on-Sea.**—PAVILION AND BATHING ACCOMMODATION.—Erection of (1) pavilion, (2) bathing accommodation and public convenience, for the Westgate-on-Sea Council. Mr. F. J. Cornford, Town Hall Buildings, Westgate-on-Sea. Deposit £1 1s.

DECEMBER 8. — **Bridgend.** — ALTERATIONS. — For alterations at the Cottage Homes, for the B.G. Mr. R. Harmar Cox, Clerk to the Guardians, Union Offices, Bridgend.

DECEMBER 8.—**Farnborough.**—COTTAGES.—For erection of six cottages in Queen's-road, for the U.D.C. Mr. J. E. Hargreaves, Surveyor, Town Hall. Deposit £1.

DECEMBER 8.—**Haslingden.**—HOME.—For erection of a new nurses' home at their Moorland Infirmary, Rawtenstall, for the B.G. Mr. A. N. Rothwell, Clerk to the Guardians, Union Offices, Rawtenstall. Deposit £2 2s.

DECEMBER 10.—**Belfast.**—SHED.—For erection of a goods shed on the east side of the Dufferin Dock, for the Harbour Commissioners. Mr. M. J. Watkins, General Manager and Secretary, Harbour Office.

DECEMBER 10.— **Middlesex.**— HOSPITAL.— Erection of a hospital for 173 beds, nurses' home, and children's probation block, Edgware, Middlesex, for the Guardians of the Hendon Union. Mr. C. W. Wyles, Clerk to the Guardians, Union Offices, Edgware. Deposit £5.

DECEMBER 16.—**Wakefield.**—ALTERATIONS.—For alterations required at Queensbury Upper Council School, for the West Riding C.C. The Education Department, County Hall, Wakefield.

✱ NO DATE.—**Chelsea, S.W.**—HOUSES.—Erection of 12 houses in Chelsea, S.W. Mr. Arthur C. Geen, M.S.A., architect and surveyor, 38, Beauchamp-place, Brompton-road, S.W.3.

✱ NO DATE.—**Edgware.**—HOUSES.—Erection of 50 houses at Edgware. Mr. Arthur C. Geen, M.S.A., architect and surveyor, 38, Beauchamp-place, Brompton-road, S.W.3.

✱ NO DATE.—**Leyland.**—HOUSES.—For the erection of 30 houses on Sandy-lane site, for the U.D.C. The Council's Surveyor, Public Hall Buildings, Towngate, Leyland.

✱ NO DATE.—**London, N.W.**—BILLIARD ROOM.—Erection of a billiard room at the Harlesden Working Men's Club. Messrs. Sinnett, Lane & Betteridge, Station-road, Willesden Junction.

NO DATE.—**Nelson. (Glam).**—CONVERSION.—For preliminary alterations of the premises recently acquired for the conversion into a workmen's hall and institute. Mr. H. Gabe Jones, architect and surveyor, Bank Chambers, Hengoed, Glam.

✱ NO DATE.—**Tunbridge Wells.**—HOUSES AND FLATS.—Erection of 30 houses and flats, or any part thereof, adjoining the Hawkenbury Housing Estate. Messrs. Culpin & Bowers, 27A, Bush-lane, London, E.C. 4.

FURNITURE, MATERIALS, etc.

NOVEMBER 24.—**Alsager.**—PIPES.—For supply of about 20 tons of 3 in. cast-iron pipes, for the U.D.C. Mr. H. V. Lynam, Surveyor to the Council, Council Offices, Alsager.

NOVEMBER 24.—**Epsom.**—MAINS.—For supply and delivery of 2,000 yds. of 4 in. cast-iron socket and spigot water main and 880 yds. of 5 in. cast-iron socket and spigot water main, for the U.D.C. Mr. E. G. Wilson, Clerk, 37, Church-street, Epsom.

NOVEMBER 24.—**Felling.**—MATERIALS.—For supply of Portland cement, &c., for the U.D.C. Mr. W. P. Parkin, Clerk of the Council, Council Buildings, Felling-on-Tyne.

NOVEMBER 25.—**London.**—WOOD BLOCKS.—For the supply and delivery of about 30,000 creosoted yellow deal paving blocks, for the Islington B.C. Mr. C. G. E. Fletcher, Town Clerk, Municipal Offices, Tyndale-place, Upper street, N. 1.

NOVEMBER 26 —**Manchester.**—IRON.—Supplies of iron castings, for the T.C. Mr. P. M. Heath, Town Clerk.

NOVEMBER 29.—**Hindley.**—GRANITE.—For supply of about 1,500 tons of 4 in. by 5 in. granite setts, for the U.D.C. Mr. T. Robey, Clerk to the Council, Council Offices.

ENGINEERING, IRON AND STEEL.

NOVEMBER 24.—**Malton.**—BRIDGE.—For construction of a reinforced concrete footbridge alongside the existing bridge over the River Derwent between Malton and Norton, for the N. & E. Riding County Councils. Mr. J. Bickersteth, Clerk of the East Riding C.C., County Hall, Beverley.

NOVEMBER 24.—**Rhondda.**—STEELWORK.—Supply of 270 and 190 tons of bridge steelwork, for the U.D.C. Mr. E. Taylor, Engineer and Surveyor, Council Offices, Pentre.

NOVEMBER 27.—**Irvine.**—REPAIRS.—For concrete sheet piling and other concrete, stone and filling work, renewing gear for working tilting steel shutters, and other work required to make good the weir and the adjoining banks and channel for the River Irvine, for the T.C. Messrs. D. Gillies and A. R. Wilson, Joint Town Clerks, Council Chambers. Deposit £1 1s.

NOVEMBER 28.—**Ormesby.**—RESERVOIRS.—For construction of two covered service reservoirs, for the Tees Valley Water Board. Mr. T. S. Calvert, Clerk to the Board, Water Board Offices, Middlesbrough. Deposit £2.

DECEMBER 1.—**Egypt.**—TOWER.—For erection of a water tower at Init Ghamr, for the Ministry of Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 1.—**Stone.**—TANK.—For construction of a separator and humus tank, for the U.D.C. Mr. C. H. Matthews, Clerk to the Urban District Council, Town Hall. Deposit £1.

DECEMBER 5.—**South Africa.**—SEWERAGE.—For erection of a pumping station and some machinery and cast-iron rising mains, for the City Council of Port Elizabeth. Messrs. Davis & Soper, Ltd., 54, St. Mary-axe, E.C.3, or Mr. W. How, Town Clerk, City Hall. Deposit £2.

DECEMBER 6.—**Dewsbury.**—TANKS.—For construction of percolating filters, humus tanks, and other appurtenant works in connection with the construction of sewage disposal works at Mitchell Laithes, for the T.C. Mr. Holland Booth, Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 6.—**Wilmslow.**—TANKS.—For construction of screen chamber, suction wells, settling tanks, percolating filters and humus tanks; sundry lengths of pipe line, and auxiliary works at their Southern Sewage Farm, for the U.D.C. Mr. H. Cliffe, Clerk to the Council, Clerk's Office, Wilmslow, Cheshire. Deposit £5.

DECEMBER 20.—**Egypt.**—RESERVOIR.—For construction of a steel reservoir, for the Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 31.—**Hamilton.**—BRIDGE.—**Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.**

ROAD, SANITARY, AND WATER WORKS.

NOVEMBER 24.—**Chesterfield.**—MAINS.—For construction of six main intercepting sewers with all necessary manholes and subsidiary works, consisting of 2,317 yds. of stoneware pipe sewers and 429 yds. of cast-iron pipe sewers, for the T.C. Mr. V. Smith, Borough Engineer and Surveyor, Engineer to the Scheme, Borough Engineer's Office, 2, Gluman-gate, Chesterfield. Deposit £2 2s.

NOVEMBER 24.—**Chesterfield.**—SEWAGE WORKS.—For construction of a sewage disposal works, for the T.C. Mr. V. Smith, Borough Engineer and Surveyor, Engineer to the Scheme, Borough Engineer's Office, 2, Gluman-gate. Deposit £5 5s.

NOVEMBER 24.—**Exmouth.**—SEWER.—For (1) Excavation, roadmaking, and other contingent work in connection with the widening of Hulham-road for a distance of approximately 460 yds; (2) excavation, laying, &c., of a 9 in. sewer in Littleham-road, for the U.D.C. Mr. S. Hutton, Engineer and Surveyor, Council Office.

NOVEMBER 24.—**Lichfield.**—TUBING.—For provision and laying of about 3,000 yds. of 1¼ in. diameter galvanised tubing water service, from Hilliards-cross to the Woodend Hospital, Curborough, with appurtenant works, for the T.C. Mr. W. Brocksom, Town Clerk, Guildhall.

NOVEMBER 24.—**Manchester.**—PAVING.—For draining, paving with concrete, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

NOVEMBER 24.—**Oxfordshire.**—ROAD.—For improvements to the London-Oxford-road, Section 4, Bucks County boundary at Stokenchurch, to Postcombe, for the C.C. Mr. A. E. Cockerton, County Surveyor, 8, New-road, Oxford. Deposit £10.

NOVEMBER 24.—**Rhondda.**—ROADS.—Construction of roads and sewers for the 200 houses at Wattstown, for the U.D.C. Mr. E. Taylor, Engineer and Surveyor, Council Offices, Pentre.

NOVEMBER 24.—**Southend-on-Sea.**—SEWERAGE.—For construction of concrete tube sewers, consisting of approx. 397 yds. of 24 in. diameter, 94 yds. of 21 in. diameter, and 83 yds of 18 in diameter, also 650 yds. cast-iron pipe sewer, 18 in. diameter, depths up to 24 ft., and including 38 yds. of heading and crossing over railway, and incidental works, for the C.B. Mr. H. J. Worwood, Town Clerk, Municipal Buildings, Clarence-road. Deposit £2.

NOVEMBER 24.—**Tanfield.**—REPAIRS.—For street works at back Robson-terrace, Flint-hill, for the U.D.C. Mr. Geo. Arkless, Clerk to the Council, Council Offices, Tanfield, Tantobie, S.O.

NOVEMBER 24.—**Teignmouth.**—ROADS.—For (1) Widening and making-up of Mill-lane, (2) construction of a surface water drain in Dawlish-road, for the U.D.C. Mr. F. W. Knight, Surveyor and Water Engineer, Town Hall.

NOVEMBER 24.—**Wombwell.**—FOOTPATHS.—For constructing surface water drain, building manholes, forming roadways, channelling and footpath, and laying kerb and other works, for the U.D.C. Mr. P. Milnes Walker, Clerk to the Council, Town Hall, Wombwell. Deposit £1 1s.

NOVEMBER 25.—**Cheshunt.**—SEWER.—For construction of about 535 yds. of 24 in. diameter concrete pipe surface water sewer, together with the necessary manholes, and other works, for the U.D.C. Mr. J. E. Sharpe, Engineer and Surveyor to the Council, Manor House. Deposit £2 2s.

NOVEMBER 25.—**Gosforth.**—IMPROVEMENTS.—For road improvements at the west end of Elmfield-road, for the U.D.C. Mr. Frank Kirby, Joint Clerk to the Council, Council Chambers.

NOVEMBER 25.—**Waltham Cross.**—SEWER.—For construction of about 535 yds. of 24 in. diameter concrete pipe surface water sewer, together with the necessary manholes and other works, for the U.D.C. Mr. J. E. Sharpe, Engineer and Surveyor, Manor House, Cheshunt. Deposit £2 2s.

NOVEMBER 26.—**Dunfermline.**—MAINS.—For providing, laying, and jointing four miles of 18 in. diameter cast-iron water main, with other relative works, for the Fife C.C. Mr. G. J. Sherriff, District Clerk, 30, Queen Anne-street, Dunfermline. Deposit £2 2s.

NOVEMBER 26.—**Langwith.**—SEWERAGE.—For construction of about 4,160 lin. yds. of stoneware and iron pipe sewers, together with manholes and all appurtenant works, for the Blackwell R.D.C., and Bolsover U.D.C., and Blythe and Cuckney R.D.C. Mr. W. S. Cockerham, Clerk to the Committee, 106, Stockwell Gate, Mansfield. Deposit £5 5s.

NOVEMBER 28.—**Ashby Woulds.**—SEWERS.—For laying about 500 yards of 9 in. diameter sewers at Albert Village, for the U.D.C. Mr. G. E. Marlow, Surveyor, Town Hall, Ashby-de-la-Zouch.

NOVEMBER 28.—**Calder.**—PIPES.—For laying and jointing of about 9½ miles of cast-iron pipes, and constructing two concrete tanks and a filter, with relative works, for the Midlothian C.C. Mr. A. G. G. Asher, County Clerk, County Buildings, Edinburgh. Deposit £1.

NOVEMBER 28.—**Near Birmingham.**—SEWERAGE.—For construction of drains, manholes and inspection chambers at Great Barr-park, for the Walsall and West Bromwich Unions. Mr. A. H. Ward, Clerk. Deposit £3 3s.

NOVEMBER 29.—**Glasgow.**—ROADS.—For constructing about two miles of roadway, forming part of a new road, at a higher level than the former road along the north side of Loch Katrine, including the construction of eleven bridges with their ironwork complete, and all accessory works, &c., for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers, Glasgow. Deposit £2 2s.

NOVEMBER 29.—**Hindley.**—MAKING-UP.—For taking up of grit setts, excavating, concreting, and paving with granite setts about 6,000 sq. yards in Leigh-road, Hindley Green, for the U.D.C. Mr. T. Robey, Clerk to the Council, Council Offices. Deposit £2 2s.

NOVEMBER 29.—**Tilbury.**—FOOTWAYS.—For works in connection with the reconstruction in artificial stone paving and re-bedding and levelling of kerbs to footways on both sides of 22 unclassified roads or streets, for the U.D.C. Mr. A. W. Buckner, Clerk of the Council, Council Offices. Deposit £2.

NOVEMBER 29.—**Tilbury.**—ROAD.—For works in connection with the reconstruction in reinforced concrete, portion of Calcutta-road, for the U.D.C. Mr. A. W. Buckner, Clerk of the Council, Council Offices. Deposit £1.

NOVEMBER 29.—**York.**—SEWERS.—For construction of 9 in. sewers, surface water drains, manholes, &c., for the T.C. Mr. F. W. Spurr, City Engineer, Guildhall. Deposit £2 2s.

DECEMBER 1.—**Romford.**—REPAIRS.—For widening and reconstructing about 650 yds. of Church Elm-lane, Dagenham, extending Nelmes-road, Hornchurch, for about 25 yds., and also widening and diverting Coombe Green-road, Cranham, for about 200 yds., for the R.D.C. Mr. T. W. A. Greenhalgh, Clerk to the Council, 16a, South-street, Romford.

DECEMBER 1.—**Sunbury-on-Thames.**—SEWER.—For about 150 yds. of 8 in. glazed stoneware pipe sewer in Manor-lane, with all necessary manholes and contingent works, for the U.D.C. Mr. E. Beeching, Clerk, Council Offices.

DECEMBER 1.—**Woodford.**—SEWER.—For construction of about 31 lin. yds. of 9 in. stoneware pipe sewer, with manholes, &c., in Broomhill-road, Woodford Green, for the U.D.C. Mr. W. Farrington, Surveyor to the Council, Council Offices, Woodford Green.

DECEMBER 2.—**Kensington and Hammersmith.**—SEWER CONSTRUCTION.—For the construction of a 9 ft. 6 in. internal diameter sewer in cast-iron, with concrete lining, of a total length of about 9,695 ft.; also 6 ft. internal diameter sewer in cast-iron, with concrete lining, of a total length of about 2,375 ft., for the L.C.C. Chief Engineer of the Council, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

DECEMBER 3.—**Dinas Powis.**—IMPROVEMENTS.—For street improvement works in Elmgrove-place, for the Cardiff R.D.C. Mr. M. Warren, Clerk, Park House, Cardiff.

★DECEMBER 3.—**Hove.**—WOOD PAVING.—Providing and laying wood paving in portions of Church-road, Holland-road and Western-road (about 15,820 yds. super.), for the Hove B.C. Mr. H. H. Scott, Borough Surveyor, Town Hall, Hove.

★DECEMBER 3.—**London, S.W. 6.**—SANITARY WORK, &c.—(*a*) Removal of division wall and tiling to walls of kitchen and scullery; (*b*) sanitary work, including the provision and fixing of bed-pan sinks, scalding sinks, &c., at the Western Fever Hospital, Seagrave-road, Fulham, S.W. 6, for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C. 4. Deposit £1 in respect of each work.

DECEMBER 3.—**Stevenage.**—OUTFALL.—For reconstruction of the outfall works, for the U.D.C. Mr. W. O. Times. Clerk to the Council, Council Offices, Stevenage. Deposit £3 3s.

DECEMBER 4.—**Southwell.**—PIPES.—For provision and laying of about one mile of 12 in. and 9 in. stoneware pipe sewers, and the construction of sewage disposal works, at Clipstone, for the R.D.C. Mr. J. Ellis, Clerk to the Council, Westgate, Southwell, Notts. Deposit £2 2s.

DECEMBER 4.—**Wanstead.**—MAKING UP.—For making up of Broad-walk, for the U.D.C. Mr. Bruce Blewitt, Clerk to the Council, Council Offices.

DECEMBER 8.—**Crewe.**—ROADS.—For making up part of Gainsborough-road, for the T.C. Mr. H. S. K. Feltham, Town Clerk, Municipal Buildings. Deposit £2 2s.

DECEMBER 8.—**Epsom.**—MAINS.—For providing, laying, excavating and jointing of about 2,829 yards of 4 in. cast-iron water main, including valves, fire hydrants, &c., for the U.D.C. Mr. E. G. Wilson, Clerk, 37, Church-street,

Competitions.

(*See Competition News, page* 808.)

Auction Sales, Tende

NOVEMBER 25.—**London, E.C.**—Mr Beard will sell, at Winchester House, Ol E.C., the important freehold business p as Nos. 5, 6, and 7, Gray-street, Dul frontage 100 ft., workshops, cellarage, being about 4,200 sq. ft.; estimated £1,200 per annum. Auctioneers, 109, street, Bedford-square, W.C.1.

★NOVEMBER 25.—**London, W. 6.**— Butcher & Co. will sell (by order of Mr. S trustee under a deed of assignment, stone and marble merchant), on the pr Grove, Hammersmith, W. 6, plant, stock of a stone and marble merchant, furniture and other equipment. Auctio Chancery-lane, W.C. 2.

NOVEMBER 26.—**Colnbrook, near S** Gale, Power & Co. will sell, by order for the debenture holders, at the Staines, equipped sand, gravel and ball at Colnbrook, three miles from Staines, area of about 23 acres. Auctioneers, street, Piccadilly, W.1, and 122, High-s

★NOVEMBER 28.—**Cambridge.**—Mess Gray are instructed by Mr. W. R. Elw the Receiver appointed by the debent sell in the store yard, *re* Wm. Saint, L Yard, St. Barnabas-road, Cambridge, bu and plant. Auctioneers, 29, St. A Cambridge.

★NOVEMBER 28.—**Crawley, Sussex** Clark will sell, without reserve, new tim Lion Field, White Lion Hotel, at 2 p.m Beddington House, Beddington, near Cr

★DECEMBER 2.—**London, W. 12.**— Clark will sell, without reserve, at the Depot, No. 401, Wormwood Scrubbs Shepherd's Bush, steel-framed building, and building materials, cast and wrough corrugated galvanised iron sheets, hot w sheets wired glass, shovels, new pi Auctioneers, Railway Wharf, York-road S.W. 18.

DECEMBER 2 AND FOLLOWING TWO D **E.**—Messrs. Joseph Hibbard & Sons wi reserve, by order of the Liquidators, Mr and G. G. Liverman, *re* Price & Low, Ltd liquidation), at the two depots at 118, and 49, Hackney-road, stock of timbe other items. Auctioneers, 15, Newi Islington, London, N.16.

DECEMBER 9.—**East Kent.**—Messrs. H will sell, at the St. James' Estate Rooms, square, S.W.1. freehold residential property of over 14¼ acres, to be offered in Auctioneers, 20, St. James'-square, S.W

★DECEMBER 9 AND 10.—**London,** Fuller, Horsey, Sons, & Cassell will se the Ministry of Transport, road contra 11 o'clock each day, at the Merchant Exchange, St. Mary Axe. Auctioneer square, E.C.3.

DECEMBER 12.—**Weymouth.**—Mr Horsey, Sons & Cassell will sell in lots head Torpedo Factory, Weymouth, bui steel joists, angles, steam piping, roof t bars, timber, &c. Auctioneers, 11, E.C. 3.

Public Appointme

★NOVEMBER 28.—**South Wales.**—I Works and a Walking Clerk of Works with the erection of the buildings for t of Physics and Chemistry in Cathays Apply Mr. D. J. A. Brown. Regist College of South Wales and Monmouths College, Cathays Park, Cardiff.

NOVEMBER 29.—**Birmingham.**—CLE —Clerk of Works required for ho Mr. Herbert H. Humphries, City Engine and Executive Officer for Housing Council House, Birmingham.

NOVEMBER 29.—**Cheltenham.**—CLER —Clerk of Works required to supervise of gravity pre-filters, ferro-concrete tan system) and concrete block filter an (contract about £8,000), for the Corpora ham. Mr. J. S. Pickering, Borough P cipal Offices, Cheltenham.

DECEMBER 1.—**Rochester.**—CLERK Clerk of Works required for a large s intended to be begun in the near futu Corporation of Rochester. City Surv Rochester.

★DECEMBER 4.—**Lewes.**—Quantity quired on the temporary staff in conn proposed new County Secondary Scho Sussex County Council. Mr. Fre A.M.I.C.E., M.S.A., County Surveyo Lewes.

★NO DATE.—**Hong Kong.**—ASSISTANTS.—Assistants (three) req Government of Hong Kong, for servi tectural Office of the Public Works a period of three years, with possib Crown Agents for the Colonies, 4, minster, S.W. 1, quoting "M/12919."

★NO DATE.—**Hong Kong.**—OVER required by the Government of Hon Public Works Department, for three with possible permanency, to supervise tion with the maintenance, repairs and of Government buildings. Crown Colonies, 4, Millbank, Westminster quoting "M-12921."

POSED NEW BUILDINGS & OTHER WORKS.*

ese lists care is taken to ensure the accuracy of the information given, but it may occa- appen that, owing to building owners taking the responsibility of commencing work ns are finally approved by the local authorities, "proposed" works at the time of n have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for trict Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board of Education.

OT.—The T.C. passed plan for house and ver Farnham-road, for Mr. E. Field.
N.—The U.D.C. has agreed to seek the o erect 120 houses.
.—The Governors of the Infirmary decided new wing to the Infirmary.
HAM.—The Surveyor has submitted details llustrating the type of houses and lay-out ction of 24 houses.
D PLAIN.—Plans passed by the U.D.C.: es on the West Kyo site, for Messrs. Thomp- vn; 2 bungalows, Loud-hill site, for Mr. C. se, Loud-hill site, for Mr. M. Southren; Loud-terrace, for Mr. J. J. Bulmer.—The as approved the design of the proposed war r Annfield Plain Park.
OCH.—Messrs. Jas. Nimmo & Co., Ltd., are houses at West Auchinloch, in connection ousing of their employees of their mining t at Lumloch.
CASTLE.—The U.D.C. passed a plan for a n the Flatts Wood, for Mr G. A. Carter.
Y.—A site at Wilthorpe housing estate has ed for the erection of an elementary school. has been given to a lay-out plan prepared . for land at Carlton, for housing.—The mittee has approved of proposals sub- Mr. C. F. Moxon, architect on behalf of l Harral, with regard to buildings to be Graham's Orchard and Shambles-street e Manor House site has been agreed upon tion of the proposed mining college and stitute.—Information has now been ob- o departmental requirements in the new cheme and forwarded to the Borough Sur- connection with the suggested erection of ashhouses, the Baths Manager has been detailed information on the subject from —Plans passed: Eight houses, Dodworth- . F. Oxley: 2 houses, Dodworth-road, for rth; extensions to workhouse, for Board of

ORD.—Plans have been approved for the emi-bungalows in Colne-road, for Mr. H. d also for Messrs. Earnshaw & Crabtree. M.—The U.D.C. passed plans: Six ingshall-road, three in Shortlands-road, room at St. James'-avenue.
ONSHIRE.—The U.D.C. agreed to seek the he M.H. to borrow £34,200 for the erection at Sleekburn.
-The Bedwas Navigation Colliery Co., ceed with 150 of the 178 houses sanctioned by the Company.
SIDE.—The U.D.C. is making application for permission to proceed with the erection at Shotley Bridge.
—The T.C. is to convert the rifle range o a school clinic, at a cost of £1,150.— nd yard at the Guildhall are to be con- fire station, at a cost of £350.—A teachers' e provided at Spencer school.—Further be erected, and Mr. R. Whiteing has been architect.
-The T.C. has decided to invite tenders for f a pavilion in Pole-grove.—The T.C. has ements with Messrs. W. J. Simms, Sons & to construct a further 6 houses on the site.—Tenders are to be invited for the houses on Little Common estate.
D.—Plans passed: Sixteen houses, from ue to Woodsorrel-road.
M.—Loan sanctions as follows have been rchase of site for elementary school, in £560; improvements at Cowper-street alterations to Summer-lane generating 00; erection of houses and purchase of 00.
ORTFORD.—The U.D.C. approved plans: ad, for Mr. F. Markwell; detached villa, r Mr. Bradshaw.
—Tenders have been invited for the w grammar school premises, for the aines' Charity, estimated to cost £18,000. Best, of Blackpool, is the architect. ng Plans Committee have approved houses by private enterprise.— being made to the M.H. for sanction to 55 for sewerage works improvements.
inquiry was conducted by Mr. A. W. behalf of the M.H., into an application r permission to borrow £5,500 for the a promenade, sea-wall, &c., at Links- cost of which is £10,000.
e Streets Committee of the T.C. have ation the improvement and reconstruc- Bridge.—The B.G. are to consider the f a central registration office.—Sanction ved from the M.H. for the proposed ownley's Hospital, and the provision of at Fishpool Institution.
DEARNE.—The U.D.C. is seeking sanc- 0 dwellings.
The Surveyor to the U.D.C. has been the M.T. regarding the proposed new river Ribble at Swindleton.
-The Housing Committee recommends respect of 20 houses to be erected by in Church-walk.—The Surveyor has

* List of Contracts, Competitions, etc.

prepared plans for a lodge and garage at the Isolation Hospital, to cost £650.—Plans passed: 20 houses, Church-walk, for Mr. Davies.

BRYNMAWR.—Plans submitted to the U.D.C.: House, Llwynpwll, for Mr. A. Webb.

BURNLEY.—The Borough Surveyor has been instructed to prepare plans for 40 houses, with a view to this scheme being submitted to the M.H.

BURY.—Work has been commenced on the foundation of the new central labour club to be erected in Irwell-street; the contractors are Messrs. J. Greenwood & Co.

CARLISLE.—Land at Blackwell is to be acquired compulsorily for housing purposes.—Plans passed: House, Dykes-terrace, for Mr. H. Irving Graham; 14 garages, St. Paul's-square, for Mr. W. C. Johnson.

CARNARVON.—The T.C. is submitting to the M.H. a scheme for the erection of 56 houses, according to plans prepared by the architect, Mr. Rowland Lloyd Jones.—The B.S. is to prepare plans for a waiting room and parcel room at the parking ground.

CHELTENHAM.—It is now proposed to deal with the Stanhope-street slum area. Plans passed: Two houses, Halland-road, for Miss Barnard.

CHESHIRE.—The E.C. have decided to provide schools for the Bromborough and New Ferry districts. It is proposed to purchase lands for the buildings at a cost of £4,471, the New Ferry site to cost £2,662. A new school for Ellesmere Port is to cost £15,148.

CHORLEY.—The B.G.'s plans for the erection of a new mortuary at the Eaves-lane institution were provisionally approved.—The Corporation are considering the question of providing new public baths.—The B.S. has been asked to prepare a plan and an estimate for the construction of an open-air bath in Astley-park.—The T.C. has accepted tenders for the erection of 60 houses on the Highfield estate; application is also being made to the M.H. to allocate an additional 50 houses to Chorley, to be erected by private enterprise.

COBHAM.—The Catholic congregation are raising funds for the purchase of a site for a new church.

COULSDON.—Plans passed by the U.D.C.: Fourteen houses, Southwood-avenue, for Messrs. Thomas & Sons; 2 shops and flats, Chipstead Valley-road, for Messrs. Stewart & Burrage; house, Bramley-avenue, for Mr. V. Herbert.

COVENTRY.—The T.C. has adopted a scheme for the provision of 2,200 houses during the next three years.

CROYDON.—The Electricity Commissioners have sanctioned a loan of £26,000 for show rooms and offices in High-street.—The Council proposes to ask the M.H. to hold an inquiry into the scheme for the purchase of land for the erection of baths at Addiscombe.—Heathfield Estate, adjoining Addington Hills, has been sold for building purposes.

DARLINGTON.—Plans passed by the T.C.: Two houses at Haughton-road, for Estate Agent, L.N.E. Rly. Co.; house, Cleveland-avenue, J. A. L. Robson; two houses, Haughton-road; three houses, Westlands-road; ten houses, Yarm-road; two houses, Pierremont-gardens; eight houses, The Fairway, J. E. Chilton; house, Pierremont-road, H. B. Richardson; five houses, Bowman-street, H. Parvin.—A new men's club and a large recreation room are to be erected at Cockerton.—Plans passed by the R.D.C.: Eight houses, Yarm-road,; house, Middleton-on-Row; two houses, Measham-road; two houses, Hurworth-road, Hurworth; two houses, Burtree-lane; lay-out plan for a building estate at Hurworth.

DARTON.—The U.D.C. approved plans for 250 houses to be erected near the Darton Main Colliery, by the Darton Housing Association, Ltd.

DERBY.—The T.C. propose erecting 239 houses.—Messrs. G. H. Wheatcroft & Co., of Wirksworth, have arranged to establish a textile factory at premises in Leaper-street.

DONCASTER.—The Housing Committee have considered tenders for the erection of 400 houses on the Warmsworth-road site.—Tenders are being invited for the extension to the premises of The Yorkshire Penny Bank, Ltd., at the corner of High-street and Scott-lane.—Demolition of old property in Scott-lane is now being proceeded with, and when the site is cleared a new shopping centre is to be erected of concrete construction. Plans have been prepared by Mr. T. W. Sharpe, architect, of Ravensthorpe.—A new secondary school is to be erected upon a site at the corner of St. Nicholas-road and Church Baulk, Thorne, for the E.C.—The Governors of the Infirmary have decided to erect their proposed new institution on a site in Thorne-road. Dr. MacIntosh, of the Western Hospital, Glasgow, is to be consulted on the construction and lay-out plans.

DOUGLAS (ISLE OF MAN).—Plans passed by the T.C.: House, Peel-road, for Mr. Ainley.

DOVER.—Detailed plans are to be prepared for a shelter at Granville-gardens, with seating for 700, and estimated to cost £2,500.

DRIFFIELD.—Plans have been prepared for the erection of a house, garage and engine house at Bridlington-road, and tenders for the work are being invited by the architects, Messrs. F. Mitchell & Sons, Upper Fountaine-street, Leeds.

DURHAM.—The R.D.C. approved plans: H. L. Gradon, house, at Whitesmocks, Durham; J. J. Scott, house, at Belmont; Trustees, United Methodist, chapel and school at Broompark.

EARSDON.—The U.D.C. has received sanction from the M.H. to build a further 66 houses, which will complete the Castle Park estate.

EASTBOURNE.—The B.S. has prepared a lay-out plan for a new depot at Bedfordwell-road. Plans passed: House, Le Brun-road, for Mr. H. Philbey; house, Willingdon-road, for Mr. T. Pain; house, Victoria-drive, for Mrs. M. Walker; two houses, St. Phillip's-avenue, for Mr. F. C. Benz; two houses St. Phillip's-avenue, for Mr. A. Ford; two houses and 10 garages, St. Phillip's-avenue, for Messrs. Llewellyn & Co.; house, Southfields-road, for Mr. F. G. Dyer.

EAST HAM.—Plans passed: Four houses, Melford-road, for Mr. Seymour; 14 houses, Cotswold-gardens, for Mr. F. Hamlett; 44 houses, Caulfield-road, for Messrs. Gale Bros.; house, Wellington-road, for Mr. G. Hansford; house, Elsenham-road, for Mr. Talbot.—A scheme for extensions at the dust destructor works, to cost £10,000, has been prepared by the Borough Engineer.—The T.C. is considering the provision of accommodation for 50 mentally defectives. Plans are to be prepared for extending the offices of the tramways department. Alternative plans are to be prepared for a convenience at Barking-road.

EAST STOW.—The R.D.C. have a proposal from Mr. G. A. Woodward to build five or six houses at Old Newton.—The Council has approved the filtration of the pond in the district for water supply.

EDGWARE.—Plans for over 200 houses have been passed by Hendon Council.

EDINBURGH.—Plans approved by the Dean of Guild Court: J. Stewart, cottage, Parkhead, Junipergreen; J. B. M'Kay, double villa at Barnton-avenue, Davidson's Mains; A. T. Wood, two semi-detached houses at Morningside-grove; J. B. Patrick, house, Barnton-avenue; A. Matthew, bungalow, off St. John's-road, Corstorphine; Incorporated Edinburgh Dental Hospital and School, new building at Chambers-street; T. S. Henderson, house, Hillview-terrace, Blackhall; A. Forbes, four bungalows, Hillview-terrace, Blackhall; C. Macandrew, Ltd., four houses, Craiglockhart Park.

EDMONTON.—The Middlesex C.C. is purchasing land required for the construction of a bridge across the Lea Navigation at Angel-road.

ELLESMERE PORT AND WHITBY.—The Housing Committee recommends that arrangements be made with Messrs. Gould, Ltd., to erect eight houses similar to others in course of erection on the gas works site, at £1,176 per block of two.

FELIXSTOWE.—The U.D.C. are to erect 38 houses on a plot of land in St Andrew's-road.

FOLKESTONE.—Plans passed by T.C.: Mr. O. Marx, house, Broadfield-road; Mr. A. Castle, house, Cherry Garden-avenue (Mr. J. L. S. Dahl, architect).

GELLYGAER.—The U.D.C. has asked neighbouring authorities to join in a scheme for the erection of a new isolation hospital.

GLAMORGAN.—Representatives of the University College of South Wales and Monmouthshire have waited upon the County E.C. requesting grants towards the maintenance of new physics and chemistry departments, to be erected at Cardiff, which total costs incurred, £250,000.—The Pontypridd U.D.C. are proposing to erect a bridge from the Park Cinema to the Park grounds.

GLASGOW.—Plans passed by the Dean of Guild Court: Victoria Infirmary, nurses' home and recreation rooms, Grange-road and Langside-road (the cost is estimated at about £15,000); J. Caldwell, five semi-detached villas, Langlands-road, Newlands; J. C. Lyle, eight houses, Fernleigh-road; Southern Building Co., 15 houses at Crompton-avenue and continuation of Woodend-avenue, Cathcart; Glasgow Corporation, houses at Hamilton Hill.—The Scottish Board of Health has sanctioned a two million loan for housing.—The Baptist Union has selected a site at Corkerill-road for the erection of a church.

GOSPORT.—The T.C. is considering the purchase of land, at a cost of £10,500, for the development of Stokes Bay.—Efforts are to be made to purchase a site in the King's-road district for a children's playground.—The B.S. has prepared a lay-out of the esplanade at the Hard.—Plans passed: Five houses, Grove-road, for Mr. W. G. Roberts; house, Bridgemary, for Mr. H. Tribbeck; 10 houses, Melville-road, for Mr. A. Monkton; house, Privett-road, for Mr. T. Taylor; house, Brockhurst-road, for Mr. C. Howard; house, Grove-road, for Mr. W. A. Withers; house, Elson-road, for Miss Pellatt; house, Grove-road, for Mr. W. Hetherington; house, Algesey-road, for Messrs. Northcott & Pile.

HA)HAM.—The R.D.C. passed plans: Pair of cottages at Much Hadham, for the Herts C.C.; bungalow, Braughing, for Mr. Rogers.

HALIFAX.—The Halifax Ind. Co-operative Society, Ltd., have purchased St. Paul's Church schools, and it is proposed to build new stores on the site.

HANWELL.—Plans passed by U.D.C.: House, Hume-avenue, for Mr. T. R. Pettifer; house, Hume-avenue, for Mr. E. Coventon.

HARROGATE.—The Borough Engineer has been instructed to prepare a plan of the lay-out for the erection of 200 new houses on the Ripon-road Farm.—The rebuilding of the Magnesia Well pump room, in the Valley Gardens, is to be carried out in conjunction with the erection of a covered promenade near the bandstand. The Borough Engineer has been instructed to prepare a plan and estimate of the cost.

HARTLEY WINTNEY.—Hampshire C.C. has purchased a site for a new school.

HASLAND.—An inquiry has been held by the M.H. into the scheme for the erection of public baths at Storforth-lane. The total cost is estimated at £8,000, towards which the Miners' Welfare Fund will contribute £3,000. Plans have been prepared by Messrs. Wilcockson & Cutts, of Chesterfield, the contract for the building work having been provisionally placed with Messrs. P. & W. Anderson, Ltd.

HAZEL GROVE.—Plans approved: House, Chester-road, for Mr. R. G. Burrow; house, Grange-road, for

Mr. R. Stockton; house, Pownall-avenue, for Mr. T. J. Oldham; house, Carr Wood-road, for Mrs. E. G. Crosby.

HEADLEY.—Considerable extensions are proposed by the Hampshire C.C. to the Bordon school.

HEBBURN.—The U.D.C. are to erect 37 houses.

HESTON AND ISLEWORTH.—The U.D.C. passed plans: Mr. A. C. Hodges, two detached houses, The Grove; Mr. J. P. Power, two houses, London-road; Mr. C. T. Cushing, house, Alexandra-road; Mr. H. B. Phillips, two houses, Standard-road; Mr. W. Harris, four houses, Denbigh-road; Mr. P. H. Watkins, two houses, Martindale-road: Messrs. Cartwright & Son, house and two shops, Whitton-road; Mr. T. H. Revis, house, London-road; Messrs. P Chase Gardener & Co., eight houses, Tiverton-road; Messrs. P. Chase Gardener & Co., eight houses, Standard-road; The Glenwood Construction Co., 18 houses, Smoky-lane; Mr. R. Willison, house and outbuilding, Heston-road; Messrs. Dodge & Reid, two houses, Jersey-road.

HITCHIN.—The R.D.C. approved plans: Bungalows at Weston, Todds Green, and Rabley Heath; a pair of cottages at Newnham; two cottages at Stockens Green, Knebworth; four cottages at Stagenhoe Park; and a cottage at Broom Barn.

HOUGHTON-LE-SPRING.—The U.D.C. has obtained sanction to proceed with 36 houses on the Hetton-road site.

HOVE.—The T.C. have received the Ministry approval to the erection of 164 houses required to complete the Old Shoreham-road estate scheme. The Borough Surveyor has submitted for approval a plan showing the proposed arrangement and types of houses to be erected.

HUCKNALL.—The U.D.C. approved plans for 10 houses.

ILFORD.—The U.D.C. is to erect 12 houses on land near the electricity works, at a cost of £8,400.—The M.H. has now sanctioned the scheme for the erection of a central library, and the surveyor is to prepare plans.—Plans passed: Five houses, Hatch-lane, for Mr. W. Butcher; 18 houses, Kingston-road, for Sunnyside Development Syndicate; four houses, Breamore's-road, for Messrs. Harber & Cox.

ILKESTON.—Plans passed by T.C.: Two houses, Manor-road, for Messrs. Briggs & Co.; two houses, Wharncliffe-road, for Mr. F. Chambers; house, Drommond-road, for Mr. Godber; bungalow, Manor-road, for Mr. J. Smith.

KEIGHLEY.—A number of slum houses are being abolished at Keighley, and 536 persons are to be accommodated in new houses.—The E.C. are to erect lavatories at the corner of Lord and Cavendish streets. Plans passed by T.C.: Three houses, Park-lane, for Mr. L. Whittaker; bungalow, Spring-gardens-lane, for Mr. W. H. Collingham.—Plans passed by R.D.C.: Four houses, West Bank, Riddlesden, for Mr. H. Anderson; three houses, Sun-street, Eastburn, for Mr. T. Atkinson.

KIVETON PARK.—The R.D.C. decided to seek tenders for the erection of 28 houses at Kiveton Park and Wales.

KNARESBOROUGH.—Plans passed by the U.D.C.: House, in Scriven-road, for Mr. G. E. Arnold.—The Council is to apply to the M.H. for sanction to borrow £12,000 for the construction of 24 dwellings in Stockwell-avenue.

LEATHERHEAD.—The U.D.C. has appointed a sub-committee to consider the question of town planning the district.

LEEDS.—The T.C. passed plans: Mr. W. Teal, bungalow, Cambridge-gardens estate; Mr. A. Booth, 16 semi-detached houses, Old-lane, Beeston; Mr. C. Smith, five houses, Chandos-place, Lidgett-lane; Mr. W. C. Rogers, six semi-detached houses, East Moor-crescent. Roundhay; Mr. E. B. Verral, bungalow, Stainbeck-lane, Chapeltown; Mr. W. Short, detached house, Old-lane, Beeston; Mr. W. Teal, two semi-detached bungalows, Cambridge-gardens estate.

LEICESTER.—The T.C. proposes the acquisition of a site in Ayleston-drive for a transformer house.

LOFTUS.—Members of the Roman Catholic Church are launching a scheme for the erection of new church premises in West-road.

LONDON (CITY).—The Corporation have approved the application of Messrs. Ellis & Clarke for erection of a building to abut Tudor-street, Whitefriars-street, and Glasshouse-alley.

LONDON (FULHAM).—Plans agreed: Buildings at 632 to 638, Fulham-road, for Mr. J. H. Puttick; buildings on a site in Roxby-place, for Messrs. Jones & Sons, Ltd.

LONDON (ISLINGTON).—The B.C. is to convert the "Beehive" public house in Eden-grove into a garage for the Electricity Department, at a cost of £1,700.

LONDON (LAMBETH).—The L.C.C. recommend the borrowing by the B.C. of £56,316 for housing purposes.

LONDON (LEWISHAM).—Plans passed by B.C.: Ten houses, Bovill-road, for Messrs. Ensmore Bros.; 10 houses, Casslee-road, for Messrs. Middletons, Ltd.; seven houses, Calmont-road, for Messrs. Dobden & Co., Ltd.; pavilion, Bromley-road, for Mr. E. Watt; two houses, Cranston-road, for Messrs. Laxton & Sons; two houses, Canonbie-road, for Messrs. Osborne & Son; house, Baring-road, for Mr. W. Stevens; five houses, Manor-lane, for Messrs. Scudamore, Ltd.

LONDON (MARYLEBONE).—It is proposed to construct an arcade from Bell-street to Edgware-road.

LONDON (POPLAR).—The B.C. proposes the purchase of a site at Cubitt Town for £4,750 for the erection of 71 houses.—The Libraries Committee recommends the purchase of two houses adjoining the Bow library for extensions.

LONDON (PUTNEY).—The railway bridge is to be widened, at a cost of £10,500.

LONDON (SHOREDITCH).—The L.C.C. Education Committee proposes to proceed with the erection of an elementary school for 1,000 at Crondall-street.

LONDON (STOKE NEWINGTON).—The L.C.C. intends to erect an elementary school in Albion-road.—Plans sanctioned: Rebuilding "Red Lion" public house, Church-street, for Messrs. Truman, Hanbury, Buxton & Co.; two houses, Woodberry-grove, for Mr. H. White.—Eight tenders have been received for the erection of the library extension, but the Library Committee cannot recommend any as the cost is in excess of the estimate.

LONGTON.—Plans passed by Stoke-on-Trent T.C.: Bungalow, Weston-road, for Mr. T. Fell; house, Star and Garter-road, for Mr. W. Leese; house, Star and Garter-road, for Mr. A. Vass; two houses, Star and Garter-road, for Messrs. Vernon & Clewes; house, Rough-close, for Mr. W. Edwards; two bungalows, Weston-road, for Messrs. Caulcott & Son.

LUTON.—The B.S. has prepared a scheme for reconstructing the sewage pumping station, to cost £41,000.

LYTHAM ST. ANNE'S.—The Corporation propose to erect houses near the site of the new gasworks at Eastham, for their employees.—Plans for the erection of 56 houses have been approved.

MAIDSTONE.—The Council recently approved of the grant of the subsidy in respect of six houses and two bungalows.

MANSFIELD.—Notts County E.C. has authorised the preparation of plans for a technical school on the Ashfield House site. The new school will embody the mining department, towards which a grant of £9,700 has been promised by the Miners' Welfare Fund.

MELTON.—The R.D.C. passed plans: Two houses at Sewstern, for the Stanton Ironworks Co.

MEXBOROUGH.—The E.C. has asked the West Riding C.C. to provide a new central school.

MIDDLESBROUGH.—The sum of £6,000 is to be spent for extensions to the children's ward of the North Riding Infirmary.

MILE CROSS.—The Norwich E.C. recommend that public notice be given of the intention of the Local Education Authority to provide a new public elementary school for about 600 children.

MORECAMBE.—Plans passed: Two houses, South-road, for Mr. W. H. Walker: house, Lancaster-road, for Mrs. Crowther; house, Lancaster-road, for Mrs. Drake; house, Woodhill-lane, for Mr. Johnstone; two houses, Thornton-road, for Mrs. Hunt; two houses, South-road, for Mr. H. L. Moody; 48 houses, Silverdale-street, for Messrs. Edmondson Bros., Ltd.; house, South-road, for Mr. R. Cocking.—The T.C. has agreed to carry out suggestions by the B.S. for using the Morecambe-street offices by the Education Department.

NELSON.—Work is being proposed by the T.C. in the construction of public abattoirs.

NETHER WALLOP.—Hampshire C.C. has decided to erect a school for about 120 children.

NEWBIGGEN (NORTHUMBERLAND).—The Co-operative Society has adopted a building scheme for the erection of 250 houses.

NEWBURY.—The T.C. passed plans: House, Essex-street, for Mr. H. Cook; club room, Bartholomew-street, for Church Army.

NEWPORT (MON).—The B.C. is to apply for sanction to acquire 25, 27, 29 & 31, Stow-hill, for extending the municipal secondary school.—The Council is to extend the Spring-gardens school.—The Llanover Estate is to have new offices erected in Fields-road.

NEW MALDEN.—Plans passed by Maldens and Coombe U.D.C.: Four houses, South-lane, for Mr. R. Thomas.—The Surrey C.C. is to be urged to provide a secondary school in the district.

NORTHAMPTON.—Plans passed by T.C.: House, Park-avenue South, for Mr. J. M. Read; house, St. George's-avenue, for Dr. Brown; two houses, St. George's-avenue, for Mr. A. Holloway; house, Delapre-crescent, for Mr. E. H. Tibbs; two houses, Linden-road, for Mr. F. Jordan; house, The Avenue South, Dallington, for Mr. F. H. Allen; house, Beech-avenue, for Mrs. Harland; detached house, St. George's-avenue, for Mr. Hamp; 5 houses, The Broadway, for Messrs. S. G. Sale & Co.; house, Kingsthorpe-grove, for Messrs. A. L. & H. W. Chown; 8 houses, Linden-road, for Northampton Co-operative Society, Ltd.; 4 houses, Linden-road, E., for Mr. C. H. Rainbow.—The C.C. has appointed a committee to prepare a comprehensive scheme for office accommodation.

NORTHALLERTON.—The U.D.C. are to build houses and sell them on the hire purchase system. A contract for 20 houses has been signed.

OSWALDTWISTLE.—Plans passed: Six houses, Margaret-street, for Mr. W. Clegg; reconstruction of two houses, Riley Mount, for Mrs. Crankshaw.

OXFORD.—It is proposed to rebuild the "Duke of York" public house in Union-street.—It is not proposed to proceed with a scheme for a municipal swimming bath, but negotiations are suggested to take over the Merton-street baths from the University College.—Plans have been passed for the lay-out of the Gipsey-lane housing site.—The Iffley Glebe land is to be purchased for £4,870, as a housing site.—The Corporation is negotiating with the Midland Bank, which proposes a lease of Sun Vaults and to spend £6,000 on reconstructions, &c.—The T.C. approved the plans of the lay-out of the Gipsy-lane site and the Meadow-lane site, and that application be made to the M.H. for sanctions to loans of £21,485 and £13,400 for the cost.

PAISLEY.—The Court passed plans for six blocks of three-story tenements at the junction of Inchinnan and Springbank roads; two bungalows at Balgair-drive, Arkleston, by Mr. J. Manwell.

PETERBOROUGH.—Plans passed: Four houses, Fairfield-road, for Messrs. Corner & Campion; house, Granville-road, for Mr. Ellington; house, Grange-road, for Mr. J. Robinson; house, Grange-road, for Mr. A. Maycock; house, Blinco-road, for Mr. Staniland; shops, &c., Mansion House site, for Mr. G. C. Fitzwilliam; compressor shed, Wagon works, for Moy's Wagon Co.; 2 houses, Dogsthorpe-road, for Mr. Jellings; 2 houses, Stone-lane, for Mr. Langsley; house, Alexandra-road, for Mr. J. A. Lee.—The B.S. is to prepare plans for as many houses as possible on sites at Orchard-street, Queen's-walk, and South View-road.

PLYMOUTH.—The T.C. recommend ten invited for the erection of houses in brick or various numbers up to a total number The T.C.'s Borough Surveyor submitted adapting "Stonehall," which the Counc decided to purchase, for the purpose of housing accommodation.

PONTEFRACT.—Plans passed: New slau at Newtown, for the Pontefract Industrial C Society, Ltd.; bungalow, Fairy-hill, for Mr

PORTSMOUTH.—The Camber and Dock recommends granting a lease to the Red Spirit Co., Ltd., of a site at the Camber, for t of a store.—Having interviewed Mr. Steph F.R.I.B.A., as to the provision of public abattoir accommodation, the Health Com called for the preparation of a detailed Electricity extensions to Hayling. Rowla Stubbington and Horndean are recommende of £39,000.—Plans have been approved fo struction of a wind screen on the pier, w to cost £1,100.—Plans passed: Re-building Fratton-road, for Messrs. Hobbs & Cestere bolton-road, for Mr. J. Brittan; 6 houses, road, for Mr. C. Brittan; two houses Priory-road, Milton, for Mr. C. Brittan; hous road, Cosham, for Mr. A. J. Chase; two ho come-road, for Messrs. E. & A. Sprigings; 184, Dover-road, for Messrs. C. W. Stiga business premises, High-street, Cosham, for Fritchley.

PRESTON.—Sanction is to be sought for s an additional 100 houses.—The Finance Com approved plans and estimates for the impro the river bank, at a cost of £27,000.

PURLEY.—Plans passed by U.D.C.; house road, for Mrs. Baddeley; club room, Lowe British Legion.

REDCAR.—The B.E. has approved plans fo tion of a new permanent council school at town, and are prepared to sanction the e involved, at an estimated cost of not more th Accommodation will be provided for 300 mixe and 136 infants.—The T.C. proposes to er fectious diseases isolation hospital near Te lane Marshes.

ROCHDALE.—Plans were approved for two Oldham-road.

ROSSINGTON.—The West Riding E.C. hav to build four houses for teachers of Rossingto school, at a cost of £3,175.

RUSHDEN.—Northampton C.C. is consid erection of a central school.

SANDERSTEAD.—Plans passed by U.D.C.: Arkwright-road, for Mr. W. L. Horwood Arkwright-road, for Mr. Wildman; tw Florence-road, for Mr. R. C. Barwood; house, for Mr. A. Rowsell.

SCALBY.—Plans passed: Two bungalow Hudson; bungalow, at Cross-lane, for Mr bungalow, at Cross-lane, for Mr. Waite; Mr. F. Dixon.

SEAHAM HARBOUR.—Premises at the re "Londonderry" Hotel are shortly to be rec —The Surveyor is to report as to the impro the drainage system from the Ropery subw dock.—A committee is to report on the a model lodging house.—The U.D.C. is see tion to grant subsidies for 54 houses to be er Princess-road.—The County Education Com decided to provide a new elementary scho enlarge the Upper Standard school.—In v necessity for alterations and extensions to t offices, negotiations are taking place resp adjoining premises.

SEDGEFIELD.—The R.D.C. has decided 300 houses.

SHARDLOW.—The R.D.C. propose rec Spondon Canal Bridge.

SHEFFIELD.—The trustees of the Brunswic Chapel are considering the question of ca a scheme for erection of new Sunday sch Yorkshire Penny Bank, Ltd., has acquire at the corner of Commercial-street and the H upon which they propose to erect a new bu A site has also been acquired by anothe company on the corner of Rockingham-stre Moor, upon which new banking premises erected.

SHILDON.—The U.D.C. is considering t bility of erecting a new rest house in the ground, or carrying out extensions to th building.

SHIPLEY.—The U.D.C. proposes the ere smallpox hospital at Heaton Royds, at £5,600. Plans passed: Pavilion, Thackle Windmill Cricket Club; 26 houses, Gaish Mr. Dalby; house, Glenview-road, for Mr. —It is proposed to purchase a house in Fa conversion into a Child Welfare Centre. Th is to prepared plans for houses on the estate, the lay-out allowing for 196 houses

SHREWSBURY.—The T.C. has prepared a the erection of 70 houses. A house is to at the waterworks at a cost of £600.

SIDMOUTH.—The U.D.C. is considering t of houses.

SKEGNESS.—The T.C. received plans for a of properties proposed to be erected on parade, comprising an auction mart, garage, shops, &c.

SOURTON.—The Devon E.C. is discussin managers a site for a new school.

SOUTHEND-ON-SEA.—Plans passed by Shop, Tyler's-avenue, Mr. Sims; house, road, A. Johnson; two shops, London-r Martin; shop, Scarborough-drive, A. J mission hall, rear of Bournemouth Park-ro of St. Mary the Virgin; two houses, 1 Southend-on-Sea Estates Co.; bungalow, S Park-drive, Miss A. Sargeant; bungalow, avenue, H. J. Manners; house, Western R. T. Howard; two houses, Silversea-drive,

es, Eastwood-road, Leigh. J. Snell; four
nsleigh-drive, G. Spurgeon; house, Bon-
enue. G. Wood; four bungalows, North-
A. Johnson; ten bungalows, Daines-close,
ay, F. W. Goldsworthy; four houses, Fair-
nue. G. Payne; two houses, The Ridgeway,
vard; house, Colbert-avenue, S. M. Derrick;
all. Bournemouth Park-road, Trustees of
ional Church; bungalow, Burlescombe-
W. Goldsworthy; two houses, Elm-grove,
umner; four houses and two maisonettes,
l-chase and Welsted-gardens, C. Neil; two
houses and six garages, London-road, A. D.
two houses, Hadleigh-road, Leigh, S. F.
two shops and houses, London-road, A. D.
three houses, Station-road, A. Hood.

ND.—The Manchester Consistory Court has
faculty for placing a reredos in St. Clement's

ORTH.—Plans have been prepared for a new
Chapel at Stainforth, at an estimated cost

CON.—The Borough Engineer has submitted
ate of £12,567 for the provision of new accom-
at the Isolation Hospital.—The question
ing a public abattoir has been discussed, and
cal Officer has been requested to supply
to cost.

ON-TRENT.—A foundation stone has been
onnection with the extension of St. Peter's
Infants' school.

ORT.—The superstructure of the large
generating station at Stourport, Worcs,
Shropshire, Worcestershire and Staffordshire
Power Co., is to be commenced shortly. The
ve been prepared by Mr. J. T. H. Legge, of
r House, Smethwick, the Company's Engineer,
. W. G. Little, 88, Kingsway, London, W.C.,
to the British Electrical Federation.

RLAND.—A commencement has been made
erection of a new parochial hall for St. Benet's
Sunderland. Mr. M. McGlynn, of Pallion,
nd, is the builder, and Mr. W. Dent, of 59,
-street, Sunderland, is the architect, and it
ed to erect a two-story building which will
billiard room, men's club, reading room,
ert room to accommodate 400, with dressing
d stage. The cost will be about £3,000.—
Dent has prepared plans for the alteration of
ric Theatre, South Hylton, Sunderland, into
hall.

-IN-ASHFIELD.—Notts County E.C. has
d a site at a cost of £1,568 for the erection
ndary school.

EA.—The T.C. Estates Committee is leasing
Sketty-avenue to the Trustees of Glamorgan
y, for the erection of a church.—Revised
to be prepared for the proposed central
The Libraries Committee is considering a
r the erection of a public hall and institute
fach.—Details are being considered regarding
for branch libraries at Landere, Mumbles
samlet.—Plans passed: Two houses, Tycoch
or Messrs. Rogers & Davies; bungalow,
hin-road, for Mr. R. B. Mansfield; bungalow,
hin-road, for Mr. E. A. Medland; bungalow,
state, for Mr. A. B. Fursland; bungalow,
state, for Mr. J. W. Holland; two houses,
t, for Mr. J. O. Watkins; two houses, St.
ad, for Mr. E. Davies.

EE—The U.D.C. have received the M.H.
o erect 30 further houses on the existing site
n. The Surveyor is to prepare and submit
e meeting, sketch plans of a suitable type
for erection in pairs, with an estimate of the
ouse.

—In connection with the Thirsk Institute
titute is to be erected, for which plans have
ared and tenders are to be invited.

DGE.—The U.D.C. approved the purchase of
age Green, Shipbourne-road, and the erection
es.

Y.—Plans approved by the T.C.: Pair of
eignmouth-road, for Mr. E. Lax; house,
drive, Mrs. Rexherd; house, Teignmouth-
F. B. Wilkins.—The T.C. has decided to pro-
the complete scheme of sea defence works to
ach.—The conveniences at the old Town Hall
combe Downs are to be reconstructed at a cost
-The B.S. has prepared plans for extensions
kitchens at a cost of £3,000.—Mr. G. H.
F.R.I.B.A., has been appointed architect
plans for the new school at Westhill.

TREDEGAR.—The L.M. & S. Railway Co. has informed the U.D.C. that it hopes shortly to commence building a new railway station at Tredegar. In addition, the Company is considering provision of better station accommodation at Nantybwch, and covered shelters at various workmen's platforms.

TYNEMOUTH.—A further instalment of the quay extension is to be carried out at a cost of about £12,000. The Housing Committee has authorised the preparation of plans for 24 blocks, each comprising four maisonettes of a superior character to be erected at Balkwell.

WAKEFIELD.—The T.C. is asking the M.H. to sanction 20 experimental houses costing £8,695.

WANDSWORTH.—The B.C. is arranging for the preparation of a lay-out plan, &c., for the development of land in Blackshaw-road. It is proposed to erect two-story self-contained flats.—The B.C. is to assume control of Streatham-green, and proposes to construct sanitary conveniences thereon, at a cost of about £2,400.—The B.S. has been authorised to carry out road works to cost £50,000.—The Cemeteries Committee is to secure designs and estimates for a shelter at the Putney Vale cemetery.—The B.C. is asking the L.C.C. to prepare a town-planning scheme for the area near the railway at Streatham.—The Housing Committee is formulating further schemes for the erection of houses on undeveloped housing estates.—Plans have been prepared for flats to be erected on land at Blackshaw-road.—Plans passed: Seven houses, Grove-road, for Messrs. R. Bilham & Son; house, Streatham-common, for Messrs. J. Potterton & Sons; four shops, Streatham-vale, for Messrs. Chapple & Fulford; four houses, Upper Tulse-hill, for Mr. W. H. Davies.

WARRINGTON.—In connection with the suggested extension of the Whitecross Poor Law institutions, the B.G. are negotiating with the Corporation for land in Lovely-lane.

WARWICK.—Plans passed by the T.C.: Two houses, Beauchamp-road, for Messrs. Crosbee & Atkins; house, Brook-street, for Mr. Alcock.

WATH-ON-DEARNE.—Application has been made to the M.H. for sanction to borrow £1,800 for the improvement of the water supply.

WEARDALE.—The R.D.C. has passed plans, submitted by Mr. Geo. Thompson, for the erection of an auction mart at St. John's Chapel.

WELLINGTON.—The U.D.C. passed plans: House, at Seymour-street, for Mr. E. Hookway; and a bungalow at Ford-street, for Mr. Gray.

WEMBLEY.—Another secondary school is to be erected.

WESTGATE.—Wiltshire C.C. has a scheme for the acquisition of the Leighton House grounds of 50 acres, and proposes to erect an institution for mental defectives. It is suggested that accommodation should be provided for 540 patients. The cost is estimated at £90,000.

WEST HARTLEPOOL.—The Corporation has received permission from the M.H. for the immediate erection of 100 houses on the Raby Estate.

WESTON-SUPER-MARE.—Formal consent of the M.H. had been received by the U.D.C. to the appropriation of four acres of land in Bridge-road for the erection of 50 workmen's houses. Plans and specifications were practically completed and the surveyor was instructed to obtain tenders.

WHITBY.—A scheme of extensions are to be carried out at the Council offices, at an estimated cost of £2,200.—Plans passed: Four houses at Stakesby; two pairs of semi-detached houses at Stakesby.

WHITLEY.—Plans passed: Two houses, Evesham-avenue, for Mr. Mather; house, Grange-park, for Mr. S. J. Short; three houses, Evesham-avenue, for Mr. J. M. Dawson; two houses, Uplands, for Mr. Dodsworth; house, Davison-avenue, for Mr. J. M. Dawson; house, Monks-road, for Mr. G. Wilkinson; house, Uplands, for Miss Minnis.

WILTS.—The E.C. propose subject to the approval of the C.C., to provide new elementary schools at Devizes (cost £10,500), Bradford-on-Avon (£4,050), Calne (£6,000), and Bratton (£2,430).

WIMBLEDON.—It is proposed to erect conveniences in Haydon's-road recreation ground and Garfield-road recreation ground.—A site is to be secured for the erection of a day nursery.—Plans passed: House, Dora-road, for Mr. R. Sharp; house, Conway-road, for Messrs. Whitehead & Co.; house, Cottenham Park-road, for Mr. Walker; house, Ridgway, for Mr. A. V. Farrier.

NEW BUILDINGS

Wembley.—Building operations are in progress in connection with the new Wesleyan Methodist Church at Wembley. The new building has been designed to seat about 600, and will be carried out in brick, relieved with stone dressings for windows, door linings, &c. The floors will be of wood blocks, whilst a heating and electric lighting system will be installed. The contractor is Mr. Thos. Shillitoe, of 3, Electric-parade, London, N.3. The architect is Mr. A. E. Lambert, of 28, Park-row, Nottingham.

Westcliff-on-Sea.—A new church and school are to be erected at Crowstone, for the local congregational community. The edifice will be built of local brick with stone dressings, and will accommodate about 500–600 persons. The architects are Messrs. George Baines & Son, F.R.I.B.A., of 121, Victoria-street, London, S.W.1. The builders are Messrs. J. Jarvis & Sons, Ltd., of 8, Wormwood-street, London, E.C.2.

Bushey, Herts.—The governors of the Royal Caledonian School at Bushey, Herts, have under consideration the erection of additional buildings in order to augment the recreation room and workshop facilities of the school. The new premises will be erected to a design in conformity with the present buildings, and the plans are now being prepared. The architect is Mr. F. W. Troup, F.R.I.B.A., of 14, Gray's Inn-square, London, W.C.1.

A NEW ROADLESS TRACTOR

AT a largely attended demonstration at Shrewsbury last week, the capabilities of a new production of the "Sentinel" Waggon Works, Ltd., a roadless tractor, was shown in a practical manner. The tests carried out showed the tractor surmounting tree trunks, going up inclines, through ponds, and hauling on a muddy and slippery road. As a timber hauler, its usefulness was demonstrated by a cinema display, in which the tractor was seen loading and hauling felled timber through a slippery and muddy woodland, where a grip of the surface appeared impossible. Colonel Clarke explained the mechanism of the tractor, and the following tests were undertaken: Demonstration of tractor drawing a large load; climbing and descending steep hills; slow demonstration of the movement, of the tracks, and control of the vehicle; demonstration of silence of tractor on hard roads; going through ponds; demonstration of the action of the track in swallowing up obstacles and the swivelling action of the front axle; demonstration of turning radius and of drawback pull, by means of a dynamometer. The whole of the tests, though severe, were successful. The tractor is 7½ ft. long. Illustrated and descriptive booklets of the technical details of this new "Sentinel Roadless" Tractor can be obtained from the Sentinel Waggon Works, Ltd., Shrewsbury.





A New Roadless Tractor.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.
Fjettons, at King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose ..	3 8 3
Best Stourbridge Fire brick:— 2½ in.	8 11 0
GLAZED BRICKS— Best White Ivory, and Salt Glazed Stretchers ..	23 0 0
Headers	22 10 0
Quoins, Bullnose and 4½ in. Flats	29 10 0

	£ s. d.
Best Stretchers	3 0 0
D'ble Str'tch'rs	31 10 0
D'ble Headers	28 10 0
One Side and one End ..	32 10 0
Two Sides and one End	33 10 0
Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	3 9	" "
Thames Sand	14 6	" "
Best Washed Sand	14 6	" "
⅜ in. Shingle for Ferro-Concrete	12 9	" "
½ in.	14 0	" "
⅜ in. Broken Brick	11 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6

51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement (water proof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. 2, d. 9½

Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube 2 11½

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4

Do. do. delivered on road wagons at above stations, per ft. cube 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) ..... Per Ft. Super	5 6
6 in. rubbed two sides, ditto ..... "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks ..... Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) ..... Per Ft. Super	5 1½
	6 1½
6 in. rubbed two sides ditto ..... "	2 10
4 in. sawn two sides slabs (random sizes) "	2 1½
3 in. ditto. ditto "	9 0
2 in. self-faced random flags .. Per Yard Super	

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	.... £32 0	3 × 6	.... £23 0
4 × 9	.... 28 0	3 × 11	.... 28 0
4 × 8	.... 26 0	2 × 11	.... 28 0
4 × 7	.... 26 0	3 × 9	.... 26 0
3 × 8	.... 24 0	2½ × 9	.... 26 0
3 × 7	.... 23 0	3 × 4½	.... 24 0
2½ × 7	.... 23 0	3 × 4	.... 24 0

PLANED BOARDS.

1 × 11 .... £34 10 1 × 9 .... £32 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/-	1¼	32/6
¾	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
⅝	16/6
¾	20/-
1	25/-

BATTENS

Inches	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

	s. d.
Per bundle	0 2 6

Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2 6
⅜ in. do. do.	0 1 6	to	0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6
Cuba Mahogany	0 3 0	to	0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0	to	—
American Whitewood planks, per ft. cube ..	0 12 0	to	0 14 0
Best Scotch Glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt. ..	4 7 0	to	5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ½ in...	13 10 0
⅜ in.	14 10 0	¾ in. to 2⅜ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ⅜"&up. ½"to¾" inclusive.	Fittings. ¾"&up. 1"to1½" inclusive.	Flanges
Black Gas....	50 %	50 %	47½ %	60 %
Blue Water ..	45 %	45 %	42½ %	55 %
Red Steam ..	40 %	40 %	37½ %	50 %
Galv'd Gas ..	35 %	40 %	37½ %	50 %
" Water.	28¾ %	35 %	32½ %	45 %
" Steam	22½ %	30 %	27½ %	40 %

Black Gas....		57½ %		
Blue Water ..		52½ %		
Red Steam ..		47½ %		
Galv'd Gas ..		47½ %		
" Water.		42½ %		
" Steam		37½ %		

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2¾	3½d.
3½ in.	1/6½	1/2¾	3½d.
4 in.	1/7¾	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. "	6 3	6 8	11 4
5 in. "	7 6	11 6	18 2
6 in. "	8 10	14 4	23 5

IRON—	Per ton in London. £ s. d.	£ s. d.
Common Bars	13 10 0 to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0 ..	15 10 0
Staffordshire "Marked Bars"	17 0 0 ..	18 0 0
Mild Steel Bars	12 0 0 ..	13 0 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..
Hoop iron, basis price	16 10 0	..
Galvanised	31 0 0	..
Soft Steel Sheets, Black— Ordinary sizes to 20 g...	14 10 0	..
" " " 24 g...	15 10 0	..
" " .. 26 g...	17 10 0	..
Sheets Flat Best Soft Steel, C.R. & C.A. qual Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 0 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0	..
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0	..
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0	..
Best Soft Steel Sheets, 26 g.	26 0 0	..
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pai coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up	
Pipe in coils	
Soil Pipe	
Compo pipe	
NOTE—Country delivery, 30s. per ton extra; 3 cwt., 2s. per cwt. extra and over 3cwt. an cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s.	
Old lead, ex London area, at Mills ..... per ton	35 0 0 ..
Do., ex country, carriage forward ..... per ton	36 0 0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB C IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 i
29/	45/-	76/-	153/-	246/-	510/

NEW RIVER PATTERN SCREW DOWN STOP C UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/-

NEW RIVER PATTERN SCREW DOWN MAIN

¼ in.	¾ in.	1 in.
39/6	60/-	116/6 per do

CAPS AND SCREWS.

1½ in.	1¾ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/-

NEW RIVER PATTERN CROYDON BALL VALVE

¼ in.	¾ in.	1 in.	1¼ in.	1½ i
35/-	56/-	98/-	162/-	228/-

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

	1½ in.	1¾ in.	2 in.	3
8 lbs. P. traps ..	33/-	41/-	56/-	101
8 lbs. S. traps ..	35/-	45/-	66/-	126

COPPER—	£ s. d.	
Strong Sheet ....per lb.	0 2 3	..
Thin " .... "	0 2 4	..
Copper nails .... "	0 2 3	..
Copper wire .... "	0 2 4	..
TIN—English Ingots "	0 2 6	..
SOLDER—Plumbers' "	0 1 2	..
Tinmen's ..... "	0 1 4	..
Blowpipe ..... "	0 1 5	..

PAINTS, &c.

Raw Linseed Oil, in pipes .....per gallon	
" " " in barrels .... "	
Boiled .. " in drums .... "	
" " in barrels .... "	
" " in drums .... "	
Turpentine in barrels ..... "	
" in drums (10 gall.) "	
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's, "Spedol" and other best brands (1 14 lb. tins) not less than 5 cwt. lots per ton delivered	
Red Lead, Dry (packages extra) ....per ton	
Best Linseed Oil Putty .....per cwt	
Filocol .....per cwt	
Size, XD Quality .....firk	

[Continued on next page.]

"The information given on this page has b compiled for THE BUILDER and is copyright. this list is to give, as far as possible, the a of materials, not necessarily the highest or lov and quantity obviously affect prices—a fact be remembered by those who make use of this

CURRENT OF MATERIALS (*contd.*)

GLASS.

SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
rths ..	3¾d.	32 oz. fourths	8¾d.
rds	4¾d.	32 „ thirds	10¾d.
rths ..	5d.	Obscured Sheet, 15 oz.	4d.
rds	6¼d.	„ 21 „	5¾d.
rths ..	6d.	Fluted 15oz. 6¾d., 21oz.	9¾d.
rds	7¾d.	En'lled 15oz. 5¾d., 21 oz	7¼d.

e according to size and substance for squares n stock.

ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
plate	4¼d.
rolled	5¾d.
rolled	5¾d.
d Rolled, Baltic, Oceanic, Arctic, Stip-te. and small and large Flemish white ..	6¼d.
itto, tinted	9d.
Sheet	6d.
Rolled Cathedral	5¼d.
do.	7¾d.

t Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
lish	Outside	0 14 0
.....	ditto	0 16 0
al	ditto	0 18 0
al	ditto	1 0 0
al Carriage	ditto	1 4 0
o	ditto	1 12 0
rnish	Inside	0 18 0
Paper	ditto	0 18 0
al Cabinet	ditto	1 2 6
al Flatting	ditto	1 0 6
ing Oak	ditto	0 18 0
d Drying Oak	ditto	0 19 0
al Varnish	ditto	1 0 0
o	ditto	1 2 0
o	ditto	1 12 0
n Gold Size		0 10 0
k Japan		0 10 6
Mahogany Stain (water)		0 12 0
Black		0 7 6
ck		0 14 6
(patent)		1 5 0
d Brush Polish		0 17 0
yers in Terebine		0 9 0
ack Enamel		0 7 0

PATENTS

APPLICATIONS PUBLISHED.*

—P. Kavanagh: Means for detaching articles to floors.
—E. C. R. Marks (Wiggin's Sons Co.): nd a process of controlling the setting an accelerator therefor, and a process such accelerator.
—W. H. Clegg and G. Whittaker: re of artificial stone or marble and the on of articles therefrom.
—T. F. Bailes: Cranes.
—D. M. Findlay: Strengthening or wood, and wood compositions.
—J. Lyons & Co., Ltd., and C. F. urniture castors.
—Chatwood Safe Co., Ltd., and H. S. : Strong-rooms.
—W. A. Hiscox: Device for drying e.
—Doulton & Co., Ltd., and G. lf-closing lavatory tap.
-A. Rosa: Machine for making
-G. Petrie, and Petrie & McNaught, ing systems.
-E. Dixon (P. Claxton): Fastenings d boxes.
-R. G. Cottier: Machine or device ricks in building operations.
-G. W. Berry and Berry Hinge, Ltd.: of hinges of the flat or plate kind.
-J. J. Rawlings and Rawlplug Co., lar plugs for walls.
-J. Lyons & Co., Ltd., and J. Crook: ables.
-F. K. Kayte: Seat adjustments.
-E. A. Smith: Building of concrete e for dwelling-houses.
G. W. R. Nobel: Concrete blocks
-C. Carnes: Pre-cast concrete build-
-W. H. W. Idris: Method of making nnis courts.

applications are now in the stage in on to the grant of Patents upon them

THE SCOTTISH BUILDER

GLASGOW ACADEMY WAR MEMORIAL

The Glasgow Academy War Memorial, which has been erected at the junction of Colebrooke-street and Great Western-road, was unveiled on November 11. The memorial is the third and final instalment of the scheme, which embraced the endowment of the school, the erection of panels within the school containing the names of those who died on service, and the incorporation of a memorial in the enclosing wall of the grounds bearing a commemorative inscription. The unveiling was performed by Colonel Sir Robert C. Mackenzie, chairman of the governors. The memorial is incorporated in, and forms a prominent feature of the school wall at the western angle on Great Western-road. From the piers at each end the wall sweeps inward in crescent shape to a large dedication panel forming an elevation in the wall. The panel is surmounted by a frieze, on which is carved a memorial wreath. Fluted pilasters are placed on each side bearing the palm branches of victory and the dates of the foundation of the school and its reconstitution, 1845 and 1923. The memorial was designed by Mr. A. N. Paterson, of Messrs. Paterson & Stoddart, architects, Glasgow.

Dalkeith High School.

Midlothian is about to spend £16,500 on extensions to Dalkeith High School, making provision for housecraft, handcraft, chemistry, physics, art, gymnasium, and staff rooms.

Glasgow Housing.

At a recent meeting of the Glasgow Dean of Guild Court authority was given for the erection of about 380 additional houses in the city. An important application was by the Corporation, and had reference to the extension of their Hamiltonhill scheme by 350 tenement houses of two and three apartments, with scullery and bathroom.

LEITH DOCKS

Plans of dock extension on the lines of the Commissioners' decision of last February were generally approved at a recent meeting of the Leith Dock Commission. The plans show several changes on the previous ones. In a report Mr. A. H. Roberts, M.Inst.C.E., the Docks Engineer, stated that under the plans the breakwater would be 400 ft. longer than was proposed under the 1913 Act authorising extension An additional ten acres of space would thus be secured. There would be 17 acres of water space in the first instalment of the proposed dock. Of the total area to be reclaimed about eight acres would lie to the westward and about 34 acres to the south and east of the new dock. To the south a lagoon would be left to be gradually reclaimed by deposits of dredgings in preparation for the ultimate completion of the northern arm of the dock. General estimates prepared showed that the breakwater would cost £426,000, and that the dock works might be carried out for about £655,000, the existing borrowing powers—£1,200,000—would, therefore, be sufficient to cover the work of the next ten years.

Alloa's New Post Office.

A commencement has recently been made with the clearing of the site at Mansfield, Bedford-place (opposite the War Memorial), for the erection of a new Post Office for Alloa. The new Post Office will be of one story to the front, with under-buildings behind, and the cost is estimated at between £6,000 and £7,000. Mr. R. M'Gee, builder, Tillicoultry, is the contractor for the whole of the work.

Fettercairn Fire.

Damage estimated at between £2,000 and £3,000 was done in the courtyard of Fettercairn Distillery recently. A large wooden building, measuring 120 ft. by 80 ft., was completely destroyed.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Masons' Labourers.	Plasterers' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Kirkwall	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0	
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 834.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0	
Do. joists	" "	5	6	
Do. roofs, floors and partitions	" "	6	0	
Do. trusses	" "	8	6	

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"	1½
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/7	1
Deal shelves and bearers	"	1/4	1
Add if cross tongued	"	2d.	2

STAIRCASES.

		1"	1¼"	1½"	2
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	-
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2

Housings for steps and risers		ea
Deal balusters, 1 in. × 1½ in.	per ft. run	
Mahogany handrail; average 3 in. × 3 in.	"	"
Add if ramped	"	"
Add if wreathed	"	"

FIXING ONLY IRONMONGERY (INCLUDING SCREWS

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges letting in to floor	
Casement stays	1/2		
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	per c
Plain compound girders	"
Do. stanchions	"
In roof work	"

RAIN-WATER GOODS.

		3"	4"	5
Half-round plain rebated joints	ft. run	1/11	2/4½	3
Ogee Do. Do.	"	2/4½	3/1	3
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3
Do. nozzles for inlets	"	2/2	2/7	3

PLUMBER.

Milled lead and laying in flashings and gutters	per sq	
Do. Do. in flats	"	
Extra labour and solder in coated cesspools	each	
Welt joint	per ft r	
Soldered seam	"	
Copper nailing	"	

		½"	¾"	1"	1½"	2
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					3/
Bends in lead pipe	each					3/
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/
Red lead joints	"	11d.	1/-	1/3	1/11	2/
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/
Lead traps and cleaning screws	"				14/7	19/
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard s
Do. Do. Sirapite	" "
Do. Do. Keen's	" "
Add sawn lathing	" "
Add metal lathing	" "
Portland cement screed	" "
Do. plain face	" "
Mouldings in plaster	per 1 girt
One-and-a-half granolithic pavings	per yard s

GLAZIER.

21 oz. sheet plain	per foot s
26 oz. Do.	" "
Obscured sheet	" "
⅛ in. rolled plate	" "
¼ in. rough rolled or cast plate	" "
¼ in. wired cast plate	" "

PAINTER.

Preparing and distempering, 2 coats	per yard
Knotting and priming	" "
Plain painting 1 coat	" "
Do. 2 coats	" "
Do. 3 coats	" "
Do. 4 coats	" "
Graining	" "
Varnishing twice	" "
Sizing	" "
Flatting	" "
Enamel	" "
Wax polishing	per foot s
French polishing	"
Preparing for and hanging paper	per piece

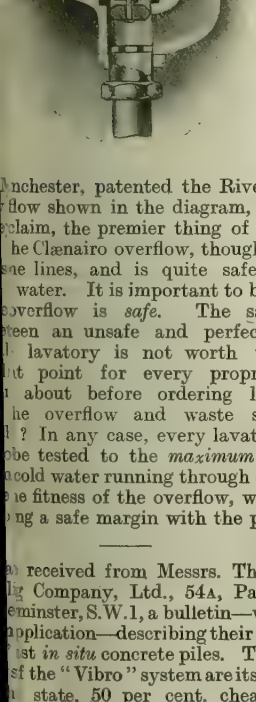
* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment or percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The wi

information given on this page is copyright.

TRADE NEWS

The Riverina Overflow.

vatory overflow and waste are the centre of the lavatory. On them he safety, sweetness, and cleanliness aratus. But there are more insanitary d overflows on the market than of the l cleanly ones. The accessible safety is very simple to construct, although re costly, but it is easily cleansed and et, fresh air passing throughout; t can be periodically cleansed with a rush. Nearly twenty-eight years ago lorrison, Ingram & Co., Ltd., of Hygeia



nchester, patented the Riverina cir- flow shown in the diagram, and it is claim, the premier thing of the kind he Clænairo overflow, though oval, is ne lines, and is quite safe for any water. It is important to be certain overflow is *safe*. The saving in ween an unsafe and perfectly safe, lavatory is not worth the risk. nt point for every proprietor to about before ordering lavatories he overflow and waste safe and ? In any case, every lavatory fixed be tested to the *maximum* pressure cold water running through ½-in. taps e fitness of the overflow, waste, and ng a safe margin with the plug in.

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received from Messrs. The British g Company, Ltd., 54A, Parliament- eminster, S.W.1, a bulletin—which can pplication—describing their system of st *in situ* concrete piles. The princi- sf the "Vibro" system are its economy state, 50 per cent. cheaper than of pre-cast concrete piles); its 40 ft. pile can be completed in one the solidity and uniformity of the ed. These are cast *in situ* and are d into the ground throughout their ids are impossible. Every pile is, a perfect column of compressed, solid d all guess-work is eliminated. The t in the ground the required depth, o the mode of casting, fit the holes y perfectly. It is unnecessary to rehand what depth of piling is d "Vibro" piles can be driven to and need not be reinforced. "Vibro" be damaged in driving; a valuable n.

---

received from Messrs. Clark, Hunt Shoreditch, E.1, a brochure which summary of the growth and present business from 1828–1924, nearly ars of continual progress. Starting may say so—the humble origin of a monger, it has developed into an organisation which includes general builders' ironmongery of every description. A visit to this well-known house is certainly the only way fully to realise its potentialities.

Messrs. Jenson & Nicholson, Ltd., Goswell Works, Stratford, E.15, send us a manual on the treatment of damp walls. Those who have had trouble with this difficult problem will be interested in the notes on the preservation of masonry, brickwork, and cement work, &c. Their preparations are made for both inside and outside use, and although the most effective way of treating a damp wall is by prevention, it often happens that such a course is not practicable. Their object in issuing this booklet is to assist those engaged in the prevention and cure of damp in selecting the right material for the particular work in hand. "Nepthlene," "Fossolite," "Sealite," and "Anti-dampine," are all preparations specially manufactured by this firm with this object in view.

Messrs. Perkin & Co., Ltd., Leeds, inform us they have recently fitted up a travelling workshop containing Spindle Moulder, &c., which they are sending round the country demonstrating their "Rapid" Stair Housing Attachment. The appliance is designed, primarily, for the economical production of stair housings, and on this particular work shows a saving in time, they state, of 90 per cent. against hand work, as well as a very much better finish and greater accuracy. A pair of strings, which would take a capable joiner eight hours to mark off and trench by hand, may be completed in thirty minutes with practically no marking off or previous preparation. The cost of the apparatus, it will be seen, is therefore saved in the production of less than twelve staircases. It consists of an adjustable graduated templet which may be readily set to trench stair strings between the limits of 5 in. to 9½ in. rise and 7 in. to 12 in. tread. The templet is designed to do a pair of strings, *i.e.*, R.H. and L.H., without resetting, thus ensuring perfect matching of the two strings, besides saving the operator's time.

OBITUARY

THE death occurred recently, at Westbrooke, Hexham, of Mr. Samuel Andrew Short, aged 61, founder and head of the firm of Messrs. Samuel A. Short & Son, builders' furnishers hardwaremen, and joinery tool warehousemen, of Newcastle.

The death has occurred of Mr. William Edward Isaacs, builder and contractor, Sketty (Glam), at the age of 48 years.

Mr. Thomas Evans, builder, Penlline-road, Whitchurch (Glam), has died at the age of 61 years.

The death has taken place of Mr. John Pritchard, Brynterion, Risca, Mon, builder. He built a number of municipal offices and churches in the area.

Kirk Sandall Church Hall.

A new church hall, erected at a cost of £3,500, was recently opened at Kirk Sandall by Lord Cozens Hardy. The joint architects of the hall are Professor Abercrombie, of Liverpool, and Mr. T. H. Johnson, of Priory-place, Doncaster. It is constructed of rustic-faced bricks which were made at Messrs. Pilkington Bros. brickworks, at St. Helens. There are stone dressings, and a red tiled roof, surmounted by a bell cote. The hall has seating accommodation for 250 people, and provision has been made for a gallery to be inserted at a future date. Electric lighting has been installed, and the current will be obtained from Messrs. Pilkington's works. There is a low pressure hot water system of heating. The contractors for the building were Messrs. Johnson & Moore, of Balby-road, Doncaster.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ALLOA.—For erection of a new Post Office at Mansfield, Bedford-place, for H.M. Office of Works:—
*R. M. Gee, Tillicoultry £7,000

BACKFORD.—Canal bridge reconstruction, for Cheshire C.C.:—
Ferro-concrete—
*W. H. Brocklesby, Birkenhead.. £2,527 19
Steelwork—
*Joseph Parks, Northwich 1,108 0

BARNT GREEN.—Storm water overflow, for the Bromsgrove R.D.C.:—
Wm. Thorpe, Hollywood £502 8 0
Geo. Macdonald, Hunt & Co., Ltd., Harborne..... 478 19 8
Edward Woodward, Rubery 454 9 0
C. G. Huins & Sons, Redditch.... 450 0 0
Tilt Bros., Bromsgrove 448 7 6
*J. & A. Brazier, Bromsgrove 367 11 6

BRIERLEY HILL.—Laying out new cemetery:—
Geo. Macdonald, Hunt & Co., Ltd., Harborne £2,472 17 4
*W. H. Rogers, Wolverhampton 2,387 8 6

BROMSGROVE.—For erection of a market hall, for the U.D.C.:—
*Jas. A. Brazier, Ltd..... £7,600

BROXBOURNE.—For rebuilding bridge, for the Hertfordshire C.C.:—
W. & C. French, Buckhurst Hill £2,369 16 3
P. R. Paul, Waltham Abbey .. 1,977 2 2
*A. E. Farr, London 1,705 11 6

BUCKLOW.—For construction of 337 yards of 9 in. stoneware pipe sewers, for the R.D.C. Mr. R. C. Cordon, surveyor, 25, Station Buildings, Altrincham:—
*Smith & Briggs, Ltd., Manchester .. £449

BURY.—For erection of four houses, for the St. Edmunds T.C.:—
*Sewell £1,770

BUXTON.—For erection of 14 houses, for the T.C.:—
*R. Kershaw & Sons..... £521 per house

BUXTON.—For erection of 11 houses, for the T.C.:—
*T. Lowe & Sons ..... £521 per house

CAERPHILLY.—For erection of a ferro-concrete bridge over the River Rhymney at Pontypandy Farm, for the U.D.C.:—
*Watkin Williams..... £350

CANTERBURY.—For extension of the buildings at the Electricity Works, for the T.C.:—
*Dadds £1,286

CROOK.—For superstructure of new class-rooms for infants at Sunniside Council school, for the Durham C.C.:—
*Walton Bros. £697 15

DURHAM.—Construction of bridge parapets, for C.C.:—
*Messrs. Carron & Co., Falkirk—
Lambton Bridge £1,343 14 0
Croxdale bridge..... 1,421 5 6
Axwell Park bridge 872 12 0

GLASGOW.—Additional accommodation at Mearnskirk Sanatorium, for T.C.:—
Slater's Work—
‡Chas. Wilson £3,530 11 4

GLASGOW.—Painter work at Patrick Library, for T.C.:—
*Macfarlane & Smith..... £437

GLASGOW.—Engineering work at the Whiteinch Baths, for the T.C.:—
‡George Monro £6,999 5

GREENOCK.—For deepening and improving of Garvel Graving Dock, for the Harbour Trust:—
*Brins & Co., Newcastle.

HARWICH.—For erection of sub-stations, for the T.C.:—
‡Fisher & Woods £700

HOLYWOOD.—Construction of water storage tank at the Sanatorium, for the Durham C.C.:—
‡G. J. Gibson, Middlesbrough.... £898 10 10

HOUGHTON-LE-SPRING.—For erection of a secondary school, for the Durham C.C.:—
*A. V. Clercy, Sunderland £18,899

HUNGERFORD.—For erection of eight cottages, for the D.C. :—
*J. T. Gibbs ..... per house £405

HUNGERFORD.—For erection of six cottages at Eastbury, for the D.C. :—
*J. Wooldridge & Son .....per house £435

LITTLE DOWNHAM.—For construction of a pumping station, for the Littleport and Downham Drainage Committee. Mr. E. J Silcock, engineer, 25, Victoria-street, S.W. 1 :—
*S. S. Ambrose & Son, Ely..... £4,650

LONDON.—For terrazzo flooring at Limehouse generating station, for the Stepney B.C. :—

W. B. Simpson & Sons.....	£353 10 0
Art Pavements & Decorations, Ltd.	342 12 0
Jos. F. Ebner	334 19 6
McIvor & Sons, Ltd.....	333 8 6
*Fennings & Co., Ltd.....	307 4 6

(All of London.)

MANCHESTER.—Widening the Slade-lane bridge over the L.N.E.R., for the T.C. :—
*Thomas Wrigley.

NORTH SEATON.—For construction of a new steel viaduct, for the L. & N.E.R. Co. :—
*The Cleveland Bridge & Engineering Co., Ltd., Darlington.

PERIVALE.—For construction of a bridge over the Brent for the Middlesex C.C. :—
*Holloway Bros., Ltd. £6,302

PONTEFRACT.—For the erection of a workshop and store at Airedale, for the R.D.C. :—
*E. Cockshaw £150

PORTCHESTER (HANTS.).—For erection of bungalow, for Mr. James Hatch, Mr. S. E. White, architect, 73, Waverley-road, Southsea :—

Juniper & Coombes, Portsmouth.....	£1,811
John Lay & Co., Portsmouth	1,515
M. Coghlan, Southsea	1,481
*G. Harmer, Portchester	1,395

(*Accepted subject to modification.*)

SHILBOTTLE.—For erection of a Council School at the Colliery, for the Northumberland E.C. Mr. C. Williams, Director of Education, The Moot Hall, Newcastle-upon-Tyne :—
*T. Lumsden, Newcastle-on-Tyne..... £6,890

SHIPLEY.—For erection of a Post Office and Telephone Exchange, at Otley-road, for H.M. Office of Works :—
*Wm. Irwin & Co., Ltd., Leeds.

SMETHWICK.—For erection of a garage, for the T.C. :—
*W. Jackson, Oldbury..... £335

SOUTHEND-ON-SEA.—For erection of 43 bathing huts and eight pay-boxes, for the T.C. :—
Borough Engineer..... £2,328

SOUTHEND-ON-SEA.—For erecting concrete platforms, for the T.C. :—
*W. J. Cearns £2,328

WALLASEY.—For erection of 56 houses on Poulton-road and Surrey-street sites, for the T.C. :—
‡The Dawson Housing, Ltd., Birkenhead £28,400

WARE.—For erection of a house for the Medical Superintendent of the Hertfordshire C.C., at the Ware Park Sanatorium :—
*H. Norris & Son, Hertford £2,526

WEST STANLEY.—For internal and external and renovation of Alderman Wood secondary school, for the Durham C.C. :—
*Weddall, Hindmarsh £389 15

YORK.—For painting various places, for the T.C. :—
*T. Oxtoby & Son..... £334 1 9

YORK.—For painting of certain properti
to the T.C. :—
*J. Dodsworth & Sons £21

Italian Building.

Signor Mussolini has recently ap
a scheme for the construction in R
edifice "to the glory of Fascism,"
proposed to name "The Eternal."
ing, which will be over 900 ft. high,
an hotel, a theatre, a concert hall,
in-gallery, &c. The building, for wh
has not yet been chosen, will, it is s
four hundred million lire (nearly £3,9


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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

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ARCHITECTURE AND THE SOCIAL STATE

THE inaugural paper—of which we gave an abstract—delivered at the Architectural Association by the President, Mr. H. S. Goodhart-Rendel, provides an excellent example of that form of criticism which is necessary to preserve a healthy state of mind. His Yesterday and To-morrow," has a significant meaning : challenge to those who believe in architectural free will. areful reading of this thoughtful paper makes it clear to the difficulties confronting the architectural critic are understood by those who clamour for sparkling criticism. in agreement with him when he says that what yesterday e, was done too lately for us to see it dispassionately. age, we suppose, finds the age which has immediately d it the hardest of all to understand, and therefore it. We quote Mr. Richard Middleton from " The Day Yesterday " : " Of all the intellectual exercises with e solace the idle hours that we devote to thought, none engaging and at the same time perplexing than that of uring to form a clear conception of the age in which Naturally, the difficulty lies, not in lack of materials h to base an impression—indeed, we are embarrassed uality of evidence that accumulates to our hands—but ct that it is hard to see things in true perspective when very near to the observer."

itecture, in spite of its great name, may have had ncy to become stereotyped and monotonous in its rds and formulas, and it is evident that its claim to eriority, moral and intellectual, over the other develop- mankind should not be allowed to become rigid. It ore, essential that the architect should be on his guard the conventional or negative outlook ; he should ır to see life steadily, and see it whole. Criticism is y stimulant, and critics of architecture will appreciate l and audacity of Mr. Goodhart-Rendel, whilst g the rightness of most of his judgments. He serves criticism equally to the architect and to the public. ares what the public wants with what the architect e the public to want, and by inference we assume that ulties are to arrive at how far the architect must ise, or by what means he can persuade the public to m.

n interesting line of thought to ascertain whether the of architecture is ahead of the public, or the social such a thing can be imagined), and how far it is itself to social conditions. That there is a powerful nd the architect and architecture is certain, but if we s as a fact we have not yet defined the position of the in the modern state. Architecture, in its broadest ne of the most important factors in social life, but it to say whether it is an absolute expression of the spirit e, or something better. We deplore the loss of old eet, but if we inquire into the social state we find quiet, graceful and dignified street was produced by puted to be the flashiest and most vulgar in Europe. it difficult to reconcile the well-bred grace of the archi- th a profligate and ostentatious age, we are forced to t to John Nash and his architect friends. Similarly, ult to say that the new buildings are indicative of s and uncertain age (they are probably much better), safe in saying that they indicate a radical change in state.

Mr. Goodhart-Rendel criticises the buildings in Regent-street from the architectural standpoint, but, apart from any architectural lapses, it appears to us that it is the social problem which has played havoc with the charm of the old street. The buildings are higher ; they jostle and compete with each other ; and the ragged skyline no longer permits of the beautiful play of light and shade on the delicate modelling of planes and curved surfaces. We feel that the street is narrower, that it is no longer a sunny thoroughfare. There are several matters for serious reflection concerning Regent-street. The perishable nature of Nash's buildings gave rise to the well-known quatrain from the *Quarterly Review*, but it is apt to be overlooked that these stucco buildings lasted so long (yet less than a century), that they had to be torn down to make way for another age with different needs and wants. In the new buildings Portland stone has been substituted for plaster, but an appearance of permanency has only a relative value when we cannot prophesy what posterity will demand. Again, one of the great advantages which Regent-street possessed was that it was designed and carried out under an Act of Parliament which aimed at making one of the most beautiful streets in Europe. Practically the whole of the land is Crown property, and we understand that the Commissioners of Woods and Forests pass all designs and lay down any restrictions they desire. It is, therefore, reasonable to assume that the general lines of the old buildings could have been maintained had the desire been there. Short of this, there are those who think that the Crown supervision has not produced a better result or more uniformity of design than can be seen in many other streets where the ownership of the land is in different hands. The broad fact is, we are dealing with a social problem involving the demands of the public, the shopkeeper, and the lure of increased land values. It is one of the paradoxes of civilisation that the fascination of the shops has led us to destroy what was a fascinating shopping street. Whether the new Regent-street is a better shopping street is open to question ; it is a street of large shops instead of small shops, and instead of architectural unity we have a hundred separate entities. The architect, if he is not powerless in these matters, is compelled to work within certain well-defined limits, and in expressing a phase of civilisation which he may dislike he is all the time striving to make it appear better than many people would consider it deserves. It is, perhaps, a forgivable weakness to wish that the Crown authorities had made the financial sacrifice which we would never entertain as individuals.

There are those who maintain that the high-water mark of excellence in certain forms of architectural design was passed somewhere about the eighteenth century, yet they would not deny that we might reasonably look for a better result in Regent-street were it now only being considered, instead of being completed. Kingsway, as a whole, is decidedly a finer street (considering its purpose) than we would have expected from the standard of architectural design, say, forty years ago. We believe that the architects of to-day have a surer grip of fundamental principles, and that they do their best to embody certain essential qualities inherent in all good architecture. And this at a time, be it remembered, when the condition of the social state is considered by many to be unfavourable to the production of great architecture. We have left the period behind when there might have been some analogy between architecture and this parody on literature from the *Referee* :—

" Little bits of Walpole,
Little drops of Dell,
Scattered over England,
Pay extremely well."

NOTES.

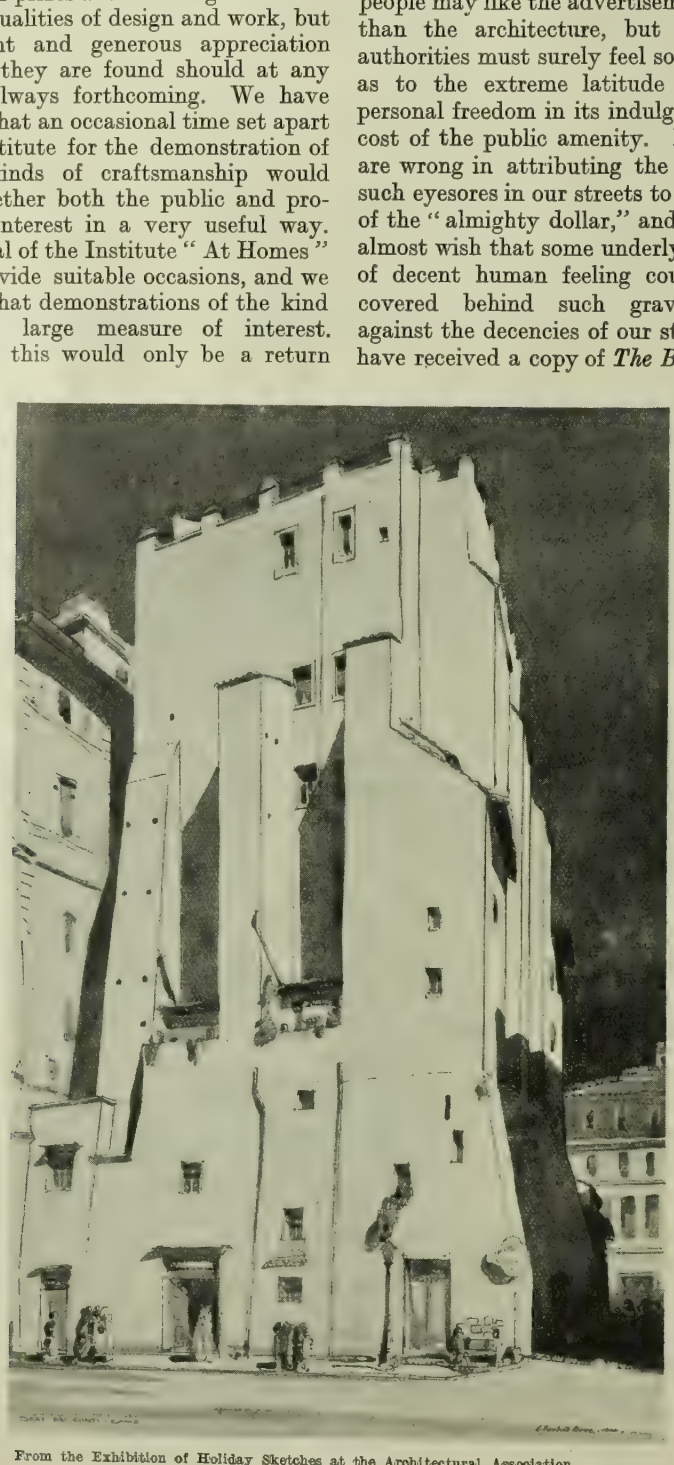
Craftsmanship. THAT the proper understanding of craftsmanship is of the first importance to architects none can deny, and it is therefore with pleasure that we note the special efforts which are being made by the R.I.B.A., on the initiative of the Art Committee, to concentrate thought on means for the better study and encouragement of sound craftsmanship. We cannot provide the instinct of good design in the crafts, but we can encourage and develop it wherever it is found, and we can at least provide sound teaching on the technical and practical side. It is doubtful how far prizes and awards go to stimulate fine qualities of design and work, but a constant and generous appreciation wherever they are found should at any rate be always forthcoming. We have long felt that an occasional time set apart at the Institute for the demonstration of various kinds of craftsmanship would bring together both the public and professional interest in a very useful way. The revival of the Institute "At Homes" would provide suitable occasions, and we are sure that demonstrations of the kind ensure a large measure of interest. After all, this would only be a return to former policy, but the establishment of a special committee is a new and wise development. The development of interest in the crafts should tend to remind us all of the value of individuality and that there may still exist alleviations to our very machine-made existence.

Disfigurement of Street Architecture. WE gave an example on October 17 of the way in which the quest of money values is allowed to deface and vulgarise our streets. This example showed about the extreme limit to which advertising enterprise can go. We can understand the possibility that many people may like the advertisements better than the architecture, but our public authorities must surely feel some concern as to the extreme latitude allowed to personal freedom in its indulgence at the cost of the public amenity. Perhaps we are wrong in attributing the increase of such eyesores in our streets to the pursuit of the "almighty dollar," and one might almost wish that some underlying motive of decent human feeling could be discovered behind such grave offences against the decencies of our streets. We have received a copy of *The Builder* from one of our public libraries in reader of our issue of Octobe written all round our illustration comments on this striking obj are glad to note even this solitar but we wonder whether any poss grounded reason can be found public should be so afflicted. a building does not yield a goo return we might find some pu which would provide a dole to case.

Ca-Canny. CA-CANNY, and all implies, is pertine in a letter to t this week (sign Harris"). We all suffer from even the best of us, and who c that the British workman, wh best, is a fine and reliable work fully appreciate the futility of a implied in ca-canny if he could b to realise it? We need light— air cure. The trade unions much to help us all on the prosperity, but we believe tha understanding of the issues b would bring the average British into line with the only possible a an increase in the general pros workmen and masters alike. workman can lay 800 bricks in on may sound almost incredible, b just been done, if the fact i recorded. Between 600 bricks a 800 an hour, what a dreary s ca-canny exists!

The City Churches. ONCE more these with a determi slaught. The U Benefices and Dis Churches (Metropolis) Measure passed by the Church Assembly promoters will soon be in a po begin demolition, unless Parlia be persuaded to prevent th danger is so great and so immi we urgently recommend those w the destruction of Wren's works at once to their members of P pressing the rejection of the made by the Church Assembly. that to write letters of this kin an effort. Let us make that once. It is utterly useless to say it is a pity, but that it c helped. The decision rests wit ment, and the attitude of tha largely dictated by the feeling i stituencies as shown in lett private individuals.

Church Champions. FORTUNATELY, w active champions be relied on to defe churches to the Sir Reginald Blomfield and Sir Fletcher, to mention only two We shall be placing ourselves i paradise if we listen to any



From the Exhibition of Holiday Sketches at the Architectural Association.
Sketch in Rome. By MR. S. R. PIERCE.

ose who are intent upon destruc-
hen they coo softly that their
are so very much restricted that
n really do so very little. It is
y this gentlemanly progress that
ady robbed us of one-third of the
mber of City churches that Wren
ind him. The Bishop will tell us
will only sanction the destruction
that have no great architectural
Who is going to have the final
'The Clergy!" says the Bishop,
ures us at the same time that he
ever sanction the demolition of St.
omew the Great. His successor
ere what is left of Wren and begin
tructions with St. Bartholomew
. Helen's. In case it may be
that we are exaggerating the
we quote the final sentence from a
article in *The Times*: "Under the
chinery hardly any of them [the
urches] will be safe; against a
ned attack they might go down
many ninepins."

vals ecapi-ns.

NEITHER let us listen to any proposals for removing the churches to the suburbs, nor yet for cutting their heads ing the bodies, and turning the into pigeon lofts. The Church ly seems to possess no imagination. ot visualise the churches used for urposes; it cannot see the con- f Church of England bankruptcy in admitting that while the will always pay for their cinemas lic houses they will only think it hile to save their souls if they can rches for nothing. They must tly never be asked to make any for their church as this would great a strain upon their religious

ban re-s.

As was natural in the course of such a controversy an exaggeration of statement has been observ- both sides. The churches are es spoken of as monuments of ual beauty, which they are not. e good churches of their time. e at which they were built was burdened with passion or inven- they are characteristic of it and nts of historical and sufficiently alue to be cherished, and for sterity claims our regard. On r hand the "longing to save n the part of the clergy leads undervalue the witness of these to the piety of the builders and mple to us, nor do they attach value to the opportunities, nd social, which they should be provide for the 400,000 day- whose souls have also to be his is not to withhold sympathy fficulty of providing means to ne demands for more church lation of populations—such as at Dagenham—which have grown from 6,000 a few years ago to 40,000 at the present time. The historic value of the City churches is not to be sacrificed, nor their service to the multitude ignored, to provide accommodation elsewhere.

Disposal of Churches Bill.

IN an article in our contemporary discussing this Bill, we are told that "This measure goes to Parliament frankly as a means for destroying churches and not for preserving them, and everything in it is heavily weighted in favour of clerical opinion." We are told elsewhere to believe that the Benefices Board is to be trusted, and that its influence will not be predominantly "clerical." Even if this were the case and the Board does not approve the scheme, after five years, as pointed out in Sir R. Blomfield's letter—the Bishop can set the ball rolling again. It is this prospect that invalidates the securities which the Board is supposed to possess, and explains the reason for objection to any measure which includes proposals for the destruction of the City churches.

Housing and the Speculating Builder.

WE give on p. 869 an abstract of an admirable address on the "Housing Question," by Mr. J. E. Drower, C.B.E., before the Surveyors' Institution (South Western Branch), in which the lecturer showed that the speculating builder was very far from dead, but that he had left the housing of the working classes alone because even he could not make it pay, and had turned his attention to another style of house and built to sell. We agree with the lecturer that the services of the speculating builder of houses for the working classes ought not to be lost to the community, and that, by "carefully guarding subsidies and reasonably restricting rents," we may enable the speculating builder once more to turn his attention to this class of building.

Misdirection of Employment.

IT has taken the nation a considerable time to recognise that the payment of the dole without employment was adding only a further evil, even though unavoidable at a time of crisis, and it is seen that to find employment is not only economically but morally much better. It has not, however, been sufficiently understood that employment on productive and needed public work is the direction to be followed; jobs were often artificially provided, not because the work was wanted, but to keep men employed. This has been in a degree the case in regard to roads, and work has been done with much injury to the countryside that might well have been avoided.



From the Exhibition of Holiday Sketches at the Architectural Association.

Ronda. By MR H. THA TUN.

GENERAL NEWS

Professional Announcement.

Mr. A. Vivian Jackson, architect, has opened an office at Wellington College Station, Berks.

Mr. R. N. Stroyer, M.I.Mech.E., consulting engineer in reinforced concrete, has removed to No. 224, Abbey House, Victoria-street, London, S.W. 1.

Builder's Estate

Mr. Thomas Rees Price, of Cartref, West Hill-road, New Parks, Leicester (net personalty, nil), £16,841.

Royal Sanitary Institute.

The next congress of the Royal Sanitary Institute and Health Exhibition will be held in Edinburgh from July 20 to 25, 1925, by invitation of the magistrates and City Council.

Art-Workers' Guild.

At a recent meeting of the Art-Workers' Guild, at 6, Queen-square, Bloomsbury, Mr. Gilbert Bayes, sculptor, was elected Master for the ensuing year.

Royal Academy.

At a General Assembly of Academicians and Associates held recently, Mr. Terrick Williams, painter, and Mr. Walter Sickert, painter, were elected Associates of the Royal Academy.

The Church Building Society.

At the last meeting of this Society Mr. F. C. Eden, M.A., F.R.I.B.A., and Mr. Robert Atkinson, F.R.I.B.A., were duly elected to the Society's Committee of Honorary Consulting Architects.

Royal Welch Memorial.

Lieut.-General Sir Francis Lloyd, the colonel of the regiment, recently unveiled a memorial to the Royal Welch Fusiliers at Wrexham. The memorial, which consists of bronze figures, was executed by Sir Goscombe John, R.A. The Archbishop of Wales dedicated the memorial.

Wigan War Memorial.

The Wigan Corporation war memorial, which will be situated in the Public Gardens in front of the Parish Church, has been designed by Sir Gilbert Scott, R.A., of Westminster, the architect of Liverpool Cathedral. It is proposed to unveil it next year.

Welsh Housing Scheme.

Messrs. Courtaulds, Ltd., are prepared to consider propositions for the erection of 100 houses for their workpeople at Flint, North Wales. Rapidity of construction is the primary consideration. Address communications to Courtaulds, Ltd., Engineer's Department, Coventry.

Architects' Estate.

Mr. Harvey Dyball, of Cannon-street, E.C. and of Warwick-square, S.W., architect (net personalty, £7,552), £8,993.

Mr. Thomas Edward Collcutt, of West Lodge, Totteridge, Hertfordshire, and late of Bloomsbury-square, W.C., President of the Royal Institute of British Architects, 1906–08, designer of the Savoy Hotel and the Imperial Institute, £19,074.

Buxton Building Trade Course.

The students who are taking the building trade course connected with the Buxton Evening Continuation Classes were recently taken over the New Mills Secondary Schools to study the architecture and construction of the schools. Mr. G. H. Widdows, F.R.I.B.A., the County Architect, was responsible for the plans of these schools.

R.I.B.A.

At the third general meeting, on December 1, the following notice of motion by Mr. Francis Hooper, seconded by Mr. H. D. Searles-Wood, will be considered: "To request the Council to consider and if thought desirable to approach the Master Builders' Association and the Building Trades Union, and to offer any assistance deemed suitable in furthering the training of craft apprentices."

Acoustics and Competitions.

Mr. G. A. Sutherland, writing recently in the Press, states that the first work of the Advisory Committee on Acoustics will be the issue of a set of principles of acoustic design, conformity to which will be one of the conditions laid down for all designs submitted in the international competition for the new League of Nations Conference Hall at Geneva.

Architecture Entrance Scholarships.

Fifteen Entrance Scholarships and Exhibitions are available for award to students entering University College, London, in October, 1925. Two of these are tenable in the Bartlett School of Architecture. Three others are available in any faculty of the College or in the School of Architecture. Full particulars regarding all the Scholarships and Exhibitions may be obtained on application to the Secretary of the College.

Building Trades Employers.

At the recent annual meeting of the Birmingham Association of Building Trades Employers, the council's report said that arrears of work, caused by the national stoppage, emphasised the acuteness of the main problem before the ndustry, *i.e.*, the shortage of craftsmen. This was the problem the solution of which would take time. Mr. H. H. Crump, who was unanimously re-elected President, said he hoped the recent troubles would lead to a better understanding between employers and employed.

A Nash Centenary.

All Souls' Church, Langham-place, one of the few remaining buildings of Nash's Regent-street, celebrated its centenary on Tuesday last. The interior of the church was recently redecorated in olive green and gold, and several alterations have been carried out, making for enlargement both in the church and in the vestries. The renovations have already cost about £4,000, and about £3,000 is required to complete the scheme. The architect for the work is Mr. H. S. Goodhart-Rendel.

Building Apprentices.

A scheme for the training of apprentices in the building industry was recently approved and recommended to local authorities for adoption at a conference of the Lancashire and Cheshire Housing Authorities. The scheme, which has secured the support of representatives of employers and workers in Manchester, provides for the technical training, to be provided by the Manchester Education Committee under the regulations of the Board of Education, of youths, resident within the City of Manchester, between school-leaving age and 20. Practical training to be provided by employers is also approved by the scheme. Mr. H. R. Aldridge, secretary to the National Housing and Town Planning Council, stated that the scheme would be considered at Birmingham, Newcastle, Nottingham, and Bristol, and that schemes for the adoption of alternative building materials would stand aside if it could be proved that ample supplies of bricks, stone and skilled workers were available.

Modern Brick Laying.

With reference to a statement which recently appeared in the press that a foreman engaged on the Treeton Housing Scheme, near Sheffield, laid 809 bricks in one hour, the London Federation, we understand, say that the average speed for London is 50 bricks an hour, which represent 400 a day. It has been claimed that the average day pre-war work was from 1,000 to 1,400 a day.

Crane Collapse.

A hand-crane weighing two tons, working on the foundations of the new headquarters of the Society of Friends, in Endsleigh-gardens, Euston, N.W., recently collapsed while hoisting a steel stanchion.

COMPETITION N

Oldham Union.

The design of Messrs. C. T. Ta Roberts has been placed first by the in a competition for the extension of Nurses' Home. The plans will be view shortly.

Constantine Technical Colleg

Mr. Percy E. Thomas, F.R.I.B.A appointed assessor in the original c informs us that as the Middlesbr mittee has been presented with a f of £40,000, bringing the total up a revised schedule of accommodatio being prepared, and it is hoped to conditions of competition in a fe

Modern Methods of Ventilati

For an essay on "The Ventilation Court," a silver medal will be awar Worshipful Company of Fan Ma advertisement this week.)

Leeds Library.

Designs are invited for a library to at the Compton-road estate. Mr. Worthington, F.R.I.B.A., is the premiums of £35, £20, and £15. from the Town Clerk, Leeds. Sen February 16, 1925.)

Argentina.

The Argentine Government offer 10,000, 6,000, 4,000, 3,000 and 2,000 gold pesos for the best architectural a National Institute for the Blind particulars are available in the Enq at the Department of Overseas Tra Queen-street, S.W.1. The principa this competition, translated into E be seen at the Office of *The Builder*. day, December 31, 1925.)

Other Competitions.

Other competitions still open incl lowing (the dates given are, first the date, and second the issue of *The* which full particulars were given) Hall (May 1). Manchester Art Galler Aug. 22). Offices at Nairobi (Feb Nov. 7). Jugo-Slav Landscape Nov. 7). Church at Southport (no date; Nov. 7). Southend School Nov. 14).

CORRESPONDEN

[While we are glad to publish letters on p other matters of interest to our readers, it stood that we do not necessarily endorse correspondents, who will oblige us if the their views as briefly as possible.]

Planning for Good Acousti

SIR,—May I correct a mistake for myself responsible in the report o given in the last issue of *The Builder* contributing factors causing the exce Greek theatre should read as follow sound was intensified near the s number of useful reflections; (2) t a clear passage to the listener and at a wide angle; (3) there were n reflected paths of sound back from stage. HOPE

Cork Floors.

[With reference to our article o of cinemas, in our issue of the 14th i pondent points out, with regard that the ideal cinema floor is cork ti floor, he states, is durable (lasting oak), silent, hygienic, non-odorous, n non-conducting, warm and resilient floors may be washed or polished matches or cigarette ends do no har a cork floor can be laid direct on to t



VIEW OF THE NAVE AFTER EXCAVATION, SHOWING PIERS AND AISLE WALLS.



VIEW OF THE NAVE BEFORE RESTORATION. (*See page* 850.)

Rievaulx Abbey.

NORTHERN POLYTECHNIC

PRESERVATION OF ANCIENT MONUMENTS

On October 27 Sir Frank Baines, C.V.O., C.B.E., gave a paper at the Northern Polytechnic Department of Architecture, Surveying, and Building, on "The Preservation of Ancient Monuments and Historic Buildings." The lecturer opened an interesting lecture by a reference to the provisions of the Ancient Monuments Act, explaining the duties and responsibilities which it imposed upon private owners and upon the Government in respect of buildings scheduled as ancient monuments. He referred to the extraordinary historic interest and importance of many of these buildings, and indicated the necessity for preservation from many points of view. He then showed a series of slides of various buildings, indicating the condition of the masonry and walls when transferred from private ownership to the custody of H.M. Office of Works. The lecturer showed the serious disintegration and damage caused by the extensive growth of ivy, trees, and other herbage, as well as the damage caused by time and the use of these buildings as quarries for the erection of surrounding houses and other structures.

Passing to the consideration of individual buildings, reference was first made to Tintern, one of the great Cistercian abbeys. (See *The Builder*, August 18, 1922.) The date of the existing work is generally that of the end of the thirteenth century, when the present church was built to the south-east of the older church. The most serious difficulty which the preservation of this abbey presented was the support to the south arcade wall, which was 68 ft. high, 5 ft. 6 in. thick at the top, and unsupported. This wall was out of plumb and bowed in the centre; the eccentric loading of the piers thereby created had brought the load per foot super on some of the masonry to a dangerous point, and some of the piers were actually failing by crushing, and in order to reduce this load without resorting to the use of unsightly and obstructive buttresses, a horizontal steel girder of N type was designed which was anchored down at the ends into the wall of the south transept, and to the wall of the west gable, and connected to the south arcade wall over the centre of the piers. Connecting bolts were employed to reduce the overhang—an operation which was carried out in four stages, separated by intervals of one month, stress recorders being fixed at a number of points. By this means the load on the piers was reduced, the masonry was rendered safe, and Tintern was preserved for all time as nearly as possible in the condition in which it was handed over. A view was shown of some of the tracery which had been repaired by means of copper bands, which will keep it in position indefinitely and prevent further destruction.

From Tintern the lecturer passed to Rievaulx, which is the earliest Cistercian house in the country, dating from 1131. Rievaulx came under the jurisdiction of the Government in an extremely difficult, almost disheartening, condition. Much of the plan of the abbey was invisible owing to the mass of debris which was piled up over the top of the pier stumps and pavement. This debris was removed and the plan exposed to view. The masonry was repaired to the extent demanded by the needs of preservation, and views were shown of the abbey in its present condition.

The next view was of Carnarvon Castle, one of the most, if not the most, magnificent mediæval castles in existence. It was commenced by Edward I (its date is 1285-1322) to guard the Menai Straits and as a means of overawing the Welsh people. Built as a purely defensive structure, it has remarkable architectural attributes. Its massive walls of coloured stone, its fine outline, and beautiful proportions mark it as an architectural achievement of the highest interest and importance. Views were shown of, and particular reference was made to, Queen Eleanor's Gate and the Eagle Tower.

Whitby Abbey next claimed attention. (See *The Builder*, March 28, 1924.) This abbey was founded in A.D. 657, but the portion which remains dates from the thirteenth century. This abbey was officially scheduled as a historic building in 1914, and before any attempt at preservation could be made the war broke out and suspended all work on ancient monuments. In 1914 the Germans bombarded Whitby and, incidentally, damaged the abbey, destroying certain portions of the tracery and other masonry at the west end. This damage resulted in further falls of masonry during the ensuing year, so that when, after the war, the lecturer commenced the task of preservation he found the remains in a far worse condition than at the time of handing over. This incident of the German bombardment resulted in a departure from the normal policy of the Ancient Monuments Department. Its almost invariable policy is to avoid restoration or reconstruction and to concentrate only upon preservation, but in view of the "accidental" character of a large amount of the damage at Whitby it was decided that in the case of Whitby some of the damaged masonry should be replaced, save only that where new work must be added for purely constructive reasons this new work should be clearly indicated. In the case of Whitby, therefore, a combined scheme of restoration and preservation was carried out, and the abbey is visible to-day practically as it was in the early part of 1914, except that it is now rendered safe from further depredations by the weather or other forces. In addition to this work at the west end, certain excavations were carried out which exposed the plan and the remains of some of the walls and piers.

Kirby Muxloe Castle, an old fortified manor house of Tudor times, dates from 1480, and was another of the monuments which had fallen into such extensive disrepair that it had almost ceased to have architectural interest. The moat was re-excavated, a bridge was constructed on the site of the original drawbridge, and some of the old piles were exposed and now remain standing in their original positions.

Views of Byland Abbey, another of the historic churches, were thrown upon the screen. This abbey is remarkable for its fine carving and ornament which would be difficult to rival. In the floor of the abbey was found the remains of a fine coloured tile pavement of excellent design and colour.

The condition of Goodrich Castle w worse than that of other cases me and after instructions had been given mence work upon the north-west curta a collapse occurred whereby hundreds of masonry were dislodged. It probable that if this collapse had occ month later when scaffolding had been it might have involved serious injury of life to the workmen. The remain tion of the wall was, however, shored repaired; the overgrowing vegetati cleared away, and Goodrich was n manently preserved and was able to with some indication of its ancient gl

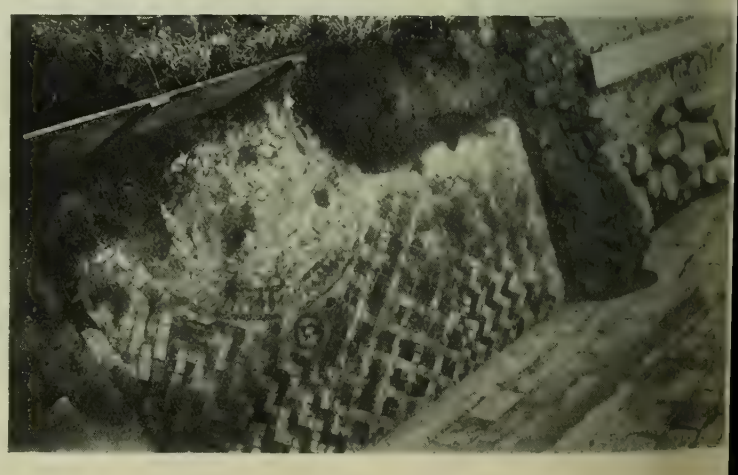
At Netley Abbey another of the problems of isolated walls was enco In this case it was necessary to fin means of stiffening the top of the such a way that it would resist wi sure and the normal disintegration t it was subjected by ordinary weath ditions. To this end a reinforced beam was built into the wallhead, pi down to the more solid masonry at treme end. A detailed view of one p shown, and the process "coring" e in detail.

Hampton Court Palace next claime tion, being shown first by means of a view from the air, and next by detaile of the woodwork of the hall roof. turer commented upon the fact that the carving was apparently carried the ordinary workmen engaged on th and that this carving was considered task which they could accomplish the aid of specialists or carvers. Som were shown of the Westminster Ha with an indication of the destruction by the beetle Xestobium Tessellatum lecturer referred to the almost unbe destruction which this small grub had and gave some views of the grub its of the beetle which eventually evolve

A general view was shown of Ri Castle, one of the great Yorkshire holds, and views were given of Stor with some interesting details condition of the stones of the inner ci evidence of the existence of an out of a much earlier date.

The lecturer concluded his lecture view of Maiden Castle, showing a fosse constructed with immense lal men of the Stone Age, a fosse which and importance has no equal in ar part of the country. In this case able destruction had been brought a rabbits, a pest now kept within bo constant ferreting.

Mr. T. P. Bennett proposed a hea of thanks, which was carried with tion. Owing to the lateness of the discussion followed.



Byland Abbey; Part of Pavement exposed during excavation.

ARCHITECTURAL SOCIETIES

R.I.B.A.

take the following notes from the es of the Council meeting held on nber 3:—

hitecture and Craftsmanship.—The fol- recommendations passed by the Art ing Committee were approved by the il: (1) That an additional committee be d, the purpose of which shall be to the best interests of the crafts con- with the construction, decoration, and nent of buildings. (2) That the Allied ies be invited to form local committees a similar object in their districts. (3) one evening in each institute session be d to the reading of papers and discus- n subjects relating to craftsmanship. hat short lectures of a popular kind be ed for from time to time at Conduit- and locally by Allied Societies. (5) he Board of Architectural Education be l to consider whether more can suitably ne to assist the understanding of craft ses and the right use of material in ucation of students.

ibald Dawnay Scholarships.—On the nendation of the Board of Architectural tion the following awards were made: Turner (Liverpool), £50 scholarship; Cameron (A.A.), £25 scholarship; Burnett (Leeds), I. R. Erith (A.A.), C. Todd (Liverpool), grants of £20

B.A. Scholarships at the School of cture, Cambridge.—The scholarships warded as follows: First year, Miss Aiton, Girton (£35); second year, dward Le Bas, Pembroke (£35).

ds and Committees.—The following ap- ents were made: L. Sylvester Sullivan, of Architectural Education; George le, Board of Architectural Education; Sadgrove, Royal Gold Medal Com- L. H. Bucknell, Competitions Com- T. Taliesin Rees, Housing Com-

tration.—The following were invited ve on the Registration Committee: Harry Barnes, Arthur Keen, G. C. ice, Percy Thomas, W. Gillbee Scott, Alan Slater (R.I.B.A.); A. J. Taylor, . Sheffield, C. F. Skipper, L. Sylvester n, E. J. Partridge, and Thomas (Society of Architects). The Com- was given power to appoint, at their scretion, a number of advisory mem- representatives of the Allied Societies other bodies and interests affected.

ed Overcrowding of the Profession.— llowing members were appointed to n a joint committee (with representa- f the Architects' and Surveyors' As- Professional Union) to inquire into ged overcrowding of the profession: Keen, Maurice E. Webb, and Francis

s in Offices.—On the recommendation Board of Architectural Education the decided to recommend Members and tes of the Royal Institute not to upils until they have been registered ationers R.I.B.A.

ESSEX SOCIETY OF ARCHITECTS.

time ago the Bristol Society of Archi- nd the Gloucestershire Architectural ion amalgamated and formed the Society of Architects. The inaugural n of this new body was held at the dge, Bristol, recently, the President, . Lawrence, F.R.I.B.A., in the chair. . J. Taylor, F.S.A., President of the of Architects, in proposing "The Royal e of British Architects," said that for rty years the profession had been d and governed by two Societies which n working on different lines, and had ays seen eye to eye. He thought that een proved that the ideals and aims of both bodies were identical, and that it only required their coming closer together and knowing one another better to realise that. With regard to his own Society, they had had definite objects in view which had not been in the forefront of the Institute programme, but he was hoping now that they would go forward with but one object in view.

Mr. Arthur Keen, F.R.I.B.A. (Hon. Secretary of the R.I.B.A.), said, in response, that he had no doubt the New Wessex Society had a career of great usefulness before it, and he wished it the utmost prosperity. The Institute, which had been going on for 100 years, was originally a learned Society. It had become a great professional Society, but it had not ceased to be a learned Society; the matter of education occupied the greatest share of its activities. It had been helped and supported most vigorously by the provincial Societies. As time went on he thought that the provincial Societies would link themselves up with larger bodies, but they would still recognise the value of the Institute to them, as the Institute recognised their value to itself. The test of the usefulness of the Associations was the test of service. They wanted to see a better standard of work throughout the country. If they could go back one hundred years and see this country they would find no vulgarity; all the vulgarity in building work had arisen in that period. They must all set themselves to correct it, and it was only to be done by way of education. He believed they were doing very well in Bristol with the new school they had started, and he thought there was little hope without the help of such schools.

Mr. Ian MacAlister (Secretary, R.I.B.A.), who also responded, said the overseas associations were making it into a very big Imperial organisation, and for that development they had to thank the allied Societies.

Mr. W. S. Skinner, F.R.I.B.A., President of the Bristol Society of Architects, in proposing "Our Guests," coupled with the toast the name of Canon J. O. Hannay.

Mr. G. P. Milnes, President, Gloucestershire Architectural Association, in support, said he was sure Gloucestershire members appreciated the amalgamation, which would extend over the whole of Wessex, and would be for the good of all.

Canon Hannay, responding, said that he had found people in the West of England as courteous as his Irish friends, and as ready to welcome the stranger who came amongst them.

Major Harry Barnes, F.R.I.B.A. (Vice-President of the Institute), proposed "The Wessex Society of Architects." He thought that we should never express ourselves as a people completely in any way until we had once more reached that variety and unity which would come when the great, distinct provincial areas were fully alive to take an active part in all the varied activities of the civilisation in which we lived. Those living in Wessex had probably escaped, to a large extent, the vulgarity mentioned by a previous speaker compared to other parts of the country. Regarding housing, he was afraid there would be great atrocities in some places, but so far as they could influence public feeling he hoped they would influence it against allowing lovely villages and towns to be devastated by hundreds of buildings which had nothing to commend them beyond the fact that they gave shelter.

Mr. P. E. Thomas, F.R.I.B.A. (President of the South Wales Institute of Architects), conveyed the best wishes of that Society for the prosperity of the Wessex Society.

In response, the President (Mr. Lawrence) compared the amalgamated Societies to a bride and bridegroom, and said the union was a very happy one. Following the example of the Institute, the Society had determined to put service first. They existed first to serve the art of architecture, next to serve the public, then to serve the future generation of architects, and, last of all, to serve themselves.

Mr. G. C. Lawrence, the President, occupied the chair at the first session, which was held the same evening at the Royal West of England Academy, when Canon Hannay (George A. Birmingham) gave a lecture on "Emotions in Stone," saying that they all knew how buildings gave them certain emotions. After touching on his visits to famous buildings on the Continent, Canon Hannay said if they thought of the old English parish churches, of the generations after generations of people worshipping there, carrying their sorrows and other human emotions there, did they think that all those waves of emotion surging on the walls and arches of the church had left no mark behind?

Was the spirit of a building, house, church, or anything, due more to the people who used it than the architect or builder who built it? They might think that a fantastic theory, but was such a theory true?

GOTHIC CATHEDRALS.

At a recent meeting of the Vesey Club held at the Council House, Sutton Coldfield, Mr. G. Salway Nicol, F.R.I.B.A., delivered a lecture on "The Great Gothic Cathedrals." It was probable, he said, that no one could completely realise the true significance of the largest of the mediæval churches and appreciate all they could teach of a very important chapter in the history of civilisation. They were, perhaps, a more exact embodiment of the aims and aspirations of their builders than the buildings of any other age. Their production was the enthusiastic concern of the greater part of the intellectual life of their time. To-day, six or seven centuries after their construction, they held perhaps the highest place among all their most valuable possessions. They were a distinct embodiment of a new conception of life, of its beauties, its responsibilities, its joys, and its capacity to receive and propagate divine inspiration. In their day they admired them, but they had only recently learned to treat them with respect and care. They appealed to them mostly on account of their age, the accident of their colouring due to the weathering of their stones, and on account of the very happy subjects they made for the pencil, brush, and the camera. To understand them completely they must by study reconstruct them in their minds as they were in their prime, and picture them with their furniture and fittings restored, their statues replaced, their windows glazed with the original glass, their gold and silver vessels in use, with their vestments, tapestries, and paintings undimmed. Thus they could be made to live again, and their casual interest became a wonder and delight.

During the Dark Ages the lamp of civilisation had almost gone out in Europe, and only in such cities as Byzantium were the Roman traditions continued and developed. It was not until after men realised that the last day was not necessarily near at hand that they threw off their lethargy and, laying aside their contemplative inaction, started progress again with feverish and enthusiastic diligence. Of this rebirth the Gothic cathedrals were the most important expression. Starting with little knowledge of the Roman and Eastern traditions, their forefathers developed new ones for themselves, and in a very few centuries built up a civilisation, and contributed to history one of its most glorious pages. In addition to providing a setting for elaborate services, these cathedrals became a centre for the display of craftsmanship of all kinds, and a distinguishing feature of the time was the honour and respect in which skilled craftsmanship was held. A mediæval city, in addition to its organisation for defence, was the centre of a craft university, and the various guilds of skilled workers were among the most important of its organisations. Gothic art, unrestrained by the classic and Renaissance traditions they now enjoyed, was developed by free and daring experiment. It was an expression of great vital force, full of reasonableness and gaiety. Although its aim and achievement was very different from that of their own time, its vitality and glorious attainment should be a source of inspiration to all of them.

A PROBLEM OF CHRONOLOGY IN STONE: FARLEY CHURCH, SURREY

By H. V. MOLESWORTH ROBERTS (assisted by A. C. BAWTREE).

ONE of the most interesting and well-preserved antiquities in eastern Surrey is the parish church of Farley, between Warlingham (near Purley) and the Kent border. It is best approached from Whyteleafe Station or the adjacent point on the Caterham-road, from which it is about three miles' walk, passing close to the parish church of Warlingham. The church, over 550 ft. over sea-level, lies eastward of Farley village, the rectory being situated between the two.

The isolated position of this sacred little structure, shrouded in trees and boasting no neighbour but a sleepy old-world farm, enhances the peacefulness and sanctity inherent in the church itself, and one's impressions on approaching it are one almost of awe and a readiness to live for a time in the distant age when it was first erected by the devotional labour of willing hands. The interior, especially when redeemed by the beauty and fragrance of Easter flowers, possesses something of that quietude and restfulness common to our village shrines and intensified by one's sense of the ancient date of the fabric, despite the modern chancel arch and fittings which harmonise as well as can be expected with the structure.

The plan is one of the simplest mediæval types, with western porch and unaisled nave and chancel, and the building is unusual in that it does not show insertions of obviously different periods, as in most churches, but has maintained a similarity of treatment throughout. Except for the modern chancel arch, vestry and some restoration of the stonework of the openings, it has remained practically untouched since the date when the nave and chancel were completed.

The most noticeable feature of the exterior is its general bareness; the windows are small and few and the intervening spaces are covered by irregular rough-casting, comprising patches of hard cement, possibly of Georgian date (now moss-grown), and retaining the thick yellow mortar-coat proclaimed by Mr. P. Mainwaring Johnston to be of mediæval date, and therefore priceless in these days of restoration and plaster stripping—indeed, Mr. Johnston is said to have once been instrumental in saving it from such a fate. The small stretcher-and-header quoins are ancient, and the absence of buttresses, string-courses, or other external features gives a primitive character to the little structure.

The wall is of great thickness (about 3 ft.), and the windows deeply splayed; there is one over the west door, two on each side of the nave, and two likewise in each flank wall of the chancel; there are also two in the east wall, with an intervening pier immediately over the altar—an unusual arrangement.

These openings furnish a unique example of the process of the diagnosis of date of mediæval structures. To take first the exterior, starting with the western end: The western doorway into the nave (see sketch) is typically Norman. The tympanum, incidentally, is without a supporting lintel. The capital of the monolithic nook-shaft has a plain square chamfered abacus (without quirk), and is of a rudimentary cubiform or cushion type. This suggests an early Norman date; the door may well be of the early twelfth or even late eleventh century, so primitive is its structure—a view confirmed by reference to the Victoria County History, which favours the earlier date, by comparison with other churches in the county. The alternative must, however, be kept in view—that the door may have been erected in the twelfth century, and the style may have been a mere survival of tradition quite possible in this remote rural district.

The nave windows are high, but proportionately narrow (originally 9 in. wide), and are round-headed both outside and in; they may date from any part of the Norman period (i.e., from late eleventh to late twelfth century), possibly from the earlier part, like the west door; their fairly tall proportions, however, perhaps indicate the Transitional Norman period, say 1150–90, particularly as they resemble the early Gothic windows of the eastern part of the chancel. The proportions of the nave windows, however, though suggestive of Transitional Norman, are no criterion and can be explained on the grounds that all Norman windows in some localities were fairly tall, but only markedly so in the later Norman period (*e.g.*, Brinkburn Priory; lady chapel, St. Michael, St. Albans) and onward. At the beginning of that period similar proportions existed, but were obscured by the relative smallness of the windows (*e.g.*, original west windows, St. Stephen, St. Albans), whereas these nave windows at Farley, being larger, are of the more developed and apparently later type. The internal "barrel" rere-arch, semicircular on the inside, as well as on the glass plane, precludes the Gothic date, which might be inferred from the suggestion of a point in the external heads of the openings.

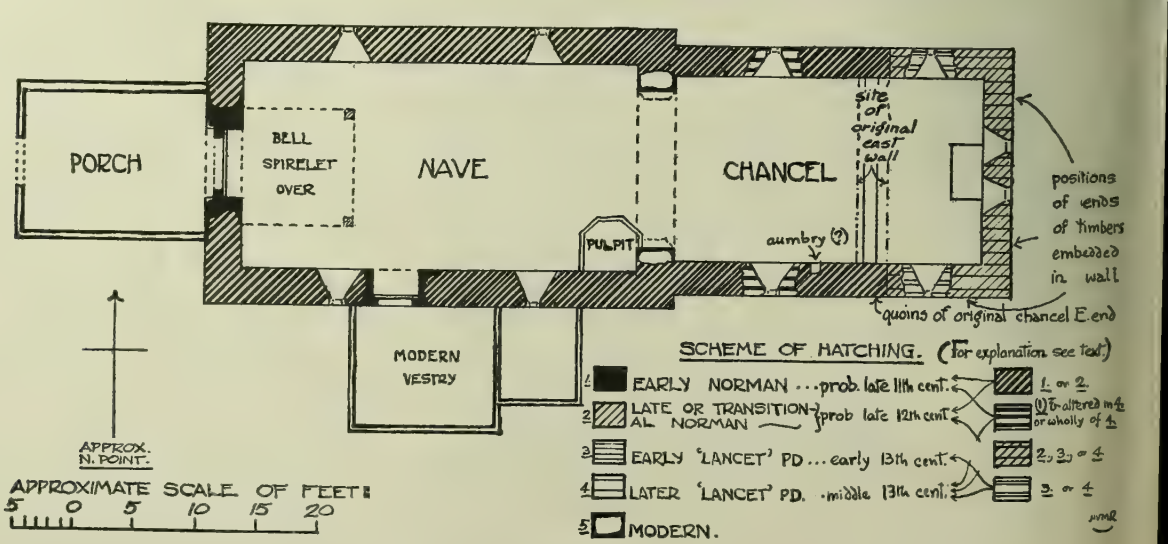
The chancel must be carefully studied. On its north side the exterior betray of a break in the continuity of its the masonry being completely maske rough-casting. High up on the so however, several stones are laid ba eastern edges are vertically continuo are quoin-stones, formerly marking of the structure, and indicating the p the east end of the original chancel, t which was so square as almost to Saxon tradition. The present chan porates an eastward extension later.

The western window on each sid chancel differs in having a slight po arch, shown more definitely internal the scoinson is of pointed segmental Gothic date must therefore be as these windows, which, therefore, date end of the twelfth or beginning of the t century—the pointed arch having bee by the local masons, we must suppo dawn of the Gothic period. These ope however, of somewhat similar prop the nave windows, which they rese ternally, and may well be of the same period, the heads being altered at mentioned.

The eastern windows of the north a walls of the chancel belong to the later and are therefore subsequent to th of the western part. They are very simi western ones, and also have definitely heads outside and in; the proportions, are even slenderer, being slightly as well as higher. They are therefo nisable as "lancet lights" of the early thirteenth century (pure "Early style). The two east windows over are less easy to diagnose. They bo pointed segmental scoinsons, but w northern opening is round, the so pointed—a difference which has, ap been reversed in the restored heads e perhaps by a mistake of the repairin These openings may date from the Tr Norman period, the point, if so, bein of optional trick of technique; this m the heads would have been altered in the early thirteenth century, and th windows to north and south also in this date.

Now that the individual features b diagnosed on their own merits and in ship to their immediate neighbours, clusions to be deduced as to the act of the whole must be considered.

The dating of the different part church, as of so many of our ancient s cannot be determined with certain though certain probabilities can (as indicated, yet it is desirable to sch alternative hypotheses, which must the discretion of scholars, in the ho while that documentary or structural will be forthcoming to establish th



Farley Church, Surrey.



EXTERIOR FROM NORTH, SHOWING NORMAN NAVE AND "LANCET" (?) PERIOD CHANCEL.



INTERIOR LOOKING NORTH-EAST INTO CHANCEL, SHOWING "LANCET" (?) PERIOD WINDOWS.

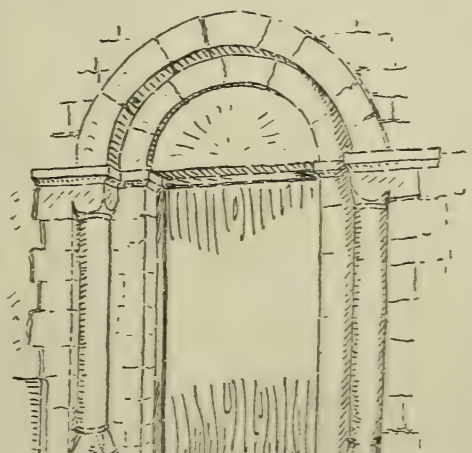
nd doubt. Meanwhile, such a consistent rsis, even though not strictly necessitated is particular example, where the ruling of Victoria County History is authoritative probably beyond question, serves as a l for the scientific working out of the ological order of growth in the case of churches, especially where an authoritative ment has not been published.

e system of hatching employed in the plan in which appearance and suitability to the idual building are to some extent sacrificed system which is conceived on a uniform applicable to any church. It, moreover, rs as far as possible the text of this article, does not merely indicate the probable of each part, but, where necessary, aims vering the range of probable dates by ining the types of hatching indicating espective periods, or (as in one case) this ination indicates construction in the first l and alteration in the next. As a basis, n of hatching is adopted for each single l, e.g., solid black for Early Norman, al hatching for Late or Transitional an, and so on; and these are combined tably as possible, e.g., the nave walls are ted in the text to either the early or late an period—therefore, on the plan, solid is combined with diagonal hatching as a version of the latter. It is believed that heme, though at first sight complex, will ially aid the reader in grasping as a whole potheses set forth in the text.

eral alternative hypotheses, then, may be d and compared in the case of both nave hancel. To take the former first :—

whole of the nave must evidently have built at the same time—originally, at any By the foregoing analysis it has been ted that the west door is probably Early un, assuming first that the nave windows ave been Transitional Norman in style; is unlikely that (1) the whole nave was re- leaving the west door intact—the common of diagnosis, in which the date is deter- by the *later* features, and the earlier ones ed as survivals in rebuilding; it is also y (2) that the windows were enlarged in ansitional Norman period; (3) it must, er, be remembered that building some- proceeded slowly and intermittently, and raditions changed with corresponding y; it must be allowed therefore as a lity that the work was begun in the late h century with the west door and lower and that the walls were gradually raised the following century, the level of the s being raised by the later part of the . This, however, is unlikely, as the church would be needed for worship from it, and some kind of structure would be quickly, however gradual the subsequent ements. (4) For a similar reason one suppose that the west door or wall was nd left isolated for a few generation the structure was completed. (5) It is probable, therefore, that the windows, despite their size, are no later than the door and the nave as a whole dates from the early eleventh century. This view is adopted by the Victoria County History. This hypothesis, however, does not explain the close resemblance between the nave and chancel windows; and if the latter are really Gothic the similarity of the former must therefore be ascribed to the simplicity and crudity still obtaining in local workmanship in the later period, and to the well-known principle of "assimilation," by which additions to a structure were designed, purposely in harmony with the existing fabric, as in the naves of Westminster, St. Albans, and elsewhere. This line of argument regarding the nave constitutes an example of the type of building where good reason exists for dating the whole structure by the *oldest* existing part.

The chancel, however, needs separate diagnosis. (1) The early Norman date that is most conclusively assigned to the nave applies equally to the original (western part of the existing) chancel, as the church must have had a chancel from the very first; this view is adopted in the Victoria County History. Judging from their proportions, the windows may date from the same period, their heads being subsequently Gothicised. This view explains the similarity between the nave and chancel (despite the apparent hiatus in point of time) by ascribing a part to each and thus acting as a link. This will therefore leave us free to call the rest of the chancel Gothic, and to assign to it (as does the Victoria County History) a date approaching the middle of the thirteenth century—probably when Merton College, Oxford, took over the estate. (2) Or, adopting otherwise the above line of argument, we may follow the Victoria County History in ascribing the western chancel windows



WEST DOORWAY FARLEY

to about 1220—i.e., rather earlier than the more characteristic "lancets" of the eastern chancel, and approximating more closely to the nave type, but not otherwise explaining the similarity of tradition. (3) If, however, the nave is "Transitional Norman," the whole of the chancel may also have been constructed in that period, especially as the twin east windows closely resemble the rest of the fabric and that one of them is round and the other pointed—usually a sign of gradually-changing tradition. The eastern extension of the chancel, though made subsequently, does not necessarily indicate a distinct period of growth, but may have been carried out only a few years after the earlier portion, which perhaps was only a makeshift for temporary use necessitated by lack of funds—so the squareness of the plan would seem to suggest. The heads of all the six chancel windows would, on this process of reasoning, have been altered subsequently internally. This hypothesis is, however, on the whole, unlikely.

Independently, however, of the problems of chronology which it offers, this little church is full of interest and repays a careful and reverent inspection. The western porch, of half-timbered work resting on a stone plinth, is modern in its present form, but is of fifteenth-century type, and incorporates some ancient oak timbers which appear to hail from an earlier structure. The timber belfry is lightly built, with an open bell stage and squat pyramidal spire, and may follow an earlier type in its design, as at Wilcote Church, Oxfordshire.

A Norman doorway in the south wall of the nave, of still simpler type than the western entrance and now opening into a modern vestry, consists of a deep semi-circular archway and a lintel behind, a little above the springing level. It is unusual to have a south external doorway in addition to a contemporary western one, but there appears to be no sign of any southern apartment into which it might once have opened, and a chapel, at any rate, would be out of place so near the western end.

The chancel arch, lancet-arch in form, is modern, like the conical corbels and jambs on which it abuts. On the south side of the chancel, near its east end, is a small square recess which once served possibly as a credence or aumbry, since no trace is visible of any sinking or "dish" suggestive of a piscina, though it occupies the typical position of this feature in relation to the altar of the original chancel. Two ancient grave slabs (one bearing small early brasses of 1495) are now stood upright by the walls—an ingenious manner of preservation which, while protecting them from further wear, makes them clearly visible and easily inspected by the observer, though violating the original posture of the figure as pourtrayed, and presenting a great difficulty to the rubber of brasses.

[Indebtedness is expressed to the Victoria County History of Surrey and others, consulted subsequently to the original survey embodied in this article.]

THE ARCHITECTURAL ASSOCIATION

MR. H. S. GOODHART-RENDEL (President) occupied the chair at a general meeting of the Architectural Association held at 35, Bedford-square, W.C., on Monday evening.

New Members.

The President announced that there were two nominations for membership, and the following new members were elected :—

W. E. Aitken.
E. H. Loye.
W. H. Eales.
W. S. H. Pawson.
L. G. Pearson.
Miss P. M. H. Bush.
Miss M. F. Pepler.
A. A. V. Campbell.
T. W. Snailum.
F. J. A. Schupback.
J. W. Parr.
W. E. Lowes.
Miss P. L. Bateson.
Miss K. A. Veitch.
A. G. Raven.
G. R. Dawbarn.
E. Playne.
Miss R. D. Morrison.
H. S. M. Carver.
B. S. Hume.
Miss J. H. Read.
R. B. J. Selby.
G. C. Ames.
H. R. Easton.
Miss M. A. M. Hodson.
R. S. Lavers.
G. F. Nicolls.
A. H. Girard.
F. C. G. Grant.
C. D. Hill.
J. A. Ritchie.
S. J. Kemp.
Miss A. C. H. Brinton.
N. B. Hillier.
H. W. Rich.
C. W. B. Ferguson.
O. H. B. Bedford.
D. R. Burles.
J. C. Rose.
J. M. Richards.
J. C. Dickson.
C. A. C. Turner.
G. F. Randall.
E. B. G. Boulton.
H. Hulse.
H. M. Peskett.
E. Mader.
M. A. Halim.
Miss M. J. Tyrwhitt.
S. L. Thomson.
Miss D. F. Buckland.
W. A. K. Faldo.
S. E. Dykes Bower.
F. E. B. MacManus.
H. Greenwood.
W. H. M. Penn.
E. A. Rowse.
T. Ritchie.
F. R. Jarman.
K. E. F. Gardiner.
J. D. Beloe.
H. R. Thompson.
A. E. Westerman.
R. F. McQuistan.
Miss M. H. Sullivan.
R. P. Cummings.
G. N. Lewis.
Claude Flight.
C. H. Reilly.

Mr. P. M. Fraser was reinstated to membership.

MR. SYLVESTER SULLIVAN read the auditors' report on the accounts of the Association for the past half-year, which was received.

It was announced that the A.A. Students' Pantomime is this year to take place on December 17, 18, 19 and 20, at the premises of the Royal Institute of British Architects, Conduit-street, W.1.

The Excursion to Spain.

MR. E. J. T. LUTYENS then addressed the meeting on "The A.A. Excursion to Spain, 1924," first pointing out that his intention was not so much to speak about the places visited as to show some of the large series of photographs taken by Mr. F. R. Yerbury during the tour. In the course of his remarks Mr. Lutyens gave some idea of the strenuous time the party spent in covering so much ground in the short period of seventeen days, and of the large number of interesting buildings which they saw. The party made their headquarters first at Madrid, and after seeing that city explored other towns in the neighbourhood, allocating a day to each trip. The lecturer also mentioned the excellent reception the party everywhere received; in most towns a civic reception was accorded to them, and in one town they were welcomed by the Mayor on arrival as early as six o'clock in the morning. Some of the party also had the honour to be received by H.M. the King of Spain, who personally conducted them round the palace and outlined the history of the tapestries and other interesting features. Those who took part in the tour were also fortunate in the arrangements made by Mr. Yerbury for local Spanish architects to meet the party at different towns, thus ensuring that the time at their disposal was spent to the best advantage.

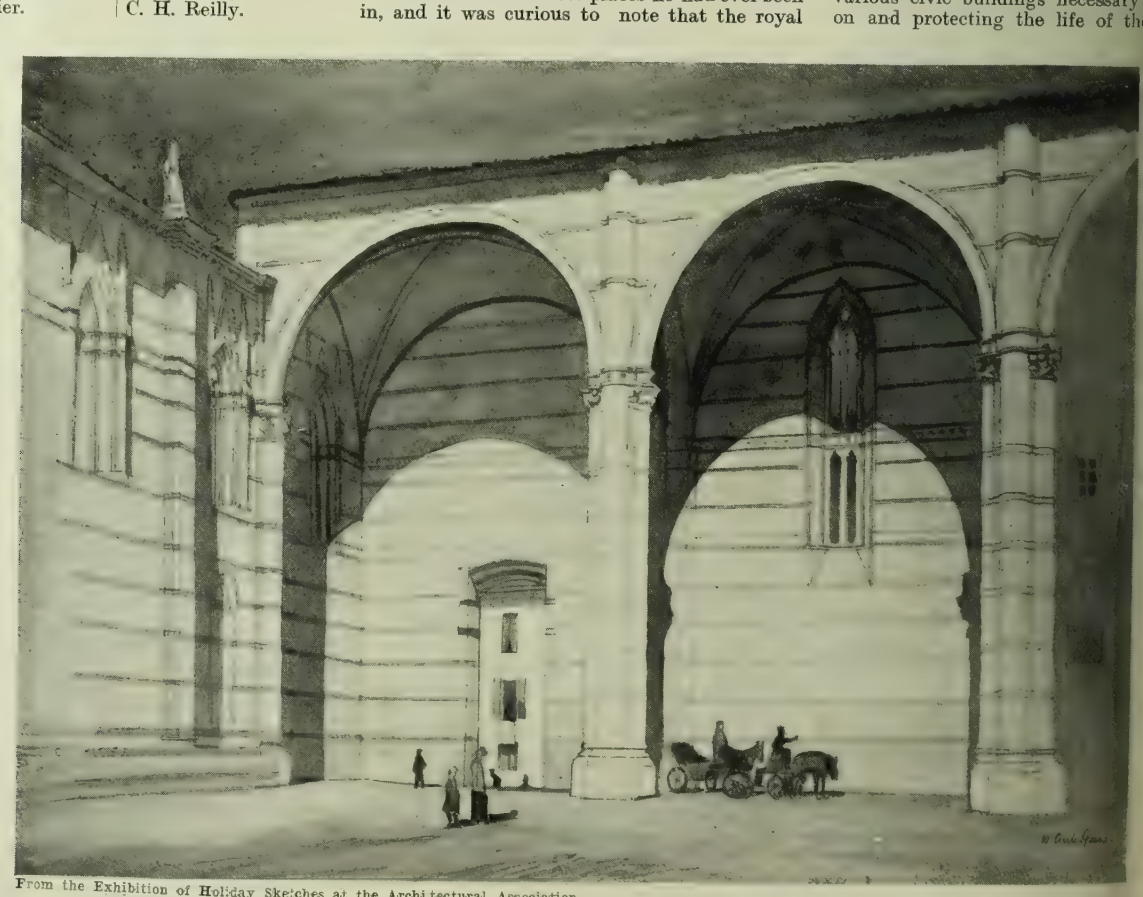
In proposing a vote of thanks to the lecturer, MR. STANLEY HAMP said this year's tour must have been one of the most pleasurable trips organised by the Association. Spain was a delightful country to visit. He found Madrid to be one of the noisiest places he had ever been in, and it was curious to note that the royal palace was right up against the railway so that everyone entering the city had to circle round the palace after leaving the station. He had also visited Barcelona, which had much freakish architecture. Apart from the freakish buildings, however, a great cathedral was now being built in Barcelona, the enclosing walls were being built first. He was extraordinary to think that such a cathedral was being built at the present day with only twenty men working on it.

The vote of thanks was seconded by J. M. EASTON.

MR. F. R. YERBURY said he would like to say how much he appreciated all that had been said with regard to the organisation of the excursion, but he would also like to point out that the good work of the staff of the Association, especially his assistant, Mr. A. alone made it possible.

PALACES OF MEDIA ITALY

SIR BANISTER FLETCHER, F.R.I.B.A. gave a lecture recently at the Central School of Arts and Crafts on the secular architecture of Mediæval Italy—bridges, palaces, town halls, hospitals, and other public buildings. He noticeable, he said, that few civic buildings existed which were erected earlier than the twelfth century, for the early warfare at the destruction of fortified and civic buildings, while regarding churches as The most interesting aspect of secular building activities of this period was the power gave of the rise and growth of municipalities and the development of the communal idea. Their conscious power was exercised not only in their dealings with irrepressible nobles and in the erection of great cathedrals, but also in all departments of life and in providing on a grand scale various civic buildings necessary for the on and protecting the life of the town



From the Exhibition of Holiday Sketches at the Architectural Association.

Part of Unfinished Nave Arcade of Sienna Cathedral.

By Mr. W. CURTIS GREEN, A.R.A.

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LLUSTRATIONS

New Office Building.

e premises, now being completed at Broadway, Westminster, S.W. 1, opposite nes's Park Underground station on the t Railway, comprise basement, ground nd eight floors over, having a total floor f about 80,000 ft. super. The structure l-framed, and the front elevation has arried out in stone. The frontage to ay is about 92 ft., while the depth of extends to the southern boundary of y in Queen Anne's-gate.

ohn Warton is acting as clerk of works, general contractors are Messrs. Ford & Ltd., of Kilburn. The sub-contractors rman, Long & Co., Ltd., steelwork; nd Portland Stone Firms, Ltd., stone-The Express Lift Co., Ltd., lifts; Young, & Young, heating and hot water; ooper, Ltd., electric light; Haywards, re escape staircases; British Luxfer yndicate, Ltd., metal casements; W. B. & Sons, tiling and terrazzo; F. Brad-Co., fire-resisting staircase; Adamsez, anitary fittings.

rchitect is Mr. H. J. S. Abrams, 19, ham-street, Strand, W.C. 2.

St. Marylebone Housing Scheme.

scheme each block consists of 16 self-l flats approached from two stair nd each flat consists of a living room, scullery, bathroom and w.c. and three s in the larger flats and two bedrooms maller flats. In addition each flat is th coal space and cupboards and pro-made for a constant but limited hot pply. The living room is fitted with ed stove and oven which can be used ; an open fire or a kitchener—the s fitted for use with a gas or electric nd the flats are wired for electric light. the flats have external balconies. out of the balconies on the site has anged so as to obtain the maximum ne in all the living rooms and bed-nd the courtyards assure a plentiful light and air to each and every flat.

nal facilities in the scheme are as -Laundry with washing and drying the tenants' own use, perambulator lation and provision for local coal nned in convenient positions on the rther, a central boiler house provides to each flat, low pressure hot water eing installed with pumps to ensure circulation to each flat.

ildings generally are of fire-resisting construction, brick walls with red facings and the floors of hollow brick tiles with concrete filling, while the roofs are covered with red Caddick tiles. Interest is given to the elevations by the treatment of pilasters, &c., in cream stucco, while the entrances are given some character by being built in artificial stone of a simple design. Internally the flats are finished with solid boarded floors to the living and bedrooms while the sculleries and bathrooms are finished with granolithic with coved skirting. The walls and ceilings are finished with Sirapite plaster finished in grey distemper, and picture rails are provided to the several rooms. Ample cupboard accommodation has been provided and special food cupboards with permanent ventilation have been planned adjoining the sculleries. The staircases are of granolithic with wrought-iron balustrading and oak handrails.

Owing to the difficulty of obtaining vacant possession of the houses already on the site it was not possible to proceed with the scheme as a whole. In January, 1923, tenders were invited for the erection of two blocks containing 32 flats, the central laundry, boiler house, coal and perambulator stores. The tender submitted by Messrs. Walker & Slater, of Uttoxeter Old-road, Derby, for the sum of £26,280 was accepted by the Council. The scheme when completed will make a very effective clearance in a congested area, and will form a substantial contribution towards the provision of improved housing accommodation in this part of the borough.

The principal contractors for the buildings now completing are Messrs. Walker & Slater; while the chief sub-contractors are Messrs. The Concrete Stone Co., artificial stonework; Messrs. F. Bradford, granolithic work; Messrs. J. Jeffreys, central hot-water engineers; Messrs. Edwards & Son, "Worker" grates; Messrs. Gillham & Jones, electrical installation; and the Gas Light & Coke Co., gas installation.

Messrs. H. V. Ashley & Winton Newman, FF.R.I.B.A., whose design was accepted in a limited competition, are the architects.

The Vale House, Chelsea.

This house was designed by Mr. W. K. McDermott, A.R.I.B.A., and, in his absence abroad, the supervision of the execution was undertaken by Messrs. Forsyth & Maule.

The Chenil Galleries.

The drawings we give this week illustrate the new Chenil Galleries now under erection on a site adjoining the Town Hall, Chelsea. This represents the first instalment of an enterprise the object of which is to provide an art centre in this part of London, and includes picture galleries, a restaurant and rooms available for music, dances or receptions, and drawing or painting classes. The galleries occupy a large area in the rear of the building and communicate also with Manor Gardens. For these Galleries various systems of lighting have been adopted to suit the conditions caused by the different heights of the surrounding buildings. The elevation to King's-road is of Portland stone, and the chief problem in the design has been to bring the rather unusual vertical dimensions which result from the special floor level requirements into some relation with those of the block, principally of shops, to which this building will form the eastern termination. The lowness of the ground story, calculated to give direct access to the main-floor level of the Galleries on entering, has called for some modification of the traditional treatment of a basement, and a more gradual transition to the contour above; whilst the second floor, with its wide window spaces, is given a certain loggia-like character by the substitution of eaves for the usual cornice.

Messrs. Perry & Co. (Bow), Ltd., are the general contractors; Messrs. Rosser & Russell the heating engineers; and Messrs. T. Clarke & Co. the electricians. The floors and roof (which is slate-covered) will be by the British Reinforced Concrete Co., and the windows by the Crittall Manufacturing Co. The Bath and Portland Stone Firms, Ltd., supply the Portland stone. Messrs. Kennedy & Nightingale are the architects.

Nurses' Home at St. Bartholomew's Hospital.

We illustrate this week the new Queen Mary's Home for Nurses at St. Bartholomew's Hospital, London, of which Mr. H. Edmund Mathews, F.R.I.B.A., is the architect. The building is of steel-frame construction. The external curtain walls are of brick faced with Portland stone. The building has been planned in four blocks connected by enclosed bridges. Each block and each floor is self-contained, and any block or any floor can be isolated without interfering with the working of the remainder. Provision is made for 557 separate bedrooms.

House at Salcombe, South Devon.

This house is situated on a steep hill looking out to sea across the bar at Salcombe. An old stone quarry has been used to form a garden below. The house is of local stone and stuccoed, with window jambs, sills and mullions of Doulting stone, from Somerset. The roof is of red Delaboles, and the half timber of old oak. The windows are steel casements with leaded lights. Mr. F. Harrild, A.R.I.B.A., is the architect.

MEETINGS

FRIDAY, *November* 28.

Glasgow Architectural Craftsmen's Society.—Mr. J. Falconer on "Woodworking Machinery." At Royal Technical College.

MONDAY, *December* 1.

Institution of Electrical Engineers (Western Branch).—Mr. W. E. Bush on "Modern Illumination." At Cardiff. 6 p.m.

Edinburgh Architectural Association.—Smoking Concert. At St. Vincent House, Great King-street, Edinburgh.

Royal Society of Arts.—Mr. L. C. Martin on "Modern Colour Problems." At John-street, Adelphi. 8 p.m.

TUESDAY, *December* 2.

College of Estate Management.—Mr. E. W. Eason on "Compulsory Acquisition of Land." At Lincoln's Inn Fields, W.C. 5.30 p.m.

WEDNESDAY, *December* 3.

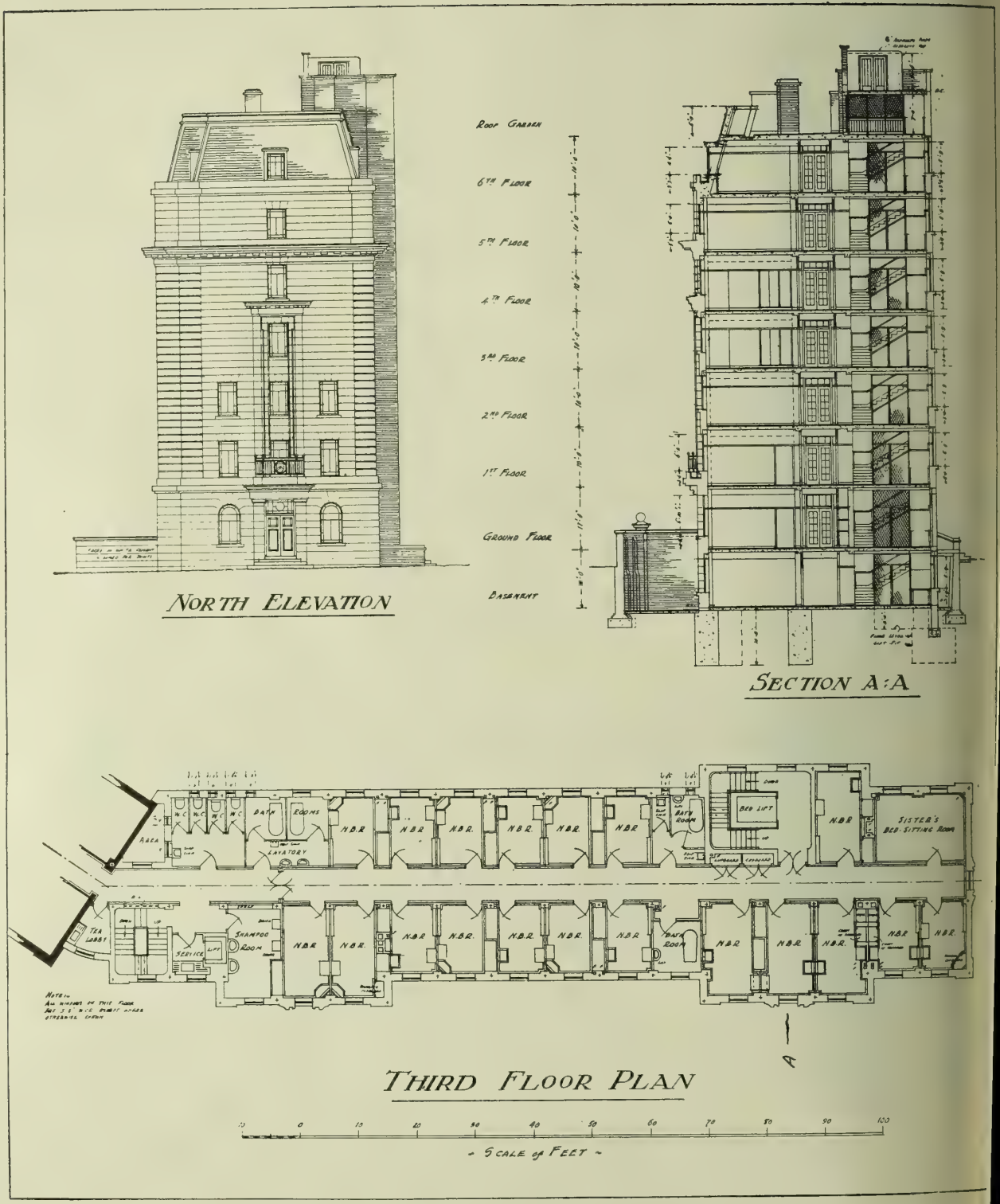
Institution of Sanitary Engineers.—Mr. H. A. Roechling on "House Drainage, with Special Reference to the Intercepting Trap." At Caxton Hall, S.W.1. 7.30 p.m.

THURSDAY, *December* 4.

Auctioneers' and Estate Agents' Institute.—Mr. E. H. Blake on "The Institute, 1886–1924." At 29, Lincoln's Inn Fields, W.C. 7.30 p.m.

Yorkshire Cottage Hospital.

A scheme suggested some seven years ago for the provision of a cottage hospital to serve an important mining area in Yorkshire of about 60,000 to 70,000 population, including and surrounding Castleford and Normanton, has now taken a definite shape, plans and specifications, prepared by Mr. R. A. Easdale, F.R.I.B.A., of Castleford, having been adopted, and a representative committee of employers and employees in the area have accepted the tender of Mr. L. J. Gallagher, builder and contractor, of Castleford, at £26,714 3s. 9d., the building to be of brick with green Westmorland slates. The hospital is to consist of a two-story central administration block with a wing on the "Y" principle at each end, each wing providing two wards with total accommodation for 38 patients, and the building is to be so constructed as to be readily capable of extension when required.

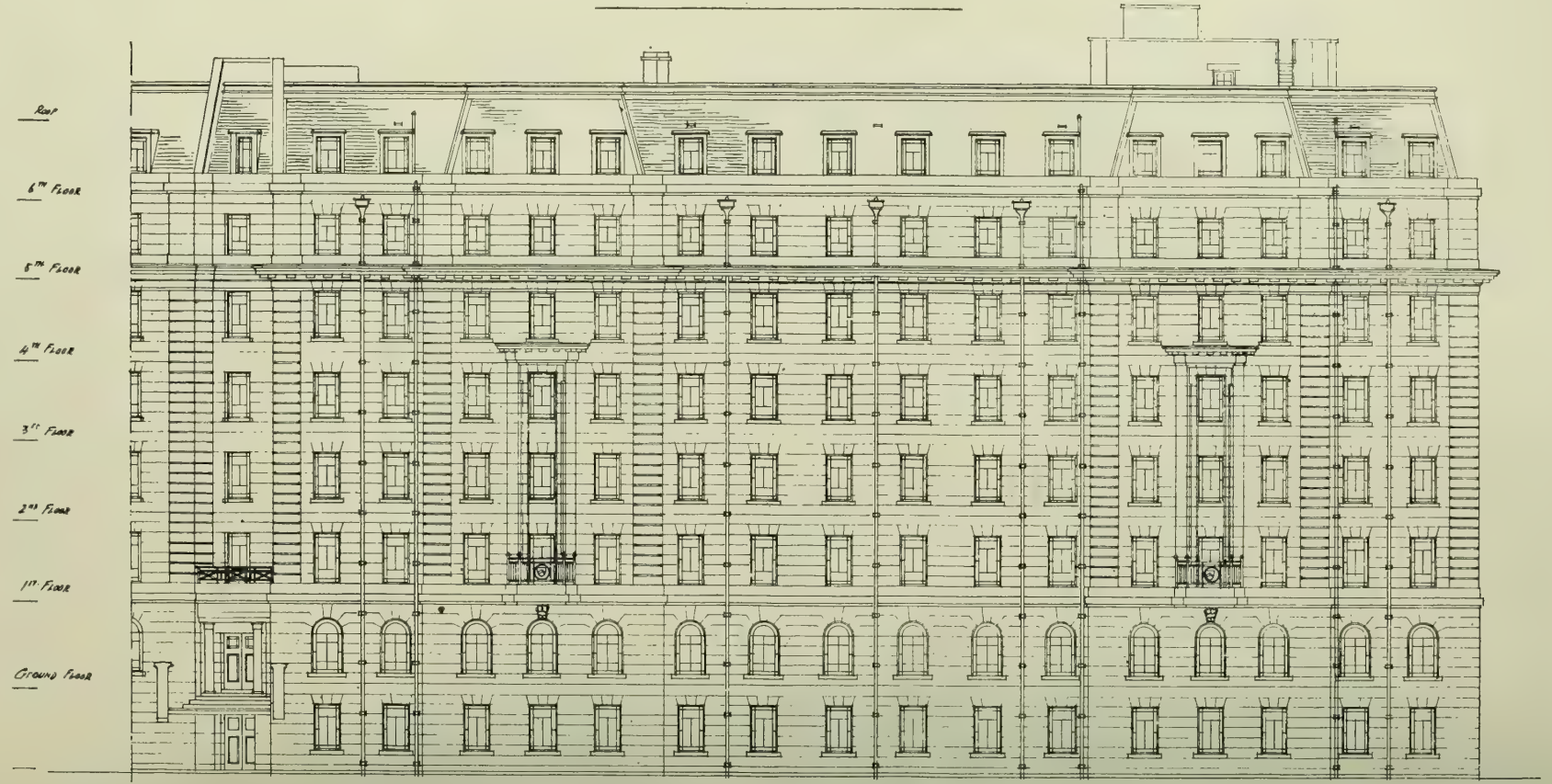


Queen Mary's Home for Nurses, St. Bartholomew's Hospital.

MR. H. EDMUND MATHEWS, F.R.I.B.A., Architect. (*See p.* 855.)

ST BARTHOLOMEW'S HOSPITAL

QUEEN MARY'S HOME FOR NURSES
EAST EXTENSION



EAST ELEVATION

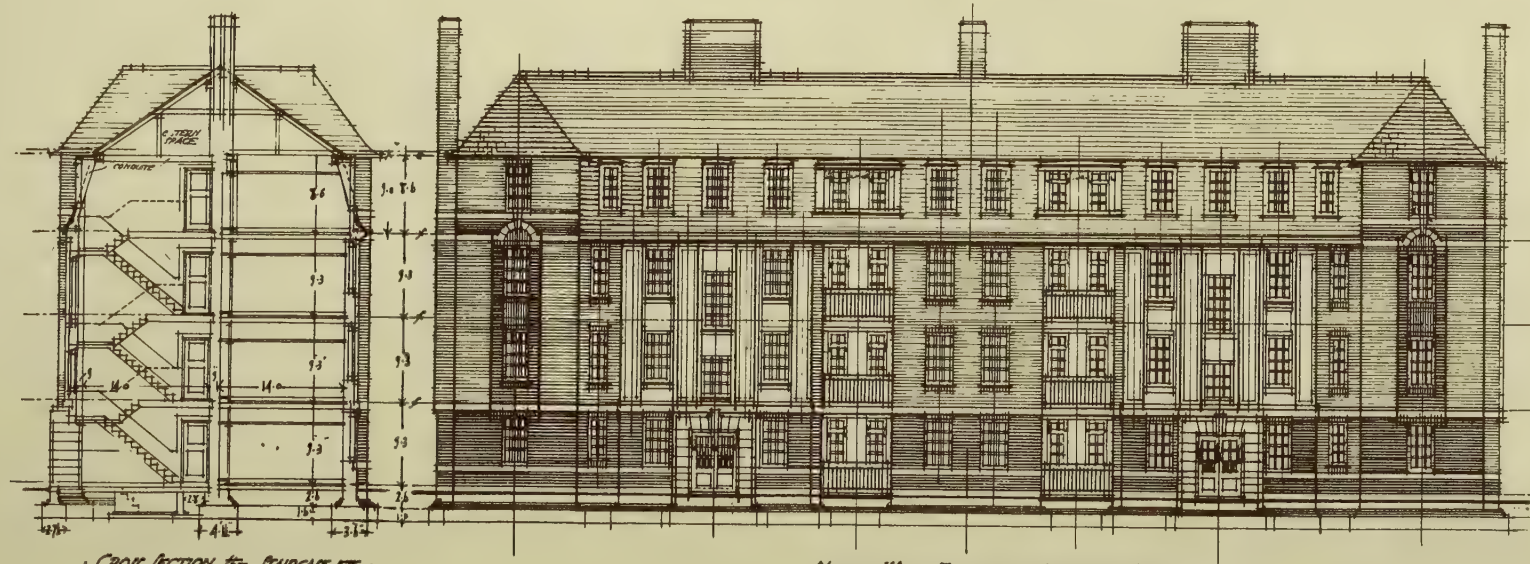
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SCALE of FEET

M. H. Baillie Scott, FRIBA, Architect

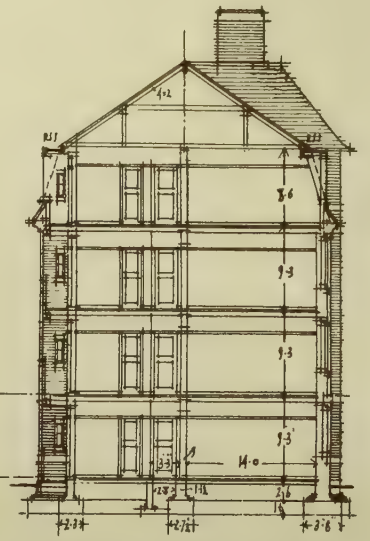
· BOROUGH of St MARYLEBONE HOUSING SCHEME ·

· FISHERTON STREET SITE ·



· CROSS SECTION thro. STAIRCASE ETC ·

· NORTH WEST ELEVATION · ENTRANCE FRONT ·

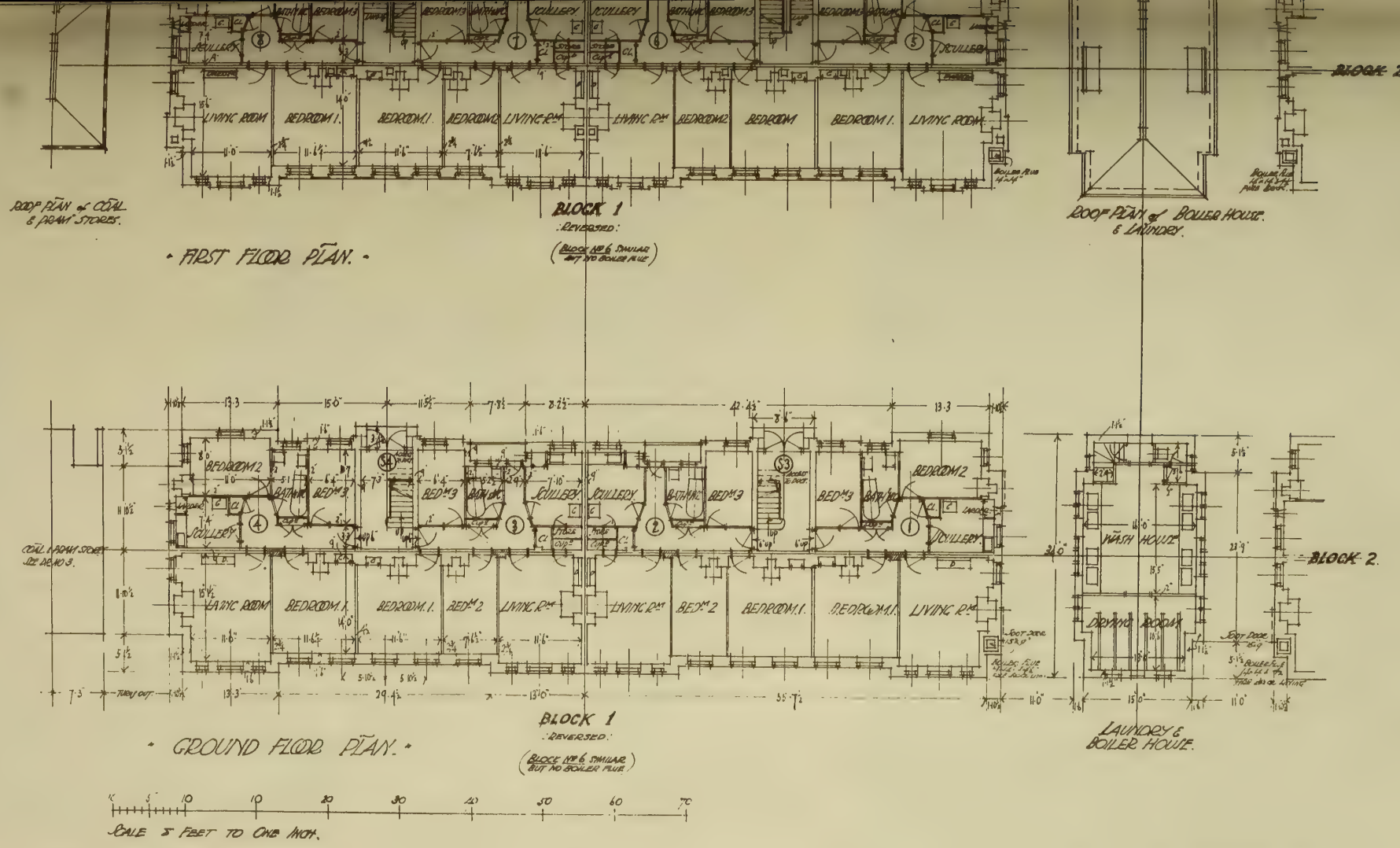


· CROSS SECTION thro BALCONIES ETC ·

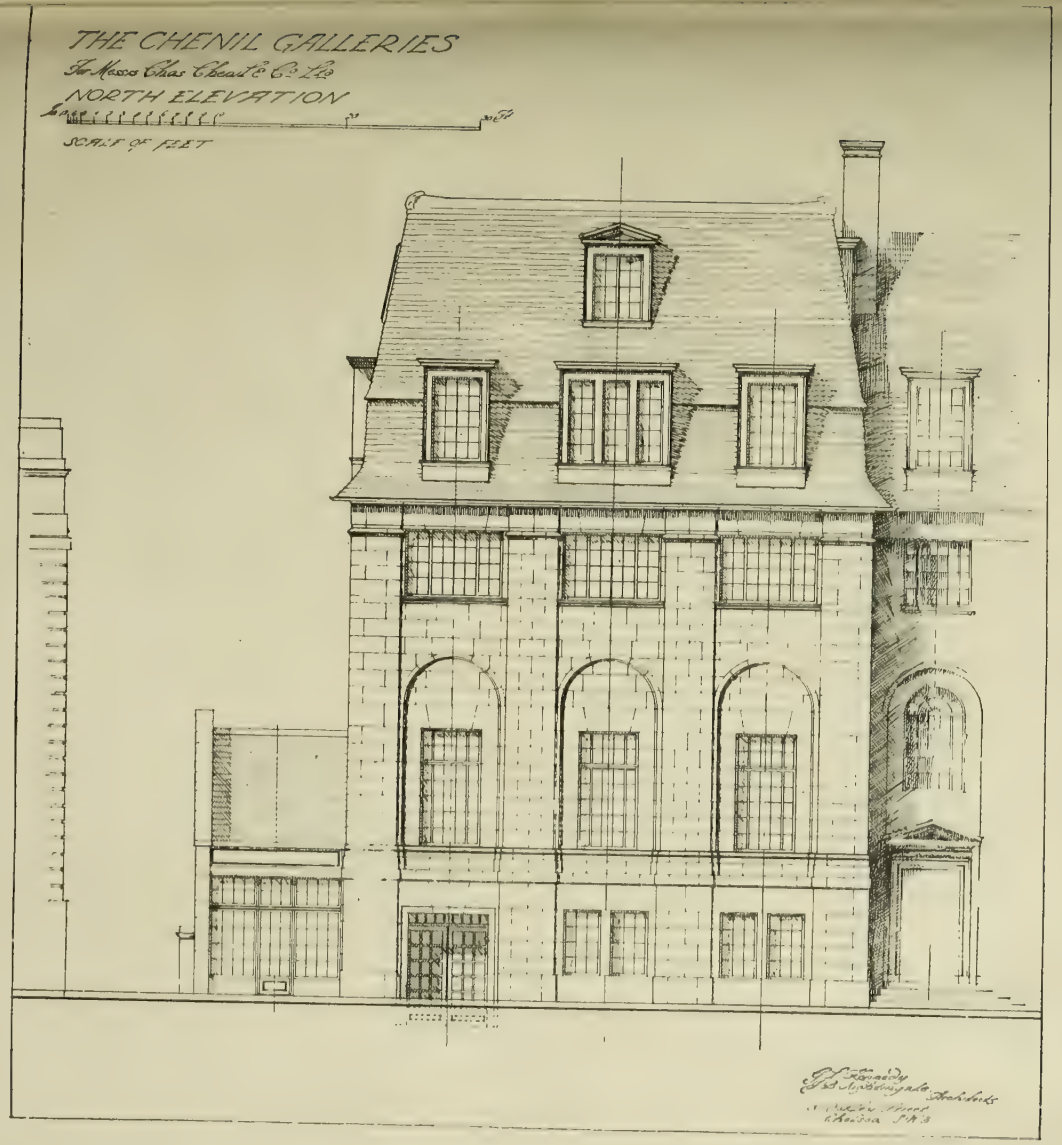


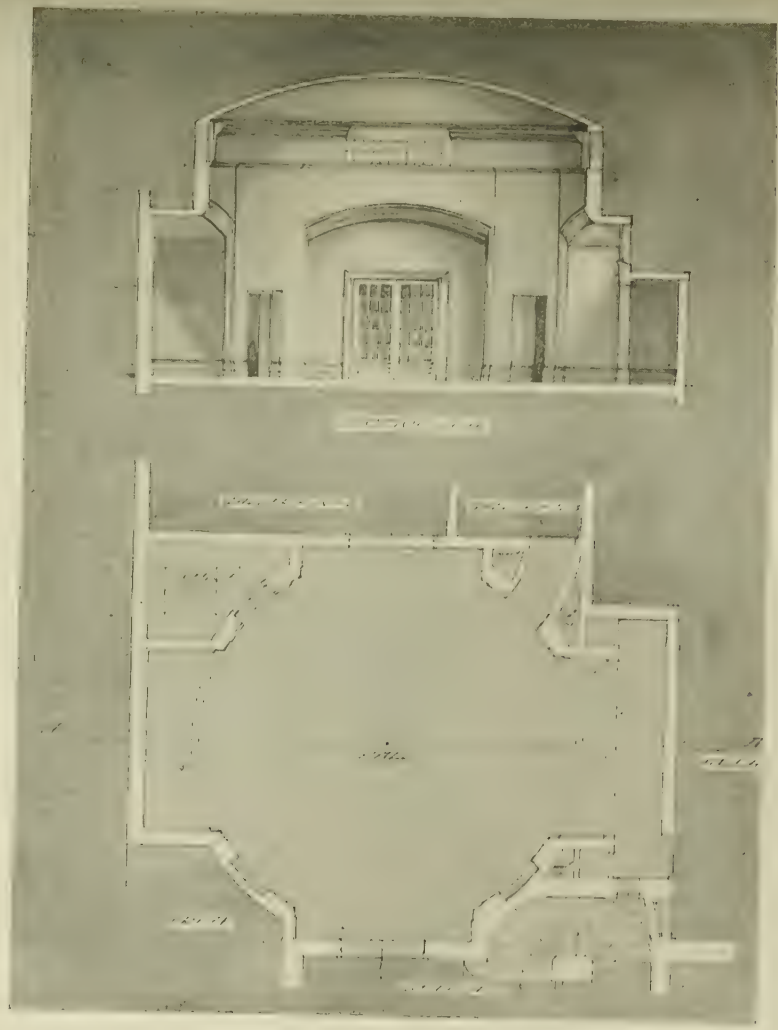


THE BUILDING NEWS



MESSRS. H. V. ASHLEY & WINTON NEWMAN, FF.R.I.B.A., ARCHITECTS.



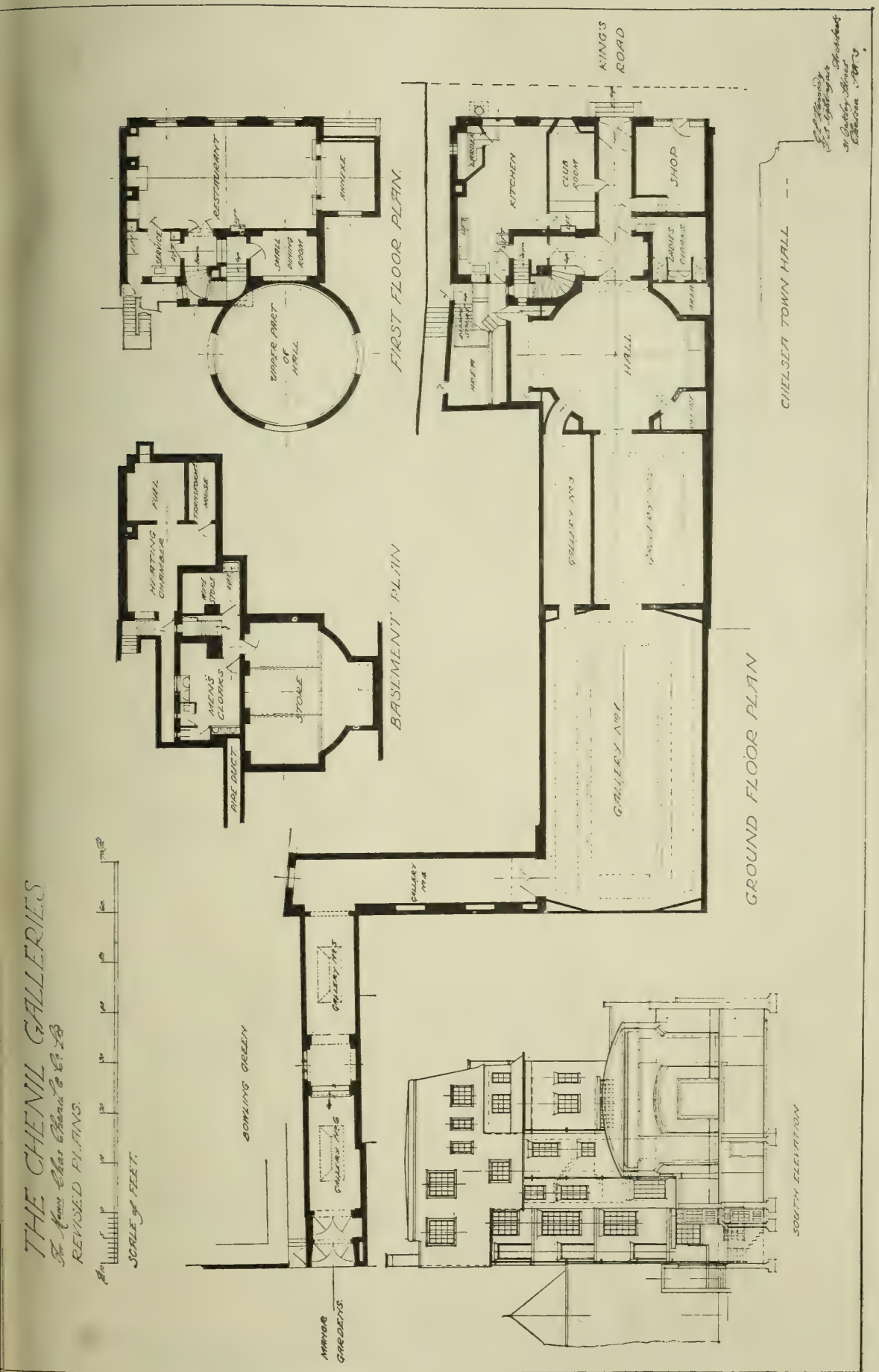


THE HALL.

The Chenil Galleries. MESSRS. G. L. KENNEDY & F. B. NIGHTINGALE, Architects.

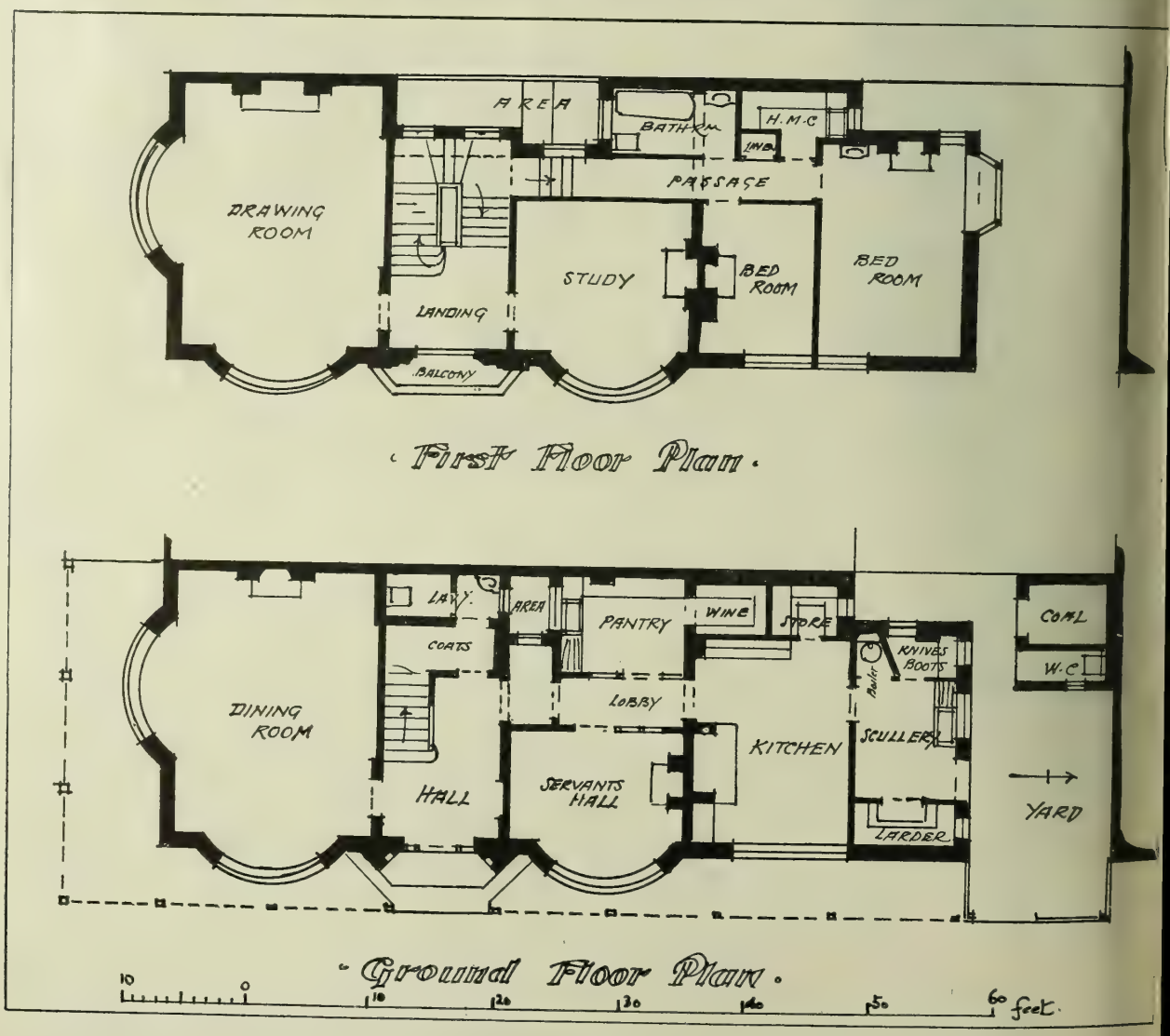


BUSINESS PREMISES, WESTMINSTER. MR. H. J. S. ABRAMS, ARCHITECT.



The Chenil Galleries. Messrs. G. L. Kennedy & F. B. Nightingale, Architects. (*See p.* 855.)





Vale House, Chelsea.

MR. W. K. MCDERMOTT, A.R.I.B.A., Architect. (*See p.* 855)



Proposed Sailors' Institute, Swansea.

Mr. Glendinning Moxham, F.R.I.B.A., Architect.

[This building will be erected on the site now occupied by offices adjoining the Sailors' Home, Mount-street, Swansea. The exterior will be built of brickwork, with Portland stone.]

THE ARCHITECTURE CLUB

THE second annual meeting of members of the Architecture Club was held at the Royal Institute of British Architects on November 18, the President, Mr. J. C. Squire, in the chair. In presenting the report of the Executive Committee and statement of accounts for the year ending May 31 last, the chairman stated that, apart from the Club's Exhibition at Grosvenor House in the spring, they had had the pleasure of co-operating with the Royal Institute in organising the representative Exhibition of British Architecture at the British Empire Exhibition and also of assisting the Institute in formulating a protest against the St. Paul's Bridge project. These matters might be taken as evidence of the happy relations that had always subsisted between the Club and the premier body of British architects, by whose courtesy, indeed, they were meeting in that hall. Mr. Squire referred to the visit of Her Majesty the Queen to the Club's Exhibition, to the excellent and stimulating address of the Marquis Curzon at the opening ceremony, and to the thoughtful and sympathetic speech of the ex-Premier, Mr. Ramsay MacDonald, at the last dinner of the Club in May. A considerable part of the report dealt in detail with the work of the Sub-Committees. The financial statement showed that a considerable loss had been sustained through the Exhibition, but the deficit, the chairman explained, had since been cleared off. The report and accounts were unanimously adopted.

Messrs. Arthur J. Davis, Nathaniel Lloyd, Charles Marriott, and Clough Williams-Ellis were elected to fill vacancies on the Executive Committee caused by the retirement, under Rule VII, of Messrs. Oswald Barron, E. Vincent Harris, Ralph Knott, and Professor Hubert Worthington. Votes of thanks to the retiring members of the Executive, the retiring treasurer, Mr. H. Austen Hall, who is succeeded by Mr. Darcy Braddell, also to the R.I.B.A., the chairman and the secretary, concluded the proceedings.

THE ANCIENT WORLD & RECENT EXCAVATIONS

A SERIES of lectures on "The Ancient World and Recent Excavations" was inaugurated recently at the British Museum, when Miss Claire Gaudet gave an address introductory to her course in which she will trace the evolution of architecture from the earliest known times until the Roman period.

Miss Gaudet showed how all arts had their origin in the service of the gods, and that architecture proper began when temples were built for worship, and theatres for the performance of religious rites; the earliest form of the latter being circular, supposed to have originated with the performance on the threshing floors. The exact date of birth and place of origin of architecture could not be stated. Until lately Ur and Ashur were supposed to have been the earliest known cities, but it had now been established that Kish flourished long before these two cities, a complete list of its kings having been found.

For many years the Egyptian civilisation was thought to be the oldest, probably the Egyptian stone was of a par enduring nature, and many evidence culture of Egypt had thus been p whilst those of Babylon and Mesopota perished. However, excavations, begu the recent war had given evidence of a civilisation in the latter countries. Arthur Evans had discovered traces o faring race farther advanced in civilisat the Egyptians, with whom they were t

The traces of civilisations were fou on clay tablets, and on stones contain than one language, such as the Roset discovered in 1798, a part of which ca the possession of the British in 1801, a be seen to-day in the Assyrian Galler British Museum.

Following the Babylonian, Mesop and Egyptian civilisations, they got Crete, then the Mycenian age with its pillar cult. Next came a dark peri which civilisation emerged to the glor of Greek art, coming to its zenith a defeat of the Persians. To this period t the sculptures of Phidias and such w temples as the Parthenon and Erecth Athens.

In conclusion, Miss Gaudet pointed o Roman building was the logical result o tion through the earlier types, and that was based Gothic architecture, which no means a mushroom growth springin a moment, as some people seemed to t

The lectures, twenty in number, ar every Thursday in the British Museum Room, at 4.30 p.m., and also in the Polytechnic on Fridays, at 8 p.m.



House at Salcombe. MR. F. HARRILD, A.R.I.B.A., Architect. (*See p.* 855.)



From "English Decoration and Furniture" (M. Jourdain).

Fig. 1.—Carved Open Elizabethan Buffet.



From "English Decoration and Furniture" (M. Jourdain).

Fig. 2.—Interior Porch, the Job Room, Bradninch.

(*See p.* 862.)

BOOK REVIEWS

English Decoration and Furniture of the Early Renaissance (1500–1650). By M. JOURDAIN. (London: B. T. Batsford, Ltd.) £3.

We are in entire agreement with Lieut.-Col. E. F. Strange when he tells us in an interesting "Foreword" that "The period covered by Miss Jourdain in the present volume is, of all others, the most interesting in the history of English Decoration and Furniture; for it was that which saw the laying of the foundation whereupon all subsequent progress has been based." This being so, Miss Jourdain has designedly or by force of circumstances reserved her choicest course to finish the feast. It is Volume I of the series, and it is two years since the same writer gave us Volume IV dealing with the period 1750–1820. Still earlier we had the two middle volumes by Mr. Francis Lenygon —one dealing with the Decoration and the other with the Furniture—covering the period 1660–1770.

Not counting Shaw in his "Specimens of Ancient Furniture" (published in 1836), are we right in suggesting Mr. Percy Macquoid was the pioneer of the modern monumental works on English furniture when he presented us with his "Four Ages" of "Oak," "Walnut," "Mahogany" and "Satinwood"? It would be out of place to draw any comparison between the one series and the other, or between Volume I and Volume IV of Miss Jourdain's contribution to furniture lore. Each series and volume finds its place on the bookshelf of the art connoisseur and art decorator.

It is in the nature of such things that the volume under review deals with the furniture and decorations of the castles and mansions of the plutocrats of the Renaissance, and not with the household gods of the middle and poorer classes. Until the growing intercourse between the British Isles and the more distant Continental states, such as Italy and Spain, in Tudor times, even the great English houses exhibited but little furniture and that little of the simplest —in the main purely utilitarian tables, benches, stools, chests, cupboards and bedsteads—devoid of any ornamental details, the whole lump leavened here and there in the case, and that almost exclusively, of the religious establishments with more pretentious reflections of the contemporary ecclesiastical Gothic. The cry of the Roman rabble was "Panem et circences," but if the English hind got bread he could well dispense with the circus. In the proletarian's hut or hovel would be found such furniture as might have been constructed by Crusoe on his island. The rudest of trestle tables and pegged stools sufficed for the meagre "board" and for "bed" a truss of straw, a bundle of heather or bracken did duty on the earthen floor. A rude chest of axe-hewn planks which might, as occasion required, serve as a seat, table or wardrobe would be sheer luxury. Such things when replaced by more civilised chattels would go the way of all wood in smoke from the family hearth-stone through the hole in the roof, and so to-day the mediæval furniture of the countryside is as rare as the Dodo and excepting for the educative purposes of an ethnological museum can well be spared.

The finer furniture of the Renaissance is in quite another case being, in spite of natural displacement by newer styles, good enough in itself for preservation in considerable quantities. Many of the greater houses up and down the country still retain, and are justly proud of, the furniture built for them in the late Tudor and early Stuart days—notably such places as Knole, Hardwick and Ockwells. Stately Knole which, with its 365 rooms, stands four fronted to the four winds is in itself an epitome of English history from pre-Reformation days. It was the home of several, and the death place of more than one archbishop, and there is scarcely an English King or Queen from Henry VII who has not made a longer or shorter stay therein. The hard knocks which reduced to ruins the strong castles of the neighbouring counties and seaboard passed by this unfortified manor house which "quietly rested under the drums and tramplings of three conquests." Continuity is the key-note—one might almost say fetish—in regard to furniture and furnishing at Knole. To mention one room alone, the King's bedroom stands to-day completely furnished as it did when the Sackville's must have temporarily ruined themselves to entertain James I. It is on record that the bedstead alone with its gold and silver thread worked hangings cost £8,000, and the entire suite, including the silver toilet service, upwards of £20,000. "Time, which antiquates antiquities and hath an art to make dust of all things, hath yet spared these minor monuments." Near by in the Leicester gallery hangs the portrait by Mytens of James I, painted on the occasion of his visit, and underneath stands the identical X-shaped Venetian chair in which he appears seated in the picture—the very same chair which was copied for the coronation of King George V.

We are not writing a complete history of Knole, and neither does Miss Jourdain of this or any other house of the Renaissance. Such things have been well done and may still be better done. Miss Jourdain has amassed a wealth of matter, both in illustration and text, which must prove invaluable to all students of period furniture and furnishing. She not only gives us carefully-selected and, in most cases well-authenticated examples of furniture, but the original, or at least appropriate, backgrounds either from photographs as they stand to-day, or from old prints, lithographs or water-colour drawings. The frontispiece, a reproduction of Joseph Nash's water-colour drawing (1870) of "The Hall, Littlecote, Wiltshire," is a sheer delight. To many of the examples such as screens, panelling, ceilings, staircases, furniture and stained glass quarries, are appended working drawings of details set out and measured to scale.

That many of the illustrations are of old familiar friends (at least to some of us) makes them none the less welcome. Figures 278 and 300 (in collection 21) have fascinated us for years and we should like to know more of their past history and provenance, which have, for some unexplained reason, been shrouded in mystery. The two pieces—a draw-table and a buffet of Elizabethan type—have sufficient details in common, palpably carved by the same hand, to establish their kinship and point, perhaps, to the earliest examples of the English "suite." The rouge dragon and lion carved supports of the buffet shelves suggest the heraldic devices of Queen Elizabeth, and we may well surmise that they were made for and adorned one of the Queen's country houses.

A number of references are made in the book to Bradninch House, which lies in a fold of the hills above the Culm Valley, near Exeter. Built by Peter Sainthill, Recorder of Bradninch, in 1547, on the site of the old rectory, it is—or the one wing which remains—an example of the smaller and less pretentious manor houses of the period. Severely plain as to its exterior, it encloses a panelled room, known as the Job room, which is comparable with the panelled room from Sizergh Castle now at the South Kensington Museum. Here we have English renaissance carving at its best. The flat pilasters, each different, are adorned with carvings of fruit, flowers, musical and warlike instruments, amorini and memento-mori. The great fireplace is surmounted by an overmantel, carved in alto-relievo with Job's trials, Abraham's sacrifice, and Jacob wrestling with the angel. The chief glory of the Job room is its inner state porch, and if we cannot all go to Bradninch, we can at least go to South Kensington and see the Sizergh Castle room, or sit at home and read "English Decoration and Furniture."

L.C.C. Regulations Relating to Reinforced Concrete, and Steel Frame Buildings. With Explanatory Notes. By EWART S. ANDREWS, B.Sc. (London: B. T. Batsford, Ltd. 7s. net. Revised Edition.)

The first forty pages contain the official regulations revised to date applicable to large structures in the London area, and will be therefore of the utmost interest to structural engineers and builders. It is divi sections relating to beams, pillars, stru foundations, &c. Each paragraph be bered, enables ready reference being the sections to which the author's ex notes apply. These notes are entirely so that confusion between regulations notes is impossible. The notes and occupy some 24 pages, and will doubtl much assistance to those engaged in s design, particularly those with little e in reconciling the official requirements continuous advance in structural engin the modern frame buildings.

Garden City Houses and Domestic (27, Tothill-street, S.W. 1.) Price

This is a fourth edition of the wor has been revised and enlarged. The divided into three sections, as follows duction with Typical Specification; and Plans of Interiors; Details. It il the designs of many architects well-k their domestic work, and numerou details.

Colour and Comfort. By JOHN GLOAG trations by Palmer Jones. (Duck Co., London.) Price 7s. 6d.

The author, in his introduction, says the purpose of this book to suggest economical uses of colour in twentieth houses," and in this we think he ceeded, for the book contains numerous tions for colour schemes of present-day Many of the schemes are very gay furniture modern in design. A coloured piece by Mr. Palmer Jones is given.

The Panelled Rooms: VI, The Walthan Room. (The Victoria and Albert M Price 1s. 6d.

An interesting account of this roo about 1530, with numerous well-rep illustrations from photographs and drawings. The book is another addition to the excellent series the au are producing from time to time.

Art Work. No. 2. (The Art Work P Co., 37, East Castle-street, W. 1.) 3s. 6d.

Art Work is a quarterly magazine, with present-day work. The number contains many interesting articles, "The Direct Carvings of Alan Durst," ton Parkes; "Thoughts on Furniture with illustrations by P. Gordon Russ many others. Other contributors are Craig, Frederick Etchells, Wyndhan Omar Ramsden, Joseph Thorp, and It is edited by Mr. Herbert Wanthier.

Books Received.

THE ELECTRICAL CONTRACTORS' YEA 1924–25. (London: The Electrical Con Association.) Price 2s. 6d.

SIXTY-THREE YEARS OF ENGINEERI Sir Francis Fox. (London: John Price 18s. net.

MASTERS OF ARCHITECTURE: John Bentley. By W. W. Scott-Moncrieff. Ernest Benn, Ltd.) Price 10s. 6d. net.

THE STORY OF ARCHITECTURE THR THE AGES. By P. Leslie Waterhouse. B. T. Batsford, Ltd.) Price 6s.

A HANDBOOK OF HOUSING. By Townroe. (London: Methuen & C Price 6s.

THE LAW OF LANDLORD AND TENA Joseph Haworth Redman. (London: worth & Co.) Price 50s.

THE HIMALAYAS IN INDIAN ART. Havell. (London: John Murray).

ALLIANCE ASSURANCE, 1824-1924. William Schooling. (London: Allian ance Co., Ltd.)

MODERN ARCHITECTURAL ART. (Sir John Burnet, Son, & Dick.) (Che Ed. J. Burrow & Co., Ltd.). Price

ARCHITECTURAL EDUCATION.—II

By W. S. PURCHON.

I.—SCHOOL AND OFFICE.

previous article an attempt was made with various aspects of general educa- the architect, both before and during essional training, and while the latter less more immediately interesting both young student and to the critic of of architectural education, it is indeed to over-estimate the importance of the

oment we leave the question of general n and touch upon the professional, the of school *versus* office is at once While there are those who for years en convinced that this is no longer a , and doubtless a much larger number re been so convinced in more recent nd notably by the exhibits at the Congress on Architectural Education, still some architects who feel that the is by no means settled. In any case tremely probable—no matter to what he general superiority of the schools demonstrated—that for many years yet hod of office training, possibly in a form, will be continued, at all events maller towns and in districts remote e greater schools of architecture. It fore imperative that the matter be to with an open mind, and the various of supplementing school training with perience, or of giving office-trained facilities for obtaining some help from ols, should be carefully investigated.

first place it will surely be agreed at t, at its very best, office training is at remarkably fine way of entering and for the profession. One has only for a moment of Norman Shaw and of architects who had the good fortune hrough his office. Under such circum- he students are carried along by the m engendered by contact with a great ty, and clearly, under these special s, the best of all results may follow. ately, men like Shaw are not s. There are, however, many archi- o, while they would be the first to suggestion that they rank with Shaw other giants, are men of high standing profession, carrying out a considerable f excellent work. Assuming that they ng to take pupils—and it is an essen- of the problem that frequently the hem decline to do so—what is to be and against articling a pupil in one of their offices, assuming, again, that is prepared to work steadily and has ability?

our of such a system it may be said pupil, at the end of his period of will be familiar with the methods of e, and would be better able to start n that office as a junior assistant than school-trained man. He should be ed to the routine of the office, and master's manner of design and con- al methods. He would perhaps be with the materials his chief would r different types of buildings, and ssibly have some little practical know- professional practice, the writing of ions, the measuring and plotting of premises, and in some cases he might uired a slight knowledge of estimates, s and land surveying. He would also e sort of drawings his chief usually he local authority, the client and the respectively, and, if given a small job on his own, would possibly be able it out more or less on the lines normal office. The design subjects on which l has worked have probably all been ly practical ones, and he will, no e familiar with the difficulty of work- a definite cost. If his chief is a specialist, he will quite likely have obtained some extremely useful information bearing on the design of a particular type of building.

In certain of these ways, and possibly in others, he would clearly be the superior of the school-trained student, and it is probably largely for these reasons that a number of architects still look askance at the schools. Put the office-trained student in a strange office and his immediate superiority over the school-trained man, while possibly still there, would be much less marked.

On the other hand, the disadvantages of office training are lack of systematic instruction, actual waste of time, particularly in the early years, and relative waste of time caused by the study of subjects in the wrong order; and while the hard-working student may overcome some of these disadvantages, there is often a lack of discipline which adversely affects even the average student, and has a markedly bad effect on students below the average. There is also in the office an absence, as a rule, of that competitive spirit which plays a large part in the success of the schools. It has been said that some architects take more pupils than they can look after, and while this may possibly be the case, a number of pupils in one office, given adequate instruction, may, because of the opportunity for competition, have a better chance of development than the solitary pupil. A great difficulty in the office system is the enormous amount of available information which is floating about, with little or no guidance to the pupil as to which parts should be selected for careful assimilation and which rejected.

The systematic training in the schools is one of their great advantages: the students taking the various subjects in the right order, and not proceeding to a higher type of work until they have dealt adequately with its "prerequisites," to use a term common in the American schools. The time of the student should be well spent from the moment he enters the school; for him there is no period of six or twelve months or more during which he is "finding his way about." The average level of draughtsmanship is considerably higher among school students than among office pupils, and the former have, on the average, far less diffidence about tackling a big highly-finished drawing than the latter. In design, the school student, while probably less familiar with the difficulties of actual design in practice, has been trained on general principles, and is thus better able to tackle new problems. He has probably acquired a considerable grasp of a particular manner of design, his imagination has been well stimulated, and his attempts at large subjects should have increased his grasp. He also has, on the average, greater ability in seizing on the essentials of a problem.

Until comparatively recently it may be that the student in the school was behind the office pupil in the smaller matters of construction. but the schools have been considerably strengthened in this direction recently, and it is probable that the student leaving a school at the end of his course would have not only a broader grasp of constructional methods but also a greater familiarity with their details. In fact, the tendencies of the leading schools are towards an improvement in the normal methods of working-drawing preparation. In the calculations of structures the school student generally receives a better training, and in this subject, again, his studies of general principles will rapidly bring him ahead. In the matter of specifications and professional practice, the well-trained office pupil may, at the moment, have the advantage, but increasing attention is being paid to these matters in the schools, where once more the study of fundamental principles may well do a useful service.

In the case of the R.I.B.A. and other student competitions it has been suggested that the standard has fallen with the development of the schools. The accuracy of this statement, however, has by no means been demonstrated, and it is probable that a complete exhibition of winning designs over a long period would show a steady improvement. The falling off of entries in certain cases in recent years is doubtless due to causes very different from that implied by the above suggestion, one of them being that during his period of training the school student has little time for external competitions.

The question of examinations may be a relatively small one, but here the school has a distinct advantage over the office, the student in the schools being expected to take his examinations in his stride—as examinations ought to be taken—while the office pupil is more or less obliged to look upon his qualifying examinations as matters for which he has to make a special effort apart from his normal work. Unfortunately, many pupils make small headway with these examinations during the period of their articles, and, as assistants, find it increasingly difficult to devote adequate time to them. It may also be said for the schools that the strong lights of inspection and examination beat down on them: they are compared one with another and a steady effort is made to improve their standards and methods year by year.

The problem, however, is not one of the school only *versus* office only, for the schools definitely and clearly realise the need for office experience and make provision for it. The R.I.B.A. requires candidates for the Associateship who have passed successfully through a five-years' school course, not only to pass an examination conducted by the Institute in Professional Practice but also to have spent twelve months in gaining practical experience. While the necessity for the R.I.B.A. examination in Practice may not be clear to all, as it may be argued that the schools and their external examiners might well deal with it adequately, the need for the obtaining of practical experience before granting the Associateship will be fairly obvious. This experience originally had to be obtained in the office of an architect, but under a new regulation half of the necessary time may now be spent with a builder or on building works.

The pupils in offices clearly realise, too, that the office alone cannot provide all they need, and for many years now they have supplemented their office training as well as possible by attending evening classes in such subjects as Architectural History and Design, Construction, etc. This, of course, was largely stimulated by the increasing importance of passing the Institute examinations. The disadvantages of this method are fairly obvious, both students and teachers being more or less tired in the evenings. In Scotland some such studies are taken in the early mornings. In either case the time for preparation is probably inadequate, and the strain too great.

In other cases pupils in offices attend two or more half-days a week at a school of architecture. While this is much better than the evening method, it is still far from ideal. If the school is a full-time one the pupils naturally find that they cannot keep abreast of the normal school students, and so get discouraged. There is also a tendency for them to feel that when at the school they are having a holiday from the office. The method interferes with continuity of work at the office and does not give the student enough time to settle down to the school work.

Under the system in vogue in the "Recognised" schools the students attend full-time at the school for the first three years, and then give six months full-time at the school and office alternately for two years. On the whole this works well, for after three full years and six months at the school the student is really able to benefit from office experience. Various suggestions for the modification of this scheme have been made from time to time, one being that the student should start with,

say, a year of office training. This has the advantage that the student would begin his school work with an increased facility in drawing and some slight knowledge of office methods, but these advantages are probably outweighed by the fact that the first year in an office, in the case of a student entering straight from a secondary school, is probably the least useful one, and that the experience gained in it would be of little use in the student's subsequent school training. Another suggestion is to the effect that the school vacations in the first three years should be spent in architects' offices. The disadvantage of this is that it would take up time which might be more profitably devoted to sketching and measuring. A compromise might well be effected here, however, the student giving his first two summer vacations to sketching and measuring, and his third one to office experience. This would clearly result in his periods of office training in his fourth and fifth years being of far greater value to him, and it would be an undoubted help to him in his fourth-year work in the school. In any case care should be taken to see that the summer vacations are wisely used by the students.

The school system has had a longer trial in other countries than in our own. We have gained much from the riper experience of other lands, and it seems clear that the schools of architecture have demonstrated their value here as elsewhere. It may safely be said that those who have given most thought to the subject would only in most exceptional circumstances advise a student living within reach of one or other of the "recognised" schools to enter the profession in any other way.

The case of the students living in areas remote from the schools must, however, be considered carefully. Those who can afford to go up to a large centre and pay for board and lodgings in addition to tuition fees will surely be well advised to do so. There will be, however, many who are debarred by financial or other reasons from adopting this course, and the problem before them is no easy one. It may be that in other professions this problem is ignored, but it would be unwise for us to adopt that attitude.

Such students will doubtless enter the profession as architect's pupils and will probably take correspondence courses, attend evening classes, or perhaps, in some cases, part-time day classes in institutions which have not yet obtained the recognition of the Royal Institute, and in some way the welfare of such students should be carefully safeguarded. Steps should be taken to ensure that they do not enter the profession until they have reached a reasonable standard of general education, and t then be encouraged to take advanta best education in architectural matt able in the area. While these ed opportunities may not reach the sta quired for Institute "recognition," to the advantage of the profession them working in the right directi Royal Institute, with the help of its Architectural Education, its Allied and the existing recognised schools useful work here, the heads of t possibly acting in an advisory capaci

A more important point, perhaps, students who for any reason have be the opportunities given by the schoo surely be well advised, if they can arrange to do so, to put in a year at a school after serving their arti (possibly) after having passed the Intermediate Examination. For this there is very clearly a real need for a scholarship scheme working under the of the Royal Institute. Such a schen be of inestimable value to students districts remote from the schools, an receive the strong support not only Allied Societies directly affected, but the local education authorities and th of Education.



Tower Screen, Coleshill Church, Birmingham. MR. W. H. BIDLAKE, Architect.

[This memorial screen is 10 ft. 9 in. by 12 ft. 6 in. in size, executed in oak, and was recently erected by Messrs. Geo. M. Hammer & Co Ltd., of Bermondsey.]

LEGAL SECTION

NOTES ON CURRENT CASES

Options in Leases.

re have recently shown, in commenting everal decisions which have been given Courts, great care should be exer- n inserting options in leases either to se or to continue the lease, if litigation e avoided. The latest case is Stewart *v.* t (*Weekly Notes*, October 25). By a dated June 12, 1912, made between Maria Winter, therein called the lessor expression included the person for the being entitled to the reversion of the d hereditaments), and the defendant, premises and a shop were leased for of twenty-one years from Lady Day, but terminable at the end of the first or fourteen years by either party giving other six months' notice in writing, the eing £65 for the first seven years, £70 the next seven years, and £75 to the the term. But later in the lease it was d that if the lessee should be desirous ing a further lease for a term of seven and of such his desire should give the six calendar months' notice in writing the expiration of the term of twenty-one then (provided that the lessee should duly performed and observed the nts in the lease) the lessor would grant lessee a further term of seven years, ase to be in the same form with such ations as the lessor's solicitor might e, at a rent of £80. The freehold re- had become vested in the plaintiff. ill be seen the term of seven years ex- Lady Day, 1917, the further term of n years would expire Lady Day, 1924, e twenty-one years would expire Lady 931.

ugust 20, 1923, the defendant informed intiff that he desired to exercise the and have a further lease of seven years nt of £80. In reply, the plaintiff in- the defendant that he declined to grant er lease, and enclosed a formal notice, August 25, that, pursuant to the pro- contained in the lease, he was desirous rmining the tenancy thereby created, ve notice that the tenancy would cease rch 25, 1924. That would be at the end rm of fourteen years. An originating ns was then taken out by the plaintiff, Order 54A, for a declaration that upon e construction of the lease the tenancy created was duly determined on 25, 1924, notwithstanding the previous of the defendant purporting to exercise ion. The Court said that the construc- the two clauses in the lease was by ans easy to interpret, but held that the e clause which conferred the option was to the penultimate clause which con- the power to determine the lease. It not be reasonable to construe the lease tling the lessee to a reversionary lease nd of the term in 1931 in circumstances the lessor had determined the lease in or to construe the option as preventing sor from determining the lease as pro- t the end of seven or fourteen years; re the plaintiff was right in claiming e lease was duly determined. It thus s that at any rate the option could not rcised before the second period of n years had at least commenced, but r it must be exercised exactly six months the expiration of the lease or could be t any time when the last period was upon was not decided, as this question arise.

Clerks of the Peace.

cision of considerable importance to of the Peace has now been decided by the f Appeal in Thornely *v.* Lord Leconfield and Others, reported in the Court below in *Weekly Notes*, October 25, and on appeal, *The Times*, November 21.

The plaintiff was bringing this action against the defendants, the Standing Joint Committee of the administrative county of West Sussex, for a declaration that his tenure of the offices of Clerk of the Peace and Clerk of the County Council was a freehold tenure and that a notice in writing given to him by the defendants to determine his tenure of those offices was ineffective. The plaintiff had been appointed to the above offices in 1913 by the Standing Joint Committee on the terms of a resolution, which had been communicated to him beforehand, which stated that the appointment was subject to certain conditions one of which was that six months' notice should be given by either party to determine the appointment.

The case really turned upon the interpretation to be placed upon certain sections of the Local Government Act, 1888. Section 83 provides, "Subject to the provisions of this Act for the protection of Clerks of the Peace holding office at the passing of this Act the following provisions shall have effect: (1) The Clerk of the Peace of a county besides acting as Clerk of the Peace of that county shall also (subject to the provisions of this Act as respects particular counties), be the Clerk of the County Council and in that capacity is referred to in this Act as the Clerk of the County Council. (2) He shall be from time to time appointed by the standing Joint Committee of the County Council and may be removed by that Joint Committee." Section 118 subsection (1) provides, "A person holding office at the appointed day as Clerk of the Peace of a county besides continuing to be such Clerk of the Peace shall, subject to the provisions respecting certain counties in the Act mentioned, become the Clerk of the County Council and if appointed before the passing of this Act shall notwithstanding anything in this Act hold his offices by the same tenure . . . as heretofore."

The Court below had held that the Act of 1888, except as to appointments existing at the time the Act came into force, had repealed former Acts which made the office of Clerk of the Peace a freehold office subject to good behaviour and that now there was nothing to prevent the appointment being made upon terms which provided for the termination of the office as was done in this case. The Court of Appeal has now reversed this decision and it is unnecessary here to detail the reasoning of the Court as the effect of the judgment may be summarised briefly as follows: The Act of 1888 did not create a new office: Clerks of the Peace retain their office as such, distinct but new duties are added as Clerks to the County Council, the office remains, therefore, as heretofore an office for life subject to good behaviour.

Managing Directors on Municipal Councils.

The decision of the late Mr. Justice Bailhache in the case Lapish *v.* Braithwaite created a great deal of agitation in those persons who had been elected to serve on municipal councils but were managing directors of companies with which the councils might have dealings, but it has now been reversed on appeal by the Court of Appeal.

The action was brought under section 41 of the Municipal Corporations Act, 1882, to recover penalties from the defendant for acting as an alderman whilst he was disqualified from being a councillor by virtue of section 12, he being a shareholder in, and managing director of, a company which had a substantial contract with the Corporation of Leeds. It may be said at once that Lord Justice Bankes, in the Court of Appeal, in giving his judgment, said the only evidence in reference to the defendant's having taken any active part in making the contract was that he was one of two directors who signed the document as witnesses to the affixing of the company's seal.

The case turned upon section 12 of the Act, subsection (1) (*c*), "A person shall be disqualified for being elected and for being a councillor if and while he (*c*) has directly or indirectly by himself or his partner any share or interest in any contract or employment with, by, or on behalf of the Council." But in subsection (2) it is provided: "But a person shall not be so disqualified or be deemed to have any share or interest in such a contract or employment by reason only of his having any share or interest in (*a*) any lease, sale, or purchase of land or any agreement for the same; (*b*) any agreement for the loan of money or any security for the payment of money only; (*c*) any newspaper in which any advertisement relating to the affairs of the borough or council is inserted; (*d*) any company which contracts with the council for lighting or supplying with water or insuring against fire any part of the borough; or (*e*) any railway company, or any company incorporated by Act of Parliament or Royal Charter or under the Companies Act, 1862." The majority of the Court of Appeal held that a managing director has not "a share or interest" in a contract within the meaning of subsection (1) (*c*), and that the judgment given for the plaintiff for penalties must be set aside.

One or two general observations may be made on this decision. In the first place, it is to be noted that the Court of Appeal was careful to say on what facts the decision was based, that is to say, it must be taken as applying only to the case of a person who is an alderman or councillor who is also a shareholder in and the managing director at a fixed salary of a very substantial company having a contract with the council, there being no evidence that the person as managing director took any active part in the negotiation, preparation, or supervision of the performance of the contract beyond that which a managing director might be presumed to take in the ordinary discharge of his duties, and no charge whatever of misconduct or bad faith as against the person as alderman or councillor.

Lord Justice Atkin delivered a strongly dissenting judgment, holding that a managing director has a very substantial interest in the contracts of his company, and that a statutory provision so important to the purity of local administration should be strictly enforced.

We may have to refer to this decision when it is reported in the Law Reports. At present it is reported in the *Times*, October 24. It is to be observed that the decision of the majority of the Court turned upon the disqualifying portion of the section, subsection (1) (*c*), as, if the defendant did not come within that, it was unnecessary to consider the exceptions; but apparently this company was a company under the Companies Act, 1862, and therefore, *qua* shareholder, the defendant would be within the exception in subsection (2) (*e*), and the reasoning of the Court appears to have been that if the substantial interest as a shareholder is excepted and does not disqualify, it would be unreasonable to hold that disqualification was intended for a less real and substantial interest as managing director. Lord Justice Atkin pointed out that a managing director might have a direct interest, as he might receive increased remuneration on a percentage of profits. In the judgment of Lord Justice Bankes it is particularly stated that the managing director to be within the decision must have a fixed salary, but we do not know whether this would meet the question of percentage remuneration mentioned by Lord Justice Atkin.

One thing seems clear, that this decision will make it more difficult to prove cases where there has been some undue interest in obtain-

ing a contract by persons who are acting in the dual capacity of councillors and managing directors of companies, for this is proved by the very careful reservations made by the majority of the Court of Appeal on the facts to which the decision delivered is to apply. All those reservations are matters of fact very difficult of proof, whereas the simple fact that a managing director contracting with a municipality is disqualified from acting as a councillor is one which almost proves itself. There are two sides to every question, and the argument seems to have been that if the Legislature was to be taken to have intended to exclude such persons, some of the most capable men in every municipality would be prevented from giving their services. We leave it to our readers to consider which view they themselves would adopt.

REPRESENTATIONS MADE ON SALE OF HOUSE WARRANTY

A CASE reported in *The Times*, November 8, Lawrence *v.* Hull, is of interest to those purchasing houses. The action appears to have taken the form of damages for breach of contract on the sale of a house in the following circumstances. The plaintiff had seen an illustrated description of the property by well-known house agents in which it was described as "in first-rate order throughout," and he had gone down to see the property. The defendant was an old man of 86 years, and the plaintiff did not see him, but was interviewed by his wife, and in his evidence the plaintiff said she had assured him that the house was in such good order that one could not spend half-a-crown upon it. Two or three days later the plaintiff again saw the defendant's wife and she again repeated that the place was in perfect order. The plaintiff, however, decided at that time not to purchase, for reasons connected with the neighbourhood. About a month later the property was put up for sale by auction by the agents, but the reserve price was not reached and it was withdrawn. About three weeks later the house was again advertised by the agents and described as "a desirable freehold residence in perfect order," and the plaintiff again got into touch with the defendant, and on April 19, 1922, signed an agreement to purchase at £10,000, which was £7,000 below the reserve at the auction. This agreement was in a form prepared for the auction and contained a statement that the residence "is in good order throughout, having always been well maintained." This form contained the conditions of sale, which, amongst other conditions, provided "the property is believed and shall be taken to be correctly described in all respects . . . and if any error, mis-statement, or omission in the particulars be discovered the same shall not annul the sale nor shall any compensation be allowed in respect thereof."

The plaintiff went into possession May 26, and he then found that owing to dry rot and other matters repairs were required and he had to expend £257 16s. 9d. on these repairs, which sum he was seeking to recover from the defendant. There was no allegation that the defendant, who had spent much money on the property and had lived in it for 40 years, did not honestly believe that it was in good order. The plaintiff, however, apparently relied (1) upon the statement made by the defendant's wife on his behalf, and (2) more particularly on the statement in the agent's advertisement.

As to the verbal representations made by Mrs. Hull, the Court held that there was a distinction between a mere innocent misrepresentation and a warranty; the former might justify the purchaser in declining to go on with the contract, but if he did go on with it he had no remedy; to have a remedy there must be a warranty, a contractual part of the bargain, and there was no ground for holding that any such contractual obligation had been offered in the statements relied upon, but even were that the case the plaintiff had at that time decided not to go on with the purchase. Then, as to the statements in the agent's advertisements, the Court held that these did not constitute a warranty. Such statements are intended to induce persons to go and look at a house only. On this point it may, however, be well to note that the Court indicated that it was possible that such statements made by a vendor's agents might in equity prevent the vendor from enforcing specific performance, but this was not the case here, where the purchaser was relying upon the statements as a warranty. There is sometimes serious cause for complaint in the highly coloured statements made by house agents and we have ventured to point out on former occasions that even to send a person to inspect a house on a statement that cannot be supported in fact is bad for business, as on inspection the inaccuracy is usually easily discoverable, and the would-be purchaser is discouraged from relying on the agent's statements, but in this case seeing the amount of the purchase money and the sum claimed when all repairs were executed by the purchaser, about 2½ per cent. on the purchase money, even the expression "perfect order" does not appear very imaginative, although the expression "good order" used in the form for auction might be safer.

It is not easy to say what will constitute a warranty, but in the case Heilbut, Symons & Co. *v.* Buckleton (1913, A.C. 30), in the House of Lords, Lord Moulton, with the concurrence of Lord Haldane, then Lord Chancellor, laid down that the question whether an affirmation made by the vendor at the time of sale constitutes a warranty depends upon the intention of the parties to be deduced from the whole of the evidence, and the circumstance that the vendor assumes to assert a fact of which the purchaser is ignorant though valuable as evidence of intention is not conclusive of the question.

PUBLIC HEALTH ACT: CLEANSING CESSPOOLS

A POINT has now been decided in the case, Whitbread & Co., Ltd., *v.* Staines Rural District Council (*Weekly Notes*, November 15), which was left open in the case, Leck *v.* Epsom Rural District Council (1922, 1 K.B. 383; see *The Builder*, August 18, 1922).

In 1903, the defendant Council had voluntarily undertaken the cleansing of cesspools in part of the Staines district known as the parish of Ashford, and the plaintiffs were the owners of six houses in that parish. Until the year 1910, these six houses were drained into separate cesspools, but in that year the Council had requested the plaintiffs to drain into one large cesspool, and this had been constructed under the supervision of one of the defendant's sanitary inspectors. In 1917, during the war, the defendants had passed a resolution to the effect that, owing to the shortage of labour, plant and materials, all former resolutions with regard to cleansing cesspools throughout the district be rescinded, and that the surveyor be empowered to arrange with individual householders for the use of the Council's engines, materials and apparatus for this purpose, provided that no part of the cost should fall on the rates. The above resolution was advertised in a local newspaper, and householders were thereby informed that they should apply to the surveyor for information as to the facilities which could be granted by the defendants during the war and until the re-establishment of normal conditions.

In January, 1919, the plaintiffs had made a request to the defendants to cleanse the cesspool in question at their (the plaintiffs') cost, and such notices appear from the report to have been given until June, 1923; but on March 28, 1923, the defendants had served on the agent of the plaintiffs a notice alleging that a nuisance existed on the premises, arising from the cesspools and drains being foul and in such a state as to be a nuisance and injurious to health, and they required the plaintiffs to provide o ditional and sufficient covered cesspo modation for sewage matter on the The plaintiffs alleged that the nuisa plained of was due to the failure of t dants to cleanse the cesspools at such t at such intervals as might be reasonab sary, and that their agents had by lett April 16 and 23 required the defen cleanse the cesspool at such times and i but the defendants, by letters dated and 24, denied that there was any o upon them to so cleanse the cessp refused to do so. The plaintiffs, in th claimed a declaration that the defenda bound at their own cost to cleanse the at such times and intervals as might b ably necessary. The case is only yet re a headnote, and it is not quite clear wh cesspool had been cleansed at the cost at all; the report states, "On Ja 1919, the plaintiffs, by their surveyo a request in writing to the defendants t the cesspool at the plaintiffs' cost, and done until June, 1923," but then the re on to state the complaint of the de as to nuisance was made on March 2 This point does not seem material to the but we mention it as we cannot state quite certainly.

We now come to the judgment, and th said the case raised a short but importa under sections 42, 43 and 44 of the Health Act, 1875, which was, whet defendant Council, having in 1903 und the task of cleansing the cesspools, 1917 absolve themselves by resolution f duty of cleansing the cesspools furth

Section 42 provides that every local a may, and when required by order of th Government Board shall, themselves un or contract for the cleansing of . . . ce The Court held that the word "unde in this section does not refer to any und or promise made by a local authority other body of persons to do any work, b it merely refers to the performance of th and except where an order of the Local ment Board is in question, the section i an enabling section.

Then the Court held that section 4 imposes penalties upon local authorit have undertaken or contracted to clear pools, who fail without reasonable e excuse to perform the operation after r writing from the occupier of any house, impose the obligation for ever and does vide it cannot be got rid of, and under se it appeared it had to be ascertained wh the time of the failure to do the work t authority was still undertaking to per Thus the action failed, as from the construction of the three sections the Co there was nothing to prevent a local a which had once undertaken these duti subsequently relieving themselves of t gation, and the Court also held that t thus expressed was in accordance w opinion expressed by Mr. Justice A Leck *v.* Epsom Rural District Council.

The point now decided was not, h directly decided by the Court in th There the Urban District Council ha certain period always emptied cessp request, but they had subsequently p resolution that in future they would emptied free of cost at certain stated The householder in that case had asked his cesspool emptied between the specifie and on the Council's surveyor having that it could only be done at the house cost, the householder had laid a c before the justices under section 43. Th on appeal from the justices, who had d the complaint, held on the facts of the there had been a reasonable fulfilmen duty imposed by the statute and th was "reasonable excuse" for not oc with the householder's requirement, court in that case did not decide whe Council had "undertaken" the dut section 42.

THE TOWN-PLANNING INSTITUTE

W. T. LANCASHIRE (President) took
r at the opening meeting of the session
Institute held recently at 92, Victoria-

e commencement of the proceedings a
congratulation was ordered to be sent
Neville Chamberlain, hon. vice-presi-
his acceptance of the office of Minister
h.

Presidential Address.

President delivered his presidential
in the course of which he said he
nded many meetings of the Institute,
s able to realise the wonderful educa-
nfluence it had provided for those en-
n a calling which had to face new
s—not that planning of cities and
as without its history, but the science
n allowed to sleep and the modern
nt had certainly to approach the sub-
n a different viewpoint and by methods
ere unknown to those who practised
in bygone times. The autocrat, or
large estate owner of earlier days, was
ch better position to secure a result
ory from all points of view, according
hen existing views upon the subject,
ere the modern local authority and
visers of to-day, but times and con-
ad definitely changed, and they must
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umstances.

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uch from each other. Rather than
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nstituent profession, it was much
easant and helpful to look upon the
ich united them in one great common
and was an incentive to strive for the
of the Institute, and through it for
of the country. The compleat town-
-for want of a better designation—
rdly from his own training in one
parate professions know all he should
on this important subject. It was
t many of them, though differently
carried schemes through under the
anning Acts of 1909 and 1919, but
there were cases where members of
n one profession should be engaged,
would probably be still more evident
ey were endowed with powers for re-
ion of central areas on a larger scale.
ortunity was not given to many of
create a scheme which called for the
e and skill of all the constituent pro-
which made up the Institute, but
re a few who had had the opportunity
so, and it must be a source of great
on to those who had been so for-
placed.

f them had to be content to do their
orking under the 1909 and 1919 Acts,
at full advantage was taken of the
onferred by these Acts in guiding the
ent of the town or district they acted
gh this, if properly done, gave great
thought and energy; especially if
as they ought and took a com-
e view of the town or district as a
They were not yet enabled by Parlia-
he believed most of them thought
ht to be, to plan on sufficiently ade-
es for the rebuilding or relaying out
built-up areas, but this did not pre-
m from studying the problem and
a certain extent as if the power
existed. It was much to be deplored
vision of those who had preceded
uld have been narrowed down to the
which permitted the development of
ustrial towns in the manner in which
w during last century, and the work
nse of remedying this state of affairs
ke many decades before they would
o say, "It is enough"; and it was certain that no reconstruction could ever quite take the place of a well-planned original building or laying out of a city. The physical, financial and other difficulties to be encountered were so great and numerous. Some of the local authorities still appeared to be unwilling or unready to start their schemes, which had to be ready, at any rate in a preliminary form, by the year 1929. It was regrettable that this should be so; the advice one would give them was to make a beginning as soon as possible, the more time for studying the problem the better. They ought not to allow themselves to be hurried in such a matter; a scheme should be considered in all its bearings, and, if time was available, it ought to be thought out more than once in order to do it justice. It was not right that a problem affecting the welfare, the business, and in many ways the health and happiness of a community, should be approached with anything but a high regard for the importance of the subject, or in any light and airy way which might result in the production of a third-rate scheme. Under their present social system, and very likely it would be much the same under any modification likely to be brought about, they were subject to waves of full employment followed by periods of unemployment for many. Probably no human wisdom would guide the steps of the dwellers in this sphere so that all would always be arranged for the best, and they might still experience further world disturbance, to be followed by periods of bad trade; even in times without war they knew there were ups and downs in trade to deal with. Fortunately the Act of 1909 had caused many of them, at any rate in large centres, to put on their thinking caps; and when, after the war and the hectic period of trade immediately following, they experienced the unexpectedly rapid slump, they were in a position to take out of their plan rooms drawings showing plans and sections of miles of new roads, widenings and sewer extensions to meet future requirements which were ready, without delay, and which found work for a very large number of the unemployed.

In view of the possibility of further periods of bad trade and of having to find further work for the unemployed, there was one point which should be considered. There was a missing link between town-planning schemes under the 1909 Act and the Unemployment Relief Works Act of 1920. Most town-planning schemes would give local authorities power to make roads only after three months' notice. In many cases they would not be able to wait long enough to give this notice to carry out the work under a town-planning scheme, and, therefore, they would have to work under the Unemployment Relief Works Act, which would mean that the Council might have to lose the money unless it proceeded under the powers of the Ministry of Transport and bought land on each side, and this not all Councils were prepared to do. Under the arrangements for work in Leeds for the unemployed they had had all sorts of agreements with land owners; some gave nothing, some gave land, and some agreed to terms on what may be called town-planning conditions. It was not fair to treat owners in this differing way, and it was hoped that powers would be taken to enable owners to be dealt with on consistent lines, so that they might have even-handed justice all round. It could probably be done by allowing local authorities to carry out work under some modification of the Unemployment Relief Works Act on plans laid down in a town-planning scheme, giving the owner slightly better terms, perhaps, than if done under the town-planning scheme itself.

It was with great satisfaction that they saw the growth of the creation of regional planning committees. Any officer to a local authority engaged upon planning his own area must welcome the tendency in this direction. It was so easy to take too small a view in preparing a scheme, and it would not be at all surprising after a regional plan had been prepared if it be found that a local scheme had been put forward which conflicted with some larger interest. There was a further point in connection with thinking regionally. They were arranging new areas for electrical distribution. It seemed certain that to control and distribute water supplies properly, with fair consideration to small as well as large communities, they would have to divide the country into regions for this purpose also. They were assembling many local authorities into regional planning committees for road-planning and other purposes. They certainly ought to have drainage boards or some system for general control of sewage disposal so that the amenity reason for town-planning schemes should have its full weight. They had a Royal Commission sitting upon the subject of local government areas. Was all this movement proceeding in a haphazard way which would permit the lines or boundaries for one purpose to cut across those for others, and, if so, was this desirable? It was hoped that some one brain, if not of an individual then of a Government department, was bearing in mind all the possibilities of the movement.

As soon as the housing shortage was diminished the question of dealing with slum areas would no doubt receive more attention, since all parties were agreed as to the necessity for action in a matter which injuriously affected so considerable a proportion of their urban population and assisted in keeping them in the category of C3. This reconstruction would involve in many towns large areas of the older portions, and since the number of houses per acre in them was very large, it would be impossible to rehouse the people disturbed on anything like the original areas, so that there must be a large exodus on to sites at present unbuilt upon. To deal with this question called for the consideration and re-planning of larger areas than those likely to come under the ban of unhealthy area schemes, and brought prominently before their minds the fact that they were still without powers for town planning in already built-on areas. In dealing with large schemes in Leeds for street widenings one came across difficulties involving considerable cost in re-doing work which was not very many years old, because those who dealt with the widening and improvement schemes of the past had no general plan for the reconstruction of the central area to guide them in the matter. It was, moreover, in evidence from various centres that streets had been widened on more than one occasion, no doubt largely due to the fact that if improvements were carried out in a piecemeal fashion a sufficiently comprehensive view could not be taken. Engineers to local authorities often had brought to their minds the feeble position their authorities were in by their inability to proceed with street improvements without obtaining Parliamentary powers, which process involved delay and no doubt in some cases extra cost by reason of the granting of leases when such proposals were under consideration. Surely large authorities, say, of the standing of county boroughs, might be entrusted with the requisite powers without taking up the time of Parliament in this way.

The question of housing and the present day conditions and influences were bringing about a great change. The production of houses for the working classes through the old channel of private enterprise appeared to have dropped down to a minimum, and it was quite possible that it might never again be able to fully re-assert itself.

Housing must go on and municipalities would have to face the difficulties and build the hundreds of thousands of houses for which the country was calling out. This would, no doubt, result in somewhat better site planning, but where would it be done?

Synchronously with the movement or trend of opinion casting upon local authorities the

obligation to build working-class houses themselves appeared the cry that no extensions of towns were to take place except with the consent of the inhabitants of the outside areas affected. These two waves of opinion would materially affect the location of the new houses, in many cases they would be located on inferior sites, as it was extremely unlikely that local authorities would plant their new estates with all their inhabitants and rateable value outside their own areas as long as there was land within upon which they could build, though in many cases they ought not so to do. These questions all affected the planning of their cities and towns, and it seemed that they should look for someone to take a wide view of the situation who would put on one side all the cries raised by interested parties and map out a policy which considered only the welfare of the people. Too much might be made of the cry of autonomy, and there were many large industrial areas and districts in the kingdom which should no longer be hampered by haphazard boundary lines, defined ages ago, which had no bearing upon present day considerations. Having referred to the fact that Leeds had created a satellite suburb at Middleton in the area taken into the city in 1919, the President said if towns were not simply to add area after area of built-up lands round the older parts, it must be made possible for the larger communities to have their boundaries enlarged, so that some unbuilt upon spaces might be left open, and it should be realised that with the progress in rapid transit, the larger centre could now efficiently control a much larger area than would have been the case a quarter of a century ago, that it had the will and the means to locate its population on well spread out plans if it was not hampered by limitations which to-day were not reasonable or justifiable. If it were held that the extension of boroughs, etc., and the reduction in the number of small authorities was generally undesirable, it should be possible by some development of regional administration to have larger matters dealt with by those best able to think on broad lines, leaving matters of less magnitude to the representatives of the smaller bodies. Two points would thus be secured. The unreadiness of the larger authorities to spend their money outside the limits of their present boundaries would disappear, and the smaller units would still preserve their separate life as far as it might be considered advisable for them to do so; the number of public representatives would be increased rather than diminished. It might be asked, "What has this to do with town planning?" The making of plans would, of course, proceed without any such changes being brought about, but those who were in close contact with the subject knew how very desirable it was to have the question of local government areas settled and how great a bearing financial questions had in the conception and execution of town-planning schemes.

In conclusion, the President referred to the recent visit of the Institute to Leeds and the interest which had been aroused.

On the motion of MR. H. T. STILGOE, seconded by MR. DAVIDGE, a vote of thanks was accorded Mr. Lancashire.

British Industries Fair, Birmingham.

Owing to the proposed re-opening of the British Empire Exhibition the Department of Overseas Trade has decided to suspend the London section of the British Industries Fair until 1926, as a temporary measure for 1925 only. Arrangements have consequently been made by the Birmingham Chamber of Commerce to organise sections in their Fair for industries which have hitherto exhibited, and would ordinarily exhibit, in London, provided adequate support is secured. The British Industries Fair at Birmingham will be held from February 16 to 27, at Castle Bromwich Exhibition Buildings. Applications for space should be made at once to the General Manager, British Industries Fair (both sections), The Chamber of Commerce, 95, New-street, Birmingham.

WEST MIDDLESEX TOWN PLANNING*

THE report of the West Middlesex Joint Town-planning Committee is the first regional report to be completed for a portion of the Greater London area, and it will, therefore, have a special interest for all interested in the future of London. The County Council of Middlesex have already done good work in the carrying out of the Brentford By-pass or Great West-road, as it has been named, and from the geographical situation of Middlesex it is one of the first necessities of the case that a good system of arterial roads should be provided. The Western-avenue from Shepherd's Bush to a point on the Oxford-road beyond Uxbridge has already been commenced at the London end, and a beginning has also been made with the new Chertsey-road from Chiswick across the Duke's Meadows. New river bridges will, however, be required both at Chiswick and Richmond, and it will inevitably be some few years before this great improvement is completed in its entirety. A further new arterial road is projected to by-pass Wembley, Harrow, and Watford.

Middlesex has always taken a wide view, too, on the subject of open spaces, and for many years has made a definite grant towards the purchase of open spaces and parks by the various local authorities in the county. It is, therefore, particularly interesting to see that the Regional Committee recommend a wide extension of the policy of acquisition of open spaces for the public, and among the larger open spaces suggested for acquisition are Syon Park, Osterley Park, Cranford Park, Hanworth Park, and Hovendon Hill.

Another excellent suggestion is for the reservation of a strip of park land alongside each of the many tributary streams of the Thames which pass through Middlesex. The Brent valley, the Yedding brook, the river Crane, and the Wyrardisbury river are all suggested as suitable for preservation in this way, and an excellent example is thus set for the rest of the Greater London area.

In addition to the broad arterial roads already provided for, a number of the quieter existing roads are suggested for conversion into parkways, planted with trees and with wide grass margins, thus linking up the larger open spaces throughout the county. The preliminary zoning is limited in broad lines to the laying down of areas suitable for shops and business premises, and also to suggesting the retention of the south-western portion of the county between Stanwell and West Drayton for its present purpose of market gardening and agricultural uses.

An all-important point which is stressed in the report is the need for the laying down of building lines on all main routes, and it cannot be overlooked that this is one of the ways in which improved conditions can be obtained both for residences and traffic, with little or no expenditure of public money. The map published with the report shows the proposals in detail, and will be of great assistance to the local authorities in working out the details in connection with their own town-planning proposals.

The rapid growth of factories in Middlesex along both railway and canal frontages is distinctly ominous, and it is a matter for regret that practically the whole of the frontage to the Great Western Railway, and of the Grand Junction Canal should be allocated in the report to industrial purposes. To reserve so large and continuous an area of land for industrial purposes is, in our opinion, a mistake, and to condemn the next generation to approach London through some ten solid miles of factories is not a proposal which can be regarded with equanimity. It is to be hoped that this suggestion will be considerably modified before the next stage is reached, as it considerably mars an otherwise excellent report.

* West Middlesex Joint Town Planning Committee Final Report. 10s. 6d. E. S. W. Hart, Hon. Sec., Guildhall, Westminster.

ARCHITECTURE IN TOWN PLANNI

IN his seventh lecture on Town P at Birmingham University Mr. Haywood, F.R.I.B.A., said the appear city buildings was much affected by th acter of the roads upon which they The formal planning of the Place de riere and its adjuncts at Nancy, and curves of the High-street, Oxford, we known examples of formal and inform planning which were favourable to a tural expression. The interminable streets of cities arranged in che fashion, established one of many co unfavourable to the effective combina roads and buildings. An infinite ra nuances in design was made possible right association of roads and buildings setting of the Paris Opera House, stance, was not without some dramatic yet they knew that its designer, G bitterly resented its insufficiency; and doubt a setting of different proportio shape would vastly improve its value

On the other hand the citizens of U that the full effect of their beautiful dral was obstructed by adjoining bu which, on removal, were found to be so sary a foil to the scale and character church that they were at once replaced people were affected directly or indire their environment, and since the qua buildings was so large a part of envir in town life, it was worth while to no this quality was determined chiefly predominant character of architectural age, and less directly by the actual de of buildings than was usually supposed magnificence of Ancient Rome was a of the political force of its Dictators; t venturous and soaring architecture o old cathedrals was due to the religio vour of the Middle Ages; the splend Renaissance architecture originated stately outlook of old aristocracies; and of the present architectural force o came from Napoleon III's appreciation great political significance of national tecture. Out of such patronage as th building was almost inevitable.

They lived in a democratic and com age, and the education of democracy appreciation of something more than existence, had been a necessary prece any demand for great architecture. Bu mercial and democratic America now for fine building, and was gettin England, too, showed some signs of a ing, and wherever people had come appreciation of fine living, an adequate tectural expression in town structure not be lacking.

Incorporated Church Building Societ

At a recent meeting of the Incor Church Building Society grants were towards building new churches at :—So St. Matthew, £250; Hesketh, All Saints South Lancing, St. Michael and All Angels Sandiway, St. John-the-Evangelist, Wembley Park, St. Augustine, £300; Ll Martin, £400. Towards enlarging or re the churches at :—New Brompton, St. £150; Farnham Common, St. John-the gelist, £100; Gaywood, St. Faith, Hanslope, St. James, £125; Newcastle Holy Trinity, £150; Northfleet, St. B £150; Over, St. Chad, £120; Reddal H Luke, £100; Watford, St. Michael a Angels, £200; Worthen, All Saints, From the Mission Buildings Fund, a gra made towards Wigmore Church, Gilli £100. The following grants were also m works completed at :—Ilford, St. Andrew Swansea, St. Nicholas, £100; Walthamst John, £360; Wardington, St. Mary Mag £100. The amount granted this year, £9,000, is already much larger than the of grants made in 1923. The Society needs more help, and is dependent upon tary support.

E ASPECTS OF THE HOUSING QUESTION

E. DROWER, C.B.E., lectured recently
ie Surveyors' Institution (South-
ranch), Westminster, on this subject.
rse of his lecture Mr. Drower, after
rvey of the housing question during
w years, said housing had been a great
talk and argument, and the Govern-
v it. A Ministry of Reconstruction
d long before the end of the war, and
important tasks was to deal with the
uestion. It gathered information as
ls; it took advice from philanthropists
xes; it enlisted the services of archi-
vn planners, and surveyors. The
re embodied in various publications,
enough to read, and full of plans of
ightful to look at. No working man
d to live in such houses, and what the
the country would have been had
erected it was impossible to say.
ns, showing every modern convenience
r-saving device that could be imagined,
rned with artistic and picturesque
, and now reposed in the blue books
hey appeared, and where the curious
l them should they feel inclined to dis-
n. The work was not all wasted;
able data were prepared as to mate-
ne sound recommendations were made
been adopted.
er they might do, however zealously
ls of the Ministry of Health might
ny signs of extravagance in plans or
ons—and they did so with admirable
-housing could not pay. And in
of housing and housing schemes he
using for the working classes. Not-
ing all increases of wages, rents were
high; subsidies must be granted
as in the Addison scheme, by way of
payments, or, as in the Chamberlain
tley schemes, by annual subventions
he gap between what the worker could
what the houses cost. His own deep
s that the gap should be filled, but not
dy of any kind except as a temporary
; as a permanency it was entirely
There were two obvious methods of
ith the gap; one was to put the worker
ition to pay the rent, which meant one
ease his wages and make them certain,
econd was to work from the other end,
ase the cost of the building to such
hat the tenant could afford to pay a
upon the capital expended.
cuss the former method would lead
ng way away from housing, and would
dicated by all sorts of controversial
. Therefore let them turn to the
nd consider how the cost of building
decreased. The speculating builder
build houses for the working classes
h the State subsidy, but he could get
it in many cases for suburban houses,
it would be a hopeless case in agricul-
ricts. The State subsidy for an urban
was not the total subsidy; it did not
deficit by some £12 a year at least as
e, taking all sorts of houses in all sorts
; the rates were charged with that
A speculating builder got only the
sidy and nothing from the rates; it
a fair handicap. Could he make up
plus a profit for himself, if he were
o employ his own methods? The
hought he could do so very nearly.
nearly was not enough; he must do it
nd earn a profit and a living beside.
eculating builder was not dead; he
much alive; but he had changed.
e housing of the working classes alone
ven he could not build them to pay.
l turned to another style of house, to
was too big for a subsidy and built
s of society which could, or thought
fford to pay a fair price for the houses.
d not build to let, he built to sell.
not be plagued with rent collecting
te management. He feared Rent
n Acts, actual or prospective, so he made his profit, cleared out and started afresh. That was good business for the builder, and large profits had often been made by it; but it was not always so good for the buyer. He was not speaking of isolated cases but of many in which this buying of houses had brought calamity. Tempting terms were offered by the builder, a small sum down, a little more on completion of purchase, and the rest by easy instalments. Despairing of being able to rent a suitable dwelling, many a young couple had accepted the terms and found that they had hung a millstone round their necks.

Let them sum up the advantages and otherwise of the two systems of providing houses, by the speculating builder or by the local authority. The former was cheaper, the latter gave better building; the former was a more flexible method, it was ready to adopt at once any new idea which had proved itself to mean economy; the latter was more rigid and disinclined to move from the paths set down by plans, specifications, and contracts. So long as subsidies had to be paid by the State, and rates had to come to the aid of the housing schemes, so long would the State and the local authorities expect to have a measure of control. Was there no way by which the advantages of both systems could be combined? One felt that there ought to be a way, and that by careful study a method could be evolved. In the present system of contracts the builder had no incentive to suggest or to search for means by which savings could be effected; his employers would reap the benefit, not he. Looked at in this light the present system seemed all wrong, and to be a mere expedient to tide over a difficulty until normal conditions prevailed once more. And when would that happen? When rent bore a more reasonable proportion to wages. They were on delicate ground there, for a discussion on wages would lead them into all sorts of controversies as to unemployment pay and old-age pensions, family allowances, and similar matters. They could not wait until all these things were put right; the homely proverb that "Half a loaf is better than no bread" should be borne in mind; if they could not make the deficit quite good they might do it partially, and, by carefully guarding subsidies and reasonably restricting rents, they might enable the speculating builder once more to do good service to the community.

The deficit to be made up in the case of houses in urban districts was bad enough; in rural districts it was much worse, and it was made worse by the fact that houses often cost more in certain country places than they did in towns. They would want a revolution in their methods of farming before agricultural labourers' wages reached a parity with those of townsmen.

The houses built now for the working classes had to be better in design and plan than those in pre-war days. The demand for better housing was insistent even during the war; it grew in force, it was even menacing, and something had to be done, although what had been done fell badly short of the hopes and schemes of philanthropists and was a contempt to the Utopian. Much remained to be done, and the harassed and overburdened rate- and taxpayer would not be free of his burden for many a long year.

The speculating builder with his cheap methods and the great output of his labour was not yet at work in this housing. They must insist upon the importance of the question of output. Speaking about it to a great trade-union leader, the lecturer had for an answer, "Oh, I've heard that argument *ad nauseam*," to which he replied, "Well, an argument which makes the opponent sick need not necessarily be a bad argument." They all remembered the formation of what was called a "Builders' Guild." This was a new thing with an old name, for it had no likeness whatever to the old trade guilds. This Builders' Guild was an association of workmen whose real object was to increase wages and improve the condition of the workers, a perfectly laudable object to attain, which the housing scheme offered a very convenient chance. Estimates were made and statements made which convinced many people that the guild could build much more cheaply than the ordinary contractor. After all, estimates were only estimates, and in this case they proved to be wrong. The guild failed because its estimates were founded upon a great rarity, the ideal man, a sort of moral Robot, who would work like an automaton from morn till eve, never stopping, never slacking in his even pace. But bricklayers were human, plasterers and carpenters were frail, discipline was not strict; where there was that inhuman thing *equality* there was no real authority; and there was none here, the master's eye was lacking; promises proved more fragile than even the proverbial pie-crust; the guild failed. In Mr. Macdonald's book on Socialism he wrote:—

"I must note in passing the recent experiment in building guilds, where workmen who have been especially attacked for slacking and dishonest work, have organised themselves into self-governing groups, taken contracts for building houses, done better work than the private builder, in shorter time, at lower costs, and yet have paid higher wages and have given better conditions of employment. The secret is in enlisting the heart."

This is a very definite statement as of something which had actually happened. But in a footnote the author said:—

"Unfortunately, owing largely to want of capital, these experiments have not fulfilled hopes."

No! Mr. Macdonald, the guild did *not* suffer from want of capital; it was not that. It suffered because it misunderstood human nature.

Trade unionists would have them believe that the worker revolted at having to earn profits for the capitalist and works grudgingly, while, on the other hand, he would work cheerfully for himself. It was easy to denounce this as narrow-minded and short-sighted; it would be better to devise something to let the workman feel and know that he had a real interest in the work he was doing, that man could not work for himself alone, but that good work well done benefited everybody. Nobody could pretend that the present relation of capital and labour was incapable of improvement. It must slowly change. Anatole France gave it four hundred years: one century of frightful tumult and destruction, another of reconstruction, and two of settling down, but not even then for a permanency. He could not refrain from noting that he remarked, "But the English will retain their king and the wigs of their judges."

In conclusion, the lecturer said they must leave the City of the Future to the dreamers of dreams. Thackeray said somewhere that he did not object to being carried forward, but preferred the back seat of the dog-cart so that he might see the landscape he was leaving behind. His mind turned to a little West Country town, with its cob-walled houses and cottages clustered round the great old church that for centuries had withstood the storms and the wind and the mishandling of men, and had looked mutely and serenely upon many events of their history and yet stood, sturdy and time-defying. The evening mists were rising from the meadows; one by one the lights started up in the windows and the smell of wood smoke told of supper cooking for the men who, clattering and shuffling down the street, go each into his own home, slamming the door noisily behind him. The boys were playing buck-a-bee in the dusk, the last trains were creaking over the bridge, with the children shrilling "Harvest Home."

New Masonic Temple.

The Provincial Grand Master of Durham Freemasons, Lord Ravensworth, D.L., P.G.W. (Eng.), recently visited South Shields and laid the foundation stone of a new Masonic Temple and banqueting hall. The structure is being built from the designs of Messrs. J. H. Morton & Son, F.R.I.B.A., South Shields, by Messrs. Gustavus Bailey, Ltd.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript!—ED.

Creosoting Pitch Pine.

SIR,—To what effective extent can pitch pine in large scantlings be creosoted, and are you able to tell me of a practical case in the experience of its employment on hard woods as a submarine protective? Some information would oblige.

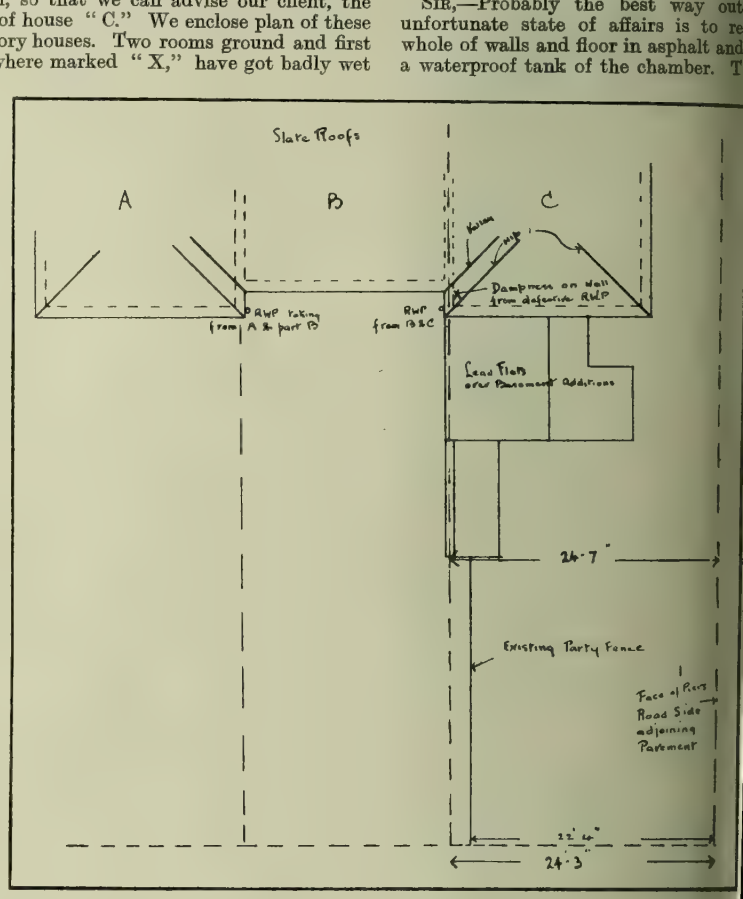
F.R.I.B.A.

[When the harbour in Bullyheigh Bay, south-west of Ireland, near Tralee, co. Kerry, was constructed during the eighties at Fenit Island, Sir Benjamin Baker acted as consulting engineer. A stone wall extended about three quarters of a mile from the mainland shore to a small island which furnished its apex or outwork. In this harbouring gangway an intermediate outlet for the purpose of scouring the harbour basin was contrived by the erection of a series of piles carrying on the harbour way level with the masonry right and left of this piled water easement. The original draft of the contract specified that these piles must be of "creosoted memel or creosoted pitch pine," but in the final form of the contract the draughtsman verbally changed this provision to "creosoted memel or pitch pine." This alteration in the wording caused considerable trouble. Some authorities contended that the meaning was identical, "memel or pitch pine," the adjective governing the use of either timber. Others urged that pitch pine could not be effectively creosoted, as it is too hard and close in texture and, like teak and greenheart, resists the injection of this preservative, as happens successfully with memel.

By the time this discrepancy in the letter of the contract was discovered, the contractors had already fixed several of the harbour piles, all of which were of pitch pine uncreosoted. The Government settled the dispute by compelling the contractors to agree to finish the work with creosoted pitch pine and give a guarantee that, should the piles already in position prove at any time faulty or unfit to remain, the condemned piles would be removed and replaced by creosoted pitch pine ones, free of all charge. The piles that had been creosoted proved efficient, notwithstanding that the creosote had only penetrated into the pitch pine an eighth of an inch. This mere skin or coating had, however, preserved the timbering from the attacks of the sea worms commonly known as the "teredo navalis," which before long had reduced the uncreosoted Fenit pitch pine piles to mere skeletons, aided no doubt by the Atlantic and millions of the submarine wood-louse (the "Limnoria terebrans") in company with the wood-boring shrimps, "Chelura" (ever-busy). Bethell's process of creosoting coagulates the albumen of the wood, filling the pores with an oily liquid; and for marine work the inventor specified 10 lb per cu. ft. in memel as necessary. In pitch pine this could not be accomplished, but the Tralee piles demonstrated that far less would suffice when the creosote was well impregnated to form a skin about one-eighth of an inch throughout. The "Teredo" worm grows to a considerable length, and has a shelly substance in its head shaped like an augur, so that by revolving its body it can bore into the wood, as it did into the uncreosoted pitch pine piles. The creosoting barred the way. There are two varieties of these worms, one kind going in at right angles across the grain, and the other sort follows the way of the grain. Thus their united inroads disintegrate the balks precisely as this Irish harbour work demonstrated.]

A Damp Party Wall.

SIR,—As regular subscribers to your journal, we shall be grateful if someone can give us an opinion, so that we can advise our client, the owner of house "C." We enclose plan of these four-story houses. Two rooms ground and first floor, where marked "X," have got badly wet



and paper is spoiled through rain-water pipe on outside being cracked and pipe becoming stopped.

The wall is a party wall and the wet that penetrated came from "C" and "B" roof. It is on "B's" ground. Should "B" keep the bottom of this pipe clear? The owner of "C" would have been quite satisfied if "B" was willing to meet him in the cost of papering, but he has refused to do this and has since sold his house. Can "C" get any redress from either the old or new owner of "B"? The owner of "C" has put the rain-water pipe in order at his own cost, but the wall really needs re-pointing. Should "C" bear the cost of this?

The dotted line on plan shows the area and measurements of ground on the deeds owned by "C," as the light iron fence now erected is two feet in his ground. Can he recover this strip, approximately two ft. wide? The house agent who sold "B's" house has written "C" on behalf of the orginal owner of "B," saying he intends not to help him out over the cost of his repairs and re-papering.

"BUILDER."

Decoration of Walls.

[REPLY TO "STUDENT," NOVEMBER 7.]

SIR,—Before plastering the walls, the distemper must be thoroughly removed and well brushed down, and the joints of the brickwork raked out as a key to the plastering. Keene's cement on a backing of Portland gives a surface that can be at once decorated without fear of spoiling. The painted work must, however, follow the trowel, *i.e.*, the first coat of paint must be applied immediately the plaster has hardened sufficiently to stand the brush.

The cost of this work would be in t
bourhood of £35 to £40. "SOL

Concrete Garage.

[REPLY TO W. STEVENSON, NOVEM

SIR,—Probably the best way out unfortunate state of affairs is to re whole of walls and floor in asphalt and a waterproof tank of the chamber. T be done for about £25, and the outlay well worth making.

Ventilation.

[REPLY TO S. T. C., NOVEMBER

SIR,—The old Tobin tube was an invention, and has led to many devel Rather a more modern way, and equally would be to provide the radiators wi plates that will throw up the current air in much the same way as the tube. the usual modern practice. "UP-DRA

Zinc Gutters.

[REPLY TO E. H. DASHWOOD, NOVEM

SIR,—The best treatment for the p zinc gutters will be to well clean the coat with bitumastic paint, and in b a second coat when the first has dri work should be executed in dry we protected from the rain until quite dr

SIR,—In my opinion, based on long ex no stopping or painting will effectu perforations or defects in zinc gutters o I have a case in hand now. Renewal is satisfactory remedy.

HENRY LOVE

Brushes.

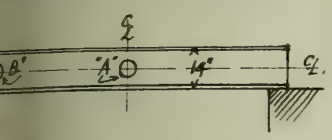
SIR,—I should be glad if one of you would kindly advise me on the followin ing daywork accounts. I recently agre some daywork with a percentage of 15 on net cost of time and material. At I overlooked the fact that the work w

ns and that a considerable number of f all kinds would be worn out in doing . Am I justified in charging in my or such brushes as may be used ?

" NEMO."

Girders.

s a girder supporting a distributed ened more by cutting a 3 in. diameter A " or " B " ? (See sketch.)



cent job, it was held that as the shear is zero, it would be better to cut the A."

R. C. ARNOLD.

ur correspondent is quite right.—ED.]

Foundations.

o MR. HENRY LOVEGROVE, NOVEMBER 21.]

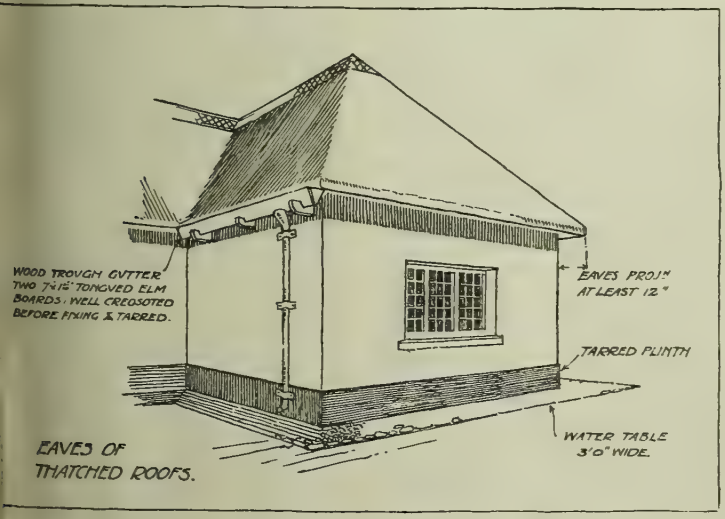
The foundations of a building are truly portant thing. The use of good modern nd, still more, of reinforced concrete, a great extent simplified the problem. -soils require a certain spread of con- prevent overloading by a heavy super- . Concrete is generally adopted as the table material with which to answer ose. It then remains to avoid over- he concrete itself. In the case of a ively weak mix of concrete, this must by a generous spread of brick footings, is little fear of this with good cement and in most cases it can be proved k footings are redundant in the vast of cases of modern buildings. Upon ly designed reinforced concrete raft is an obvious absurdity, which is fully d by the L.C.C., who invariably accede plication for relief in such cases.

" LONDONER."

Thatching.

o " OLD-FASHIONED," NOVEMBER 21.]

Us don't fix shuting to offices of us stick 'em out all of a foot and ted pebble stones for water-table all se and us tars plinth to catch splashes. datch be'ant worth saving.



nust have gutter, make un of two ¾ in. elm boards tongued together, lots of creosote, specially in joints, stuck up on wood brackets, and then per. Don't 'ee go for to use zinc or for pipes, being as datch water'll ut in no time. " DEVON."

answer to the inquiry of " Old- " we use and find quite satisfactory to eaves gutter made of two 6 in. by 1 in. creosoted (under pressure) rough deals put together in the form of a " V," run with pitch in bottom and coated with tar inside (see sketch). We fix these to the walls on local made W.I. brackets, although wood ones can be made up. Outlets are formed of square boxing in the form of straight " swan necks " delivering into the ordinary R.W. heads and down-pipes.

TRAYLEN & LENTON.

SIR,—Rain-water spouting in a thatched building is best executed in " V " shaped water troughing carried on wooden brackets, from the face of the wall, and discharging into the head of a down pipe through a short piece of wood pipe inserted into the troughing vertically. The troughing should have the external leaf rather deeper than the internal, to catch the throw-off from the roof. " WESTERN."

Hollow Walls.

[REPLY TO " CAVITY," NOVEMBER 14.]

SIR,—In reply to the query by " Cavity " *re* hollow walls, I have experienced the same thing viz., damp patches appearing at fairly regular intervals in hollow walls built of brick. On removing the bricks behind the damp patches, it was discovered that a large number of the twisted metal wall ties were carrying mortar which had evidently deposited there during the building of the wall, thus forming a direct connection between the two thicknesses. This was, of course, caused through not using a piece of wood which should have rested on the wall ties—as the work proceeded and continually lifted up clear of the wall cavity—so as to keep the space quite clear.

W. W. HITCHINS.

SIR,—In my opinion your correspondent " Cavity " is right in assuming that the damp travels across the wall ties. The reason undoubtedly is that the ties, where damp appears, have not been cleared of mortar droppings, and that the damp is conducted thereby to the inner thickness of the wall. I have seen similar cases from the same cause before.

" F. H. F."

[We have received a further reply from " Pro bono publico," which has been sent on to our correspondent.]

SIR,—Some fifty or sixty cottages were built in exposed positions, all having 11 in. cavity walls of comparatively porous bricks, some covered outside with cement (rough cast), others with the brickwork left bare. In only one case was there any trouble with damp in the rough-cast cottages. This was traced to a batten carelessly left in the cavity, and was cured. In nearly every case, the cottages with bare brickwork showed slightly damp patches on the inside of the south and west walls, after the first winter. I am convinced that this was caused by the heavy charge of water in the outer skin, saturating the air in the cavity with moisture which condensed on the inner wall, especially when, on sunny days, the outer wall was the warmer. The damp was more marked in unheated rooms. Cavities were opened and found to be quite clear. After fine weather the more exposed fronts were treated with " Sterelmy," or with boiled oil, to waterproof the outer 4½ in. wall, and the trouble has not recurred. Efficient through ventilation of the cavity is of great importance, and also care in making the cavity clear and continuous around chimney breaks and openings, especially behind the countersills of windows. " DEVON."

Timber Markings.

A reply to their inquiry for a list of timber markings has been sent to Messrs. G. Baines & Son.

Stone Flags.

SIR,—I should be glad to know what is the best method of bedding stone flags, whether dry, or on a mortar bed.

" GARDENER."

Aberdeen Granite.

SIR,—Could any of your readers kindly give me any information as to the different varieties of Aberdeen granite ? " ENGLISHMAN."

ARCHITECTURE AND THE BUSINESS MAN

MR. H. G. WATKINS, F.R.I.B.A., lectured recently on this subject before the members of the Nottingham Rotary Club. In the course of his address the lecturer said the impulse of the great architectural periods of the past had been either religious—as in Ancient Greece and in the mediæval period—or Imperial power, as in Rome. This was a commercial and democratic age. The question was, could a modern democratic country, such as their own, the dominating factor in which was commerce, produce architecture to compare with the great works of the past ? A very bad commencement was made during the Victorian period of rapid industrial development and they were paying a heavy penalty to-day for the errors of that period. Their cities grew up haphazard, became uncomely, dull, dreary, monotonous, smoky, and dirty; and a great work rested with them in altering these conditions. It could be done only gradually, but foresight and the long view were necessary, and, above all, the education of the general public and the business men that architecture, and due regard for the amenities of their cities, did matter.

The lecturer said he was not pessimistic as to the outlook ; there had been in recent years, and was, a steady improvement in the architecture of their shops, warehouses, and industrial buildings. Architects were paying far more attention to the problem of designing shop premises which should, as far as possible, satisfy the principles of architecture, and yet give the retailer the reasonable amount of glass he demanded. The retailer was realising that an architectural building was an attraction to the public, and that the artistic display of his goods was becoming more and more necessary.

The lecturer commented favourably on the erection of rows, which gave scope for design and adequate structure. He expressed the hope that the row tradition would be observed in the building to be erected on the Exchange site, and urged that the designs for the new building should be thrown open to competition to the architects of the country in order to obtain the best solution of the problem.

New London Theatre.

Messrs. Arthur Vigor & Co., Ltd., who are at present building the Plaza Cinema and the practically completed Capitol Theatre, have secured the building contracts for a new theatre, to be called the Carlton, which is to be erected on a site in the Haymarket.

THE BUILDING TRADE

NEW METHODS OF HOUSE CONSTRUCTION REPORT

THE interim report of the Committee on New Methods of House Construction, of which Sir Ernest Moir is Chairman, was recently issued by the Ministry of Health. The Committee say :—

Lord Weir's house is essentially a timber-framed house faced externally with steel sheeting. There is, therefore, nothing very novel in the principle of its construction, and there is abundant evidence that houses made of steel on wooden framing can be considered as a reasonable method of providing immediate housing accommodation. Such houses have been occupied, when properly maintained, either as dwelling houses or as meeting places of various kinds for many years from the date of their construction. Lord Weir is, however, devoting much time to investigation and experiment with the object of perfecting this form of construction, and particularly with a view to adopting such methods of standardisation as will lead to cheapness in large scale production and to rapidity of building without utilising the skilled branches of the building industry. As regards speed of construction, we are satisfied that houses of the type proposed can be erected rapidly on the site.

Houses faced externally with steel sheeting are not so resistant to high temperature nor so easily kept warm when the temperature is low as houses made of brick. Measures are proposed, however, by Lord Weir to minimise this difference, and we do not anticipate, if these are adopted, that serious objection can be taken to the house on this score. The Committee have also given attention to the risk of sweating on the inside of the outer steel plate and to the difficulty of obtaining access to the back of the plate for purposes of painting, but as a result of evidence we have heard, we do not anticipate that there will be any trouble under these heads. Another criticism made was that the internal partitions, ceiling members, purlins and boardings showed too light a scantling, and it was suggested that the internal linings were not sufficiently strong. The scantlings can, however, be increased and the necessary strength given to the inside linings and partitions by modifications in design. The houses for which Lord Weir has so far worked out his proposals are of the bungalow type; we understand that he is giving consideration to the adaptation of his principles to the two-storied dwelling, but that he is not at present in a position to undertake the erection of this type.

We have not attempted a criticism of the types at present developed so far as plan and elevation are concerned; we think it sufficient to say that we are satisfied that the method of construction presents no difficulty in the way of providing satisfactory accommodation and pleasing appearance. From an architect's point of view the necessary sameness of the buildings in any extensive scheme is some disadvantage and necessitates careful attention to lay out, colour scheme and grouping. It is obvious also that a long bungalow type involves additional cost in respect of roads and allied services. There remain the important considerations of first cost, rent obtainable, maintenance and effective life of houses of this type. On the question of cost it is impossible at this stage to give a final judgment, exact figures not being available. Lord Weir's work has largely been of an experimental nature, and he is naturally not yet in a position to state finally what reductions in cost he will be able to make as a result of quantity production.

In view, however, of the general opinion of the Committee that the life of such houses will be shorter and the maintenance charges will be greater than in either a brick or concrete structure, and on the assumption of an equal income, it is necessary that such houses, if they are to compare on an equal financial basis, should be cheaper in first cost than brick or concrete houses.

In view of the very great need for houses and a hope of some economy in first cost and of a potential life of possibly up to forty years provided that adequate maintenance and care be forthcoming, your Committee is satisfied that, subject to the criticisms we have made, this type of house is one that is deserving of encouragement and might form part, at least, in the meantime of the structures that go to house the people, particularly in cases where cheap land is available, where foundations are doubtful, and where for any reason more permanent types of buildings cannot quickly be provided. With this object we suggest for consideration that local authorities and others concerned in the carrying out of housing schemes should be encouraged to undertake voluntarily the erection of houses of this type in sufficient numbers to enable the system to be properly tested.

THE STEEL HOUSE

FROM A SCOTTISH CORRESPONDENT.

THE large numbers who have visited the steel house recently exhibited at the Kelvin Hall, Glasgow, is an indication of the keen public interest on all matters pertaining to housing. The housing problem grows more acute every day, and the need for a speedy solution is imperative. It is to meet this demand for quicker production that the steel house is being put on the market, and in this respect it scores over the brick house.

The general idea that a steel house can be erected and made ready for occupation in a few days is, however, quite erroneous. Certainly the carcass of the house can be put together in a very short time, but there are some parts of the work which cannot be speeded up any more than in other types of houses. For example, foundations have to be laid down and time given for the concrete to set. Next, when the framing is completed, there is the internal plumbing work, which requires the same time as in any standardised brick house. The laying of water and electric or gas mains, the provision of a drainage system, the erection of boundary walls or fences, and the external and internal painting work are all matters which require time. The average estimate for the completion of the house may be put as from five to seven weeks. A brick house of the same size and of standard type would take about three weeks longer.

It is from this point of view and also from the standpoint of mass production, giving a corresponding reduction in cost, that the producers of the steel house hope to relieve a national problem and supply a shortage which cannot otherwise be adequately met. There are, however, a large number of private individuals who are prospective house purchasers, and who are considering the possibilities of the steel house with a view to suiting their requirements.

Taken as a whole, the house exhibited at Kelvin Hall has a well-proportioned appearance, and the red roofing tiles lend a colour and warmth sufficient to overcome the appearance of the more unsympathetic material. The rivets on the face are not prominent and in no way detract from the elevation. Certainly the plainness of the frontage is relieved by the rose trellis work, but whether or not roses would flourish against the steel background is a matter for experiment. The rhones provided strike me as being on the small side for the depth of corrugation of the roofing tiles. The ridge tiles at the bottom of the hip spars are too open and would give too good a catch for the wind. This is a small point, but a point worthy of consideration in a climate such as ours.

There is a good weatherproof fi window cases, which are riveted the steel walls. Instead, however, opening panes, these windows sh the entire casements made to o house is certainly of a fireproof co but furniture, upholstery, and in nishings do not preclude the possib fire, and a fixed steel casement c ready means of escape. Again, a s but worthy of attention.

The general plan is well worke the frontage is well balanced various apartments. The lay-out i cal, and every inch of space is adva used. The general supply of cup however, not too generous, and a c board in the living room, with the hiding the rather unsightly heating would be a distinct advantage. Th on the right of the front door is no with a fire, and for this reason wou better for a roof ventilator.

The only part of the building in steel work is too predominant is lobby, and the general "aboard e pearance might have been avoided use of a metal framing, surfaced w board or asbestos cement sheets. teriors of the various apartments are with asbestos-cement sheets, panel wood strips—a style which is gro popularity and which gives a small pleasant and comfortable appearance

The outside walls, consisting of st air space and asbestos-cement sheet, however, be sufficiently insulated extremes of heat and cold, and a material (slag wool, for example) t place of the air space would render more comfortable.

As to the heating arrangements in a bungalow design one looks fo one interior grate or, failing that, register. The love of an open fi general, and a house without one too modern to be comfortable. T stoves provided are certainly effic they are not pleasant features in well-designed rooms. The cooking the living-room is of good type, and capable of tackling the family requ Regarding the plumbing work of t this appears of a standard lower tha taining in many housing schemes. vanised-iron hot-water cylinder and iron piping have a low first cost, but cylinder, copper boiler, and copper pipes might well be substituted. T der as it stands at present is a large to be economical.

Many of these points are common types of houses besides the steel hou theless it would repay any prospect purchaser to give them considerati details of the house would lead to that the proposed low cost of the does not come from any saving in t ence between the cost of the steel the cost of brickwork, but is to be the fact that prices in other parts of have been cut to a minimum. The or ence in price between a brick hou steel house must lie in the cost of t all other parts of the houses being is difficult to see where much econon obtained. The current price for bric for bungalow houses runs usually a per super. yard. Making allowance plumbings at corners, window a jambs, one may take as a figure super. yard. The current price of p is £12 per ton. Using ⅛-in. plate t out approximately at 4s. 9d. per su add for workmanship and works' say, 75 per cent., viz., 3s. 6d. Nex the framing material, say, 2s. p yard, and for delivery and erectio 1s. 3d. This gives a total of 11s.

odest estimate, and even with mass ion could not be greatly reduced. rding mass production, one thing s certainly not wanted in this country peless monotony in house design, and nvent this a large variety of designs have to be prepared. This is another which would increase costs. It would herefore, that the only point on which el house would help to solve the hous- blem is the fact that it can be erected than the brick house, and this is which is not so advantageous as at ght it would appear.

PUT IN THE BUILDING INDUSTRY

have received the following statement ir Charles Ruthen, Director-General of g, on the output of bricklayers :—

ave seen it stated in the Press that the bricklayer lays 2,000 bricks per day as 500 bricks laid by the British craftsman. atement, published broadcast and linked ference to my recent official visit to the lands, is likely to be attributed to me ould be refuted.

do not accept the statement as nearly e, and further consider that any com- between the output of Dutch and British yers requires a deal of careful quali- n. The standard Dutch brick measures imately 8 in. by 3½ in. by 2¼ in., or. v. 63 cub. in., whereas the cubical ts of the standard British brick is, v. 122 cub. in. Therefore it will be ated that the Dutch bricklayer must uble the number of bricks to produce imately the same cubical contents of l walling as that of his British brother an. Further, if a very artistic Dutch uch used in the Netherlands and exceed- icturesque in the finished work is used, mparison becomes even more impossible. ick measures 6 in. by 3 in. by 1¾ in., or, ally, 31 cub. in., and therefore nearly nes the number must be laid to produce ne volume of work as that of the British

am not prepared to admit for a single t that the Dutch workman produces ter volume of output than the British an. but would rather state definitely e quality and quantity of work produced British workmen in the building industry l if not superior to that of the workmen other country."

ERMAN BRICKS AND ITISH BRICKMAKERS

take the following extracts from an which recently appeared in *The British rker* :—

e Press is continuing to charge the brick- with deliberate and wilful neglect of his st duty in order that he may profiteer ise prices.

e statements made are backed up by ews with supposed authorities, and by ents which we are in a position to prove ncorrect.

are told first that 'many English rds are derelict and their workers loyed.' If the Press will inform us these brickyards are, and can show that e derelict for any reason other than their f value, we shall be glad to offer them many inquirers who are seeking just roperties.

are told that rings in the trade restrict We can show that a works now making ions of bricks annually will increase its to 100 millions next year. Another is hreat of an injunction for fume nuisance, e it has hastened increased production ding temporary and rapidly erected kilns. d is spending large sums of money on modern plant to make use of overburden hitherto excavated and put aside at great expense. A fourth has just completed the installation of expensive machines to double the output of stock bricks, and a fifth a completely remodelled plant on the latest model lines. A sixth is spending £40,000 to produce an additional 13 millions annually. We can continue this list indefinitely, and it should be noted that such things are being done by the firms themselves with their own resources. When we come to consider the finding of the capital for new concerns, the tale is different. Money is not forthcoming either from financiers or private individuals, except for buying up going concerns with good balance sheets. Why is this ? We can only suggest that hitherto the brick trade has not inspired confidence. Threats of compulsory acquisition by the Government and of confiscation are not the kind of gentle inducement which can be calculated to extract money from the pocket of the investor. If bricks are earning such big profits, why do not people clamour for openings in the trade for their savings ? Some firms declared a 7 per cent. dividend recently, others declared even 15 per cent., but what about the previous 10 years ? Did any brick concerns make profits except the firebrick firms, who are now in turn experiencing a very lean time ? No, the investment is not attractive, and at the same time the capital required is large. The Trade Facilities Act is too onerous in its provisions ; the Government encourages the freak builder, and labour will not work to help to house itself.

" Fletton is the villain of the piece. Most of the papers who revile its operations are not even acquainted with the district in which it is situated, and could not distinguish a Fletton brick from a Leicestershire red. It has been accused of deliberately withholding production for the purpose of forcing up prices ; it compasses the diabolical 'ring' which the Government is called upon to smash !

" What are the facts concerning operations at Fletton ?

" As far as prices are concerned, it is sufficient to say that in January, 1923, the basic price of Fletton bricks was reduced by 6s. per 1,000, *i.e.*, to 54s. per 1,000 at King's Cross (to quote the station which is taken for official records), and in May, 1923, when there was a reduction of 1s. 3d. in the railway rate, a further reduction of 1s. 9d. was made to 52s. 3d. This is the price Flettons are being sold at to-day. The increased demand came at the beginning of April, 1923, so that it will be seen that the ordinary effect of supply and demand has not been allowed to operate.

" So far as the alleged restriction of output is concerned, we happen to have seen the returns of the London Brick Co. and Forders, Ltd., who, perhaps, manufacture about 75 per cent. of the whole output of Fletton bricks. For the 10 months ended October 31, 1924, the make and deliveries were 20 million in excess of the totals of 1923, and the company estimate that they will make and deliver 100 millions more for the complete year than they did in 1923 !

" This result has been brought about by unremitting effort on the part of the firm and their staff. New machinery has been installed wherever possible ; night shifts have been introduced at certain of the works, and temporary kilns have been erected at lightning speed, in order to obviate the building of permanent structures covering a period of probably nine months.

" So much for Fletton's restriction of output.

" As to production in other quarters, what of the output of the Employers' National Council for the Clay Industries, the Kent and Essex Stock Brick Association, the South-Eastern Federation, the Midland Association, the National and the Northern Federations ? Each of these can show an aggregate of from 300 to 500 millions, and even then we have not exhausted the list. We may safely state that the capacity and output of works in this country at the present time is far greater than it has ever been in the history of brickmaking.

" Turning now to the importation of foreign bricks, Hull is said to have bought German bricks at 59s. 6d. per 1,000 because English bricks cannot be obtained at less than 80s. We can prove that manufacturers in the neighbourhood of Doncaster are selling huge quantities at 52s. 6d. per 1,000 in the works ; bricks which measure 9 in. by 4½ in. by 3⅛ in., and that they are ready to supply bricks to the Hull Corporation at that price !

" The importation into England is restricted by exceedingly difficult transport conditions and poor wharfage accommodation, and many would-be importers who thought they could deliver the goods have been obliged to abandon the business."

CHADWICK PUBLIC LECTURE

On November 19 Professor Julius Berend Cohen lectured on " Smoke : Its Cause, Nature, Effects, and Methods of Prevention," at the Royal Institute of British Architects. Sir Frank Baines presided. In the course of his address the lecturer said that the lungs were more delicate in structure and function than the digestive organs, and they could not with impunity inhale a vitiated air without permanent injury to their breathing apparatus. They might assume this, although definite evidence was difficult to obtain in so far as smoke was concerned, as the life and habits of town dwellers being so different from that of country folk mortality statistics were of little use. Smoke was produced either by an insufficiency of air or too low a temperature (or a combination of the two) for complete combustion, as instanced by a paraffin lamp burning with and without its chimney. Soot from factory chimneys was very different in character from that from domestic fireplaces, where raw coal was burnt. In the former case, owing to the high temperature and strong draught, the volatile portions of the coal were mainly consumed, whilst the draught carried off mechanically fine mineral dust and grit mixed with carbon containing little tar. Domestic soot, on the other hand, might contain as much as a quarter of its weight of tar. It was this tar which caused the soot to cling, accumulating with time and blackening every surface it touched with a varnish which was not removed by rain.

The observations of Sir Frank Baines had made it only too evident that these sulphur acids from coal (and there was no other source than coal) attacked masonry. Historic and beautiful buildings all over the country were undergoing slow but certain destruction. Fabrics, leather bindings and metal work were being similarly attacked. What was the remedy ? So far as factory smoke was concerned, the Public Health Act of 1875 gave powers to the local authorities to stop unnecessary smoke, and ample evidence was forthcoming before the Committee on Smoke Abatement that boiler chimneys need not smoke. A strict enforcement of these powers would stop the great bulk of factory smoke. It was difficult to legislate for the domestic fireplace. Gas and electricity were coming more and more into prominence for cooking and heating, and that was a good sign. A good deal more might be done by the gas undertakings to promote the consumption of their coke. They had their show places for gas-cookers and gas-fires. Why not other show places for coke stoves (of which there were many on the market), where they could be seen at work, and where the cost of installation and maintenance could be ascertained ? Cheaper gas, cheaper coke, cheaper electricity, and an energetic local authority encouraging their sale whilst holding a firm hand on the offending boiler chimney, would clear the air of most of the smoke.

Gracechurch-street Widening.

Gracechurch-street is to be widened to 50 ft. and Lombard-street to 35 ft. at the eastern end, where six buildings are in the course of erection.

NEW BUILDINGS IN LONDON.

Blackfriars-road.—New premises are to be erected in Blackfriars-road, S.E., as an extension to the works of Messrs. Gaskell & Chambers, Ltd., pewterers and bar fitters' engineers. A building to be used as showrooms and offices is intended, of two stories in height with basement. The construction will be of brick on a steel framework. The street frontage, about 70 ft., will be of ornamental shop windows. It is proposed to add two further stories at a later date, so the roof is to be of concrete, reinforced with steel and asphalted. The site covers about 2,000 square ft. The general contractor is Mr. James Parsons, of 190, Waterloo-road, S.E. 1. The architect is Mr. Lowell Parr, of 42, Cranley-gardens, South Kensington, London, S.W. 7.

Pall Mall.—Large branch bank premises are being built in Pall Mall, S.W.1, by the Midland Bank, Ltd. The new building will be seven stories in height with large basements, which will be used as strong rooms, stores, &c. The loads will be carried by a steel framework, supplied and erected by Messrs. Matthew T. Shaw & Co., Ltd. The elevation will be in Portland stone, supplied by Messrs. F. J. Barnes. The roof will be covered with asphalte on concrete and faced with slates. A lift will serve all floors, whilst a hoist will communicate between the banking hall on the ground floor and the strong rooms in the basements. The general contractors are Messrs. Hall, Beddall & Co., Ltd., and the principal sub-contracting firms are: Granite, Fenning & Co., Ltd.; electrical installation, Bell Bros. (London), Ltd.; ornamental bronze work, Murley Bros., Ltd.; asphalte, Thomas Faldo & Co., Ltd.; heating, Rosser & Russell, Ltd.; lift, Express Lift Co., Ltd.; hot water, Bell Bros. (London), Ltd.; casements, Messrs. Morris. The architects are Messrs. Whinney, Son & Austen Hall, of 8, Old Jewry, London, E.C.2.

St. Martin's-le-Grand.—Work has now started on the foundations of the large new head offices and warehouses which are to be built in St. Martin's-le-Grand, London, E.C. 2, for Messrs. Courtaulds, Ltd. The company have bought 12,000 square ft. of the old General Post Office site, and the extensive depth of the present excavations—some 40 ft.—will permit of two large basements being constructed. The new building will be of considerable size and will consist of eight stories, one of which will be accommodated in a Mansard roof. The roof is to be slated on the sides with green Cumberland slates and finished with a flat concrete and asphalte surface. Special provision will be made for the business to be carried on in the building, there being several passenger and goods' lifts and loading and unloading bays at the rear. Heating and ventilating, prevention of fire, electric lighting, burglar alarms, and other systems, will also be incorporated in the equipment. The building will be supported by a substantial steel framework, and the street frontages will be of Portland stone. Floors will be of reinforced concrete, as also will be the staircases, landings, &c. The window casements will all be of steel. The accommodation will include general offices, secretary's and general manager's and directors' rooms, board room, &c., in addition to warehousing and handling departments. The general contractors are Messrs. Holloway Bros. (London), Ltd., of Bridge Wharf, Grosvenor-road, London, S.W. 1. The steelwork will be supplied by Messrs. Redpath, Brown & Co., Ltd., of 3, Laurence Pountney-hill, London, E.C. 1. The architect is Mr. L. S. Sullivan, A.R.I.B.A., of 158, Fenchurch-street, London, E.C. 3. The consulting engineer is Dr. Oscar Faber, D.Sc., of 5, South-street, Finsbury-pavement, London, E.C. 2.

Buckingham Palace-road.—The large property known as the Peabody Buildings, in Buckingham Palace-road and Caxton-street, S.W. 1, are to be converted into flats and business premises. The work is being carried out in sections, the property being divided into five portions, known as A, B, C, D and E. Operations on block A are now in hand. The ground floor is to be converted into shops and involves a considerable amount of cutting away. Metal shop fronts will be installed. The upper floors, of which there are five, are to be turned into flats, each of four rooms, with bathroom and lavatory. There will be 140 flats in all, and lifts will be installed in each block, whilst central heating, hot water, electric lighting, and other services will be laid on. A part of the building will be used for office purposes, and in the centre of the property will be a restaurant, connected by service hoists with all floors. A large amount of steel girder work will be used to support the building over the shops and the other stores on the ground floor. The architect is Mr. Ernest Cannell, M.S.A., of 259, High Holborn, London, W.C. 2, acting on the instructions of Chandos Court Mansions, Ltd., Buckingham Gate, S.W.

Edgware-road.—A large block of shops and flats are to be built at the corner of Edgware-road and Upper George-street, W. 1, consisting of basement, ground floor, and four upper stories. There will be eight flats, each consisting of hall, living rooms, kitchen and offices, and three bedrooms. The shops will be double and single-fronted. Brick construction on a steel frame is being adopted with facings of artificial stone. Central heating and electric light, lift, gas and open fires will be installed. The contractors are Messrs. W. Sharman & Son, Ltd., Riverside Works, Upper Clapton, E. 5. The architect is Mr. L. S. Sullivan, of 158, Fenchurch-street, London, E.C. 3.

Holloway-road.—A large building is to be erected on the island site at the corner of Holloway-road and Parkhurst-road, Islington, N. 1, principally to provide accommodation for a club for members of the cinematograph and allied trades. It is proposed to build premises three and four stories in height. The construction will be on a steel frame with brick filling and fireproof floors, with frontages of bricks relieved by stone dressings. A heating system, of the low-pressure hot water type, supplied by a central boiler installation, electric lighting and power plant, telephone and bells, cooking apparatus, &c., will be provided. Ventilating and air washing systems and vacuum cleaning machinery will also be installed. On the ground floor, facing the street, will be a range of single and double-fronted shops, fitted with display windows and fittings to suit intending tenants' requirements. On the ground floor will be a ball-room, with a floor measuring 175 ft. × 80 ft., surrounded by lounges, chairs and tables and refreshment rooms. There will also be a billiard room to accommodate thirty full-sized tables; a large restaurant and café; reading and writing rooms, &c. The architect is Mr. S. Gordon Jeeves, of 4, George-street, Hanover-square, London, W. 1.

Hammersmith.—A further section of the rebuilding scheme is in hand at the premises of Messrs. Palmers' Stores, Ltd., in Hammersmith-broadway, W. 6. It is proposed to erect a new block, bounded by Bridge-street and the Broadway, of ground and three upper floors, containing all departments usual in a shopping emporium. The accommodation will also include a large restaurant, with kitchens, &c. One section of the plans has been completed and another is in hand, whilst the remainder of the site has yet to be dealt with. The work is being carried out by the company's building department to the designs of Messrs. John S. Quilter & Son, 3, St. James's-street, London, S.W. 1.

Wandsworth.—A new squash-racquet court is to be constructed in the factory premises of Messrs. Clayton Bros., East Hill, Wandsworth. Messrs. G. H. Carter, Ltd., of Holloway, will execute the specialist work.

Tooting.—The licensed premises, the Fountain Hotel, in Garrett-lane, Tooting, S.W., are to be rebuilt and the present accommodation considerably extended. The new building will be of four floors, with extensive cellarage, and will include public and private bars, saloon luncheon room, inside and outside lav accommodation, and residential quarters f licensee. The flooring will be of wood and position, whilst electric lighting will be inst Plans have been prepared by Mr. Malco Saunders, architect to Messrs. Watney, C Reid & Co., Ltd., brewers, the owners c property.

Battersea.—Extensions are to be made premises in Falcon-road, Battersea, S.W., by Messrs. David Thomas, Ltd., drapers, & new building of two stories is to be erect a site adjoining the present premises, the g floor of which will be fitted with shop front the upper floor equipped as showrooms. addition will be erected on a steel frame brick front and side walls. The roof w slated. Counters, cupboards and other fi will be carried out in oak and mahogany. contractors, Messrs. George Bainbridge & of 77, Terminus-road, Eastbourne, are car out the work to the plans of Mr. P. D. Ston of 58, Grove-road, Eastbourne.

East Ham.—Extensive house building is carried out in East Ham by two local One proposal provides for the erection o houses—52 in Caledonian-road, 30 in Bu road, and 38 in Holland-road—all giving th lowing accommodation: three bedr parlour or living-room, kitchen, scullery, room, and lavatory. The contractors Messrs. Dale Bros., of 74, Wood-street, Walt stow. The plans have been prepared by M R. Cheke & Co., of 11, High-street, Wans E.11. The other scheme is for the buildi 80 houses in Eustace-road and 26 in Hal road—106 in all—of a type to qualify fo Ministry of Health subsidy. The houses w built of brick in pairs and blocks of four, red tiled roofs. The contractors are the L Buildings Co., of Grove Green-yard, Le stone.

Millbank.—A new gallery for the display works of J. S. Sargent, R.A., is being er at the National Art Galleries, in Millbank, S the cost of which is being defrayed b Joseph Duveen. The new building wi somewhat similar to the gallery for Wo Modern Art, also being erected at the Ga at the expense of Sir Joseph, and will incor some novel systems for obtaining better li of pictures. The gallery will be of two and will be decorated in gilt and hard woo Heating systems and electric lighting wi be installed. The contractors are Holland & Hannen and Cubitts, Ltd., Gray's Inn-road, W.C.1, who are also bu the Modern Art Gallery. The architec Messrs. Romaine-Walker & Jenkins, of Bond-street, London, W.1.

Euston-road.—An extension appeal fu which the Duke and Duchess of York are dents, has been opened in connection wi Elizabeth Garrett Anderson Hospital for W in Euston-road, N.W. It has been deci raise £75,000 before any building work started. A legacy of £10,000 has been in purchasing a freehold site and a buildi be erected to provide larger medical and s wards, X-ray and pathological depart a children's ward, maternity and isolation A new out-patient department will be e together with an operating theatre. It proposed to erect a nurses' home, with a tion room. The buildings will be of five floors and basement, and will probal erected in facing brick with stone dressi harmonise with the existing hospital The hon. architect is Sir Brumwell Tho The Albany, Piccadilly, W.1.

Hackney.—Work is in progress on an tant scheme of extensions and alteration buildings at the Hackney Infirmary. brick building is being erected to provid ward and nurses' accommodation. Th tractors are Messrs. F. G. Foster & Co., green-road, Norwood Junction, London, The plans have been prepared by Mr. W. A 18, London-street, Paddington, W.2, wh quantities have been drawn up by Messrs. Bros., 8, Union-court, London, E.C.2.

USING WITH STATE ASSISTANCE

following is a statement showing the of housing schemes under the g, &c., Act, 1923, and the Housing ial Provisions) Act, 1924, on the under- ned dates :—

cs authorised by the Minister Health up to November 1, 1924—

erected by local authorities ..	62,045
erected by private enterprise ..	109,513
Total	171,558
ises included in definite arrange- nts on or before November 1, 24—	
nes of local authorities :— mber of houses included in con- racts or in approved direct abour schemes	46,806
te enterprise :— mber of houses included in ndertakings given by the local uthorities under Section 2 (3) f the Act of 1923 and Section 2 f the Act of 1924	77,645
mber of houses approved by he Minister under Section 3 of he Act of 1923 and Section 2 f the Act of 1924, and included n contracts	4,602
Total (included in Table I.) ..	129,053

ilding Progress at November 1, 1924—

	Schemes of Local Authorities.	Private Enterprise.	Total Houses included in Table II.
ions com-			
..	10,025 ..	15,703 ..	25,728
n ..	8,875 ..	18,242 ..	27,117
der con-			
on ..	18,900 ..	33,945 ..	52,845
ed ..	11,567 ..	26,784 ..	38,351

—Tables II. and III. For 45 local ties, from whom returns for November 1, ave not yet been received, the numbers l above are taken from the previous returns.

LLEGE OF ESTATE MANAGEMENT

e course of a lecture on "Tithe Re- n" at the College of Estate Manage- ecently, Mr. Millard said that though ce in the rates payable by the tithe- were the chief factor in causing differ- n the cost of the redemption of the mount of tithe rentcharge in different the land tax payable and the cost of n were also of some importance. In ring the advisability of redemption in rticular case it was important to bear not only the direct cost, but also the pon the rates and taxes payable in of the land. In arriving at the rate- lue of land, the amount of the tithe rge, if any, charged on it should be , but, after the rentcharge had been shed by redemption, no such deduc- ld of course be made, and the assess- the land for rates was liable to be d accordingly. On the other hand, if was agricultural, most of the rates in respect of it were subject to an nt to one-quarter under the Agricul- ates Acts, 1896 and 1923, on the re- teable value of the land. The assess- land to land tax was also liable to ased as a result of the redemption of e rentcharge.

Obituary.

eath has occurred, at "East View," , of Mr. Richard Burrow Hodgson, enty, who for many years carried on as a builder, contractor and monu- culptor, at Keswick and Appleby.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London :—								
Within 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
From 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

(For rates of wages in the Building Trade in Scotland, see page 881.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

DECEMBER 1.—**Birmingham.**—PAINTING.—For interior cleaning, colouring and painting of the school building at the children's homes, Marston-green, near Birmingham, for the B.G. Mr. J. Curtis, Clerk to the Guardians, Union Offices, Edmund-street.

DECEMBER 1.—**Boston.**—ADDITIONS.—For additions to the grammar school, for the Holland E.C. Mr. J. R. McKnight, Director of Education, Holland Education Offices, Spalding. Deposit £2 2s.

DECEMBER 1.—**Chelmsford.**—PAINTING.—For repainting offices, Waterloo-lane, for the R.D.C. Mr. J. Dewhirst, Surveyor to the Council, Waterloo-lane.

DECEMBER 1.—**Clayton.**—PAINTING.—For external painting of (1) 28 houses, Central Housing Site; and (2) 18 houses, Clayton Heights Housing Site, for the U.D.C. Mr. F. H. Richardson, Clerk to the Council, 24, Bank-street, Bradford.

DECEMBER 1.—**Egham.**—PAINTING.—For exterior painting of the Council Offices, 155, High-street, for the U.D.C. Mr. G. W. Booth, Surveyor, Council Offices.

DECEMBER 1.—**Glasgow.**—PAINTING.—For painter's work required in connection with the Elder Library and public baths, Govan, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers.

DECEMBER 1.—**Salford.**—SUB-STATION.—For erection of a small electricity sub-station building in Weaste, for the C.B. Mr. L. C. Evans, Town Clerk.

DECEMBER 1.—**Sheffield.**—SUB-STATION.—For erection of a transformer sub-station in Hangingwater-road, and erection of a transformer sub-station in Abbeydale-road South, Sheffield, for the T.C. Mr. S. E. Fedden, General Manager and Engineer, Commercial-street. Deposit £1 1s. each.

DECEMBER 1.—**Tottenham, N.**—DWELLINGS.—Erection of 70 three-story dwellings in Lordship-lane, on the White Hart-lane Estate, Tottenham, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 (payable to the Cashier of the Council).

DECEMBER 2.—**Edinburgh.**—ALTERATIONS.—For alterations and additions to Tollcross Employment Exchange, for H.M.O.W. Deposit £1 1s.

DECEMBER 2.—**Glasgow.**—CROSS.—For construction of Great War Crosses in granite and carrying out sundry works at Craigton, Riddrie Park, and Cathcart Cemeteries in Glasgow, and Hawkhead Cemetery, Paisley, for the Imperial War Graves Commission. Secretary, 82, Baker-street, W.1.

DECEMBER 2.—**Keighley.**—PAINTING.—For painter's and decorator's work required to exterior and interior of various blocks at the Fever Hospital, Morton Banks, near Keighley, for the Hospital Board. Mr. J. N. Clarkson, Clerk to the Joint Hospital Board, 40, North-street.

DECEMBER 2.—**London.**—WALL.—For rebuilding forecourt wall of Christchurch, Uxbridge-road, for the Ealing B.C. Mr. Geo. E. Brydges, Town Clerk. Deposit £1 1s.

DECEMBER 2.—**Tipton.**—EXTENSION.—For extension of Bedford House Clinic, Horseley-road, for the E.C. Mr. W. J. Howell, Director of Education.

DECEMBER 3.—**Hove.**—TELEPHONE EXCHANGE.—For the erection of telephone exchange, for the Commissioners of H.M. Works, &c. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

DECEMBER 3.—**Norfolk.**—SCHOOL.—For erection of a new public elementary school at Watton, for the E.C. Mr. J. S. Davis, Secretary, Shirehall, Norwich.

DECEMBER 3.—**Tooting, S.W.17.**—PLASTERING AND TILING.—Plastering and tiling works at Tooting Bec Hospital, extension works, Church-lane, Tooting, S.W.17, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 3.—**Welwyn.**—COTTAGES.—For erection of 200 cottages in the parish of Welwyn Garden City, for the R.D.C. Mr. P. Elton Longmore, Clerk to the Council, 24, Castle-street, Hertford. Deposit £2 2s.

✱DECEMBER 4.—**Edgware.**—PAINTING.—External painting of 337 houses (112 at Edgware, 81 at Harrow Weald, 32 at Stanmore, and 112 at Pinner), for the Hendon R.D.C. Mr. J. B. Willis, Clerk to the Council, Union Offices, Edgware.

DECEMBER 4.—**Reading.**—LAUNDRY.—For erection of a new laundry at Battle Infirmary, Oxford-road, for the B.G. Mr. W. H. Oliver, Clerk to the Guardians, Guardians' Offices, 32, Thorn-street. Deposit £1.

DECEMBER 5.—**Almondbury.**—WALL.—For erection of boundary walls and the formation of footpaths, draining, &c., at the Cemetery, for the Burial Board. Messrs. Joseph Berry & Sons, architects and surveyors, 3, Market-place, Huddersfield.

DECEMBER 5.—**Hornchurch.**—REPAIRS.—External and internal repairs to the whole of the buildings, &c., at their Cottage Homes, Hornchurch, near Romford, Essex, for the Guardians of the Poor of the Parish of Saint Leonard, Shoreditch. Guardians' Architect, Mr. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, Westminster, S.W.1. Deposit £2.

DECEMBER 5.—**Lambeth, S.E.**—STORES, OFFICES AND GARAGE.—Erection of stores, offices and garage at Lambeth, for the Receiver for the Metropolitan Police District. Mr. G. Mackenzie Trench, A.R.I.B.A., F.S.I., Police Architect and Surveyor, New Scotland Yard, London, S.W.1. Deposit £1 1s.

✱DECEMBER 5.—**London, W.**—HOUSES.—Erection of eight houses at Brentham Garden Suburb, Ealing, W., for the Co-Partnership Tenants, Ltd. Mr. George Morriss, Secretary, 6, Bloomsbury-square, London, W.C.1.

DECEMBER 5.—**Wortley.**—PAVILION.—For erection of a sports pavilion in Ecclesfield Park, for the R.D.C. Mr. J. Morton, Clerk to the Council, Council Offices, Grenoside. Deposit £2 2s.

DECEMBER 6.—**Flegg.**—HOUSES.—For erection of non-parlour houses at Martham (two pairs), Hemsby (pair), Winterton (pair), Repps (pair), Ormesby St. Michael (pair), Burgh St. Margaret (pair), Rollesby (pair), for the E. & W. R.D.C. Mr. R. Gournay Ferrier, Clerk, 16, South Quay, Great Yarmouth. Deposit 10s. 6d.

DECEMBER 6.—**Hove.**—HOUSES.—For erecting 22 small houses in Portland-road, and 70 at the Housing Estate in Old Shoreham-road, for the Borough of Hove. Borough Surveyor's Office, Hove. Deposit £1 1s.

DECEMBER 6.—**Stafford.**—ALTERATIONS.—For alterations and additions to the fire station, for the T.C. Mr. H. H. Battle, Town Clerk, Borough Hall. Deposit £1 1s.

DECEMBER 6.—**Stevenage.**—HOUSES.—For erection of 32 houses, for the U.D.C. Mr. Reg. A. Gandy, M.Inst.M. and Cy.E., Engineer and Surveyor, Council Offices, Stevenage. Deposit £2 2s.

DECEMBER 6.—**Westgate-on-Sea.**—PAVILION AND BATHING ACCOMMODATION.—Erection of (1) pavilion, (2) bathing accommodation and public convenience, for the Westgate-on-Sea Council. Mr. F. J. Cornford, Town Hall Buildings, Westgate-on-Sea. Deposit £1 1s.

✱DECEMBER 8.—**Barnes.**—COTTAGE.—Erection of a keeper's cottage at Sheen Common, East Sheen, for the U.D.C. of Barnes. Mr. G. Bruce Tomes, A.M.Inst. C.E., Surveyor to the Council, The Council House, High-street, Mortlake, S.W.14.

DECEMBER 8.—**Bridgend.**—ALTERATIONS.—For alterations at the Cottage Homes, for the B.G. Mr. R. Harmar Cox, Clerk to the Guardians, Union Offices, Bridgend.

DECEMBER 8.—**Farnborough.**—COTTAGES.—For erection of six cottages in Queen's-road, for the U.D.C. Mr. J. E. Hargreaves, Surveyor, Town Hall. Deposit £1.

DECEMBER 8.—**Haslingden.**—HOME.—For erection of a new nurses' home at their Moorland Infirmary, Rawtenstall, for the B.G. Mr. A. N. Rothwell, Clerk to the Guardians, Union Offices, Rawtenstall. Deposit £2 2s.

✱DECEMBER 8.—**London, N.1.**—ALTERATIONS AND CONVERSION.—Alterations and conversion into offices and garage of No. 2, Burnard-place, Eden-grove, Holloway-road, Islington, N.1, for the Metropolitan Borough Council of Islington. Mr. E. C. P. Monson, Council's Architect, Finsbury Pavement House, 120, Moorgate, London, E.C.2. Deposit £2.

✱DECEMBER 8.—**London, N.1.**—VARIOUS WORKS.—Works in connection with the erection of the extension of the Islington Municipal Offices, Tyndale-place, Upper-street, London, N.1, hardwood joinery, electric installation, strong room doors, metal shelving, bronze grilles and caps. Mr. E. C. P. Monson, Council's Architect, Finsbury Pavement House, 120, Moorgate, London, E.C.2, upon payment of a deposit of £1 for each of the above items.

DECEMBER 8.—**Naas.**—REPAIRS.—For new works and repairs to cottages in Scheme No. 45, Naas No. 1 Rural District. The Engineer, Sailors and Soldiers Department, Colonial Office (Irish Branch), 30, Lower Fitzwilliam-street, Dublin. Deposit £1 1s.

DECEMBER 8.—**Penistone.**—ALTERATIONS.—For adaptation of certain rooms and buildings as changing room, library and cycle sheds, for the West Riding E.C. Education Department, County Hall, Wakefield.

DECEMBER 8.—**Wokingham.**—ALTERATIONS.—For alterations and additions at the rear of the premises, Rose-street, for the Wesleyan Chapel. Mr. F. F. Burland, Trustees' Secretary.

DECEMBER 9.—**Liverpool.**—PAINTING.—For outside cleaning, painting, and repairs, &c., at the City Chambers, 59 and 67, Church-street, for the T.C. Mr. Walter Moon, Town Clerk, Municipal Buildings.

DECEMBER 9.—**Portsmouth.**—SHELTERS.—For provision and erection of tramway shelters on different sites, for the Corporation. Town Clerk, Town Hall. Deposit £2 2s.

✱DECEMBER 10.—**Basingstoke.**—COWSHEDS, &c.—Erection of additions to farm buildings, consisting of cowsheds, piggeries, &c., at the Park Prewett Mental Hospital, Basingstoke. Mr. A. Turner, Clerk of Works, Park Prewett Mental Hospital, Basingstoke. Deposit £2 2s.

DECEMBER 10.—**Belfast.**—SHED.—For erection of a goods shed on the east side of the Dufferin Dock, for the Harbour Commissioners. Mr. M. J. Watkins, General Manager and Secretary, Harbour Office.

DECEMBER 10.—**Dewsbury.**—RETORT HOUSE.—For demolition of an existing retort house and supply and erection of a steel and brick retort house, for the C.B. Mr. H. Booth, Town Clerk, Town Hall.

✱DECEMBER 10.—**Liverpool.**—HOUSES.—Erection and completion of houses based on the Corporation standard cottages of 950 and 814 super ft. floor area, built in brickwork or other sound materials, giving a satisfactory finish, and suitable for a life of 75 years, for the Housing Committee of the Liverpool Corporation. Tenders, which should be for lots of 50 or upwards, City Engineer's Office, Municipal Buildings, Liverpool.

DECEMBER 10.—**Middlesex.**—HOSPITAL.—of a hospital for 173 beds, nurses' home, and probation block, Edgware, Middlesex, for the of the Hendon Union. Mr. C. W. Wyles, C Guardians, Union Offices, Edgware. Depos

DECEMBER 11.—**Manchester.**—HOUSE.—struction and erection of a boiler-house a house extension at Bradford-road Works, fo Mr. P. M. Heath, Town Clerk, Town Hall. £1 1s.

DECEMBER 11.—**Rowley Regis.**—HOUSES.—tion of 12 houses and incidental works of hous road kerbing, making-up road to proper leve footpaths in Macmillan-road, Black Heat U.D.C. Mr. D. Wright, Clerk to the Council

✱DECEMBER 11.—**Southend-on-Sea.**—PU VENIENCE AND SHELTER.—Erection and of public conveniences and shelter and works thereto at Shorefields, Western Esplanad Corporation of Southend-on-Sea. Mr. R Dyer, Borough Engineer, Municipal Buildin end-on-Sea. Deposit £2.

DECEMBER 12.—**Erpingham.**—COTTAGES.—tion of 10 cottages, for the R.D.C. Mr. H. water, Clerk to the Council, St. Peter's-road ham.

DECEMBER 13.—**Wallingford.**—ALTERATI alteration and extension of the pump-hou Waterworks, for the C.B. Mr. F. R. Hed Clerk, Wallingford.

✱DECEMBER 15.—**London, E.C.2.**—REDECO Redecoration of the Shoreditch Town Hall, E.C.2, for the Shoreditch Borough Council. Hustler, Borough Surveyor, Town Hall, E.C.2. Deposit £2 2s., to the Borough Ac Office.

DECEMBER 15.—**Middlesbrough.**—EXTENS extension of Holgate institution nurses' hom B.G. Mr. H. Bilson, Clerk to the Guardians, Offices, Municipal Buildings. Deposit £2 2s.

DECEMBER 15.—**Penarth.**—HOUSES.—For of 30 houses proposed to be erected on sites in road, Cogan, for the U.D.C. Mr. J. W. Morr Council Offices. Deposit £2 2s.

DECEMBER 15.—**Saddleworth.**—POLICE ST For erection of a new police station, for the W C.C. Mr. P. O. Platts, A.R.I.B.A., County A County Hall, Wakefield. Deposit £1.

✱DECEMBER 16.—**Ludlow.**—POST OFFI TELEPHONE EXCHANGE.—Erection of a ne Office and Telephone Exchange, at Ludlow Commissioners of H.M. Office of Works, Branch, H.M. Office of Works, King Charle London, S.W.1. Deposit, £1 1s. (cheques to the Commissioners of H.M. Works, &c.).

DECEMBER 16.—**Scunthorpe.**—HOUSES.—For and completion of 30 houses, for the U.D.C. Auld, Clerk to the Council, Council Offices. De

DECEMBER 16.—**Wakefield.**—ALTERATIO alterations required at Queensbury Upper School, for the West Riding C.C. The Education ment, County Hall, Wakefield.

DECEMBER 20.—**Boston.**—HOUSES.—For 2 in blocks of two on the Corporation Woody site, for the T.C. Mr. G. E. Clarke, Borough S

DECEMBER 20.—**Rye.**—EXTENSIONS.—For e engine house, for the T.C. Mr. W. Dawe Clerk, Bank Chambers.

✱JANUARY 5, 1925.—**Goldthorpe.**—HOUSE For the erection of 74 dwelling houses, toget road and surface water drainage works, borough-lane, or in sections (1) 30 house houses, (3) roads and surface water drainag for the Bolton-upon-Dearne U.D.C. Mr. H. Adams, M.S.A., Council Offices, Bolt Dearne. Deposit £1 1s.

NO DATE.—**Kilmarnock.**—WORKS.—For v the erection of 30 houses, for the T.C.:—(1) D brick works, (2) carpenter and joiner works, work, (4) slater and roughcasting works, (5) work, (6) electric lighting work, (7) plaster an works, (8) painter work. Mr. W. Dunbar, Market Bridge.

✱NO DATE.—**North Wales.**—HOUSES.—E 100 houses for Messrs. Courtaulds, Ltd., for th people at Flint, North Wales. Messrs. C Ltd., Engineering Dept., Coventry.

FURNITURE, MATERIALS.

NOVEMBER 29.—**Hindley.**—GRANITE.—For about 1,500 tons of 4 in. by 5 in. granite sett U.D.C. Mr. T. Robey, Clerk to the Council, Offices.

DECEMBER 1.—**Edinburgh.**—GRANITE.—Fo ing of sand, granite, whin, and freestone, for Mr. A. Grierson, Town Clerk, City Chambers.

DECEMBER 1.—**Ilkley.**—PIPES.—For su 1,650 yds. 6 in. diameter, 300 yds. 4 in. and 300 yds. 3 in. diameter cast-iron pipes lengths, for the U.D.C. Mr. J. Montague Chartered Civil Engineer, Waterworks Town Hall.

DECEMBER 3.—**West Ham.**—MATERIALS.—nishing and equipment for an additional wa patients, at the Dagenham Sanatorium, for Mr. G. E. Hilleary, Town Clerk, Town Hall.

DECEMBER 13.—**Kent.**—GRANITE.—For s various granite, for the C.C. Mr. H. T. County Surveyor, St. Peter-street, Maidston

DECEMBER 15.—**Rotherham.**—SEWERA materials required in the construction of disposal works (tanks and filters); (2) appr 2,500 yds. of 12 in. and 9 in. pipe sewers; (3) 12 in. sewer under canal, for the R.D.C. Rawstron, Engineer and Surveyor, Enginee Grove-road, Moorgate. Deposit £3 3s.

ENGINEERING, IRON AND S

DECEMBER 1.—**Egypt.**—TOWER.—For er a water tower at Init Ghamr, for the M. Interior. Department of Overseas Trade, Queen-street, S.W.1.

DECEMBER 1.—**Stone.**—TANK.—For const a separator and humus tank, for the U. C. H. Matthews, Clerk to the Urban District Town Hall. Deposit £1.

BER 5.—**South Africa.**—SEWERAGE.—For of a pumping station and some machinery iron rising mains, for the City Council of Port . Messrs. Davis & Soper, Ltd., 54, St. Mary- 3, or Mr. W. How, Town Clerk, City Hall. 2.

BER 6.—**Dewsbury.**—TANKS.—For construc- ercolating filters, humus tanks, and other nt works in connection with the construction disposal works at Mitchell Laithes, for the . Holland Booth, Town Clerk, Town Hall. 2 2s.

BER 6.—**Wilmslow.**—TANKS.—For con- of screen chamber, suction wells, settling rculating filters and humus tanks; sundry f pipe line, and auxiliary works at their Sewage Farm, for the U.D.C. Mr. H. Cliffe, ne Council, Clerk's Office, Wilmslow, Cheshire. 5.

BER 10.—**Liverpool.**—SEATING.—For con- of seating for three boilers, for the T.C. Mr. Town Clerk. Deposit 10s. 6d.

BER 11.—**Manchester.**—TOWER.—For supply, and erection of a cooling tower at Bradford- orks, for the T.C. Mr. P. M. Heath, Town n Hall.

BER 13.—**Near Penrith.**—BRIDGE.—For con- in ferro-concrete of a new bridge across the ck in Dalemain Park, on the Penrith to road, about 3 miles from Penrith Station, mberland C.C. Mr. G. O. Lockwood, County and Bridgemaster, The Courts, Carlisle. 2.

BER 15.—**Rotherham.**—RESERVOIR.—For con- of a ferro-concrete reservoir, for the C.B. Des Forges, Town Clerk, Town Hall. De- .

BER 15.—**Shrewsbury.**—MASONRY.—For erec- sonry bridges for the reconstruction of the ridge, for the T.C. Mr. R. F. Prideaux, k. Guildhall. Deposit £10.

BER 20.—**Egypt.**—RESERVOIR.—For construc- eel reservoir, for the Ministry of the Interior. nt of Overseas Trade, 35, Old Queen-street,

BER 22.—**Manchester.**—SHEDS.—For con- and completion of two five-story transit nsion of the grain subway, and all ancillary Manchester Docks, for the Ship Canal Co. Eyre, Secretary, 41, Spring-gardens. De-

BER 31.—**Hamilton.**—BRIDGE.—Erection of lge, Hamilton, for the Joint Committee of y Council of the County of Lanark, Town the Burgh of Hamilton, and Town Council of n of Motherwell and Wishaw. Messrs. M'Call, C.E., 160, Hope-street, Glasgow. 1s.

SANITARY, AND WATER WORKS.

BER 29.—**Glasgow.**—ROADS.—For construct- wo miles of roadway, forming part of a new igher level than the former road along the Loch Katrine, including the construction of es with their iron work complete, and all orks, &c., for the T.C. Mr. J. Lindsay, k, City Chambers, Glasgow. Deposit

BER 29.—**Hindley.**—MAKING-UP.—For taking setts, excavating, concreting, and paving setts about 6,000 sq. yards in Leigh-road, en. for the U.D.C. Mr. T. Robey, Clerk ncil, Council Offices. Deposit £2 2s.

BER 29.—**Tilbury.**—FOOTWAYS.—For works n with the reconstruction in artificial stone re-bedding and levelling of kerbs to foot- th sides of 22 unclassified roads or streets, C. Mr. A. W. Buckner, Clerk of the Council, ces. Deposit £2.

BER 29.—**Tilbury.**—ROAD.—For works in with the reconstruction in reinforced rtion of Calcutta-road, for the U.D.C. Buckner, Clerk of the Council, Council posit £1.

BER 29.—**York.**—SEWERS.—For construction rs, surface water drains, manholes, &c., for r. F. W. Spurr, City Engineer, Guildhall. 2s.

BER 1.—**Romford.**—REPAIRS.—For widening ructing about 650 yds. of Church Elm-lane, extending Nelmes-road, Hornchurch, for s., and also widening and diverting Coombe Cranham, for about 200 yds., for the T. W. A. Greenhalgh, Clerk to the Council, Street, Romford.

BER 1.—**Samford.**—DRAINAGE.—For works of ial sewer outfall at Shotley, Suffolk, con- out 600 ft. 6 in. cast-iron outfall and in. glazed stoneware pipes, with manholes, amber and accessories, for the R.D.C. award, Clerk to the Council, 14, Arcade- ch.

BER 1.—**Sunbury-on-Thames.**—SEWER.—For ls. of 8 in. glazed stoneware pipe sewer in with all necessary manholes and contingent e U.D.C. Mr. E. Beeching, Clerk, Council

BER 1.—**Woodford.**—SEWER.—For construc- 31 lin. yds. of 9 in. stoneware pipe sewer, les, &c., in Broomhill-road, Woodford e U.D.C. Mr. W. Farrington, Surveyor ail, Council Offices, Woodford Green.

BER 2.—**Canvey Island.**—REPAIRS.—For the tain footpaths on the island, for the P.C. Judd, Clerk to the Council, Rayleigh,

BER 2.—**Heversham.**—ROAD.—For construc- r road at Heversham and Leasgill, for the a C.C. Mr. C. E. Hines, County Surveyor estreet, Kendal.

DECEMBER 2.—**Kensington and Hammersmith.**—SEWER CONSTRUCTION.—For the construction of a 9 ft. 6 in. internal diameter sewer in cast-iron, with concrete lining, of a total length of about 9,695 ft.; also 6 ft. internal diameter sewer in cast-iron, with concrete lining, of a total length of about 2,375 ft., for the L.C.C. Chief Engineer of the Council, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

DECEMBER 2.—**Salford.**—ROADS.—For paving and completing five streets, for the C.B. Mr. L. C. Evans, Town Clerk.

DECEMBER 3.—**Cardiff.**—SEWER.—For construction of about 170 lin. yds. of 12 in. earthenware pipe surface water sewer, with manholes, &c., at Millbrook, Dinas Powis, for the R.D.C. Mr. M. Warren, Clerk, Park House, Cardiff.

DECEMBER 3.—**Dinas Powis.**—IMPROVEMENTS.—For street improvement works in Elmgrove-place, for the Cardiff R.D.C. Mr M. Warren, Clerk, Park House, Cardiff.

DECEMBER 3.—**Doncaster.**—PIPES.—For laying of about 1¼ miles of 12 in. cast-iron pipes, and about 2 miles of 18 in. cast-iron pipes; also erection of a pump house, for the Water Department, Nutwell Borehole Supply. Mr. F. Oscar Kirby, Water Engineer, 2, Priory-place. Deposit £1 1s.

DECEMBER 3.—**Hove.**—WOOD PAVING.—Providing and laying wood paving in portions of Church-road, Holland-road and Western-road (about 15,820 yds. super.), for the Hove B.C. Mr. H. H. Scott, Borough Surveyor, Town Hall, Hove.

DECEMBER 3.—**Inverness.**—ROADS.—For construction from Inverness to the boundary between the first and third districts, a length of approximately 8½ miles of road; also earthwork, bottoming, surfacing, kerbing, drainage, and fencing, for the C.C. Mr. J. W. M'Killop, County Clerk, The Castle, Inverness. Deposit £3 3s.

★DECEMBER 3.—**London, S.W. 6.**—SANITARY WORK, &c.—(*a*) Removal of division wall and tiling to walls of kitchen and scullery; (*b*) sanitary work, including the provision and fixing of bed-pan sinks, scalding sinks, &c., at the Western Fever Hospital, Seagrave-road, Fulham, S.W. 6, for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C. 4. Deposit £1 in respect of each work.

DECEMBER 3.—**Stevenage.**—OUTFALL.—For reconstruction of the outfall works, for the U.D.C. Mr. W. O. Times, Clerk to the Council, Council Offices, Stevenage. Deposit £3 3s.

★DECEMBER 4.—**London, W.8.**—ROADS.—Making-up the carriageway entrances to, and for carrying out certain works to the existing carriageway of Pennant Mews, South Kensington, for the Royal Borough Council of Kensington. Borough Engineer and Surveyor, Town Hall, Kensington, W.6.

DECEMBER 4.—**Southwell.**—PIPES.—For provision and laying of about one mile of 12 in. and 9 in. stoneware pipe sewers, and the construction of sewage disposal works, at Clipstone, for the R.D.C. Mr. J. Ellis, Clerk to the Council, Westgate, Southwell, Notts. Deposit £2 2s.

DECEMBER 4.—**Southwell.**—SEWERAGE DISPOSAL.—For construction of a small sewage disposal works in the parish of Edwinstowe, for the R.D.C. Mr. J. Ellis, Clerk to the Council, Westgate, Southwell, Notts. Deposit £2 2s.

DECEMBER 4.—**Wanstead.**—MAKING UP.—For making up of Broad-walk, for the U.D.C. Mr. Bruce Blewitt, Clerk to the Council, Council Offices.

DECEMBER 6.—**Aberfeldy.**—POND.—For construction of three-rink artificial curling pond, for the Breadalbane Curling Club. Mr. W. Lindesay Wood, Hon. Secretary.

DECEMBER 8.—**Crewe.**—ROADS.—For making up part of Gainsborough-road, for the T.C. Mr. H. S. K. Feltham, Town Clerk, Municipal Buildings. Deposit £2 2s.

DECEMBER 8.—**Epsom.**—MAINS.—For providing, laying, excavating and jointing of about 2,829 yards of 4 in. cast-iron water main, including valves, fire hydrants, &c., for the U.D.C. Mr. E. G. Wilson, Clerk, 37, Church-street,

DECEMBER 8.—**Frinton-on-Sea.**—ROADS.—For works of private street improvement in St. Mary's-road, Eton-road, and Oxford-road, Frinton-on-Sea, for the U.D.C. Mr. P. O. Macdonald, Clerk to the Council, The Council House.

DECEMBER 11.—**Bournemouth.**—SEWER.—For laying and fixing cast-iron pipes, cradles, &c., for the C.B. Mr. F. P. Dolamore, Borough Engineer and Surveyor, Town Hall. Deposit £1 1s.

DECEMBER 11.—**Cannock.**—PIPES.—For construction of about 2½ miles of 12 in. and 9 in. stoneware pipe sewers and appurtenances and sewage disposal works, for the R.D.C. Mr. A. W. Carver, Clerk to the Council, 202, Wolverhampton-road. Deposit £5 5s.

★DECEMBER 11.—**Kensington, W.8.**—SANITARY WORK.—(1) Sanitary accommodation at the Guardians' Board Room in the Marloes-road, Kensington; (2) sanitary accommodation at the Marloes-road Institution, Kensington, for the Guardians of the Parish of Kensington. Mr. W. R. Stephens, Clerk to the Guardians, Guardians' Offices, Marloes-road, Kensington, W.8.

DECEMBER 13.—**Chester.**—ROADS.—For roads and sewerage works, for the City and County. Mr. J. H. Dickson, Town Clerk. Town Hall. Deposit £1 1s.

DECEMBER 15.—**Baildon.**—SEWER.—For work in connection with the proposed construction of the 12 in. pipe sewer of an approximate length of 240 lin. yds., together with the necessary manholes, &c., for the U.D.C. Mr. R. Howard Moore, Clerk of the Council, Baildon. Deposit £1 1s.

DECEMBER 15.—**Hayfield.**—PIPES.—For providing and laying about 7½ miles of 6 in., 5 in., 4 in., and 3 in. cast-iron pipes, with all necessary valves, hydrants and apparatus, and also for constructing two mass concrete tanks at Hayfield and Mellor, for the R.D.C. Mr. J. R. Bowden, Clerk to the Council, Council Offices, High-street, New Mills, via Stockport. Deposit £5 5s.

DECEMBER 31.—**Cowbridge.**—MAINS.—For a covered service reservoir in mass concrete, and 18,900 lin. yds. of various cast-iron mains, for the Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s.

NO DATE.—**Axbridge.**—PIPES.—For excavating trenches and laying about 2,200 yds. of 9 in. concrete or iron pipes, and for constructing concrete tank, fencing, &c., near Dunnett Farm, Compton Bishop, for the R.D.C. Mr. Arthur Powell, Engineer to the Council, 10, Orchard-street, College Green, Bristol.

NO DATE.—**Farsley.**—SEWER.—For laying a main sewer, for the U.D.C. Mr. V. Wilson, Surveyor, Council Offices.

Competitions.

(*See Competition News, page* 848.)

Auction Sales, Tenders, etc.

DECEMBER 2.—**London, W. 12.**—Mr. F. H. Clark will sell, without reserve, at the Central Stores Depot, No. 401, Wormwood Scrubbs, Wood-lane, Shepherd's Bush, steel-framed building, hutting, timber and building materials, cast and wrought iron piping, corrugated galvanised iron sheets, hot water radiators, sheets wired glass, shovels, new pick helves, &c. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W. 18.

DECEMBER 2 AND FOLLOWING TWO DAYS.—**London E.**—Messrs. Joseph Hibbard & Sons will sell, without reserve, by order of the Liquidators, Messrs. E. Hight and G. G. Liverman, *re* Price & Low, Ltd. (in voluntary liquidation), at the two depots at 118, Hoxton-street and 49, Hackney-road, stock of timber and various other items. Auctioneers, 15, Newington Green, Islington, London, N.16.

DECEMBER 9.—**East Kent.**—Messrs. Hampton & Sons will sell, at the St. James' Estate Rooms, 20, St. James'-square, S.W.1. freehold residential and building property of over 14¼ acres, to be offered in one or six lots. Auctioneers, 20, St. James'-square, S.W.1.

★DECEMBER 9.—**Farnborough, Kent.**—Mr. C. E. Clark will sell, without reserve, opposite "New Inn," Farnborough, Kent, sale of prime new timbers. Auctioneers, Beddington House, Beddington, near Croydon.

DECEMBER 9 AND 10.—**London, E.C.4.**—Messrs Fuller, Horsey, Sons, & Cassell will sell, by order of the Ministry of Transport, road contractors' plant, at 11 o'clock each day, at the Merchants' Hall, Baltic Exchange, St. Mary Axe. Auctioneers, 11, Billiter-square, E.C.3.

★DECEMBER 11 AND 12.—**Berwickshire.**—Messrs. Perry & Phillips will sell (unless previously sold by private treaty), on the premises, Blackadder House, Berwickshire (in 600 lots), the whole of the interior and exterior fixtures and fittings previous to the demolition of the mansion, pine flooring, doors, oak flooring, marble, oak, granite mantelpieces, stone staircase, garden ornaments, iron gates, central heating boilers, the fabric of the mansion, balustrading, lead, &c. Auctioneers, Bridgnorth.

DECEMBER 12.—**Weymouth.**—Messrs. Fuller, Horsey, Sons & Cassell will sell in lots at the Whitehead Torpedo Factory, Weymouth, building material, steel joists, angles, steam piping, roof trusses, glazing, bars, timber, &c. Auctioneers, 11, Billiter-square, E.C. 3.

★DATE ANNOUNCED LATER.—**Edgware.**—Messrs. Knight, Frank & Rutley, in conjunction with Messrs. Cross & Cross, will sell (as a whole or in lots, vacant possession with the exception of one cottage) in Hanover-square Estate Room (unless previously sold privately), a freehold building estate at Edgware, comprising Lower Hall Farm, including residence, also Upper Hall Farm, including cottages and farm buildings, the whole extending to about 37 acres; main drainage. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

NOVEMBER 29.—**Birmingham.**—CLERK OF WORKS.—Clerk of Works required for housing schemes. Mr. Herbert H. Humphries, City Engineer and Surveyor and Executive Officer for Housing Schemes, The Council House, Birmingham.

NOVEMBER 29.—**Cheltenham.**—CLERK OF WORKS.—Clerk of Works required to supervise the construction of gravity pre-filters, ferro-concrete tanks (Hennebique system) and concrete block filter and engine house (contract about £8,000), for the Corporation of Cheltenham. Mr. J. S. Pickering, Borough Engineer, Municipal Offices, Cheltenham.

DECEMBER 1.—**Rochester.**—CLERK OF WORKS.—Clerk of Works required for a large sewerage scheme intended to be begun in the near future, for the City Corporation of Rochester. City Surveyor, Guildhall, Rochester.

DECEMBER 4.—**Lewes.**—Quantity Surveyor required on the temporary staff in connection with the proposed new County Secondary Schools, by the East Sussex County Council. Mr. Fred. J. Wood, A.M.I.C.E., M.S.A., County Surveyor, County Hall, Lewes.

★DECEMBER 8.—**Cape Town.**—Lecturer in building trades subjects wanted for the Cape Technical College, Cape Town. Messrs. Chalmers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

★DECEMBER 15.—**Durham.**—Two Assistant Architects and one Assistant Quantity Surveyor required by the county of Durham Education Committee. Director of Education, Shire Hall, Durham, enclosing stamped addressed foolscap envelope.

★JANUARY 1.—**Cambridge.**—Assistant to the Master required by the Board of Architectural Studies, at the University of Cambridge, School of Architecture. The Secretary of the Board of Architectural Studies, Mr. Edward Bullough, Gonville and Caius College, Cambridge.

PROPOSED NEW BUILDINGS & OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board of Education.

ACCRINGTON.—A project is on foot for the provision of a town hall.

ALTRINCHAM.—Plans have been approved for the erection of club premises on the corner of Moss-lane and Mayor's-road, for the Committee of the British Legion; and for the erection of 20 houses on the Oldfield Brow estate, for the D.C.

BARKING ABBEY.—Plans have been prepared by the County Architect of the Essex C.C. for the provision of a dining hall to accommodate 200 pupils at the School, at an estimated cost of £3,560.

BATLEY.—A scheme is in hand for the extensions to the Batley and District Hospital. The architects (Messrs. W. Hanstock & Son, of Batley) invite tenders for the various trades required in the building work.

BEESTON.—The U.D.C. recommend that the M.H. be requested to give approval to a further 100 houses.

BLACKBURN.—Plans have been approved by the B.G. for the erection of a mortuary at the Eaves-lane Institution.

BLACKPOOL.—A M.H. inquiry is to be held into the application by the Corporation for sanction to borrow for the following purposes: £266,513, for the extension of the seawall and laying out of the promenade at south shore; £182,226, for sea defence works at Bispham and south shore; £81,527 for the laying-out of land on the easterly side of the promenade, south shore; £15,448 for the completion of the open-air bath at south shore.—The design and plans of Messrs. Austin & Paley, architects, Lancaster, have been approved by the Vicar and parishioners of St. Stephen's-on-the-Cliffs, for the erection of a new church, which, when completed, is estimated to cost £35,000.—The Committee of the Cleveleys Men's Club are proposing to erect new club premises to plans prepared by Mr. R. H. Cunliffe, architect, of Fleetwood.

BOLTON-ON-DEARNE.—The U.D.C. has decided to build 500 working-class houses during the next three years, 250 of them in the first year.

BRIDLINGTON.—The T.C. approved plans: Mr. C. L. Waite, two houses on the Priory estate, for Mr. W. Witting; Mr. J. R. Earnshaw, house, Trinity-road, for Mr. N. Cooper; Mr. M. B. Parkin, house, Kingsgate, for Mr. Beames; Mr. C. L. Waite, bungalow on the Priory estate, for Mr. W. Witting; Mr. C. L. Waite, four bungalows on the Priory estate, for Mr. W. Witting; Messrs. Watson & Ritson, two houses, George-street, for Mr. A. H. Evans; Messrs. Watson & Ritson, two houses, corner of Kingsgate and George-street, for Mr. A. H. Evans; Mr. J. R. Earnshaw house, Kingsgate, for Mr. W. Newsome; Mr. M. B. Parkin, bungalow, corner of Shaftesbury-road and St. James's-road, for Miss M. J. Boak; Mr. L. Stewart, house, St. James's-road, for Mr. A. Clark; Mr. L. Stewart, two houses, Kingsgate, for Mr. F. Spink; Mr. J. R. Earnshaw, four houses, Brookland-road, for Mr. H. F. Hird; Mr. J. R. Earnshaw, house, corner of Shaftesbury-road and Kingsgate, for Mr. J. R. Earnshaw.

BURY.—The B.E. have been instructed to prepare a scheme of a swimming bath in the reservoir at Clarence Park, on the floating raft system, with dressing-room accommodation. The estimated cost is about £10,000.

CHELMSFORD.—The M.H. have authorised £680 for the purchase of land adjoining the Institution grounds, and also £27,327 for the erection of the new Infirmary and Nurses' Homes.—The T.C. propose erecting another 100 houses, for which the M.H. have intimated they will give favourable consideration.

CHORLEY.—The Borough Surveyor is to prepare plans for an open-air bath in Astley Park.—Plans passed: Four houses, Collinson-avenue, for Messrs. Hickman & Partington; four houses, Highfield-road, for Messrs. J. W. Lee & Co.; four houses, Preston-road, for Messrs. Hickman & Partington.

CLITHEROE.—The T.C. has received the M.H. approval to erect a further 38 houses on the Henthorne estate. The Council is now seeking permission to borrow £16,500 to carry out the work.

CLOWNE.—The R.D.C. has decided to apply to the M.H. for permission to build an additional 26 houses at Creswell, and to proceed with the erection of 30 houses at Clowne and 10 at Barlborough as soon as the Ministry's sanction has been received.

COLCHESTER.—The enlargement of the Royal Eastern Counties institution is proposed.

COLNE.—The T.C. has decided that a scheme should be prepared for the erection of working-class houses.—Mr. G. H. Walters proposes to erect a bungalow in Clare-avenue.

CROMPTON.—The D.C. are recommended to proceed immediately with the erection of a new building on a site in Farrow-street, for a child's welfare centre, estimated to cost £917. Plans have been prepared under the supervision of the surveyor, Mr. J. Fothergill.—The provision of a maternity centre is also under consideration.

DARTMOUTH.—The T.C. passed plans: Mr. R. Pillar, houses, at Townstal.

DARWEN.—Plans have been passed for the building of works in Hollins-road, for the Walpamur Co., Ltd.; two houses, off Belgrave-road, for Messrs. Robert Shorrock & Son, Ltd.

DAVENHAM.—The M.H. has notified the Cheshire C.C. that the question will now be considered of making a grant towards the acquisition of land for the proposed tuberculosis pavilion.

DEWSBURY.—The T.C. has adopted unemployment relief schemes, such as building a bridge across the Calder and Hebble canal at Slaithwaite-road, Thornhill Lees, to replace the present stone arch bridge. Roads and sewers are to be constructed on the Ravens Lodge housing site, at a cost of £18,000. It is proposed to build 230 houses on the site.

DIDSBURY.—A large residence in Wilmslow-road has been acquired for adaptation as a home for children of the Salford Rescue and Protection Society, estimated to cost £8,000.

DONCASTER.—The Surveyor has been instructed by the Market Committee to carry out alterations to steps leading into cellar under the market hall to afford a more satisfactory entrance.

DUBLIN.—Plans passed by the City Architect: Alexandra-road, warehouses, pump house, &c., for the Galena Signal Oil Co.; Seafield-road, Clontarf, bungalow, for Mr. J. A. Coleman; Castle-avenue, Clontarf, bungalow, for Mr. W. Dunne; Hollybank-road, Glasnevin, 8 houses, for Mr. A. Strain.

EASTHAMPSTEAD.—Formal sanction has been received from the M.H. by the R.D.C. to the borrowing of £5,300 for the building of and £200 for the purchase of the site for the erection of working class cottages at Cranborne.

ESTON.—The U.D.C. is considering the advisability of establishing an open-air swimming bath, at an estimated cost of £4,500.

EYE.—The Town Clerk of the T.C. reported that the Housing Committee had met the architect, Mr. Harold Hooper, in connection with the old workhouse reconstruction scheme, and it was agreed to experiment with the front portion of the premises as a first instalment, the architect being asked to get tenders.

FALKIRK.—The Dean of Guild Court passed plans: Callendar Iron Co., warehouse and fitting shop, to cost £1,250; Mr. J. Kean, bungalow in Major's-place, to cost £1,250.

FRIERN BARNET.—Plans passed by the D.C.: Engine house at the Cambridge & Paul Instrument Works, Sydney-road; L.G.O.C. garage at Sydney-road; three shops and flats in Colney Hatch-lane.

FRIMLEY.—The U.D.C. recommended additional houses be built.

GAWSWORTH.—Farm buildings and a hou erected on the small holdings estate at a c £2,500 by the Cheshire Small Holdings Co

GOLBORNE.—The Housing Committee have decided to acquire a site for the er houses.

GRANGEMOUTH.—The T.C. has resolved with a further scheme, in the new town, c 24 houses and 30 to 40 houses.

GUILDFORD.—The T.C. approved pl houses, New Cross-road, Stoughton, subm J. F. Wilmot, for Mr. Hebburn; house, C submitted by Mr. Geo. How, for Mr. factory, Worplesdon-road, submitted by How, for Messrs. Mason & Toogood; Onslow Village, submitted by Messrs. Ke Powell & Russell, for Mr. Perry; house road, submitted by Mr. T. Dyer, for M house, New-road, off Nightingale-road, by Messrs. Tomkins, Homes & Co., for Mes Robinson; pair of bungalows, Grange-roa by Mr. R. Marsden, for Mr. Gaff; two hous road, submitted by Messrs. Frampton & Co. Holford; house and shop, Woodbridge-road by Mr. R. Marsden, for Messrs. Hart & Co.; Weston-road, submitted by Mr. E. Perdue Perdue, Weston-road, Guildford.

HALIFAX.—The M.H. has given sanc Corporation for the construction of new a the site of the existing building in the centre at an estimated cost of £58,000.

HANWELL.—St. Mark's Church are to er hall at £1,200.

HARWICH.—Plans approved by the houses in Fronks-road, for Messrs. Fisher

HEADINGTON.—The R.D.C. has asked th sanction to subsidise a further 50 house

HOVE.—The T.C. passed plans: Mr. J. C. for Mr. S. Massey, detached bungalow, Portl Mr. G. M. Jay, for Messrs. Morris & Jay semi-detached houses, Glebe-villas; Mr. for Mr. E. Miles, detached bungalow, Old road; Mr. B. James, for Mr. R. Stredwick house, Portland-road; Messrs. Roberts for Messrs. Lumley & Hunt, new premises road; Mr. C. W. Bailey, for Princes Hote boiler house and chimney shaft, Princes Hote gardens; Mr. A. Chadwell, detached house gardens; Messrs. J. H. Hackman, Ltd., semi-detached houses, Portland-villas.

HUDDERSFIELD.—The T.C. has agreed to a site at Park-avenue for the erection of a home from plans prepared by the borough and construction of a tramway shelter at Head.

ILKESTON.—The T.C. passed plans: Hou mond-road, J. Godber; bungalow, Manc Smith; two cottages, Manor-road, J. Brig pair of houses, Wharncliffe-road, F. Cham

INVERNESS.—The Dean of Guild Court pa for the erection of storage tanks for the Angl Oil Co., at a cost of £12,000.

KINGSTON.—The Guardians propose nurses' home at their hospital.

LANCASTER.—The Lancaster and D operative Society are to acquire property end of Morecambe and a plot of land on t China-street and Church-street, Lancast erection of a boot-repairing factory.

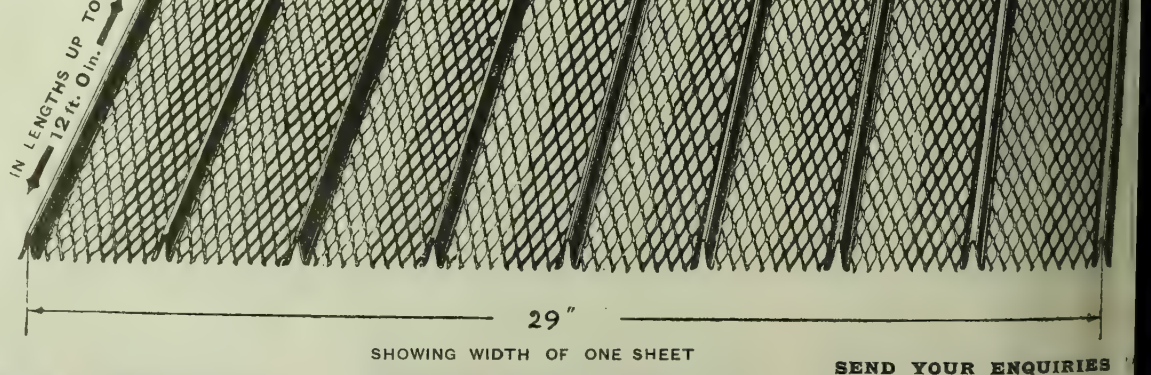
LEEDS.—A site has been purchased i Armley, for the erection of a new Rom school.

LINTHWAITE.—The Linthwaite and Gol seeking sanction to borrow £33,500 for the their sewage disposal works at Johnny Milnsbridge.

LIVERPOOL.—The Housing Committee agreed to purchase from the M.H. 547 a in Walton, Clubmoor, and other housing and south, at a cost of £185,000, for housi

LONDON (HACKNEY).—Plans: S. Goo four lock-up shops, Brooke-road; J. Jar Ltd., electricity show rooms, Lowe Cl C. P. Roberts & Co., Ltd., L.C.C. school, W

* See also our List of Contracts, Competitions, etc.



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STEPNEY).—Plans passed by the B.C.
lock-up shop, New-road; A. S. Taylor,
Eastfield-street, Limehouse.—The B.C.
scheme of the Housing Committee for the
of houses in Fieldgate-street, for the
vo blocks of five-story tenements.
T.—The T.C. passed plans: Mrs. M. A.
alow, Beccles-road, Oulton Broad; Mrs.
ngalow, The Avenue, South Lowestoft;
roft, six bungalows, Colville-road; Mr.
, cottage, Beccles-road, Oulton Broad;
e, cottage, Beccles-road.
OSWORTH.—The Leicestershire C.C. has
ild a new school.
—Plans passed by the R.D.C.: 35 houses
h, for the Ashington Coal Co., Ltd.; two
s near Morpeth Station, for the London
ern Rly. Co.; branch premises at Linton
the Ashington Industrial Co-operative

—Cheshire county surveyor has been
epare plans for widening the Marshfield

ILTON.—The Lanarkshire Tramways Co.
ground for the purpose of erecting a garage
ate at least one hundred motor buses.
-Plans passed by R.D.C.: Bungalow at
ckington, for Mr. G. Powell; pair of
Cockington, for Messrs. Tucker & Glan-
tages at Sandygate, Kingsteignton, for
pe.
—A scheme is on foot to provide a hand-
vilion.
—Plans passed by the T.C.: G. A.
use, Compton Park-road; W. H Heath,
West Down-road; W. E. Jones, three
ydrock-road.
(CHESHIRE) —The Church Council is
r the purchase of land for the erection of

-The Berks C.C. propose demolition of
at Abbey Wall and erecting two. The
ated at about £1,500.
-The T.C. approved a scheme for the pro-
works in connection with the gas under-
estimated cost of £36,000 to £40,000.
—The U.D.C. have applied to the M.H.
loan of £60,000 for new sewage disposal
engineers are W. H. Radford & Son, of

s.—The L.N.E.R. have decided to re-
st of £3,000, the platform at St. Helens'

-Tenders are to be invited for the interior
150 council houses.
RY.—The T.C.'s Housing Committee
the Surveyor has prepared plans for
e built at a cost of about £400 per house.
—A special committee of the T.C.,
the proposed public hall, recommends
e paid in respect of the purchase and
emises in Holly-street.
—Plans approved by the T.C.: Three
-road, for Mr. S. R. Moorhouse; house,
, for the Trustees of St. Paul's parish
ly hall, Vicarage-road, for the Trustees
y Church.
LDS.—The B.S. has been instructed to
the lay-out of the sites at Sunderland-
erection of about 480 houses.—Plans
e plan for 42 houses, Harton Villa, for
on, Son & Sherwood; block of premises,
s and two houses, West-avenue, for Mr.
hops and houses, Prince Edward-road,
Wilson; alterations, Golden Lion Hotel,
r Messrs. T. A. Page & Sons; house,
for Mr. Naylor.—Revised plans are to
r the provision of an open-air school.—
e taking place regarding the extension of
Park Sanatorium.—A committee is to
where public conveniences are proposed

The D.C. is applying to the M.H. for
he erection of a further 20 houses.
RE.—The C.C. agreed to the construction
Bannockburn, 12 houses at Cowie, and
onnybridge.
).—The T.C. has passed plans for the
houses on a site adjoining the Newcastle-

-The U.D.C. are proposing to erect

-The U.D.C. are seeking M.H. approval
to the Council offices, for which they
£5,000.
-The county school is to be converted
lementary school.
—The T.C. passed plans: Bell & Kay,
Mount, for Mr. J. A. Benton; Mr. H.
ouses, Manygates-lane, for G. S. Hep-
Siswick; Bell & Kay, house and shop,
ad, for Mr. A. Blackburn.
—A proposal is on foot for a new mental
on at Leighton House, which has been
rd by the Wiltshire C.C. to the Oxford
tal cost is estimated at £90,000.
N-SEA.—A new shelter is to be erected
a cost of £850.
LEPOOL.—The T.C. passed plans: Miss
, Caledonian-road.
—The U.D.C. approved plans: Mor-
ewing room, Harlesden-road, for the
eral Hospital; shop and house, Village
, for Mr. W. J. Macklin; 33 lock-up
e-road, Willesden Green, for Mr. Arnott;
lestone-avenue, Brondesbury Park, for
rn & Arnell; seven houses, Herbert-
den, for Messrs. Jermey & Son; three
d-road, Harlesden, for Mr. E. Drown;
lell-gardens, Kensal Rise, for G. Ball
Ltd.; six houses, Fleetwood-road,
Mr. J. C. Webb; house, Alverstone-road,
r George Ball (Willesden), Ltd.; two houses, Chapter-road, for Messrs. Parsons & Sons.—The Electrical Engineer reports that it will be necessary in the near future to erect a transformer station in the neighbourhood of Oxgate-lane. The Council recommend him to negotiate for a small plot of land suitable for his requirements.

WINDSOR.—The M.T. has intimated that he will make a grant of £30,000 towards the cost of reconstructing Albert Bridge by the Berks and Bucks C.C.'s.

WREXHAM.—The R.D.C. approved a scheme for the erection of 380 houses during the next two years, as follows: Gwersyllt, 70; Rhos, 54; Cefn, 52; Broughton, 48; Stansty, 30; Ruabon, 24; Brymbo, 22; Gresford, 20; Coedpoeth, 16; rural parishes, 12; Holt, 10; Rossett, 10; Penycae, 8; and Esclusham Below, 4.

WOODHALL.—The U.D.C. approved plans: House, for Mr. E. Marshall, Witham-road; 2 houses on the Horncastle-road, for Mr. Horbuck.

WORTHINGTON.—A new school is to be erected by the Leicestershire E.C.

YORK.—Plans approved by the T.C.: Saxone Shoe Co., Ltd., new premises, Coney-street; J. Elliott, house, Moorgate; W. West, two houses, Terry-street; Friends' Retreat, nursing home, Heslington-road; H. Watson, house, Layerthorpe.

FIRES.

NEW MILTON.—A fire which broke out recently in the principal street of New Milton, a small Hampshire town near Bournemouth, caused damage to business premises estimated at nearly £10 000.

NORTHALLERTON.—A fire occurred at the garage of the Metropole Garage Co. The damage is estimated at over £15,000.

THE BUILDING TRADE

According to the *Ministry of Labour Gazette*, employment in the building trade showed little change in October, except in the painting and decorating section, where there was a seasonal decline; it continued good, on the whole, with skilled operatives, other than painters, but generally slack with unskilled workers. In a few instances a little overtime was worked, but adverse weather conditions caused a certain amount of lost time on outside work.

As regards individual occupations, employment remained very good generally with bricklayers and plasterers, and good in most districts with masons and with carpenters and joiners; in a considerable number of districts a shortage of one or more of the foregoing classes of skilled operatives, especially of bricklayers and plasterers, was again reported. Employment continued fairly good generally with slaters and plumbers, and showed a slight improvement. There was a further decline with painters, and employment in most districts was very slack, as is usual at this time of the year; it remained slack, on the whole, with builders' labourers.

In the brick trade, employment in October continued good on the whole, but showed a slight decline as compared with the previous month; short time was worked in some districts, but, compared with a year ago, employment was much better. At Peterborough, Nottingham and Bridgwater employment was reported as being very good.

The percentage of workpeople unemployed in the brick, pipe, tile, etc., trades, as indicated by the unemployment books lodged at Employment Exchanges on October 27, 1924, was 7.8, as compared with 6.8 on September 22.

Statistics relating to Building Trades for the five weeks ended October 6 show that in the building trades 9,506 vacancies were notified for men and 7,591 vacancies were filled. The principal occupations concerned were:—Carpenters, 2,454 vacancies notified and 2,006 filled; bricklayers, 1,298 vacancies notified and 588 filled; painters, 2,221 vacancies notified and 2,066 filled; and builders' labourers, 1,408 vacancies notified and 1,281 filled.

Returns from local authorities in 142 of the principal urban areas in Great Britain (except the London County Council area), with a total population of 15,981,000, show that in October, 1924, plans were passed for buildings of an estimated cost of £4,526,600, as compared with £4,462,100 in September, 1924, and £4,446,400 in October, 1923. Of the total for October, 1924, dwelling-houses accounted for £2,991,100; factories and workshops for £213,300; shops, offices, warehouses and other business premises for £547,500; and other buildings, and additions and alterations to existing buildings, for £774,700.

NEW INVENTIONS

Showroom Ceilings.

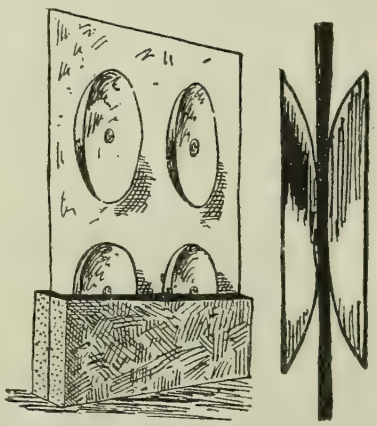
The Army and Navy Co-operative Society, Ltd., had a number of ceilings in their Victoria-street store that were not as attractive as they would like owing to exposed sprinkler pipes and, in some cases, girders. Means were therefore devised of covering these pipes and girders,



merely allowing the sprinkler valves to protrude slightly, and at the same time carry on their business without any interruptions due to rebuilding. "Sundeala" wall-boarding was adopted for the purpose, and so far some 40,000 sq. ft. has been used. As will be seen by the accompanying illustration, the sprinkler valves are hardly noticeable. "Sundeala" is supplied by Messrs. G. D. Peters & Co., Ltd., Caxton House, Westminster, S.W. 1.

Reinforcement.

According to a contemporary a new type of reinforcement for concrete walling is being put on the market by a German concern. As shown in the illustration, this consists of sheet steel on each side of which are saucer-shape pieces of steel which, it is claimed, hold the concrete in



position whilst it is setting, and thus enable shuttering to be removed earlier than usual. The vertical sheet of steel makes the wall damp-proof, and the added strength it imparts to the concrete enables thinner walls to be used.

Woolwich Housing Scheme.

The Royal Arsenal Co-operative Society intends, subject to the consent of its members, to purchase for £375,000 the Well Hall Garden City Estate, at Eltham, consisting of 1,034 houses, 212 flats, and 90 acres of freehold land.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquir

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£	s.	d.
Best Stocks	4	3	6
Second Hard Stocks	3	18	6

Per 1,000. Delivered at London Goods Stations.

	£	s.	d.
Flettons, at			
King's Cross	2	13	3
Do. grooved for plaster	2	15	3
Do. Bullnose	3	8	3
Best Stourbridge Fire brick:—			
2½ in.	8	11	0
3 in.	10	3	0

GLAZED BRICKS—

	£	s.	d.
Best White Ivory, and Salt Glazed Stretchers	23	0	0
Headers	22	10	0
Quoins. Bull-nose and 4½ in. Flats	29	10	0
D'ble Str'tch'rs	31	10	0
D'ble Headers	28	10	0
One Side and two Ends	32	10	0
Two Sides and one End	33	10	0
Splays and Squints	31	0	0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s.	d.
2 in. per yd. super	2	1
2½ in. "	2	6
3 in. per yd. super	2	11
4 in. "	3	6

	s.	d.	
Thames Ballast	10	6	per yard.
P t Sand	1	0	" "
Thames Sand	1	6	" "
Best Washed Sand	1	6	" "
¾ in. Shingle for Ferro-Concrete	12	9	" "
½ in. "	14	0	" "
¾ in. Broken Brick "	11	6	" "
Pan Breeze	7	6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0	10	0
Super Cement (Waterproof)	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
" " Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
" " White	3	12	6
" Fine	5	12	0
Sirapite, Coarse	3	9	0
" Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	11	9
Best Ground Blue Lias Lime	2	4	6
Hair	7	0	0
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s.	d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2	9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2	11½
PORTLAND STONE—		
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4	4
Do. do. delivered on road wagons at above stations, per ft. cube	4	5
White basebed, 3d. per ft. cube extra.		

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7	/-
Random blocks from 10 ft. and over "	17	/-
Sawn two sides "	27	/-
Sawn three or four sides "	32	/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s.	d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5	6
6 in. rubbed two sides, ditto "	6	0
3 in. sawn two sides slabs (random sizes) "	2	3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1	6½
1½ in. to 2 in. ditto, ditto "	1	4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks Per Ft. Cube	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5	1½
6 in. rubbed two sides ditto "	6	1½
4 in. sawn two sides slabs (random sizes) "	2	10
3 in. ditto. ditto "	2	1½
2 in. self-faced random flags. Per Yard Super	9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.			per stan.		Inches.			per stan.	
6	×	11	....	£32 0	3	×	6	....	£23 0
4	×	9	....	28 0	3	×	11	....	28 0
4	×	8	....	26 0	2	×	11	....	28 0
4	×	7	....	25 0	3	×	9	....	25 0
3	×	8	....	24 0	2½	×	9	....	25 0
3	×	7	....	23 0	3	×	4½	....	24 0
2½	×	7	....	22 0	3	×	4	....	24 0

PLANED BOARDS.

1	×	11	....	£31 0	1	×	9	....	£30 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
¾	16/6
⅞	20/-
1	25/-

BATTENS

Inches	s.	d.	
¾ × 2	2	6	per 100 ft.

SAWN LATHS.

Per bundle					0	2	6
Dry Wainscot Oak, per ft. super, as inch	0	2	0	to	0	2	6
¾ in. do. do.	0	1	6	to	0	2	0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9	to	0	2	6
Cuba Mahogany	0	3	0	to	0	3	6
Teak (Rangoon, Moulmein or Java), per ft. cube	0	14	0	to	—		
American Whitewood planks, per ft. cube	0	12	0	to	0	14	0
Best Scotch Glue, per cwt.	4	10	0	to	—		
Liquid Glue, per cwt.	4	7	0	to	5	10	0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	6	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

Per 1,000 f.o.r. London.

	£	s.	d.
Best machine-made tiles from Broseley or Staffordshire district	5	12	6
Ditto hand made ditto	5	17	6
Ornamental ditto	6	2	6
Hip and valley tiles (per dozen) Hand made	0	9	6
Hip and valley tiles (per dozen) Machine made	0	9	0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£	s.	d.
R. S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
" Stanchions	17	10	0
In Roof Work	20	10	0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
¼ in.	16	10	0	⅜ in. to ½ in.	13	10	0
⅜ in.	14	10	0	⅝ in. to 2½ in.	13	0	0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ⅜"&up.	Fittings. ½"to¾" inclusive.	Flanges ⅜"&up.	Flanges ½"to¾" inclusive
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28½ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1¾	11d.	3½d.
3½ in.	1/2¾	1/0¾	3½d.
4 in.	1/4	1/1¾	3½d.
4½ in.	1/5¾	1/4	4d.
5 in.	1/7¾	1/5¾	5d.

O.G. GUTTERS.

3 in.	1/6¾	1/2¾	3½d.
3½ in.	1/6¾	1/2¾	3½d.
4 in.	1/7¾	1/4	3½d.
4½ in.	1/9¾	1/6¾	4d.
5 in.	2/1¾	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7¼	1/1¾	1/8
2½ in. "	1/9¼	1/4	2/0¼
3 in. "	2/1¾	1/8	2/5¾
3½ in. "	2/6¾	1/11¾	2/10¼
4 in. "	2/11¼	2/4¼	3/5¼

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.		Bends, stock angles.		Branches, stock angles.	
	s.	d.	s.	d.	s.	d.
2 in. per yd. in 6fts plain	3	0¼	2	2¼	2	8
2½ in. "	3	6¼	2	5¾	3	3¾
3 in. "	4	2¾	2	8	4	0¾
3½ in. "	4	7	3	3¾	4	8¼
4 in. "	5	1	3	9¼	5	5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.		Bends stock angles.		Branches stock angles.	
	s.	d.	s.	d.	s.	d.
3 in. per yd. in 9ft. lengths	4	9	5	8	8	10
4 in. "	6	3	6	8	11	4
5 in. "	7	6	11	6	18	2
6 in. "	8	10	14	4	23	5

Per ton in London.

	£	s.	d.		£	s.	d.
IRON—							
Common Bars	13	10	0	to	14	10	0
Staffordshire Crown Bars—good merchant quality	14	10	0	"	15	10	0
Staffordshire "Marked Bars"	17	0	0	..	18	0	0
Mild Steel Bars	12	0	0	..	13	0	0

METALS (*Continued*).

	£	s.	d.	
Steel Bars, Ferro-Concrete quality, basis price	12	10	0	..
Hoop iron, basis price	16	10	0	..
" Galvanised	21	0	0	..
Soft Steel Sheets, Black—				
Ordinary sizes to 20 g.	14	10	0	..
" " " 24 g.	15	10	0	..
" " " 26 g.	17	10	0	..
Sheets Flat Best Soft Steel, C.R. & C.A. qu				
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21	0	0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22	10	0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24	10	0	..
Flat and Galvanised Corrugated Sheets—				
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20	10	0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21	0	0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23	0	0	..
Sheets Galvanised Flat, Best quality—				
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23	10	0	..
Best Soft Steel Sheets, 22 g. and 24 g.	24	10	0	..
Best Soft Steel Sheets, 26 g.	26	0	0	..
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20	10	0	..

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pai coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet. English, 4 lb. and up			
Pipe in coils			
Soil Pipe			
Compo pipe			

NOTE—Country delivery, 30s. per ton extra 3 cwt., 2s. per cwt. extra and over 3cwt. a cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s.

Old lead, ex London area, at Mills per ton	35	0	0 ..
Do., ex country, carriage forward per ton	36	0	0 ..

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB (IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
29/	45/-	76/-	153/-	246/-	510

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	800/-	588

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per d

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	4 in.
7/6	10/-	14/-	23/-	30/- 42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- pe

NEW RIVER PATTERN CROYDON BALL VALV

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRAS SCREW.

	1¼ in.	1½ in.	2 in.	3
8 lbs. P. traps	33/-	41/-	56/-	101
8 lbs. S. traps	35/-	45/-	66/-	126

COPPER—	£	s.	d.	
Strong Sheet per lb.	0	2	3	..
Thin " ..	0	2	4	..
Copper nails ..	0	2	3	..
Copper wire ..	0	2	4	..
TIN—English Ingots ..	0	2	6	..
SOLDER—Plumbers' ..	0	1	2	..
Tinmen's ..	0	1	4	..
Blowpipe ..	0	1	5	..

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	
" " " in barrels	..	
" " " in drums	..	
Boiled " " in barrels	..	
" " " in drums	..	
Turpentine in barrels	..	
" in drums (10 gall.)	..	
Genuine Ground English White Lead, per to (In not less than 5 cwt. casks.)		
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's, "Spedol" and other best brands (i 14 lb. tins) not less than 5 cwt. lots	per ton delivere	
Red Lead, Dry (packages extra)	per to	
Best Linseed Oil Putty	per cw	
Filocol	per cw	
Size. XD Quality	/lb	

[*Continued on next page.*

* The information given on this page has compiled for THE BUILDER and is copyright. this list is to give, as far as possible, the of materials, not necessarily the highest or l and quantity obviously affect prices—a fact be remembered by those who make use of thi

RRENT OF MATERIALS *(contd.)*

GLASS.

EET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
..	3½d.	32 oz. fourths	8½d.
....	4½d.	32 „ thirds .....10½d.	
..	5d.	Obscured Sheet, 15 oz.	4d.
....	6½d.	„ 21 „	5½d.
..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
....	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

cording to size and substance for square ck.

LLED PLATE IN CRATES OF STOCK SIZES. Per Ft.

e	4½d.
ed	5½d.
ed	5½d.
lled, Baltic, Ocean ic, Arctic, Stip-	
d small and large Flemish white..	6½d.
tinted	9d.
et	6d.
ed Cathedral	5½d.
do.	7½d.

ate is same price as rough rolled.

VARNISHES, &c. Per gallon.

		£ s. d.
.....	Outside	0 14 0
.....	ditto	0 16 0
.....	ditto	0 18 0
.....	ditto	1 0 0
rriage	ditto	1 4 0
.....	ditto	1 12 0
.....	Inside	0 18 0
er	ditto	0 18 0
binet	ditto	1 2 0
atting	ditto	1 0 6
Oak.....	ditto	0 18 0
ying Oak	ditto	0 19 0
rnish	ditto	1 0 0
.....	ditto	1 2 0
.....	ditto	1 12 0
old Size		0 10 0
pan		0 10 6
gany Stain (water).....		0 12 0
ack.....		0 7 0
.....		0 14 6
ent)		1 5 0
rush Polish		0 17 0
in Terebine.....		0 9 0
Enamel.....		0 7 0

v Quay Wall at Portsmouth.

new reinforced concrete work in with the widening of the Camber, the Corporation have decided to adopt of quay wall construction developed . Stroyer, M.I.Mech.E., examples of been described on various occasions rnal. The contractors are Messrs. is, Ltd., of Portsmouth.

THE SCOTTISH BUILDER

WOODEN HOUSES

THE Aberdeen Branch of the Royal Scottish Arboricultural Society recently discussed the subject of "Home Timber and Housing" at their quarterly meeting, over which Sir John Gladstone, Bt., presided.

Provost Donald Munro, O.B.E., Banchory, in opening the discussion, said it was wise to state decisively that the home timber supplies of this country could not meantime do more than supplement in the smallest way the large quantities that were required for their housing problem. It could not be made a reason for the critical state of the housing problem that there was a lack of timber. There never was a time when the imports of foreign timber so largely exceeded the demand for it. On all hands one heard schemes for the mass production of economic houses in steel and other materials, the manufacture of which on a large scale would relieve the unemployment problem, but little or nothing was heard of the possibilities of wooden houses. It was true that the risks and dangers of fire were against the erection of wooden houses in large numbers alongside of each other, but the experience of other countries was available for their consideration. The rural demand for houses to-day was proportionately as great as that of the towns, and it was in that direction that the first steps should be taken. Most of them were aware that there were hundreds, perhaps thousands, of old houses and cottages all over the north of Scotland that had been allowed to go to rack and ruin for want of repair. These houses and cottages had, generally speaking, good stone walls, and if the authorities had only given grants for the repair of these, in addition to their subsidies for new houses, he was certain the housing difficulty, particularly in the rural dictricts, would not be so acute as it was at the present time.

During the past year a number of wooden cottages, several of them of an exceedingly attractive design, had been erected in various districts of Deeside, and it was a great pity that there were not hundreds more. Before, however, wooden houses could be erected to any extent, the Burgh Police (Scotland) Act of 1892 must be amended, and local authorities would have to relax their by-laws regarding the building of wooden houses. Further, architects and others must change their attitude towards their native timber. He had never seen a specification in connection with house-building that specified home timber. In the mansion-houses of the countryside and in many of the old Scottish castles were to be found examples of the adaptability of home timber for constructional and decorative purposes. It might interest them to know that the royal entrance hall at Balmoral Castle was panelled by Scots pine from Ballochbuie by King Edward in 1903. The billiard room in the Castle was also panelled with the same kind of wood, carefully chosen. Lord Glentanar, who was interested in the question of wooden houses, had just made arrangements to build three sets of wooden cottages at Glen Tanar. Each house would have four apartments, and the foundation would be of cement. The timber, with the exception of the roofing, would be of old Glen Tanar Forest fir. The cost of each set of double cottages was estimated to be from £400 to £500.—On the motion of Sir John Gladstone, a vote of thanks was accorded to Provost Munro.

NEW BUILDINGS IN SCOTLAND

Paisley.—SUB-STATION.—The Dean of Guild Court has passed the following plans: Electricity sub-station at Potterhill for the Corporation,

Paisley. — HOUSE.—Plans passed: Double house at Dalmeny-drive, for Robert Walter C. Keith.

Dunfermline. — HOUSES. — The T.C. considered a recommendation by the Housing Sub-Committee to carry out re-housing schemes at West Netherton, Forth-street; the schemes will probably provide for the erection of between forty and fifty houses.

Alloa.—PAVILION.—The Dean of Guild Court has passed plans for a pavilion proposed to be erected at the workers' sports ground at Tullibody, for Messrs. Patons & Baldwins, Ltd.

Edinburgh.—HOUSES.—The T.C. has decided to erect four demonstration steel houses at Gorgie, at a cost of £450 each.

Cupar.—ROOM.—The Trustees and Managers of the Cupar Savings Bank lodged a petition for the erection of a new room for the Actuary at the rear of the present premises in Crossgate, on the ground floor level. The Dean of Guild Court passed the plans.

HOUSING PROGRESS IN SCOTLAND

THE following figures show the progress that has been made in State-aided housing schemes in Scotland to October 31, 1924:—

	Completed.	Under construction.
1919 Act	22,969	2,457
Private Subsidy Schemes	2,324	—
Slum Clearance Schemes..	752	2,004
1923 Act	917	5,009
1924 Act (Local Authority Schemes)	—	232
	26,962	9,702

Of the total number of houses completed and under construction under the 1923 Act, 1,975 are by local authorities and 3,951 by private enterprise.

DING TRADE WAGES IN SCOTLAND.*

ving are the present rates of wages in the building trade in the principal towns of very endeavour is made to ensure accuracy, but we cannot be responsible for errors cur:—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plumbers.	Painters.	Brick-Masons' Labourers.	Plas-terers' Labourers.
.....	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
.....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
.....	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
.....	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
.....	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
.....	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
.....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
.....	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
.....	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
.....	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
.....	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
.....	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
.....	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
astern	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

nation given in this table is copyright. The rates of wages in the various towns in England and n on page 874.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	32	0	
Add if in underpinning in short lengths	" "	7	0	
Add if in floors 6 in. thick	" "	3	3	
Add if in beams	" "	3	9	
Add if aggregate 1 : 2 : 4	" "	10	0	
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6	

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1¼

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	"	3	9

DOORS.		1⅜"	1¾"	2"
Two-panel square framed	per ft. sup	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1"	1¼"
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/7	1/8
Deal shelves and bearers	"	1/4	1/6
Add if cross tongued	"	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8

Housings for steps and risers			each
Deal balusters, 1 in. × 1¼ in.			per ft. run.
Mahogany handrail; average 3 in. × 3 in.			" "
Add if ramped			" "
Add if wreathed			" "

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists		per cwt.	1
Plain compound girders		"	1
Do. stanchions		"	
In roof work		"	

RAIN-WATER GOODS.

		3"	4"	5"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7
Ogee Do. Do.	"	2/4½	3/1	3/10
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/7
Do. nozzles for inlets	"	2/2	2/7	3/10

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	6	
Do. Do. in flats	"	6	
Extra labour and solder in coated cesspools	each		
Welt joint	per ft. run.		
Soldered seam	" "		
Copper nailing	"		

		½"	¾"	1"	1½"	2"
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					
Bends in lead pipe	each					3/3
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6
Red lead joints	"	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws	"				14/7	19/6
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard sup.		
Do. Do. Sirapite	"		
Do. Do. Keen's	"		
Add sawn lathing	"		
Add metal lathing	"		
Portland cement screed	"		
Do. plain face	"		
Mouldings in plaster	per 1 girth		
One-and-a-half granolithic pavings	per yard sup.		

GLAZIER.

21 oz. sheet plain	per foot sup.		
26 oz. Do.	"		
Obscured sheet	"		
⅛ in. rolled plate	"		
¼ in. rough rolled or cast plate	"		
¼ in. wired cast plate	"		

PAINTER.

Preparing and distempering, 2 coats	per yard sup.		
Knotting and priming	"		
Plain painting 1 coat	"		
Do. 2 coats	"		
Do. 3 coats	"		
Do. 4 coats	"		
Graining	"		
Varnishing twice	"		
Sizing	"		
Flatting	"		
Enamel	"		
Wax polishing	per foot sup.		
French polishing	"		
Preparing for and hanging paper	per piece 2/- to		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of information given on this page is copyright.

NEW BUILDINGS

—A large site in Barnet Hill and the dings, comprising the late Victoria Hospital, have recently changed hands, ding operations are projected. The buildings are to be converted into flats or four rooms each, whilst on the rontage, which stretches for about vill be built a row of shops and flats. hitect is Mr. Herbert J. Axten, A., of Enfield, Middlesex. The builders rs of the property are Messrs. Hayward t, Chesterfield Estate Office, East , London, N.2.

—A new music school is being erected School, on a site adjoining the Temple Rooms in Hillmorton-road, Rugby. ns show a building of three stories, ted of brick, on a steel framework, with tal stone copings and cills to the on the principal elevations. The roof itched and covered with slates. Inside school will be arranged twenty-four practice rooms, four general class- ther rooms for teaching, stoves, &c. itect is Sir Charles Nicholson, Bart., -square, Lincoln's Inn, London, W.C.2. lers are Messrs. Wooldridge & Simpson, hay-road, Oxford.

ith.—The Great Western Railway Co. to inaugurate shortly an extensive cheme for the benefit of their employees outh. A site of 7½ acres has been and a plan on similar lines to the schemes at Acton, Hayes, Bristol and ntres, being carried out by similar local has been adopted. The houses will rious types, comprising living rooms, three bedrooms, bathrooms, &c., and hree bedrooms, bathroom, &c. Erected they will be built of facing bricks and gings and cement with rough-cast cream. The roofs will be of hand- es. The architect is Mr. T. Alwyn .R.I.B.A., of Cardiff, architect to the own Planning and Housing Trust, Ltd.

—Lloyds Bank, Ltd., intend to build ranch bank at Bristol, and about twelve ago bought a site in Corn-street from tol Corporation. Work has recently ed upon a stone-faced building, erected l frame, to the designs of Messrs. Waller architects, of 17, College Green, r. The builders are Messrs. W. T. Ltd., of St. Paul's-road, Gloucester.

ool.—A large shopping emporium is lt in Church-street, for Messrs. Montague Ltd., wholesale clothiers, of London ds. The new building will be of five with extensive basements, and will on a steel framework, with its principal n Portland stone. The roof will be flat, reed concrete, and an outer covering of oofed asphalte. The floors will all be of d concrete—B.R.C. fabric being speci- e interior fittings will all be in mahogany r hard woods. A lift will be installed. namental display windows will front on t on the ground floor. Central heating tric lighting will be installed. The ontractors are Messrs. William Moss & l., of Roscoe-street, Liverpool, Lough- and London. The steelwork is being and erected by Messrs. Banister, Co., Ltd., of Trafford Park, Manches- architect is Mr. Harry Wilson, of 12, Park-avenue, Kirkstall, Leeds.

er.—An interesting housing scheme is ried out at Leicester by the trustees of Mr. W. R. Sutton, which will consider- to solve the city's housing problems. state in Gipsy-lane, covering an area 20 acres, has been purchased, and e been prepared for the erection of es of various types. The dwellings f five and six bedrooms, and will be nly in pairs and blocks of fours. Bricks ncipally used, whilst some of the houses artially rough-casted. The roofs will The scullery floors in each case will be covered with quarry tiles, whilst the other floors will be of wood, the ground floors being laid on concrete. Ranges of a modern type will be fitted in each kitchen, with hot water boiler. The contractor for the road and sewer works is Mr. G. H. Greasley, of St. Leonards-road, Leicester, but contracts for the houses have not yet been placed. The architects to the Trustees, whose offices are at 183, Old-street, London, E.C.2, are Messrs. Cowdell & Bryan, of New-street, Leicester. The quantity surveyors are Messrs. Widnell & Trollope, of Broadway-court, Westminster, S.W.1.

Surrey.—Plans are being prepared by Mr. Sydney Tatchell, F.R.I.B.A., of Bank Chambers, 32, Strand, London, W.C.2, for the erection of a new tuberculosis sanatorium at Milford, in Surrey, for the Surrey County Council. The first part of the scheme will provide accommodation for 200 patients, with facilities for extensions, if necessary, up to 300 beds. The buildings proposed will include administrative block, which will be big enough to serve an institution of 300 beds, officers' block, nurses' quarters, engine house, and wards. Later there will be added a medical officers' residence, mortuary, &c. The scheme will provide for brick buildings, with fireproof floors and a tiled roof.

Hendon.—A new church of St. Alphage is to be built at Colindale, N.W., in connection with the Bishop of London's scheme for the removal of some of the City churches to more residential and useful centres. This church will be built from funds derived from the sale of the site of St. Alphage Church in Aldersgate, E.C.2. The new edifice will be erected in brick with stone facings. Electric light will be used for illumination, and heating from a low-pressure boiler will be installed. The roof will be slated or tiled. All interior woodwork will be of English oak. The architects are Messrs. Nicholas & Dixon-Spain, FF.R.I.B.A., of 19, Hanover-square, London, W.1.

Wimbledon.—A block of three-story buildings is being erected in Arthur-road, S.W., to be used as shops and showrooms. The site has a frontage of about 50 ft. The buildings will be built of brick with a certain amount of stone work for window cills and jambs, &c. The roof will be flat and covered with asphalte. Electric lighting will be installed. The window casements will be of wood. The plans have been prepared by Messrs. Edward H. Wilkins & Gripper J. Bell, 28, Victoria-street, Westminster, S.W.1. The contractors are Messrs. James Burgess & Son, of Wycliffe-road, South Park-road, Wimbledon, S.W.19.

TRADE NEWS

Messrs. Walworth-Munzing, Ltd., 90-96, Union-street, Southwark, S.E. 1, have sent us a copy of their wrought-iron tube and fittings' list. They will be glad to send this useful publication to all interested.

We have recently received from Messrs. The Blick Hygienic Dish and Clothes Washer, Ltd., London, a descriptive pamphlet of their well-known combination. It has a triple capacity, for it will not only wash and dry dishes, plates, &c., but, by an interchange of two fittings, the machine becomes an efficient clothes washer. It entirely supersedes the old-fashioned gas copper, which served one (and only one) purpose.

We have received from Messrs. Harris & Sheldon, Ltd., 46, Cannon-street, E.C. 4, a copy of their new catalogue of British-made steel furniture. At the time when steel is not only superseding wood, but many other forms of material, it is as well to bear in mind the advantages which steel possesses. It is permanent, and does not warp, burn, rot or shrink. Sankey-Sheldon steel furniture is, it is stated, fire-resisting, damp and vermin proof, washable and hygienic. For practical utility, combined with its own form of artistic finish, steel buildings and furniture are well worth consideration.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

BAMPTON.—For repairs to Oakford bridge, for the U.D.C.:—
*W. Notts £132 10

BOURNE.—For erection of four houses at Billingborough, for the R.D.C.:—
*Wilson's.

BRIDLINGTON.—For brick, joiner, plastering and slater's work, for the erection of 20 houses, for the T.C.:—
*J. M. Smallwood & Son £3,535 15 6

BRIDLINGTON.—For constructing and erecting hollow cast flooring for the purpose of covering the reservoir, for the T.C.:—
*Pre-Cast Concrete Co. £2,669

BRIDLINGTON.—For providing concrete columns, constructing and erecting beams and walls, for the purpose of covering the reservoir, for the T.C.:—
*Squires & Sons, Selby £1,578 13

BURTON-ON-TRENT.—Revised tenders for houses, for the T.C.:—
*Thomas Lowe & Son, Ltd.—
11 houses at £521 10s. per house (in blocks of four), and £530 10s. per house in blocks of three.
*R. Kershaw & Sons—14 houses..... £7,350

CASTLEFORD.—For erection of a new cottage hospital at Hightown, for the Castleford and Normanton Districts. Mr. R. A. Easedale, architect:—
*L. J. Gallagher, Castleford £27,000

CHATHAM.—For repairs and renovations to the Girls' Training Home, Rainham-road. Mr. E. J. Hammond, architect, Gillingham:—

G. Lane & Co., Chatham.....	£614
Cossey & Co., Chatham.....	593
G. Gates & Sons, Frindsbury.....	560
Swain & Stanley, Gillingham.....	543

CHORLEY.—For the erection of 60 houses, for the B.C.:—
*J. W. Lee & Co., Chorley.

CWMCARN.—For erecting a new infant's school, for the Monmouthshire E.C.:—
*S. Wood, Cwmcarn £9,636

DENABY.—For erection of new schools, mission hall, and enlargement of the chapel, for the Wesleyans:—
W. G. Robson, Sheffield.

DUMBARTON.—For erection of four tenements of shops and houses, West Bridgend. Mr. W. A. Macartney, Burgh Surveyor, Dumbarton. Quantities by Messrs. Boston, Menzies & Manton, Alexandria:—

Mason—			
*James Ritchie, Cardross	£4,822	0	10
Joiner—			
*William Robertson, Dumbarton	3,598	0	6
Slater—			
*R. A. Sanderson, Kilwinning ..	297	4	6
Plumbers—			
*McCulloch & Giffen, Glasgow..	1,196	0	0
Plasterer—			
*George Steel, Milngavie	624	10	10
Painter—			
*Wm. S. Macnicol, Dumbarton ..	212	10	3

GUILDFORD.—For reconstruction of an existing highway with reinforced concrete, for the T.C. Mr. W. G. Cross, Borough Engineer, Municipal Offices:—
*J. Douglas, Southampton £3,959

HALESOWEN.—For erection of 40 houses at Hill and Cakemore, of non and parlour type, for the R.D.C.:—
*Housing, Ltd.—

Non-parlour type .. per pair	£958	15
Parlour type ..... „	1,084	15

HARBURY.—Completion of police house, for Warwick C.C.:—
*E. Batchelor, Harbury £560

LEEDS.—For erection of a Baptist Chapel. Messrs. Jones & Stocks, architects:—
*T. Ullathorne & Son, Selby.

LONDON.—For repairs at flats, 2 and 3, Park House, Holly Park, Crouch Hill, N., for the Borough of Islington. Mr. E. C. P. Monson, F.R.I.B.A., F.S.I., Architect to the Council, Finsbury Pavement House, 120, Moorgate, E.C.2:—

Yeoman & Richardson, Hornsey-road, N.	£431	0
S. A. Shillitoe, Upper Norwood, S.E.	368	0
Hooper & Hooper, Highgate, N.6...	352	0
S. Shaw, Islington, N.	349	0
Geo. Bennett, Hornsey Rise, N.....	340	0
Randall & Son, Holloway, N.7....	338	0
Leon Leonard & Co., Holloway, N.7	305	0
Stevens & Sons, Crouch Hill, N.4..	284	0
J. Johnson, Islington, N.1.....	269	0
Blythe, Ltd., Kilburn High-road, N.W.	225	0
*A. C. MacKinley, Holloway-road, N.19	195	10

LONDON.—For providing messroom, lavatory, &c., accommodation at the Electricity Works, by the conversion of the existing office building, for the Hammersmith B.G.:—

G. W. Clarke	£1,859
W. H. Cooper	1,798
Willesden Building & Construction Co., Ltd.	1,723
*John McManus, Ltd.	1,675

LONDON (H.M. OFFICE OF WORKS).—Accepted during October:—

Building Works.—Cardiff New Head P.O.: Erection, F. J. Thomas, Cardiff; masonry, Walter Davis, Hereford. Darwen P.O.: Concrete staircase, &c., John Dickinson & Co. (Bolton), Ltd., Bolton; painting, T. Whalley, Darwen; plastering, Wm. Livesey, Wigan; plumbing and glazing, Wrighton & Woods, Darwen. East Ham Telephone Exchange: Stonework, J. Bysouth, London, N. Gosport Telephone Exchange: Alterations, &c., A. E. Jukes & Son, Ltd., Southampton. Kirkburton (Huddersfield): Alterations to Storthes Hall Asylum, Edwin Dyson & Sons, Oakes. Leeds Head P.O.: Plastering, Thomas Moore, Leeds. Liverpool, Em-Ar Mills, Soho-street: Alterations, &c., John Williams (Liverpool), Ltd., Liverpool. Lowestoft Telegraph Repeater Station: Erection, R. A. Evans & Co., Ltd., Lowestoft. Manchester, Aytoun-street Employment Exchange: Extension, Frank Butterworth, Manchester. Manchester, Derby-street: Plastering, Rogers Bros., Manchester. Morriston P.O., &c.: Asphalte, Ernest H. Bird, Bristol; staircase (concrete), Stuart's Granolithic Co., Ltd., London, W.C. Newport Telephone Repeater Station: Painting, &c., Hyett Bros., Gloucester. Portsmouth Employment Exchange: Extension, Frank J. Privett, Southsea. Royal Mint: Glazing, T. & W. Farmiloe, Ltd., London S.W.; wall tiling (fixing), W. B. Simpson & Sons, London W.C. Sherwood (Nottingham) Telephone Exchange: Painting, John Collinson & Sons, Nottingham; plastering, S. Cook, Nottingham; plumbing, The Midland Plumbing, Warming and Ventilating Co., Ltd., Nottingham; steelwork, S. S. Whiteley & Co., Ltd., Nottingham. Shoreditch Housing Scheme: Granolithic and stone work, Stuart's Granolithic Co., Ltd., London, W.C. Slough P.O.: Alterations, &c., H. Lacey & Sons, Luton. Stoke (N. Devon): Erection of coastguard cottages, Samuel Cann, Hartland. Teddington, National Physical Laboratory: Erection of a new laboratory, F. D. Hidden & Co., Ltd., London, W. Walworth Telephone Exchange: Steelwork, Dorman, Long & Co., Ltd., London, S.W. War Office: Demolition work, H. Sabey & Co., London, W. "Western" Telephone Exchange: Stone work, Metropolitan Stone Co., Ltd., London, S.W. Winton (Bournemouth) Branch P.O.: Erection, James Drewitt & Son, Bournemouth.

H.M. WAR OFFICE.—Accepted during October:—

Building Works.—Didcot, Foxhall Camp: J. E. Billings & Co., Ltd., Oxford. Devonport, Raglan Barracks: Carkeek & Sons, Ltd., Plymouth. Colchester: Chambers & Son, Colchester. Chester, Castle Barracks cookhouse: T. Collier & Sons, Leigh, Lancs. Warley: S. Cronin & Sons, Brentwood. Ayr Barracks: J. Dunbar & Co., Glasgow. Norwich, Repairs to roads: H. C. Greengrass, Norwich. North Aldershot: G. Kemp Stroud, Aldershot. Strensall: A Robinson, Idle, Bradford. Maryhill Barracks, Resurfacing parade ground: W. G. Walker & Sons, Glasgow. Chelsea Barracks: West's Rotinoff Piling & Construction Co., Ltd., London, W.C. Didcot: A. & S. Wheater (London), Ltd., London, W.C.

Painting.—Sheerness Barracks: S. Lupton & Sons, Bradford, Yorks.

MANNINGHAM.—For erection of banking premises, for the Bank of Liverpool & Martin, Ltd. Messrs. B. D. Fairbank & Sons, Bradford, architects:—

Mason—M. Booth & Son, Bradford.
Joinery—Wilkinson & Dawson, Ltd.

PORTSMOUTH.—Proposed garage and repository, for Messrs. Humphrey Bros., at Queen's-grove. Messrs. Thomas & Wilkins, architects, Southsea:—

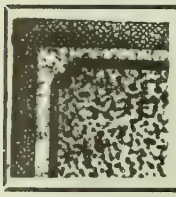
G. J. Davis & Sons	£4,298
E. A. Sprigings	4,074
Tanner Bros.	4,053
Frank Privett	4,047
A. E. Porter & Son	3,881
John Lay & Co.	3,727
Frank Bevis, Ltd.	3,714
F. H. Jordan, Ltd.	3,672
Frank Corke & Co.	3,490
Jno. Croad	3,450
*Saml. Salter	3,287

SWAFFHAM.—For erection of a cemetery chapel, for the U.D.C.:—

*J. F. Impson.

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

—No. 4270. DECEMBER 5, 1924.

HOUSING SUGGESTIONS

HE articles which we have recently published on housing, and the articles and correspondence which have appeared elsewhere, all point to the conclusion, which many must have long reached, that the production of houses, like everything else, must, to essful, eventually return to a business basis untrammelled ical considerations. This, at least, we hope Parliament and we hope consideration will now be given to the f all those in the building industry who are chiefly ed in the production of houses. For some years we estioned the policy pursued by the governments of the d have expressed the belief that the problem has not lly considered in the light of the experience of the onal and business interests concerned, and that the ve proposals for dealing with the acknowledged diffi- nherent in the problem which are frequently made in ly and technical press do not appear to receive the ation they deserve. One such suggestion is made by nown architect, who writes as follows :—" One is almost l to suggest that it would be the best policy to allow rise to an economic value at present building prices et the inevitable demand for enhanced wages which ollow and which would at least be spread over the nity at large and would probably cost no more than s and officialism. Such a course would, at least, te housing from politics." During the exceptional tances of the war, tampering with the laws of supply nand was no doubt necessary, but this is no reason why ld attempt to make this disastrous proceeding part neral policy in normal times. Under present conditions ate return to an economic basis is doubtless impossible, s our attitude towards housing not suggest that we are ur individuality and becoming too dependent on collective action ? Great schemes are very laudable, but carry nem great delays, much political complication, and sm. We venture to submit that it is time we honestly cts. There are not enough operatives in the building go round, and the small difference between the wage killed and unskilled worker is reducing the former class. n great demand the operatives are making us directly irectly pay for their services at as high a rate as possible ss of housing or anything else, and will continue to do the public cannot afford more and demand consequently . This may not be agreeable, but markets have been l before and will be again. Those who have sat on ring committees know that the cost of materials, on paper it may be otherwise, actually cannot be d by government control, but will continue to e laws of supply and demand. In these circum- can any uneconomic State building scheme hope to ?

l normal conditions are restored can we not revive ng of the old colonising spirit and try to help ourselves ? all events, is another suggestion, which has been made by laymen, but by people interested in the building and though it would not deserve consideration in times, as a temporary expedient for dealing with our es it may be worth trying. During the war it essary to put people into all kinds of new positions, and those with experience of such efforts know how exceedingly difficult the process was, but they also know in what a very short time anybody of ordinary physique and intelligence could be trained to do a limited piece of repetition work, even though that work itself was not very simple, and we have been asked : " Why should not our technical schools throughout the country undertake to train some of our unemployed in a very limited section of work necessary for erecting, say, a one-story cottage, possibly of timber for preference, as being easy to erect and free from monopolies ? These men would offer their services in teams arranged by their school. They would not call themselves, or be, building trade operatives, but would be given a certificate for proficiency in the small sphere of work on which they had been trained. They would be paid a fair wage, and would be responsible to the team leader who might in many cases be a man possessing some kind of useful previous experience. Such a scheme would, of course, have to be administered, but for a simple standard house of the primitive type this should not be difficult and might provide very suitable work for some of our ex-officers, particularly engineers, to whom we still owe a national debt. Materials could be supplied and bought, as far as possible cut and marked, ready for erection, in the cheapest markets. If any form of bonus on cost could be arranged without inviting scamping, it would be a valuable incentive to keeping down the price of these houses. The success of any such scheme would necessitate the entire exclusion of building by-laws and officials who live by their interpretation, apart from the bare requirements of health. The existing housing organisation could be usefully employed in this scheme upon questions of land and roads, and if it be objected that these houses would not be permanent, they might be confined to leasehold land on terms which would admit of their replacement when the next generation has developed saner views on economics. Under this scheme it should be possible, with perhaps the aid of some loan at low interest, for many in need of houses to form their own teams and erect a few houses between them, and even those in employment could do much in this direction during the summer months with the assistance of a versatile administrator to help such personal efforts."

The effect of such a scheme upon the unemployment problem should be considerable and lead to the absorption of many men suited for outdoor work without the necessity for transference to great distances as the need for houses is so widespread. Such a scheme would considerably augment the available supply of labour for housing, and those already in the building trade, having regard to the great arrears to be made up providing for more work than the trade can tackle, would hardly object to this effort to make provision for the worker. Further, we think that a great many ex-officers, to whom we owe a debt still undischarged, might be, as suggested above, brought into this scheme as administrators. We are aware of the Australian experiment upon short-time training for operatives in the building trade and the statement that this is being brought before the Minister of Health (see p. 886). So many fruitless efforts at dilution have, however, been made that we think this suggestion for independent action is worth considering. Will our Technical Schools—those with building courses taking the lead—get together on the matter and, if thought feasible, approach Mr. Neville Chamberlain ?

NOTES.

Manchester Architecture.

We must all welcome the interesting and informing essays on the architecture of our towns which have appeared in various papers from the pen of Professor Reilly, for his treatment of the subject seems of a kind likely to appeal to the cultured public. The *Manchester Guardian* enlisted his services in regard to Manchester, and the result is before us in a small volume.* Frankly, we think the discernment of the author has not been able to point to enough work of good quality to give Manchester citizens much cause for satisfaction in the record he has been able to make of her contributions to the art of architecture. Manchester is not, of course, so fortunate in her lay-out and development as Liverpool, which can show much that is attractive and something that is fine in many of its streets and open spaces. Manchester has its Piccadilly, which might even yet be made a striking and pleasing open place; and round about the Cathedral and railway stations the expert city planner could some years ago have directed the foundations of something worth having. Since we have known it, some of the Manchester thoroughfares, such as Market-street, seem to have deteriorated; and Deansgate is nothing like so good in its general aspect as one might have expected it to become. Of the one typical and striking example of a Manchester warehouse we have a rather inadequate illustration, but the subjects of the best sort are of somewhat ancient date, as the Bank of England, the Free Trade Hall, and the Art Gallery. Williams Deacon Bank, the Rylands Library, and the Opera House, uphold the credit of modern work, but the record of architecture in Manchester as presented in this book suggests how much this great city has missed in comparison with what such cities as Glasgow, Edinburgh and Liverpool are able to show.

* Some Manchester Streets and their Buildings. University Press of Liverpool. 5s.

Quick-Hardening Cement.

There has been an increasing demand recently for a cement which will set more rapidly than the Portland cements to which we have become accustomed, and cement chemists have for some time been experimenting with a view to the production of a quick-hardening cement at a cost which will not be excessive for the general requirements of the builder and engineer. So much progress in this direction has now been made that a new quick-hardening Portland cement is being put on the market, and tests so far undertaken by Professor Dixon at the City and Guilds Engineering College go to show that a considerable measure of success has been achieved. The tests, which are reported on p. 909, have so far only been undertaken up to the age of 7 days, but as they prove that at 48 hours the new cement has a greater strength than required by the British Standard Specification at 28 days, there can be no doubt as to the rapidity of hardening. Whether this strength will be maintained over a long period of years time alone will tell, but as it is a true Portland cement there can be no reason to expect anything but an increase of strength with age. Up to 28 days a completely satisfactory increase is indicated, and we hope to give the results of the 28-day tests, with some fuller particulars, later.

Sculpture on Buildings.

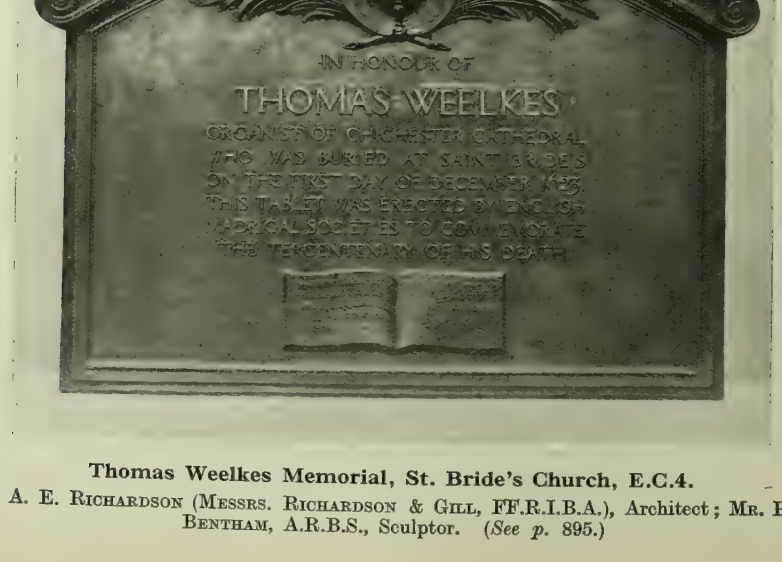
Are we right in assuming that one of the keenest critics of Mr. Epstein's figures on the Medical offices in the Strand is now objecting to their suggested removal? This sculpture was a striking example of Mr. E power, and added something of and vitality to Messrs. Adams & H building, so why should it be r when the fright of the critics has a The figures may not appear to particularly comfortable setting, dom does sculpture appear to be comfortable and valuable additi building, because architects and s do not often work together in an sympathetic way.

Building Trade Dilution.

The officials who are sible for advisin Government on the problem are, we formed, reading this week a repo committee appointed by the Builders' Association of New South which gives details as to the succe scheme for intensive training for layers and plasterers instituted las A similar scheme is under consid for this country, and the replies fro education authorities that hav received by the Board of Educatio that in the majority of cases te schools in England and Wales may be used in order to provide the in labour needed for housing. Acco the report of the Sydney experime special interest. Preference for was given to returned soldiers and b labourers. At the end of a 13 course students were tested as number of bricks they could lay i hours on a plain straight 9 in. wal average of students up to 21 year was 911 bricks, while the averag students aged between 26 and 1,077. After 30 years of age the decreased. Plastering was also with satisfactory results. It sh noted that the trainees were select as possible from those who had r engaged in the building trade, a bricklayers and others who are outside working conditions. It is in the report that "these result conclusively that the idea that must be learned between the age o 21 or not at all was a fallacy, an man who has realised the value o a skilled trade at his command made up his mind to learn can do quickly than a boy who has not l school and who has not realised t of learning a trade.

Plumbers and Housing.

There is much r building quarters postponement of a ence of the repres of the plumbing industry—a trad tial to the success of the Gov housing policy—that had been su to meet on Thursday at the I Education. It is feared that th pected postponement means that a danger of the failure of a natio that was being made to raise th standard of craftsmanship in the



Thomas Weelkes Memorial, St. Bride's Church, E.C.4.
Mr. A. E. Richardson (Messrs. Richardson & Gill, FF.R.I.B.A.), Architect; Mr. P. G. Bentham, A.R.B.S., Sculptor. (*See p.* 895.)



il of Ornamental Band in Exposed Aggregate Concrete at the Church of the Sacred Heart, Washington. (*See p.* 895)

. This is far more than an industrial ion, for efficient plumbing is essential e health of the nation. This fact has s been recognised by Mr. E. Lesser, rly of the Ministry of Labour, and Chairman of the Plumbing Trade's nal Apprenticeship Council, and his gues, Mr. W. D. Caröe, F.R.I.B.A., of Worshipful Company of Plumbers, . Porter, the Royal Sanitary Insti- Mr. H. D. Searles Wood, F.R.I.B.A., R. S. Clay, D.Sc., of the Association chnical Institutions, and Mr. Hugh es of the Board of Education. The cil, on which sit six master plumbers ix operative plumbers, as well as the sentatives of associated interests, has d out a far-reaching scheme in order in every plumber to be a true crafts- and to eliminate bad work. Pro- s are under consideration for the tion of Provincial Local Councils to employers to see that all appren- have a thorough grounding in the ical processes of the craft, and to rage attendance at technical schools. sudden breaking off of the Confer- arranged for Thursday is causing much anxiety among those who consider that efficient training is essential for the success of any housing policy.

The late John Slater.

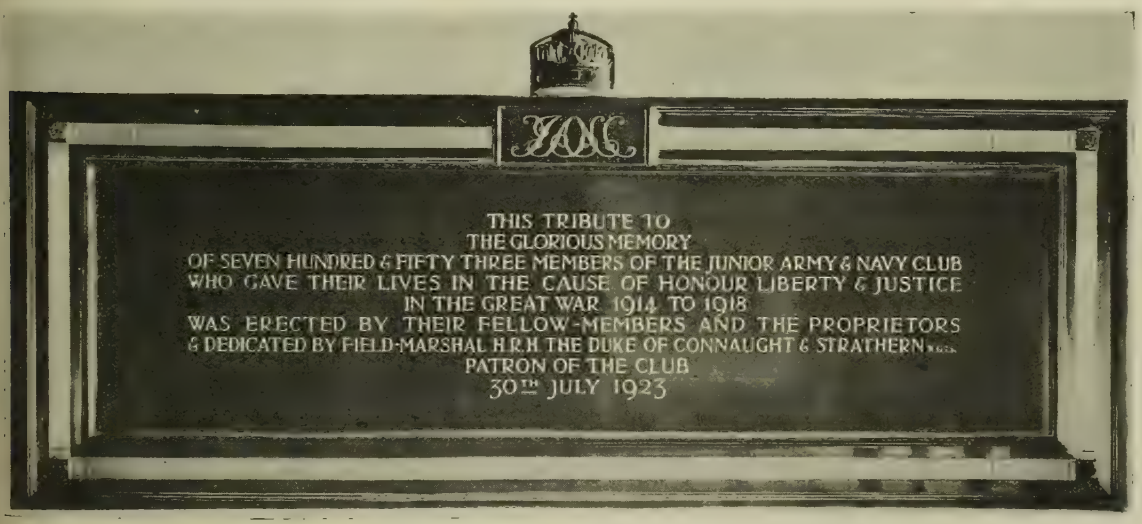
The death of Mr. John Slater, F.R.I.B.A., will be heard with much regret by many of our readers, especially those architects of the older generation who remember the prominent position he occupied in the profession and the interest he took as a young man in the Architectural Association, and subsequently the Royal Institute of British Architects. He was a worthy President of the A.A. in 1887, and though he did not serve the Institute in that capacity he became a Vice-President in 1900–4 during which period and subsequently as member of Council his sound judgment and wide experience were made full use of. For some years he was the architect member of the Tribunal of Appeal under the London Building Act, while he will be remembered as Surveyor to the Berners Estate in London, which position he held for many years. He will long be remembered as a very able man whose standard of professional conduct and high sense of honour had won for him the regard of all who knew him. We give some notes of his career on p. 888.

A New Garden Suburb.

The most promising source of new houses is the energetic Public Utility Society, and it is gratifying to note that a new one of considerable magnitude is to undertake the development of an estate of 123 acres at Streatham. The ordered development associated with such a society is a guarantee that the natural beauties of the area, which is adjacent to Streatham Common, will be considered and safeguarded. The formation of such societies depends upon the driving force of men of energy and determination, and if such men could be persuaded to come forward in other districts, until these societies were the rule rather than the exception, our housing troubles would begin to evaporate.

Women and Housing.

May we hope that the very representative meeting of the Women's Housing Associations recently held at Westminster may herald the approach of a wider and saner public attitude towards the solution of our housing difficulties? Politics have been the bane of the past. They have encouraged foolish panaceas, aroused false hopes, provoked suspicion, and favoured delay and exploitation. Women are notoriously free from definite political labels, and they are at the same time strongly susceptible to problems of direct home importance. Ruskin once said that if women combined they could prevent war; this theory may or may not be acceptable, but if they combined they could unquestionably solve the housing problem, or, which would be just as effective, see that it was solved by someone.



War Memorial Tablet, Junior Army and Navy Club.

Designed by Lieut.-Col. H. P. Cart de Lafontaine, A.R.I.B.A.; Executed by Messrs. Blunt & Wray.

GENERAL NEWS

Oldswinford Church.

The restoration committee and the church council of Oldswinford Church have definitely dceided to adopt the scheme for the restoration of the tower and the rebuilding of the nave of the church according to the plans drawn up by Sir Gilbert Scott, R.A.

Change of Address.

The address of the proprietors and editorial office of Concrete Publications, Ltd. (*Concrete and Constructional Engineering, The Concrete Year Book*, and "Concrete Series" of books) has been changed to 20, Dartmouth-street, Westminster, S.W.1. (Telephone: Victoria 4581.) The Publishing Office remains at No. 4, Catherine-street, W.C.2.

The Late Sir Thomas Jackson.

The Royal Academy has arranged a memorial service to the late Sir Thomas Jackson, Bart., R.A., on Monday, December 8, at 2.30 p.m., at St. James' Church, Piccadilly.

Glasgow School of Art.

The governors of the Glasgow School of Art have appointed Mr. John D. Revel to be Director of the School, in succession to the late Mr. John Henderson. Mr. Revel is at present headmaster of the Chelsea School of Art, a position he has held for the last twelve years.

Brick-making Industry.

New rates of pay and conditions are to be paid to boys and youths engaged in brickmaking in the northern section of England from December 1. According to the arrangement made with the Northern Conciliation Board, the scale is based on the payment to boys 14 years of age of 4½d. per hour, with an increase of a halfpenny at the end of every six months until 21 years old.

Rating and Income Tax.

A very interesting and timely article on the rating of tenements and flats appears in the issue of November 29 of *Rating and Income Tax*. The article is written by Messrs. Albert Crew and W. T. Creswell, Barristers-at-law, and will be of assistance to all who will be engaged in valuation in connection with the forthcoming Quinquennial in London, or in rating generally. Further subjects of interest to property owners in the same issue are an article on the proceedings of the London Assessment Conference in connection with next year's Quinquennial, and an examination of the form of Statutory Form required at previous Quinquennials, a comparison of it with the return being issued for 1925, and a clear indication of the manner in which the form has been modified.

Middlesbrough Technical College.

In 1916 Sir Joseph Constantine presented Middlesbrough with £40,000 to meet the cost of erecting and equipping a technical college. The authorities, however, found that the amount was not nearly sufficient to cover the cost of a really representative college. The widow and family of the late Sir Joseph Constantine, and Mr. William Constantine, senior, have now intimated their willingness to augment the original gift to a maximum, including interest, of £80,000. With the contributions of £10,000 each promised by Messrs. Dorman, Long & Co., Ltd., and Messrs. Bolckow, Vaughan & Co., Ltd., together with other bequests, the committee are in the position, we understand, of being able to invite immediate competitive plans on the original basis, as noted under "Competition News" in our last issue.

South Wales Institute of Architects.

A meeting of the South Wales Institute of Architects and members of the South Wales Builders' Associations were addressed recently, at Cardiff, by Mr. T. Pierson Frank, the Cardiff City Engineer, on "Recent Changes in By-laws Relating to New Streets and Buildings." Mr. J. E. Turner, J.P., F.I.O.B., presided. Mr. Frank dealt with the draft of the new Cardiff by-laws now awaiting sanction of the Ministry of Health, under which are to be permitted several departures in building construction in the matter of walls interdicted before. One clause would permit the construction of arcades. He dealt also with the general advantages obtained in the matter of estate development by the town-planning regulations with regard to new streets.

OBITUARY

We regret to announce the death, at the age of 77, of Mr. John Slater, F.R.I.B.A., Born at Bishops Stortford, Mr. Slater was educated at the Collegiate School, and University College, London. In 1878 he was articled to Professor T. Roger Smith. From 1887–8 he was President of the Architectural Association, and Vice-President of the Royal Institute of British Architects from 1900–4. Mr. Slater was a Member of the Tribunal of Appeal, London Building Acts, and was well known for his activities as an arbitrator. He was responsible for many important business premises, and apart from his numerous lectures found time for a considerable amount of literary work, including A Short History of the Berners Estate, and Classic and Early Christian Architecture, with Professor Roger Smith.

The death of Mr. John William Dennison, of Eastbourne, removes the oldest member on the Rolls of the Royal Institute of British Architects. Mr. Dennison was elected an Associate over sixty years ago and was promoted to the Fellowship fifty-three years ago. He retired from practice in 1899.

We regret to announce the death of Mr. E. J. Kibblewhite, a former editor of *The Building News* and *The English Mechanic*, at the age of 77 years. Mr. Kibblewhite retained his connection with those journals until so recently as September, 1923, when he retired. Mr. Kibblewhite had a lifelong experience of journalism, chiefly in connection with the enterprises of the late Passmore Edwards, and was for many years editor of *The Weekly Times*. He was also one of the founders of the Society of Architects.

MEETINGS

FRIDAY, *December* 5.

Trades Training Schools.—Prize Distribution. At Carpenters' Hall, London Wall, E.C. 7.45 p.m.

MONDAY, *December* 8.

Royal Society of Arts.—Mr. L. C. Martin on "Modern Colour Problems." 18, John-street, W.C.2. 8 p.m.

TUESDAY, *December* 9.

College of Estate Management.—Mr. C. Dalgliesh on "Rating of Special Properties and Public Undertakings." At Lincoln's Inn Fields, W.C.2. 5.30 p.m.

Liverpool Architectural Society.—Mr. J. E. Marshall on "Permanency in Building." At 13, Harrington-street.

Institution of Electrical Engineers.—Mr. T. Hall on "Domestic Application of Electricity." At the Town Hall, Leicester. 6.45 p.m.

THURSDAY, *December* 11.

Architectural Association.—Conversazione. At 34, Bedford-square, W.C.1. 8 p.m.

London Master Builders' Association.—Annual Dinner. At Hotel Cecil, Strand, W.C.2. 7 p.m.

Society of Antiquaries.—Sir Martin Conway on "Present Condition of Works of Art in Russia." At Burlington House, Piccadilly, W.1.

COMPETITION NEW

Hamilton War Memorial.

THE assessor in this competition, Mr. A. Paterson, has made the following aw (1) Mr. T. Harold Hughes, A.R.I.B.A Ashton-terrace, Glasgow; (2) Mr. V H. Gregory, A.R.I.B.A., 7, Appletree St. James's-square, London; (3) M Heiton & McKay, 72, George-street, E (4) Messrs. Orphoot, Whiting & Bryce Alva-street, Edinburgh. The designs w exhibited in the Public Library from D ber 6–13.

Ross-Smith Memorial.

The design of Mr. F. B. Hitch, sculpt London, has been accepted in this compet

Coventry Wall Tablet.

Designs are invited for a wall tablet placed in the large hall of the King Henry School, Coventry. Sending-in day, Decemb Full particulars from the Headmaster. advertisement this week.)

Leeds Library.

Designs are invited from architects in Riding only for a library to be erected a Compton-road estate. Mr. Percy S Wort ton, F.R.I.B.A., is the assessor; premiums £20, and £15. Conditions, on the payme £1 1s., from the Town Clerk, Leeds Sendi day February 16, 1925.

Modern Methods of Ventilation.

For an essay on "The Ventilation of a Court," a silver medal will be awarded b Worshipful Company of Fan Makers. our issue for November 28.)

Valletta Lay-out Competition.

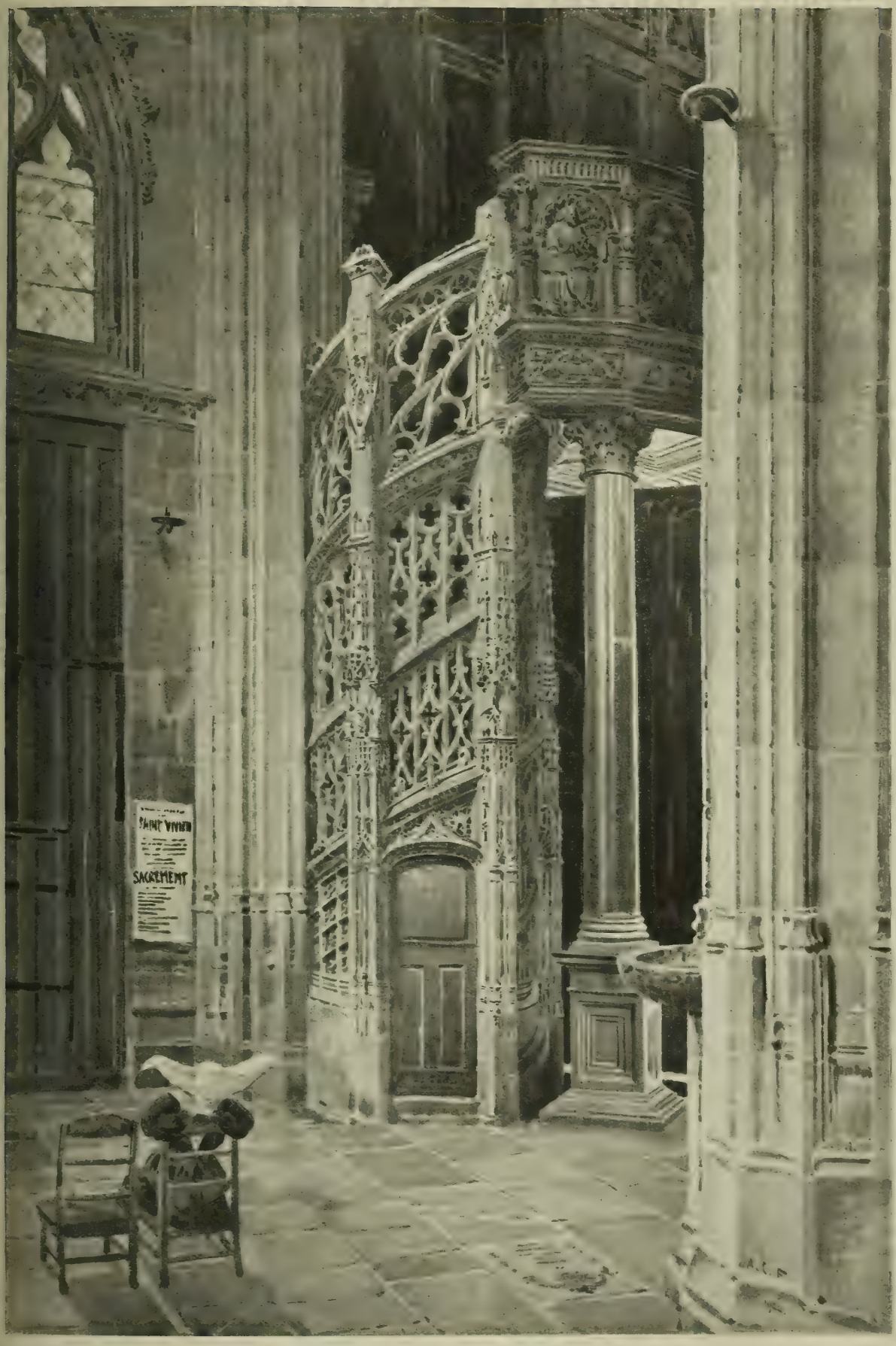
Designs are invited for the lay-out o open spaces and fortifications between Va and Floriana and those encircling Flo Applications for particulars, with a depo £5, to be made to the Minister of Public W Public Works Office, Valletta, Malta, not than December 1. Premiums of £1,000 and are offered to the first and second compe respectively. An indemnity of £100 w awarded to three other designs showing spicuous merit. Sending-in day, June 30, Conditions can be seen at this office. assessors in this competition are Mr. Warren, F.S.A., F.R.I.B.A., and Pro Patrick Abercrombie, M.A., A.R.I.B.A.

Other Competitions.

Other competitions still open include th lowing (the dates given are, first the send date, and second the issue of *The Build* which full particulars were given):—M Hall (May 1). Manchester Art Gallery 28; Aug. 22). Offices at Nairobi (Feb Nov. 7). Jugo-Slav Landscape (Dec. Nov. 7). Church at Southport (no send date; Nov. 7). Southend School (Dec Nov. 14). Argentine Institute for the (Dec. 31, 1925; Nov. 28).

Smoke Abatement.

Representatives of sixty-six local auth in the Manchester and district town-pl area, following a requirement by the M of Health, met recently in the Manchester Hall, under the chairmanship of the e Mayor (Alderman W. T. Jackson), to a a committee to bring about a uniform a strative system in connection with abatement. Sixteen members were app with the addition of Alderman Jack chairman and Dr. Veitch Clark, the Man Medical Officer of Health. The Mini Health hope that uniformity in reg penalties and the degree of restrictions introduced.



Staircase to Organ, S. Maclou, Rouen.

Sketch by MR. A. C. FARE, A.R.I.B.A.

THE "QUEEN MARGARET" STATUE AT LINCOLN CATHEDRAL

By JOHN L. HODGSON, M.I.Mech.E.

In the following article the writer gives a brief account of Queen Margaret, who was the second wife of Edward I. He also describes a mediæval portrait statue of her, which, owing to its inaccessible position, and to the belief that the head was a reconstruction, has been previously overlooked.

* * * * * *

After the death of Edward's first wife, Eleanor, in 1290, the erection and endowment of the famous Eleanor Crosses (these were used as outdoor preaching places, and also for the distribution of alms according to their several endowments. The records show that they were paid for by Eleanor's executors! The only ones that remain are at Northampton, Geddington, and Waltham) and the other ways of perpetuating her memory which the Church devised, did not for long fill the gap in Edward's life which the loss of a wife's companionship had made. In the words of the monk, Piers of Langtoft:

"His solace all reft, sith shè was from him gone,
On fell things he thought, and waxed heavy as lead,
For sadness him o'ermastered, since Eleanor was dead."

We, therefore, find Edward in 1293 corresponding with Philip le Bel, King of France, for the hand of his sister, Blanche la Belle, then aged twenty-two, and reputed to be the most beautiful woman of her time. A treaty was drawn up, whereby Gascony was to be given over for ever in return for her hand. Philip in due course took Gascony. In the meantime, however, he found that it would be possible to marry Blanche to Rudolph of Hapsburg, the eldest son of the Emperor Albert I. He, therefore, proposed that Edward should marry Margaret, the younger sister of Blanche, who was then a mere girl of thirteen.

Edward immediately went to war, and it was not until 1298 that any pacific arrangement was come to between him and the French King. Peace was facilitated by the fact that while Edward and Philip fought, Margaret grew up, and gave promise of even greater beauty and grace than her famous sister Blanche. In his chronicle, Piers describes her as

"Dame Marguerite, good withouten lack."

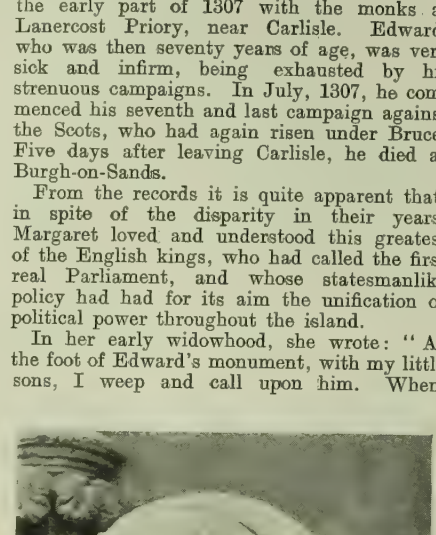
It was thus that on September 9, 1299, Margaret was married to Edward in Canterbury Cathedral by Robert of Winchelsea; she being in her eighteenth and Edward in his sixty-second year. There was no time for the new Queen to be crowned, as within a week, Edward, in spite of the opposition of his barons, started on his third campaign against the Scots, who were recovering from the defeat he had inflicted upon them at Falkirk in 1298.

During his absence in Scotland, Margaret resided at the Tower. She was practically under quarantine; as smallpox, brought back by Edward's men from his crusade in Syria, was ravaging the city of London. After this first summer, Margaret either accompanied Edward on his campaigns against the Scots, or, when this was too dangerous, kept court in one of the northern counties, notably at Cawood Castle, near York. Always a keen sportswoman, her first son, Thomas, was born at a house in Brotherton while she was away from Cawood following the chase in the forest which then lined the banks of the Wharfe. In the winter, 1305-1306, there were, following upon the execution of Wallace and the apparent subjugation of the Scots, great festivities at Westminster, in which the young Queen joined.

Margaret and Edward spent Christmas and the early part of 1307 with the monks at Lanercost Priory, near Carlisle. Edward, who was then seventy years of age, was very sick and infirm, being exhausted by his strenuous campaigns. In July, 1307, he commenced his seventh and last campaign against the Scots, who had again risen under Bruce. Five days after leaving Carlisle, he died at Burgh-on-Sands.

From the records it is quite apparent that, in spite of the disparity in their years, Margaret loved and understood this greatest of the English kings, who had called the first real Parliament, and whose statesmanlike policy had had for its aim the unification of political power throughout the island.

In her early widowhood, she wrote: "At the foot of Edward's monument, with my little sons, I weep and call upon him. When



Three-quarter View of Head and Bust.
(Note the sensitive modelling of the mouth and chin.)

Edward died, all men died for me." (John O'London's Chronicle.)

Margaret survived Edward by only ten years. She died at Marlborough Castle, on the border of Savernake Forest, at the early age of 36, and was buried in the Church of the Grey Friars, near Newgate, of which she was one of the founders. (She began the choir in 1306, and finished it during her widowhood.)

The English chroniclers relate nothing but good of her. She frequently tempered the King's harsh judgments; notably in the case of the city of Winchester, whose charters Edward had forfeited. At times, when she felt her own unaided skill might fail, she would send her young children to plead the cause she had espoused. While she lived, she was an influence for good in the unhappy lives of Edward II and Isabella his queen.

Such is a brief account of Queen Margaret and the troublous times in which she lived.

* * * * * *

The writer recently, after an absence of some twenty-five years, re-visited Lincoln Cathedral, which he had known and loved as a schoolboy. While at Lincoln, he came across a photograph of the statue, that, according to tradition, represents Queen Margaret. This statue, which is in a niche on the right-hand side of the south "Judgment" porch of the cathedral, level with the roof of the Russell Cha can only be imperfectly seen from the grou According to various guide-books, and to Messrs. Prior & Gardner, whose book the accepted authority on mediæval fi sculpture, the head of the statue has b restored, and the figure is of no g interest.

The photograph above referred to, wh was taken from the roof of the Russell Ch when some scaffolding was erected in 1 seemed to the writer to reveal a very differ state of things. The amount of weather of the head could be seen to be about eq to that of the lower part of the figure, this could be definitely dated as being p to 1480 by the chisel marks of the ma who had hacked part of it away in order put the last battlement of the chapel i place.

Further, the treatment of the head show several strange features, such as the be out ears, which were not likely to have b invented by a nineteenth-century renovat and the whole texture of its composition w such as only the late thirteenth or ea fourteenth century could have produced. T statue, in its grace of pose, and the vig and freedom of its treatment (usually mediæval sculptor had no freedom at when filling in important spaces; he had design set figures, or groups of figures, the instruction and edification of an unl tered public, all the main features and acc sories of which were carefully specified his employers, the priests), seemed to an amazing piece of work, even for period 1290-1310, to which it obviously longed. The writer, therefore, approach Dean Fry for permission to take photograp and make drawings and measured sections the statue, and also to copy the he This request, having been granted at meeting of the Chapter, the necess scaffolding was erected at the beginn of September last. The accompany photographs, which were taken for writer by Mr. S. Smith, the official cathed photographer (who took the original pho graph in 1908), show the beauty of the stat and the dignity and poise of the quee woman who inspired it.

That the statue is a portrait the writer little doubt. Careful measurements of face show that the eyes are not of the sa size, that the ears are not at the same le that the left corner of the mouth is hig than the right, and so on. Such idios crasies are not to be found in idealised imagined faces. But in a subtle way t give character and interest to the living f as every skilled portrait-painter and sculp knows. The statue is carved in Linc oolite stone from the "Silver Bed" la It is 6 ft. 2 in. high—the exact height Edward I himself. It represents the Qu standing with her left foot advanced, carry the train of her cloak over her right a and holding in her much weathered ri hand something that was probably a scar gloves or the tassel of her cloak. Her h dress is ornamented with a trefoil patt which is still visible at the corners. Ex that the hands are too small, as was tomary in the statues of the period, figure is in correct proportion.

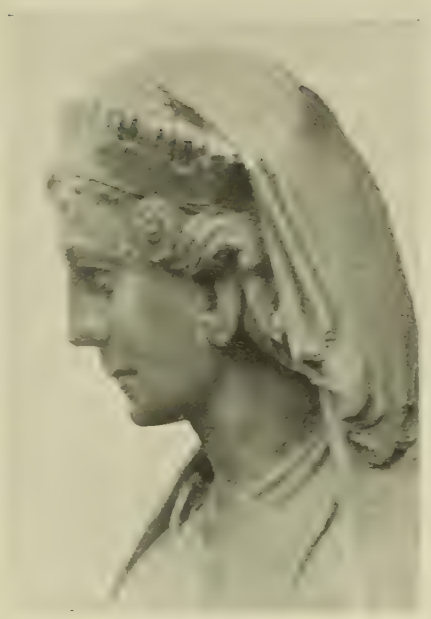
Although intended to be viewed from be the clumsy device of making the head shoulders unduly large, adopted by Gi and the Florentine sculptors in similar ca has not been used. The necessary effect been obtained by a natural inclination ward of the head. The statue is not e metrical about any centre line. Yet it its symmetrical niche with perfect harm It is beautiful when viewed from all positi and in almost all lights. In certain asp the face has a serenity that reminds on the great Egyptian statues. This is m due to the extremely sensitive modellin the mouth and chin. Like Donatello, and

ike many of the ancient Egyptian sculptors, ..e creator of the Queen Margaret Statue ealised that the greatest results could be ..tained by concentrating on the mouth and ...n, rather than upon any other features. As a piece of carving it is a "miracle in ..ne." The draperies are "alive" with ..tle folds and creases. In some parts ..ose that hang over the right hand and arm, ..re not more than half an inch thick! The ..wer draperies are undercut upwards for more ..an six inches!

At first sight the design would appear to .. too delicate for a stone figure which was .. be exposed for centuries to wind and rain .. the exterior of a building. Closer exami-..ation, however, shows the consummate ..raftsmanship of the sculptor. The head and ..ce are protected from the rain by the for-..ard bend. The thin portions of the drapery ..re vertical and drain quickly; a few short ..engths of these are the only parts of the ..tatue that have been restored. We, there-..ore, find that after six hundred years of ..xposure it is only the hands and the lower ..arts of the draperies, where the water has ..lung and the frost has penetrated, which ..re appreciably damaged.

Produced at the very zenith of achievement ..f Gothic craftsmanship, the Queen Margaret ..tatue is possibly the finest and most per-..ect example of mediæval portrait sculpture ..eft in Europe. The name of the sculptor ..as not yet been ascertained, though search ..s being made for it by examining the records ..f payments made in the early part of ..dward II's reign, and in similar ways. ..he sculptor might well prove to be ..lexander of Abingdon, who was responsible ..or the Eleanor figures on the Waltham ..ross.

Two other statues, which are obviously by ..he same hand, still exist at Lincoln. These ..re the well-known figures of Edward and ..leanor, which are to be found in the next ..iche to the Queen Margaret Statue. The ..gure of Eleanor has been largely restored.



Profile of Head.
(With background blocked out.)

and is, in consequence, of little interest. The lower draperies of the Edward figure are, however, still untouched except by time. It is probable that all three statues were planned during the respite from the Scottish wars (1305-1307), and that Queen Margaret herself supervised their making.

The builder of the Russell Chapel, who, less than two hundred years after the Queen Margaret Statue was hauled into place, hacked part of it away, must not be judged too harshly. There were plenty of mediæval statues in his time! Moreover, individu statues, however fine, were not greatly tre sured by men who felt that they could st create even better statues at their will. F us the case is far different. The conditio under which the great mediæval statues we created have disappeared, never to return while at the same time considerably less tha one per cent. of the work of the mediæv figure sculptors still survives. It woul therefore, seem desirable that the Quee Margaret Statue should be removed from i exposed position, where it is gradually bein disintegrated by the acid and frost-laden air the east winds, and where its exceptional beau has remained unnoticed and unappreciated long, and brought within the shelter of t cathedral.

The writer found Dean Fry quite in syn pathy with this point of view, and he te tatively discussed with him the possibility the removal of the statue to a specially pr pared niche at the back of the altar scree in the Angel Choir. If this suggestion, aft due consideration, is ultimately carried ou the Queen Margaret Statue will be place in a setting which, though in many respec less advantageous than its present one, wi be worthy even of its quite unusual grac and beauty.

The Royal Sanitary Institute.

Acting on the advice of the adjudicators, t Council of the Royal Sanitary Institute h awarded the Henry Saxon Snell prize of fif guineas and the silver medal of the Institute Mr. E. Thomas Swinson, M.R.San.I. (Feltham writing under the motto "Cave Dweller." Tw of the other essays showed considerable meri and the Council has decided to recognise this b making a supplementary award of a Bron Medal of the Institute, to each of the writer Mr. Edward E. Barks, A.R.I.B.A. (London writing under the motto "Agenda Pro Bo Publico," and Mr. F. R. Jelley (Sutton), writi under the motto, "Plebs."



Front View of Upper Part of Figure.
(Note the fifteenth-century chisel marks just below the right hand.)



Side View of Complete Figure.
(Taken from specially erected platform.)

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Craftsmanship and Architects.

SIR,—I can well understand your zeal in furthering so excellent and timely a proposal as this; therefore you naturally devoted to it the opening "Note" for the week in the last issue of *The Builder*, thus giving your warm support to a long-desired movement started with the approval of the Council of the Royal Institute of British Architects on the recommendation of the Art Standing Committee. An additional Committee at Conduit-street is intended to institute immediately a scheme for the co-ordination of craftsmanship in relation to Architecture. This really amounts to a revival of methods often advocated half a century ago by such masters as Wm. Butterfield, Wm. Burges, E. W. Godwin, Eden Nesfield, Norman Shaw, G. F. Bodley, G. E. Street, Thomas G. Jackson, J. L. Pearson, Philip Webb and Mr. Basil Champneys. That this revival should emerge immediately after the recent amalgamation of the Society of Architects with the R.I.B.A. is a remarkable fact which cannot fail to furnish a highly pleasurable surprise to those who live to recall, as I do, the formation of this Society. The "Whirligig of time" inevitably "works wonders." The founders of the Society no doubt set out with the noble intention of promoting "Registration," but in order to gain support in the initial stages not a few were induced to believe that the Arts and Crafts would be also incorporated on practical lines. Thus, at the outset, my friends, J. M. Brydon and J. D. Sedding, with others of their school, began to participate in the hope that such an idea might materialise. They induced me to attend the inaugural meeting of the Society, held in the Council Chamber of the Strand Board of Works, in Tavistock-street. We speedily realised, however, that the majority cared nothing about the applied arts and the pioneers fundamentally differed from our views and objects, consequently J. M. Brydon and his mistaken, or misled, supporters naturally felt that the "subsequent proceedings interested them no more," so accordingly withdrew. I never attended any other meeting. I do not wish to decry "Registration," for which the Society has done so much. Circumstances no doubt have changed; therefore, bowing to the wishes of the vast majority of architects in this country, I voted in support of the unified scheme adopted last July by the splendid gathering held at Caxton Hall, Westminster. I rejoice that amalgamation has been accomplished in the interests of the profession as a whole, but I reckon that by encouraging the Arts allied to building in the way now proposed the Art of Architecture will assuredly make greater headway and, I hope, become worthy of our advantages and enormous opportunities. I have no doubt about the ultimate success of the project if properly handled. The experience of the ages is in evidence, hence my assurance.

MAURICE B. ADAMS (F.R.I.B.A.).

Bedford Park.

British Confederation of Arts.

SIR,—The Organising Council of the British Confederation of Arts has become aware of the existence of an exhibition, namely, the International Exhibition of Decorative Arts, Paris, 1925, and wishes to make it public to the general body of artists. The exhibition is being purely organised to show what the world has done since the war in specifically modern art—not in date but in spirit. The Organising Council of the British Confederation of Arts some time ago asked for wider representation of artists on the Fine Arts Commission, and now demands wider representation upon the Committee handling this Exhibition. The Organising Council is a centre for organised action on the part of all types of Art Societies. The Fine Arts Commission is a body of individuals which, although of high standing, must represent the individual outlook and not the collective outlook. Therefore, the British Confederation of Arts is the right organ to assist the Exhibition Committee and the Fine Arts Commission in determining the national policy to be pursued in arriving at a thoroughly representative British show at this all important exhibition. The Organising Council of the British Confederation of Arts would influence artists to depart from their usual unpatriotic custom on these occasions and encourage them this time to have the patriotism to send the finest and latest work to bring credit to the British section.

A. SEDGWICK, *Honorary Secretary.*

Assessing Competitions.

SIR,—I beg a little space in your columns to protest against the ridiculous time taken by some assessors in settling small competitions. In a recent case, the money to be spent was less than £2,000, and yet more than two months were taken to come to a decision.

The smaller the competition the longer would appear to be the time required to assess it. Sir Edwin Cooper, I think, set a good example to some assessors by settling a big competition within a fortnight. Competitors are placed at a disadvantage as they cannot write to the promoters owing to the risk of being disqualified. I believe a lot of competitors would join me in this protest.

"COMPETITOR."

Northumberland War Memorial.

The memorial to the men of the 6th (Territorial) Battalion Northumberland Fusiliers was recently unveiled at Newcastle by Major-General Sir P. S. Wilkinson, K.C.M.G. The bronze is the work of Mr. J. M. W. Reid, A.R.C.A., Master of Sculpture, King Edward VI School of Art, Armstrong College, and the architects for the work are Messrs. Cackett & Burns Dick, Newcastle.



Old Farm near Lisieux, France. Sketch by MR. A. C. FARE, A.R.I.B.A.

HE EFFECTS ON BUILDNGS OF THE JAPANESE EARTHQUAKE OF 1923

By CHARLES DAVISON, F.G.S.

The effects on buildings of the great Japan- earthquake of September 1, 1923, have n described in two papers recently pubed. Professor A. Imamura has written a uable preliminary report on the earthquake general,* and Mr. H. M. Hadley has died the effects of the shock on different types buildings.† The tables given by Professor amura show how slight was the damage ually caused by the shock itself in the two ef cities. In Yokohama, 12.4 per cent., and Tokyo less than 1 per cent., of the houses lapsed completely. In the towns and vil- es along the low-lying earthy shores of gami Bay the figures were much higher. ching 95.5 per cent. at Arima and Tateno, 7 per cent. at Hodyo and Nago, and 97.8 cent. at Simosoga. Mr. K. Suda has mined the effects of the site on the disbution of the damage.‡ His main result is t the intensity of the shock depends for most part on the nature of the ground. an example, he refers to three villages amada, Kasukabe, and Yamanaka) which built on alluvium. In each of them more n 60 per cent. of the houses were entirely troyed, while houses in the surrounding trict, built on harder ground, were pracally undamaged.

Mr. Hadley's brief paper is of great inest. He has examined hundreds of buildrs that stood uninjured and hundreds of ers that were damaged or had collapsed. Tokyo and Yokohama the buildings were structed of various materials, wooden struces of the light Japanese type predominating. ck was used in buildings up to four stories height, reinforced concrete for others up to hundred feet high, and, more recently, el has been used in the largest buildings limited to the latter height. "Whatever material of construction," says Mr. dley, "the undamaged building was the so framed and braced that it moved bodily a block or unit with its foundations when se foundations were moved by the irresistiforce of the seismic waves. Whatever the terial of construction, increasing damage, to the state of complete collapse, was protional to lack of lateral strength and idity. Whether the lateral strength and idity was secured by trussing, frame ion, or by the use of adequate wall construn, was immaterial."

At the time of the earthquake there were sixn large steel-framed buildings in Tokyo. of them were uninjured, the rest were re or less severely damaged. The former e preserved by their complete or extene use of reinforced concrete wall construn, which stiffened and braced them. In latter, material was used for their wall struction that was deficient in tensile ngth, and afforded little or no stiffening heir steel frame. "Such buildings swayed ently and had their exterior and court walls ttered and broken, interior partitions cked and broken, plastering destroyed, rble trim shaken down and broken, elevas damaged, etc." In houses built of reined concrete lateral strength and rigidity e possessed by those undamaged, and reined concrete at the corners of buildings was icient to protect them from damage. Of k buildings, those which escaped had ry exterior and division walls well tied ether. The behaviour of wooden buildings the same as that of the others; when adetely braced they were uninjured, otherwise collapsed. After two months' investigaMr. Hadley concludes that "earthquake-proof construction could be secured with any material, but that safest and most economical results could be obtained with structural steel or reinforced concrete, both embodying an adequate amount of reinforced wall construction."

* Imp. Earthq. Inves. Com., Seismol. Notes, No. 6, pp. 1-22.
† Bull. Seismol. Soc. of America, vol. 14, 1924, 6-8.
‡ Mem. of the Marine Obs., Kobe, Japan, vol. 1, pp. 137-239.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

We take the following notes from the Minutes of the Council Meeting held on November 17 :—

Architectural Copyright.—On the recommendation of the Practice Standing Committee, it was decided to inform the Board of Trade, in reply to the Board's request for the observations of the R.I.B.A. as to the desirability or otherwise of introducing legislation for the purpose of setting up a Statutory Register of Copyright, that in the opinion of the Council it is desirable that legislation should be introduced for the purpose of setting up a Statutory Register of Copyright, provided that assurances are obtained that the rights granted under the Copyright Act of 1911 are not affected in any way.

Richmond Bridge.—Reports were received from the Art Standing Committee and the Town-Planning Committee on the subject of the proposed widening of Richmond Bridge, and it was decided to take steps to call the attention of the authorities concerned to the undesirability of widening the Bridge and the necessity of a broad consideration of the whole question of new bridges over the Thames outside the County of London.

British Architects' Conference, 1925.—On the recommendation of the Allied Societies' Conference the offer of the Northern Architectural Association to organise the Conference in their province in 1925 was cordially accepted.

Housing Fees Tribunal.—The Tribunal presented its final report on its work since its appointment in 1922, and in releasing the Tribunal from its duties the Council passed a very cordial vote of thanks to the members of the Tribunal for their indefatigable and successful labours in the interests of the profession.

RECORDS IN STONE

Sir Banister Fletcher, F.R.I.B.A., lectured recently at the Central School of Arts and Crafts on the subject of Romanesque architecture in France, preceding the great cathedral-building or Gothic epoch. He described how Romanesque architecture, indirectly derived from Roman, evolved a series of different constructive expedients in different parts of the country, and eventually produced the Gothic style, first in the north. These ancient churches showed the intertwined histories of English and French kings, when much of France belonged to England, and there were many architectural exchanges. France, said the lecturer, had not the marble of Italy, but good building stone, and had great vivacity and inventiveness. The great dividing line between peoples and styles was the Loire, and vaults and domes in the south against the usurping arches and concentrated thrusts of the north showed how the latter style, from its distance from Roman influence, grew more progressive in spirit, and led up to the building genius of the "Ile de France."

Bethlem Hospital.

The City of London Corporation recently considered the question of the removal of the Royal Hospital of Bethlem from its present site in Lambeth. A new site has been found by the Governors at Monks Orchard Estate, near Eden Park, Croydon. The freehold is to be transferred to the Corporation and will be leased to the Governors at a nominal rental. The freehold of the existing site at Lambeth, at present the property of the Corporation, will be conveyed to the Governors. The new site at Eden Park is to cost approximately £33,000.



Bull Inn Yard, Ludlow.

URBAN AMENITY

In his eighth lecture on Town Planning, at Birmingham University, Mr. William Haywood, F.R.I.B.A., said of the several factors which contributed to amenity in the material condition of towns—other than beauty of situation—a consistent scale and manner were most important and most difficult to secure. Consistency of general effect was sometimes attempted by the imposition of a uniform style of building; sometimes reliance was placed upon one-man control as a means for securing the necessary cohesion. These methods, however, could only result in a consistency of mediocrity, with no prospect of any distinction of manner unless handled with genius; and in that case, too, they must still fail in representative character. In these days, the true source of urban amenity was in the disposition of the populace, and was best moved by the stirring of many minds toward a high standard of general excellence.

Towns which had become large only by the multiplication of small parts would usually be deficient in a scale appropriate to their new size. They had provincial towns in England of an importance, population and wealth, which, for adequate expression, required an almost metropolitan character in their equipment; yet they remained so ill provided with civic and social accommodation proportioned to their condition that their people appeared unsuited to the larger life that the growth of their environment had made possible.

The value of amenity in towns could be most effectively demonstrated by the great building periods of the past, when beauty was thought to be as essential a factor in city life, as convenient and rapid transit facilities were to-day. But while the past might stimulate by example, it could not properly serve as a model. Modern towns which sought to give their growth an appropriate expression, must effect this by an imaginative treatment of their own vital energies. Industry and its equipment had much potential beauty; and the predominate occupation of all towns, whether it be industry or not, should be regarded as an essential factor in the determination of an amenity suitable to local conditions.

LEEDS ARCHITECTURAL SOCIETY

MR. W. ALBAN JONES recently gave his Presidential Address before this Society. In the course of his remarks Mr. Jones said the improved tastes displayed by modern business firms, as compared with thirty years ago, rendered it highly probable that the architecture of the proposed new street improvement from the Leeds Town Hall to Vicar-lane would be much superior to that of the last improvement in Briggate, which cleared away the old Shambles. The vista of this proposed new street with the Town Hall as the dominating focal point at one end, held out an alluring prospect to architects.

With regard to State housing, Mr. Jones said the hectic period under the 1919 Act was now about over. Architects, for the first time in history, were largely employed under this Act, and if the actual part they took in it was more widely known to the public they would at any rate absolve them. Architects were the only body who met Dr. Addison before prices soared so high, and agreed beforehand on a reasonable scale of payment, to which they faithfully kept, except for a few isolated cases, which they deplored, where previous agreements had been made. One had only to reflect for a moment to realise what a totally different result the Act might have had if contractors and trade unions had followed the architects' example and agreed upon a reasonable fixed rate for their services.

Under this fixed scale, the architect's fee, even on the £1,100 house, worked out to about £20 per house, so that if this had been eliminated entirely it would have made little difference to the financial disaster.

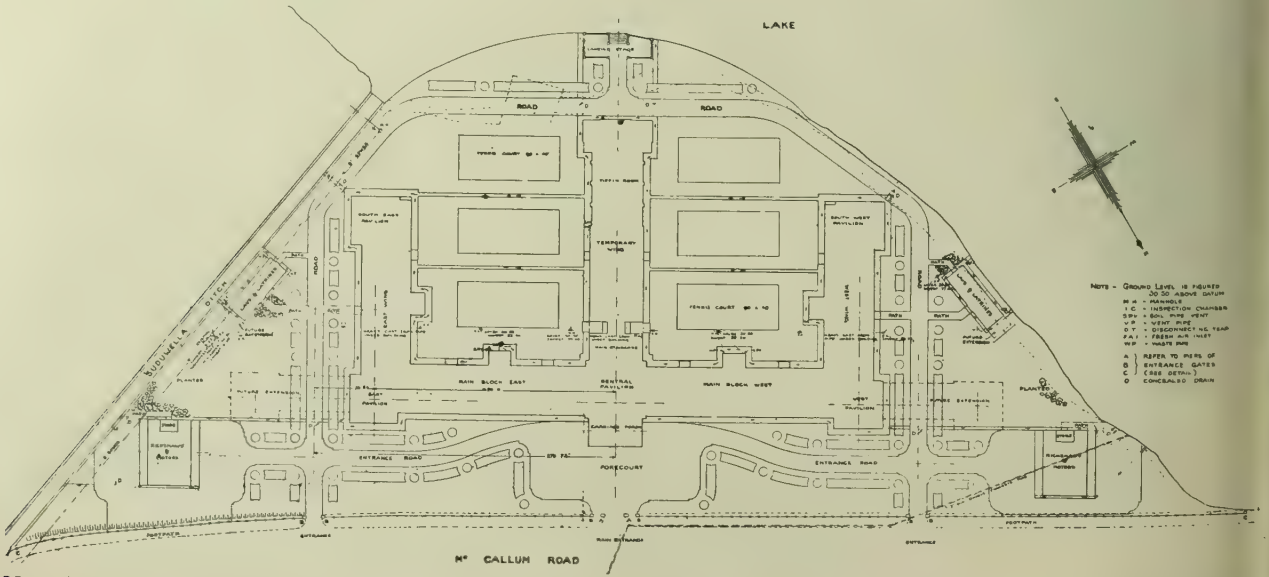
The whole of the accounts for the Leeds Corporation houses were not yet available, but they knew that the cost would work out very much below the national average of £1,100 each. He predicted that the local average would be nearer £900 for those built by competitive tenders obtained under Leeds architects. By far the cheapest houses built in Leeds under the Addison Act were those for which competitive tenders were obtained under architects and to their special plans, at £308 per house plus cost of land with roads and sewers.

In reference to the new Act, Mr. Jones said it was in the reaction from the extravagance of the Addison Act that the chief danger lay of an extremely ugly countryside. Last May he attended at Whitehall as President of the Society, forming one of a deputation to urge upon the late Minister of Health the advisability of architects functioning in further housing schemes. Briefly put, he gathered that they were talking to the converted at Whitehall, but as these matters were to be left largely in the hands of local authorities, their best plan was to convince them. He knew of no better service to architecture at the present time than so convincing local authorities.

So great was the hunger of the nation for houses that it had lost all niceties in its appetite, and if cast-iron houses for Robots proved economic proposition, æsthetic objections w of no avail. The only convincing argume must be on the economic side. They must stu to prove that architects could function as sav of the public purse rather than spenders. T less funds for disposal the more need for a skil architecct,



Church of the Sacred Heart, Washington. MESSRS. MURPHY & ELMSTEAD, Architect.
[An all-concrete church.]



New Offices for Ceylon Government Railways, Colombo: Site Plan. MR. H. BULKELEY CRESWELL, F.R.I.B.A., Architect.

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ILLUSTRATIONS

New Railway Offices, Colombo.

This building is to accommodate the central aff of the Ceylon Government Railways, the veral departments of which are now dispersed rough a number of scattered buildings. The te is a level and open promontory jutting into e larger of the two lakes which lie behind lombo Harbour, from which they are accessible locks and are therefore not tidal. On the posite side of McCallum-road, upon which e building fronts, lie the extensive sidings, ores, goods sheds and loco. and carriage ops of the railway.

The new building is conspicuous from distant ews in several directions, and is not a central ublic building. This consideration has led to oad emphasis in the general lines and large ale in the parts of a design which has sought combine the tradition of Western Europe ith indigenous forms.

The entrance block and pavilions and dress-gs are of concrete, ashlar faced in the mould ith granolithic and washed down while still een to bring out the grain and give a surface xture. The main wall face of connecting locks is finished in stucco on brickwork. The onstructional system is armoured concrete. he architect is Mr. H. B. Creswell, working in llaboration with Mr. D. McMillan, Engineer f Ways and Works, Ceylon Government ailways, under whose direction the building being erected.

House on St. George's Hill, Weybridge.

This house, designed by Mr. E. Stanley Hall, .R.I.B.A., is built of mottled stock bricks, ith red quoins to the windows, and the roof of tiles. The windows are steel casements with aded lights, hung in oak frames. The ground oor contains sitting hall, dining and drawing oms, and study. All the sitting rooms id hall have mahogany doors and oak ors. On the first floor there are five drooms and two bath rooms, with a butler's droom off the back stairs. On the second oor are three bedrooms, one bath room, nd a box room. The garage is situated on the orth-east side of the house. There is a rrace at the back and west side of the ouse, and below the south terrace is a long owling lawn The tennis court is on a unk lawn on the west of the house. The hole of the work is being carried out by Messrs. W. G. Tarrant, Ltd., of Byfleet.

New Office Building.

The clerk of the works for this building, at 0–64, Broadway, is Mr. John Warlow, and not s stated in our last issue.

Concrete Church.

We give this week two interior views and a detail of ornament of the Church of the Sacred Heart, Washington, which has been built entirely of concrete. In this building a great deal of experimental work in the surface treatment of concrete was carried out by Mr. John J. Ealey, who, in a recent interview, said: "Architectural sculptors have for years struggled against the suppression of their art by increasing costs of executing designs in permanent materials. Some years ago it became clear to me that the economy which would again permit the freedom of design which existed before industry took the profession of skilled workmen from the arts would rest upon new principles. My attention was attracted to concrete as a medium of artistic expression, and the culmination of my efforts in this direction is the work on the interior of the Church of the Sacred Heart." The whole of the interior decoration is in bare concrete, in colours obtained by using different coloured aggregates and scrubbing the film of cement from the surface after the formwork was removed. The shape of the decorative details was obtained by the design of the formwork Messrs. Murphy & Olmstead are the architects'

Church House, Newtown.

The Church House at Newtown has been built as a war memorial. The building is faced with rustic bricks and grey terra-cotta dressings, having a combed face.

The building contractors are Messrs. Treasure & Son, Ltd., of Shrewsbury; the heating engineers are the Paragon Heating Co., of Birmingham. Mr. G. T. Bassett, A.R.I.B.A., is the architect.

St. Bride's Memorial.

A memorial to Thomas Weelkes, organist of Chichester Cathedral, who died in 1623, was recently unveiled in St. Bride's Church, Fleet-street, and dedicated by the Rev. Lewis Gilbert-son, president of the Madrigal Society. The memorial is in bronze by Mr. P. G. Bentham, A.R.B.S., from a design by Professor A. E. Richardson (Messrs. Richardson & Gill, architects to St. Bride's), and is illustrated on p. 886



Church of the Sacred Heart, Washington: One of the Side Aisles.

MESSRS. MURPHY & ELMSTEAD, Architects.



The Silver Reredos for the Lady Chapel of Saint Mark's Church, Philadelphia.

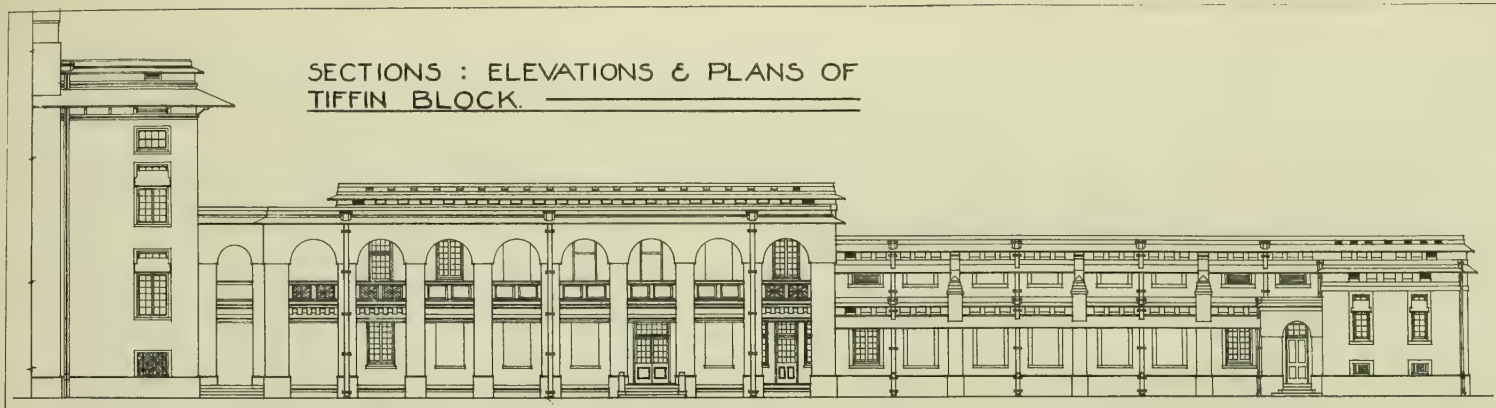
Designed by MR. WALTER STOYE.

[This silver reredos has been designed to form, with the altar, the central feature of the interior of the Lady Chapel. The decorative detail, although all original work, has been designed to harmonise in character with the altar and the chapel building. The whole work is carried out in solid silver with the exception of the Agnus Dei, which is made of solid gold, and the various jewels, consisting of sapphires, rubies, tourmalines, pearls, amethysts, topaz, chrysoprase, some six hundred in number, are also set in gold. The reredos measures in its main lines 6 ft. 9 in. from side to side and 10 ft. 11⅜ in. from the base to the top of the central pinnacle. The three pinnacles correspond to the mullions of the window immediately behind and are arranged so as not to interfere with the stained glass. The work was carried out by Messrs. Barkentin & Krall, Ltd., of London, who have been engaged on the work for two years.]

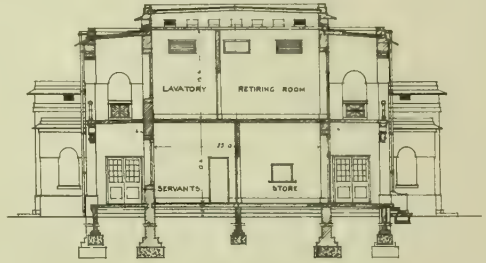


Coleshill, Bucks.—Messrs. A. Dunbar Smith, F.R.I.B.A., and Cecil Brewer, Architects.

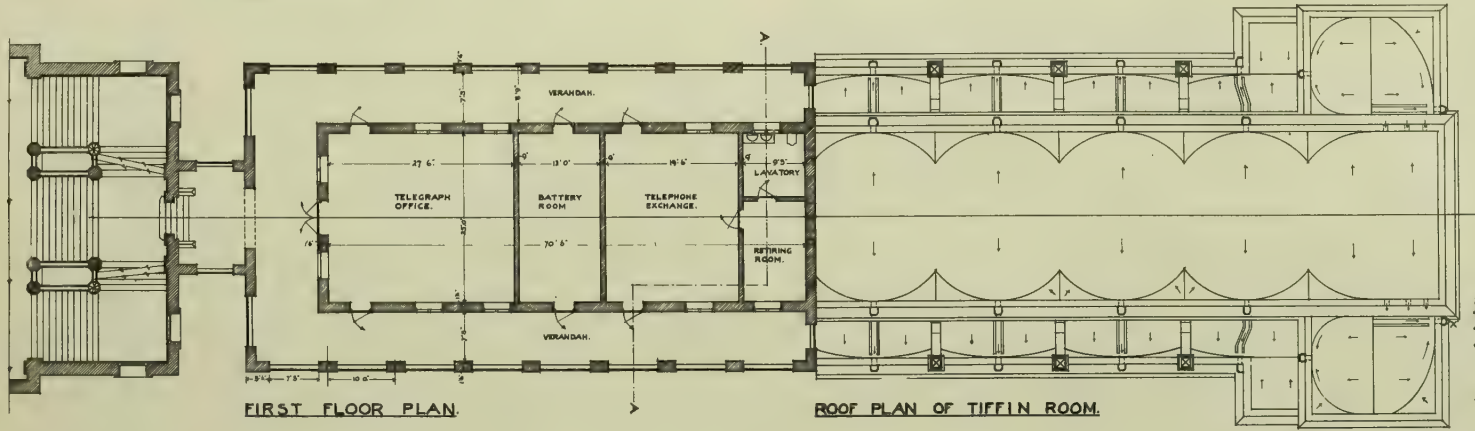
SECTIONS : ELEVATIONS & PLANS OF TIFFIN BLOCK.



SIDE ELEVATION.

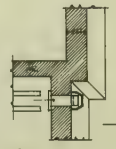


SECTION A-A.

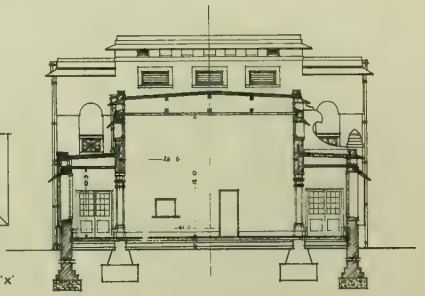


FIRST FLOOR PLAN.

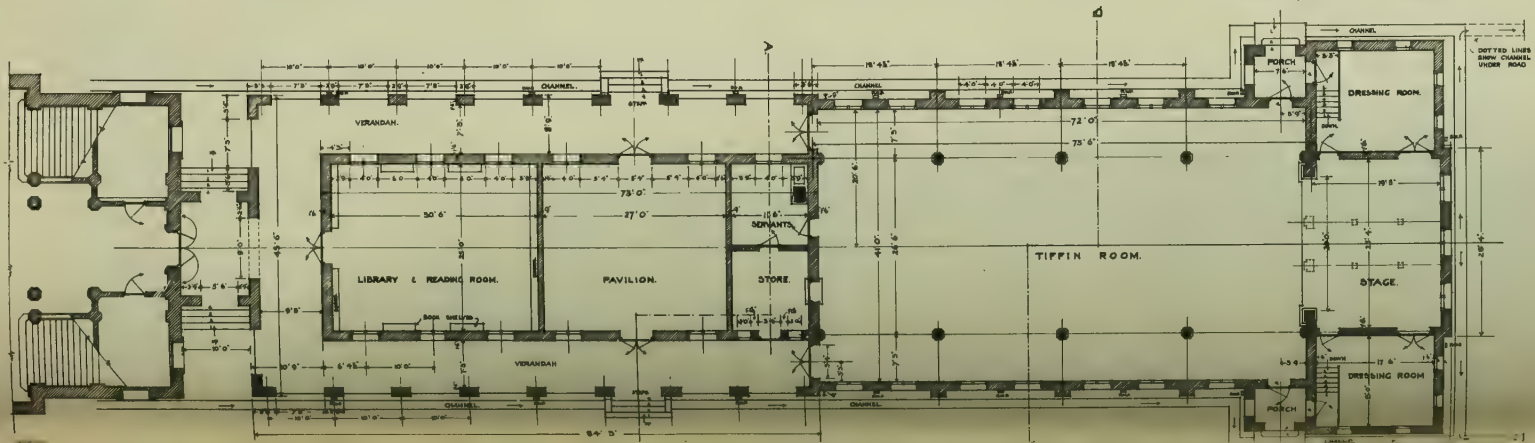
ROOF PLAN OF TIFFIN ROOM.



A SCALE PLAN AT 'X'



SECTION B-B.



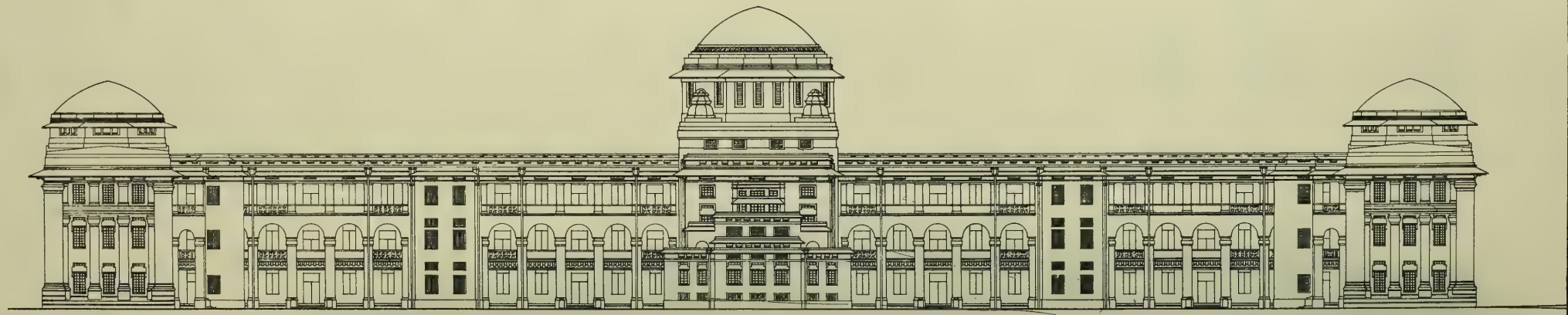


BACK ELEVATION.

THE BUILDER. DECEMBER 5. 1924.



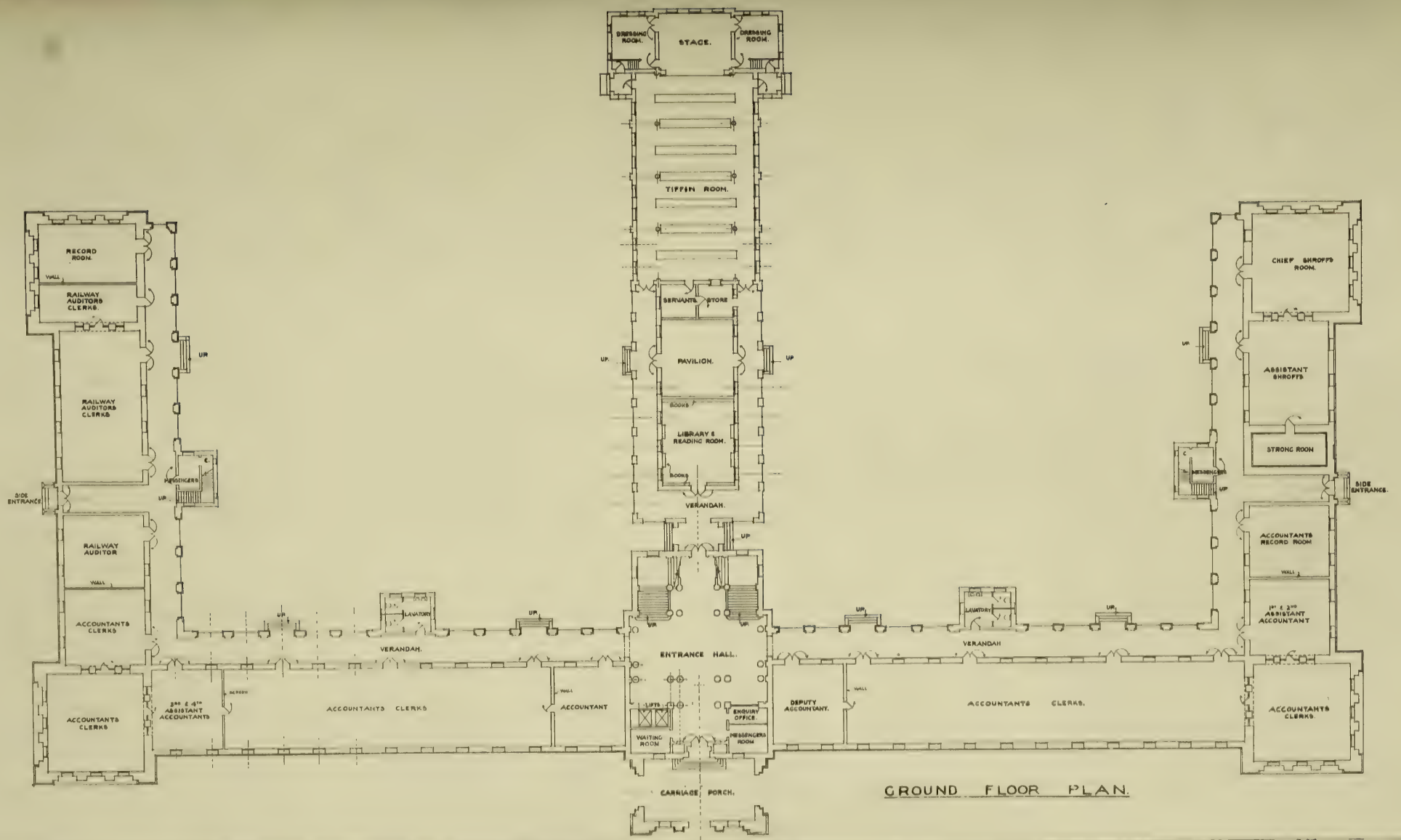
ELEVATION TO Mº CALLUM ROAD.



ELEVATION TO LAKE.

EAST ELEVATION.

ELEVATION TO COURTYARD.



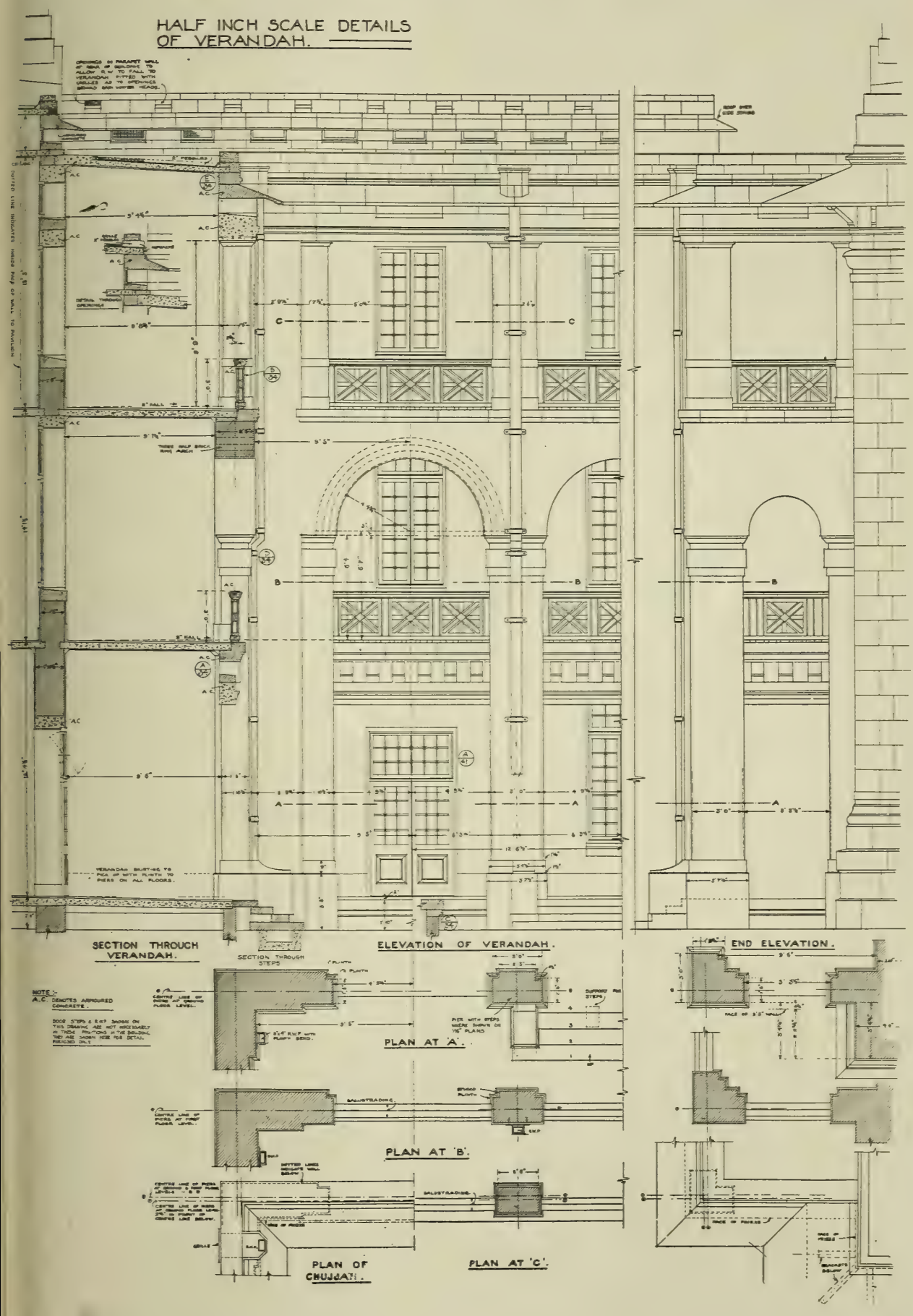
GROUND FLOOR PLAN.

NEW OFFICES FOR CEYLON GOVERNMENT RAILWAYS, COLOMBO.

MR. H. BULKELEY CRKSWELL. F.R.I.B.A., ARCHITECT.

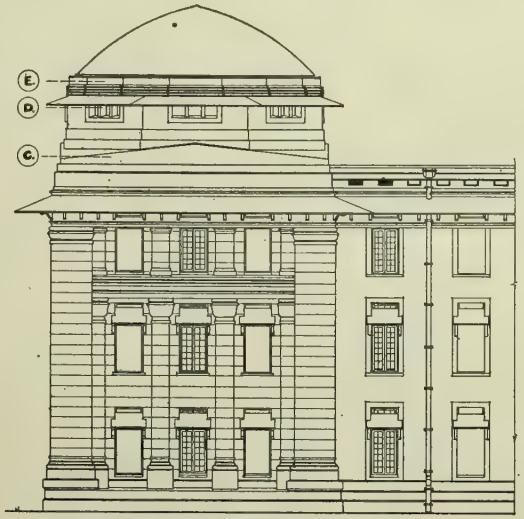


House on St. George's Hill, Weybridge. Designed by Mr. E. Stanley Hall, F.R.I.B.A.

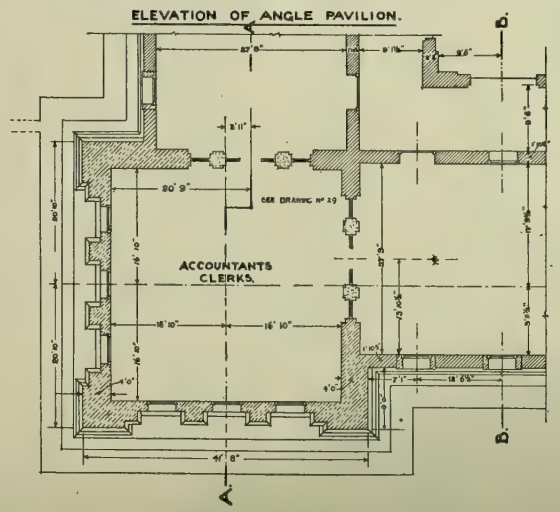


New Offices for the Ceylon Government Railways, Colombo.

MR. H. BULKELEY CRESWELL, F.R.I.B.A., Architect. (*See p.* 895.)



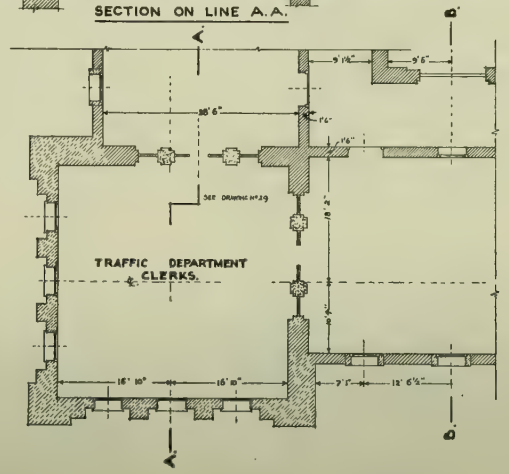
ELEVATION OF ANGLE PAVILION.



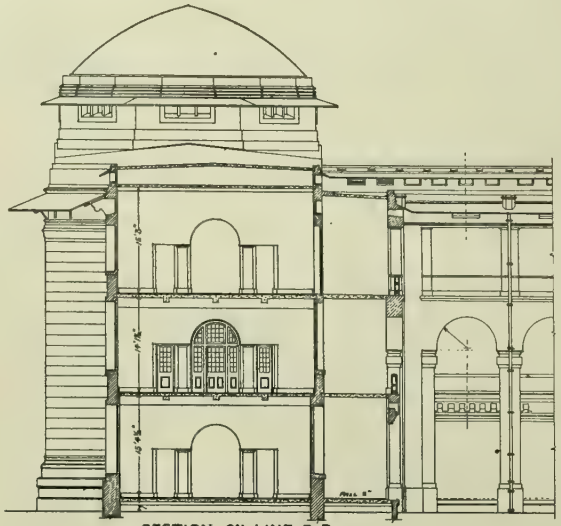
GROUND FLOOR PLAN.



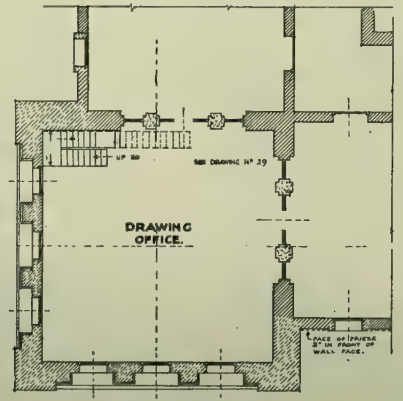
SECTION ON LINE A.A.



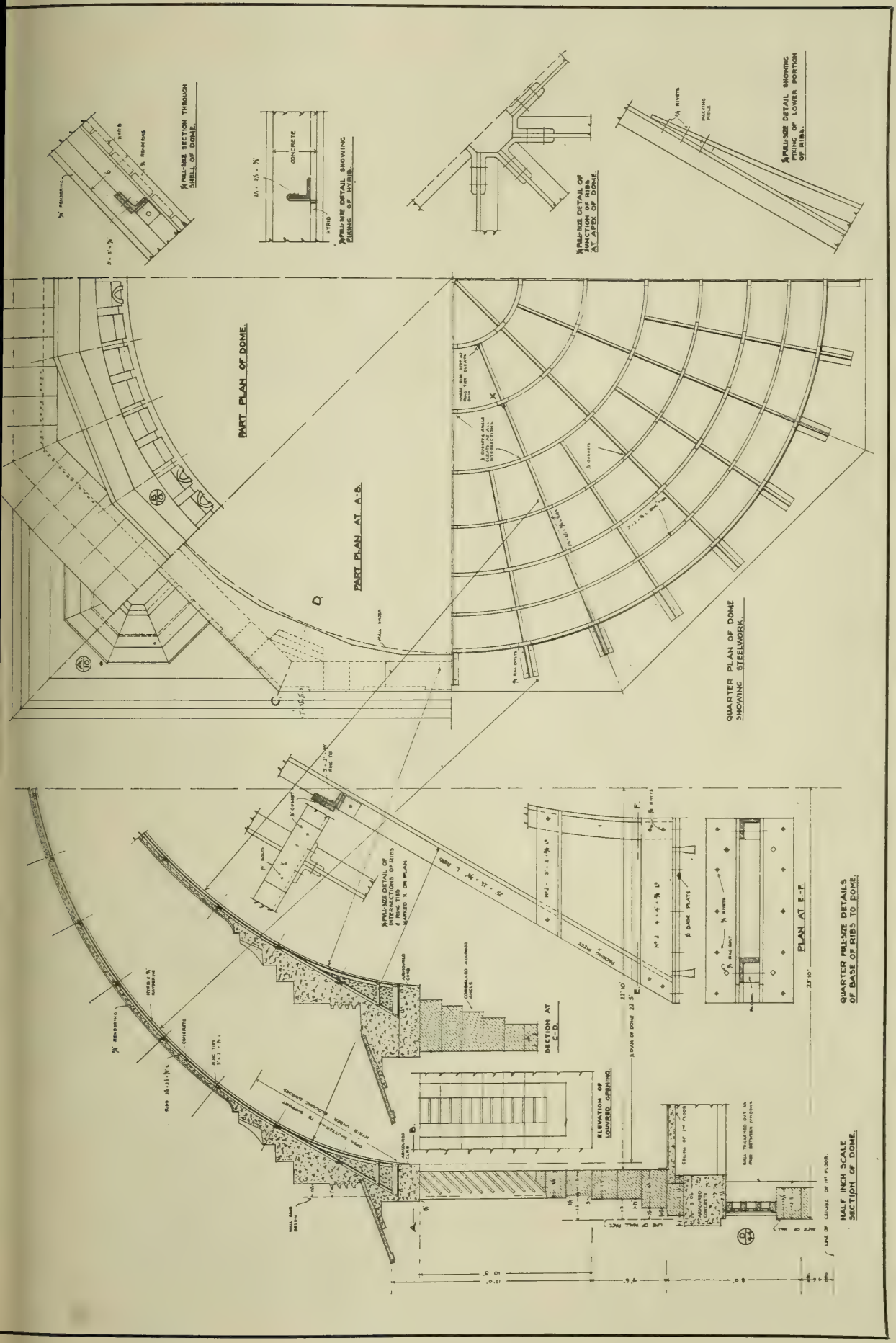
FIRST FLOOR PLAN.



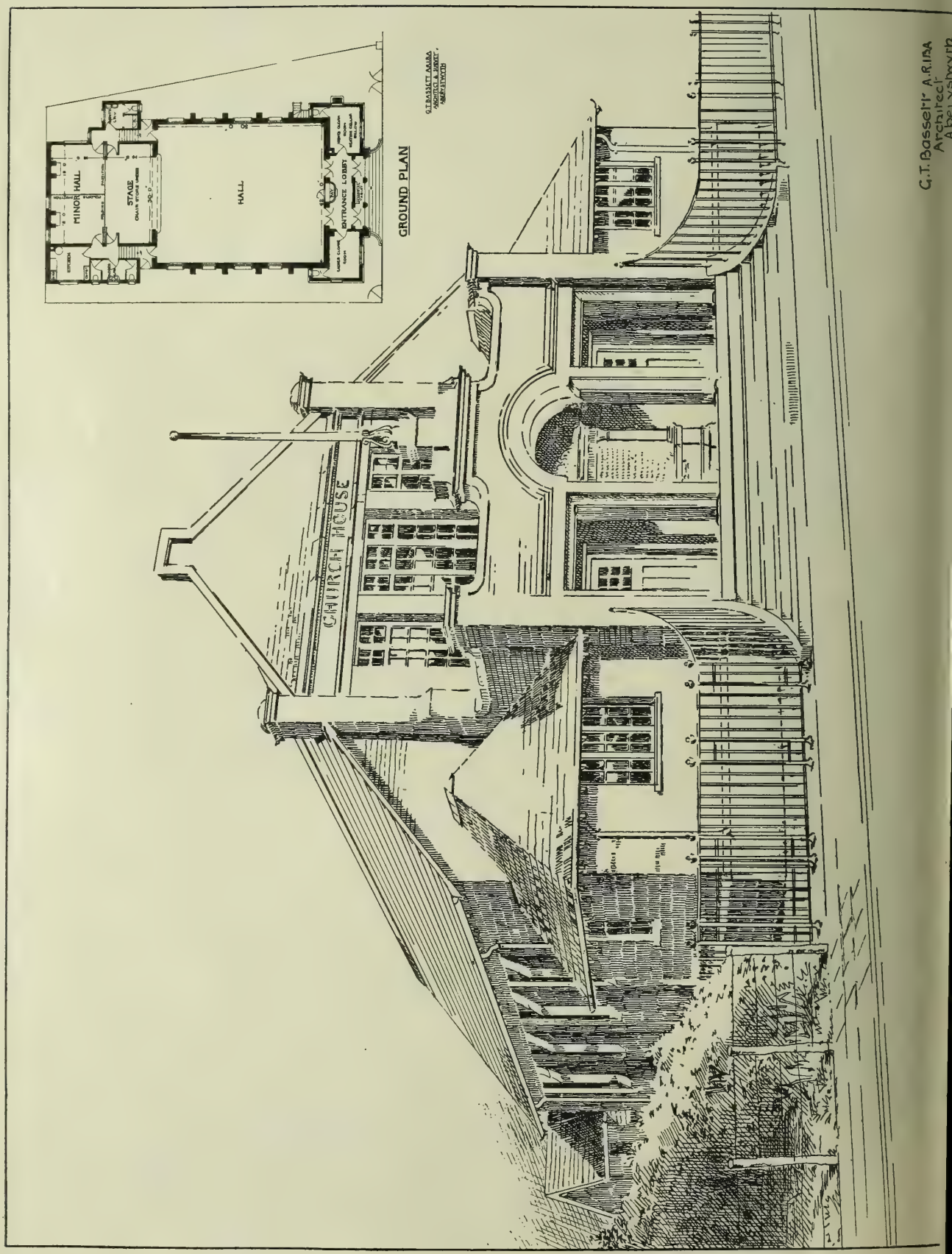
SECTION ON LINE B.B.



SECOND FLOOR PLAN.



New Offices for the Ceylon Government Railways, Colombo: Constructional Details of Central Dome.
Mr. H. Bulkeley Creswell, F.R.I.B.A. Architect. (*See p.* 895.)


GROUND PLAN
MINOR HALL
STAGE
HALL
ENTRANCE LOBBY
CHURCH HOUSE
G.T. Bassett A.R.I.B.A.
Architect
Aberystwyth

STMINSTER ABBEY RE-EXAMINED.—X

By W. R. LETHABY.

MOSAICS AND STAINED GLASS.*—Part I.

gs.—At Westminster, there are six ble examples of Roman mosaic works hirteenth century, a group unequalled Rome itself: (1) The Pavement of bytery, dated 1268; (2) The Pavement Confessor's Chapel; (3) Tomb of the Princes, John and Alphonso, and of e, daughter of Henry III; (4) Tomb John and Margaret de Valence; (5) the Confessor's Shrine, 1279; (6) Tomb r III.

ay begin our examination of the ry floor with the description of Keepe, 'Ascending by two or three Steps n come to the Rails that compass in Altar, you there behold that noble and brious inlaid Floor still remaining t was done by the command of Richard , Abbot of Westminster; where in ificial Work and delightful Figures you *Jasper*, the *Porphyry*, the *Lydian*, the e *Alabaster*, and the Serpentine stones, and wrought to the Spectator's satisiat you are unwillingly drawn from the reof; round the Squares and Great n Letters of Brass, are some of the ill remaining, which when entire were e read, concerning the duration of the *Si lector*," &c.

oor was in fact of red and green porand glass mosaic inlaid in Purbeck On it were Latin inscriptions: (*a*) a rse around the Central circle to the it it was an image of the archetypal (*b*) a curious prophetic calculation as ong the world would last; (*c*) words e work to this effect, + the year of 268, King Henry the Third, the City Odoricus (mosaic-worker), and the Richard Ware) assembled these porones together.

inute details given in the accurate woodcut in "Gleanings," can still for the most part be verified, although some letters and indents of the inscriptions have disappeared in the sixty years since the drawing was made. Around the central disc six letters now remain of the words, MoNsTrAt aRchEtypum. Of



Fig. 2 (one line).

the straight band on the north side there only exists a letter of lapidEs; and O and E remain on the east side. Most of the straight band on the east can be read from the indents beginning + Xri, and the important line containing the names is still certain on the west—*Tercius Henricus Rex, Urbs, Odoricus et Abbas.* The

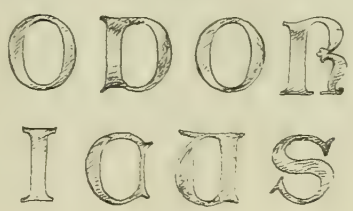


Fig. 3 (one line).

curious prophetic inscription was on the strip round about the four circles next to the big central circle. (See Neale and *Gleanings.*) Here I have found two brass points (:) in a continuous sunk groove. The lettering on Abbot Ware's grave slab seems to have been of the same kind. Both of these have entirely disappeared—the dots on Fig. 1 show the positions of these inscriptions. Fig. 2 is a restoration of what remains of the name of Henry III, and Fig. 3 is the name of the artist; this is usually given as Odericus, but the second vowel was certainly O. Both names are in a single line.

Many parallels to the prophetic inscription are known. In the evening *Westminster Gazette*, October 26, 1906, a correspondent quoted an old Gaelic saying, "*Tri aois coin aios eich*," &c.:—

"Thrice dog's age, age of horse;
Thrice horse's age, age of man;
Thrice man's age, age of deer;
Thrice deer's age, age of eagle;
Thrice eagle's age, age of oak."

A complete record of this wonderful and romantic pavement fully illustrated by a minute survey, should be made at once—there is some necessary loss by age, and probably the last trace of a letter disappears every year.

The plan of the floor given by Ackermann, together with Malcolm's detailed description, when compared with the minutely accurate plan in *Gleanings*—made before the repairs of 1866—make it possible to decide that in 1800 the details of the pavement were much as they are to-day. Ta man is recorded to have made a careful plan in the eighteenth century, but I cannot discover if it now exists. The plan (Fig. 1) is from an outline print of Ackermann's tinted engraving, and on this I have dotted the position of the inscriptions.

The floor as we have it now has been much repaired; often it appears with plain marble in place of intricate mosaic patterns. Burges observed that the big central circle "has a very modern look," also that the fillings of the four smaller circles round about it were not satisfactory. Most of the fillings of the small circles in the wide margin look equally doubtful. Neale speaks of injury "by wear and the removal of thousands of tesseræ." Ackermann (1811) cites the "lamenting enthusiasm" of Malcolm. Malcolm himself (1803), beginning his description of the Presbytery with the then existing Altar, continues: "Descending two steps which cover parts of the mosaic, we tread on the wreck of the most glorious work in England; venerable through age, costly in its materials, and invaluable for its workmanship. What must have been the glories of this holy place soon after the completion of the church! An admirer of the arts must view it with deepest regret. . . . since it has been the custom to show the choir for money, it is trodden, worn and dirtied daily by hundreds. Is it not a national treasure? When it is quite destroyed can we show such another?" He then gives a detailed description, from which it appears

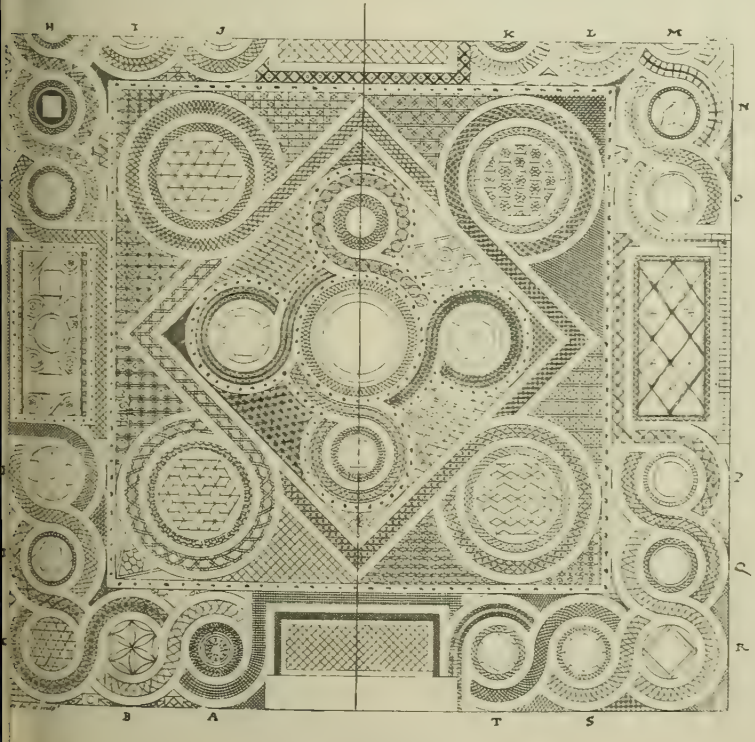


Fig. 1.

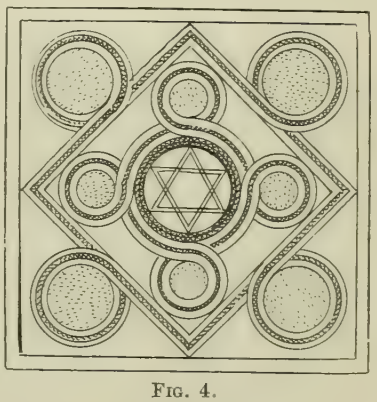


Fig. 4.

that the number of brass letters which remained were much as at present, and that the band of stars around the central circle was "much depredated." It is clear that the floor as we have it now must to a considerable extent be the result of successive repairs.

It is said that the larger circle near the north-west angle was renewed about fifty years since This would be in 1866, when Scott refaced the reredos and "restored" the destroyed half of the eastern margin of the floor. The pattern of the circle and doubtless the other repairs of the time carried on the old design. The plainer strips filling out the spaces on the north and

* last part I would add the following note: describing the Chantry of Henry V, says he was examining it "a large portion of ies fell by their own weight, which has nore solidity than limps of sand dried in They have been covered with whitewash ins perfect till the stone actually powders beneath it."

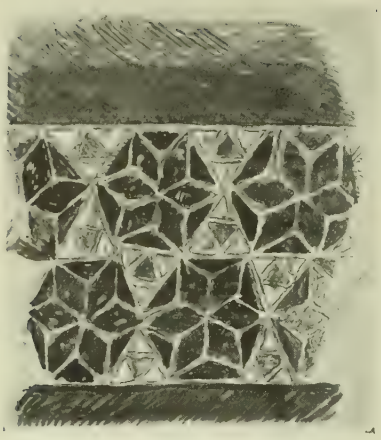


FIG. 5.

south sides were added. An abbot's coffin, thought to be Crokesley's, now in St. Paul's Chapel, was found at this time in front of the reredos, and another coffin—probably Ware's—was seen on the north side. The foundations of the Confessor's church were also then discovered.

I consulted the late Mr. W. Brindley about the large central circle, and he said: "It certainly would have been more worn if it had been there from the first; circles like this for table-tops have long come into the country." The original centre may have been of porphyry or have had some device relating to the surrounding inscription. As was observed by Miss Mary Hervey and myself independently, Holbein's portrait of the Ambassadors in the National Gallery represents this floor and the central circle here contains two interlocking triangles. Fig. 4 gives as a complete plan the indications of the perspective in the picture. The same pattern of interlaced triangles also occurs in the stained glass of the apse windows made in Wren's time. It also occurs in the original mosaic pavement of the Confessor's Chapel. From these facts we might certainly infer that the central circle had these interlacing triangles were it not that it is possible that the Confessor's pavement was the source from which the pattern was taken by both Holbein and Wren. This symbolic device is sometimes called the Shield of David. The short inscription round about would seem to have had reference to some special device or representation here. The late mediæval writer, Sporley, says that the meaning of the short inscription was that the round stone had the colours of the four elements—fire, air, water and earth. This brings to mind a plan of the universe given by Matthew Paris in a British Museum MS., which shows four concentric circles inscribed fire, air, water and earth. Either by the mixed tints of porphyry or by some definite arrangement of colours the universe was symbolised. This central circle is surrounded by a band of glass-mosaic forming a star pattern (Fig. 5). Glass mosaic is also found in the grave slabs on the north and south sides. Burges seems to have thougth that the use of glass tesseræ was confined to these places, but it seems originally to have been distributed all over the floor.

The intricate and altogether remarkable filling of circle E on the plan Fig. 1 is largely of glass. It is now so far obliterated that without the help of sketches and a rubbing made many years ago it is doubtful if it now could be made out. It is certainly entirely original (Fig. 6). Medallion A, Fig. 1, looks modern in workmanship and material, but the design may be old. B almost certainly had the spandrels of mosaic like a similar circle in the Confessor's Chapel, but all is now of marble; C seems largely

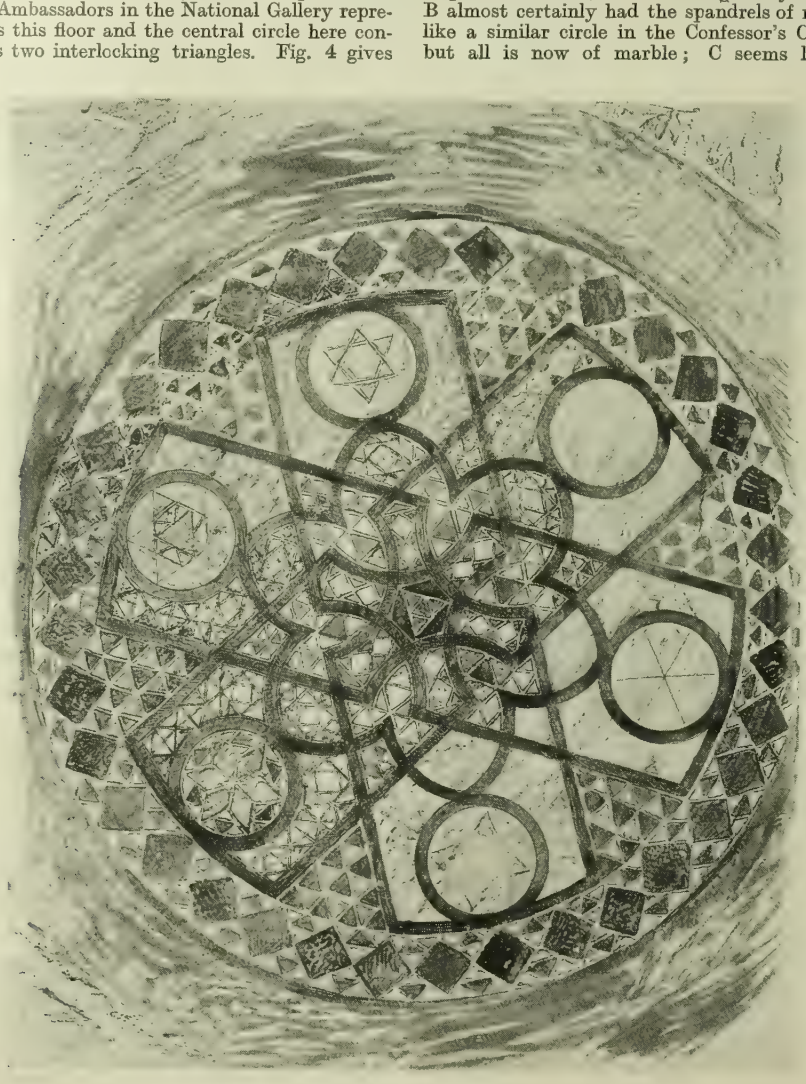


FIG. 6.

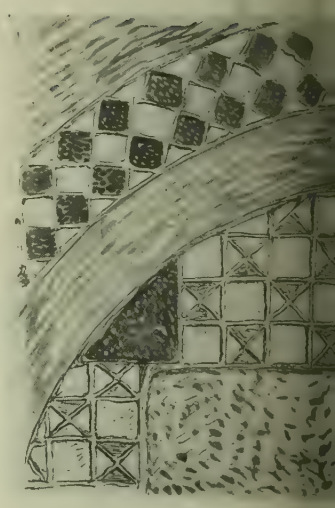


FIG. 7.

ancient; D, of marble, is probably renewal; E is discussed above; F is d semi-modern; G still retains mosaic small square slab, and this may be, or re ancient work (Fig. 7). H to M were cu semi-modern steps; the circles were by Scott in 1866. K, perhaps in part, the old pattern. The rest, N–T, seem t semi-modern.

The history of the floor is fully docu The lettering formerly around the grave north side told how Abbot Richard brought the stones from "the City." Patent Roll for 1269 is this interesting which I have never seen quoted: "A ledgment of £50 to the Abbot for the pa which he brought with him from the C Rome to the King's use to be put in the at Westminster before the King's grea there and for the service which he did t at the Castle of Kenilworth." This re to the Vatican suggests that the materi have been a gift from the Pope. In t Roll for 1267–8 appears an entry for the of certain *cementariorum pavatorum* before the Feretory of Saint Edward. craftsmen must have been Odoricus assistants. In the Roll for 1271–2 o similar entry "for making the pavement the various altars." This may refer Confessor's Altar and an Altar of Relics same chapel.

Confessor's Chapel.—When I studi floor before I thought that the mosai not have been laid until Henry III's to in place, for the pattern stops short tomb, and that it might be as late a On the other hand, provision for this to its execution, or at least commencen probable during the life of the King. T slab of John de Valence (died 1277) s form a considered part of this floor, and now suggest that it was begun on the co of the Presbytery pavement. Burges that this floor was an English work imitation of the Presbytery pavement

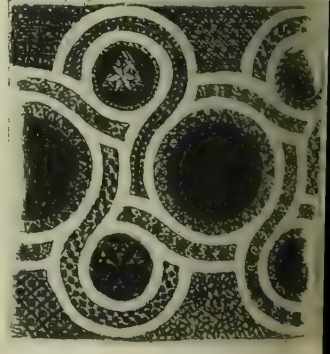


FIG. 8.

in Sta. Prassede in Rome may be put vidence on this point. This example is panel, but the pattern and details are imilar, and it is cut in on a slab in the way as ours. See the illustration in Mr. ristie's delightful book on "Pattern " (Fig. 8). The Roman panel, he tells ms the front of an altar, and it bears an tion with the date 1238. It might be of the masters who later worked at inster.

dea of these mosaic workers was constant on of the minor patterns. Of the dozens les filled with patterns in the floor of nfessor's Chapel, there do not seem to een two alike. Some sketches hurriedly hen the floor was uncovered are here to those I gave before (Figs. 9 and 10).

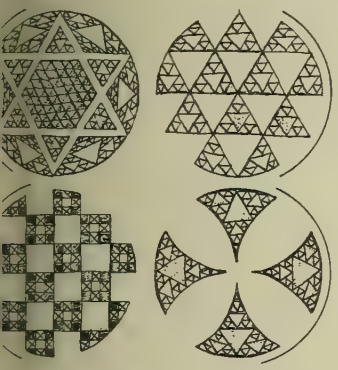


FIG. 9.

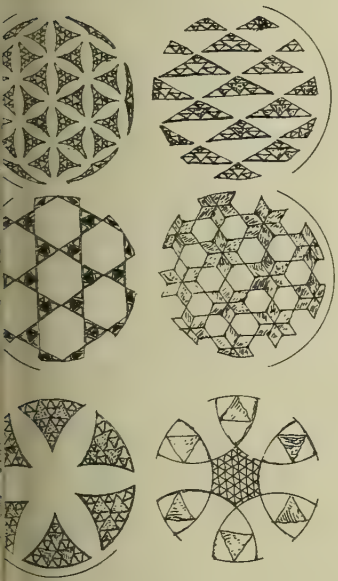


FIG. 10.

is an enlarged detail. Some others with al plan are contained in the first volume Architectural Association Sketch Book. o Scott's *Gleanings*, Malcolm, and some s in the Print Room, South Kensington, e of the floors.)

Confessor's Shrine.—The high marble saic basis which supported the golden r shrine was of minute workmanship. e existing portions still show this was f gilt-glass tesseræ, the glow and glitter must have been the most marked ristic. An inscription in large letters glass on a gold ground recorded that it work of *Petrus Romanus Civis*, 1279.

1910 an American student, Miss Waern, sent me a small photograph of ument of Pope Clement IV at Viterbo e note, "This is said to be by your ster Pietro d'Oderisio. It looks *new* as been moved about and set up again lly decently restored about fifty years again in 1885; but the simple elegance is still very charming after first shock *of scrape.*" (Fig. 12). This tomb of Clement IV (died 1268) was signed by Petrus Oderisi, and in a guide book to Viterbo, published as early as 1894, it had been noted that it must have been made by the artist who worked at Westminster.



FIG. 12.

This identification was adopted by Professor Frothingham in *Monuments of Christian Rome* (1908), and by Mr. Gerald Davies (1910). Frothingham thought that Petrus and Odoricus of the Westminster inscriptions were probably one, for "it was sometimes the habit to call a man by his patronymic." Mr. Gerald Davies writes: "The father wrought the pavement of the Presbytery, while the son Pietro Oderisi completed and signed the tomb of the Confessor. . . . Another son of Oderisi, Stephane, is known." The best reading of the facts would, I think, be that Odoric and his sons were the most famous mosaic workers in Rome in the period 1260–70, that Henry III, advised by the Pope, through Abbot Ware, attracted the father to Westminster. The Pope died in 1268 while Odoric was away from Rome, and Peter, his son, made the Papal tomb. When this was done Peter came to Westminster to execute the basement of the Confessor's shrine. He may have been here before with Odoric. Frothingham wrote of him thus: "A leader of the Roman School, Peter, son of Oderisius, made the first attempt to introduce both sculpture and mosaic decoration in sepulchral art in his tomb of Clement IV at Viterbo in 1268. . . . He also *for the first time* substituted for the antique architrave and classical orders the Gothic trefoil arch and foliated capitals; it was quite a revolution." Our shrine base has trefoil arches, and we may ask: was the revolution in the Roman marble-workers' style a consequence of their contact with Westminster? A comparison between the works at Westminster and Viterbo shows such resemblances as confirms the view that they are both by the same master. The main arch of the Viterbo tomb has cusps in the Westminster style. One of the arched compartments at Westminster is filled in a singular way by circles at top and bottom connected by vertical strips, and the same awkward arch-filling is found at Viterbo; there one of the columns is inlaid with an inverted chevron pattern, and the same occurs on one of the niche heads of the shrine base. Again, on the tomb of Henry III, which was certainly by the same master who made the shrine base, there are similar patterns and large crosses in the two recesses; there are similar crosses on the Pope's tomb.

The shrine basis was surmounted by a flat cornice band which bore the inscription giving the name of Peter. A fragment of this cornice exists which must have been part of the west end; this is wrought on three sides, and a rebated joint shows that it projected as a "break" about 9 in. beyond the angle.

On comparing the record of the whole of the inscription with a part which is now apparent on the east front, it will be found that extra space was required at the west end for several letters more than those at the east end. This extra space was provided by the projections just described. These projections of the cornice of the west front of the basis were probably supported by the larger spiral mosaic columns, which are now half buried.

Scott says that these pillars at the west end were found to agree in height with those at the east; that is, they would rise to the bed of the inscribed cornice. The best preserved portion of mosaic is in one of these columns and the part formerly buried may have been placed uppermost by Scott. In the Print Room at S. Kensington is a careful drawing, inscribed, "Done in 1850 by uncovering the base of the columns of the tomb of the Confessor. I made this drawing and we then covered it up again.—A MacCallum."

Among the fragments in the Triforium, I recognised some years ago two of small spiral marble columns with lines of gilding following the twist. The shrine at St. Albans had detached spiral columns around the shrine, which are almost exactly like these, and fragments of similar pillars exist at Winchester. (For these, see *Antiquaries' Journal*, October, 1924.) In all these cases, these pillars probably supported candlesticks. There is a Westminster record that in 1290, 46s. 8d. was paid for making three marble columns around the shrine, and our fragments are probably of these. (Fig. 13, without base).



FIG. 11.

The original cornice of the basis was the inscribed course consisting of a "face" with a few mouldings above. When the existing wooden shrine was set on the marble basement by Abbot Feckenham (1556-8), the sides of the marble work were heightened by the addition of



Fig. 13.

a new projecting cornice. At the same time what now appears as a narrow frieze under this new moulded cornice was made longer and wider. It had been the margin of the slab on which the shrine proper rested, and it was originally narrower and shorter than the inscribed band or cornice, forming a "step" above it. This step course was enlarged in an irregular way, as may be seen by the spacing of the pattern, and a few years ago Mr. Westlake found that, on the south side, there was hidden a complete angle piece and return, near, but not at the west end.

The Presbytery pavement, the shrine basis, and the tomb of the Pope at Viterbo, were all signed prominently by the artists who made them. Examination of similar works in Italy shows that this school of Roman mosaic workers made a practice of putting their names on monuments, frequently adding (as in the case of our shrine) the words, "*Civis Romanus.*" This points to the existence of some guild of workers who prided themselves on seeking the inspiration of ancient Rome and turning away from the art of the Tedeschi of the Lombard schools. Such a thought was the germ of the whole Renaissance, which in essence was the rebirth of national culture and the repudiation of Germanism. The Westminster inscriptions are thus specially interesting and they resemble other inscriptions in Italy so closely that it is probable that they were suggested by the craftsmen themselves.

If all the artists who signed themselves Oderisio were of one family they must have been an artistic clan comparable to the Cosmati. The fine bronze doors of Troja Cathedral in South Italy, made in 1119-27, bear the name of Oderisus of Benevento. At Eboli, near Naples, a fine picture of the Crucifixion is signed Robertus de Oderisio, a follower of Giotto (Woltmann and Woermann, "History of Painting"). Dante tells of Oderisi of Gubbio, "the honour of that art which, in Paris, is called illuminating." According to Vasari he was working in Rome bout 1295.

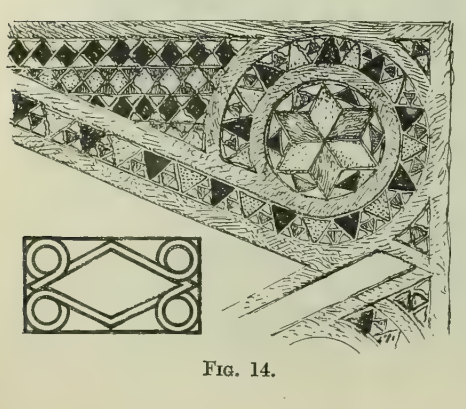


Fig. 14.

The shrine basis is in many ways a work of extraordinary interest. The recent cleaning of it has revealed many details of the mosaic patterns. By the evidence of small portions remaining here and there together with imprints left in the matrix where the mosaic has been picked out, the designs could almost fully be made out and a restored drawing made by any student. Fig. 14 is a restoration of one of the frieze panels. A patient study of this one monument, and more still of the series of mosaic works, would be instructive to do and valuable in result. The point has been reached when special work on details is required.

Tombs.—Recent cleaning has also revealed the glittering splendour of Henry III's tomb. It was a surprise to find that much pure white was used to set off the gold and colour. In the borders, where one pattern is continuous, the background colour is varied in lengths of a few inches. At the east end, where it is sheltered, the panels are largely complete.

The small tomb of the royal children, Katherine, John, Alphonso, &c., now in the south ambulatory, has also been cleaned and the general disposition of the mosaic work can be traced. At the east end the now mostly-hidden panel was like the restored sketch, Fig. 15; the central disc remains and the two on the left may also exist. The side of the tomb which was placed against the wall here, about 1395, may still be in good condition.

Two grave slabs close in front of Henry V's tomb form a part, as has been mentioned, of the

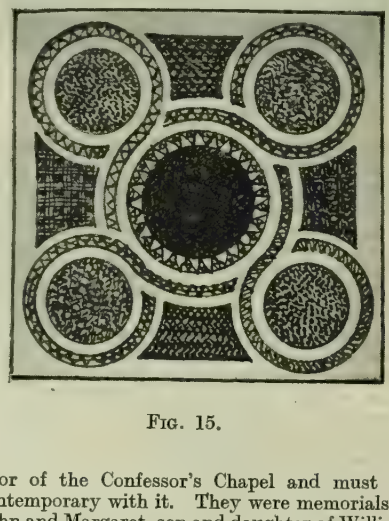


Fig. 15.

floor of the Confessor's Chapel and must be contemporary with it. They were memorials of John and Margaret, son and daughter of William de Valence. Both had brass crosses and one of them had the field set with mosaic; this was probably the tomb of John; it occupied a position on the central axis of the pavement and thus seems to have been the first to be put in place. With the mosaic a few letters were found, . . . LAME : on one side, with traces from which the name Willame could be safely inferred, and on the other side RLEA. About twelve years ago a portion of the plain paving by Henry V's tomb, which overlies the slabs, having been lifted, the end of the second slab was exposed and this retained several letters and imprints giving VALENCE : KI : PUR : LA . . . The name Valence began under the foot of the cross and the rest continued up the south side of the cross.

Putting the remnants of the two inscriptions together it is evident that they must have been in French, and of the well-known form : + Here lies John son of William de Valence for whose soul God have mercy.

The systematic cleaning of the structure and monuments which has been referred to several times has given me more pleasure during my little term than almost anything else—the one exception is the work I have not done in the ancient church.

EXHIBITION NOTI

THE BURLINGTON GALLER

One can enjoy the variety and inter present exhibition at the Burlingt Gallery without having to consider an theories or indulge in futile comparis might ask why this or that particular o been brought here, and the answer wou be found in the intrinsic interest of th It is a richly furnished gallery, for the on the walls and the furniture and obje which are admirably displayed combin a sort of summarised epitome of the which can enfold and overlay all things which surround us. What a w specimen of perfect craftsmanship is especially when you open it up a minutely all the wonders of its make a remarkably fine Gothic cabinet is broad, simple, and vigorous, but with a refinement of effect! What a delight Gothic figure is No. 57! What a fi overmantel is No. 55, and what perfe work is to be found in the old barom and 77! The pictures, the silver w pottery, glass, and the needlework of a stimulating interest, and we feel exhibition such as this, which illustra application of art to many varied obje some senses, the most instructive of a Such things as No. 175, the walnut a (1690), are not often met with, and of a same period are two fine types of stools, 172. One notes the skill and refinemen framework of No. 171. The walnu No. 44 is another of the wonderful speci craftsmanship. Such an exhibition as the sort for one to browse over, as a c very aptly put it.

FINE ART SOCIETY.

The able paintings by Mr. Dacres Ad the Fine Art Society deal largely with a tural subjects, which in many cases a adequately treated, such as the paintin Waterloo Bridge staircase and the loggi There is no mystery or playfulness i serious drawings, but the rendering solidity and mass of the heavier type of b is very satisfying. To appreciate the and grace of our Wren towers and spire within the power of many. London inexhaustible field for the study of archi effects, and we sometimes wonder if mor of capacity could not be tempted to se us some adequate rendering of their The scores of vivid impressions of li colour to be found in London stre Monday have probably not found a singl exponent. The able paintings by Mr. Adams serve to whet our appetite for m and also for work in a lighter vein.

The water-colours by Mr. Martin H subjects at home and abroad show a hand, and in some cases reach a high le the masterly little view of Frontignan, w something of the breadth and style o Master. "Inland Waters, Cette," an Belfry, Honfleur," indicate the varied Mr. Hardie's work.

Finnish Architecture.

Professor Tancred Borenius lectured before the Anglo-Finnish Society, un presidency of the Finnish Minister, at t Edition Club, Little Russell-street. course of his remarks the lecturer said architecture in the Middle Ages was cl ised by its great simplicity and streng churches were built mainly of large blocks, the decorative parts being carri brick. The lecturer gave as typical of Finnish architecture the cathedrals of Borga, and the church at Hattula, wh exceptionally, built entirely of brick. paintings of the churches were oft extensive, and gave an impression of t which English mediæval churches m produced originally.

T. HELEN'S, BISHOPS-GATE *

the nine volumes of the great " Survey ondon," issued jointly by the London ty Council and the London Survey Com-ee, the last one published, that dealing the Parish Church and Priory of St. n, Bishopsgate, is surely the best and informative.

e are told in the preface that this volume he first one dealing with the City of ion, with the exception of the monograph he now removed Crosby Hall, once so but recently re-erected at Chelsea, and but fitting that St. Helen's should have chosen for a commencement because of ne monuments and architecture and of ing easily the first of the ancient churches n its border. Here was also a rich Bene-he nunnery, where for three hundred the daughters of the merchant princes ndon took the veil.

e Church of St. Helen was probably led before the Conquest, though of this, re told, there is no proof, but nothing is known about it until the middle of the th century, when it is mentioned as one he churches in the jurisdiction of St. s Cathedral.

important addition to the church was about 1350, when Adam Francis, mercer, ondon, built a chapel in honour of the Ghost. In August, 1374, he left direc-in his will for the establishment of a tual chantry of St. Mary, and of er in the chapel of his foundation.

bably the greatest personage connected the church was Sir John Crosby, Alder-Sheriff and M.P. for London, and yor of the Staple of Calais," who died 75, and is buried in the church. He be-hed to the high altar of the church 1s. 4d. for offerings " delayed or for-n," 400 marks to endow a chantry for years, 100 marks for keeping his anni-ry, and other sums for various purposes. ad a mansion hard by, and his name is emorated in Crosby Hall and in Crosby-e. To Sir John must be assigned the rches on the south of the parish chancel of which spans his tomb), the mouldings ther details being the same as those ave arcade, and of the ancient painted now in the church; the only parts can be said to have been there before Dissolution are the roundels commemora-of him in the north-east window of the chapel. In this church are also buried Thomas Gresham, the founder of the l Exchange; Francis Bancroft, whose al monument now rests beneath the floor e church in accordance with the instruc-of the deceased that it should remain for undred years and then be placed under d; Sir Andrew Judd; Sir William Picker-Sir John Spencer, an ancestor of the nt Marquis of Northampton; Sir Martin ey, 1634, Lord Mayor of London; and other City worthies whose tombs are of nate character of a bygone age, some of are illustrated in this volume. The records of St. Helen's do not, as in the of several City parishes, include any of eformation date.

e Vestry Minutes begin in 1558, but there erious gap between 1578 and 1676. The hwardens' Accounts begin in 1563. These ls contain a certain amount of informa-relative to the fabric, the material por-of which are printed in a former vicar's the Rev. J. E. Cox's " Annals of St. 's, Bishopsgate," published in 1876.

e nuns' church, together with the rest of riory buildings, was granted in 1542 to ichard Williams (*alias* Cromwell). The ersellers' Company acquired their property in St. Helen's in 1543, and with it the nuns' choir. In 1561 the Vestry Minutes refer to a conference with this company as to " the repairing and amendment of certaine decayed places on the outside of the north Ile of the Church," and sometime between these two dates the parish had come into possession of the fabric of the nuns' church, but whether by gift or purchase does not appear.

The religious troubles of the middle of the seventeenth century are reflected in two entries in the Churchwardens' Accounts of 1643-44, relating to the taking down of the cross on the belfry, and the defacing of " superstitious " inscriptions. A sundial was set up on the church in the latter year. Few alterations seem to have been made to the fabric or its fittings during the second half of the seventeenth century. There is, however, mention of a new organ in 1683, and to the pulling down of the old engine-house in 1694. At a Vestry meeting held on October 8, 1696, it was agreed that Sir Christopher Wren should be consulted about the repairs of the church. Something was done and finished in 1697, but no particulars of the work are given. In 1696 an agreement was entered into between the parish and Thomas Armstrong that, in consideration of the sum of £100 and taking down the bells, wheels and ropes in the belfry (over St. Helen's Gate in Bishopsgate), and delivering them safe and sound in the church, Armstrong should have the lease of the belfry for sixty-one years (for the purpose of letting). From this it would appear that the bells hung, and probably had hung since the sixteenth century, over the gate-house at the entry to Great St. Helen's, and that only a clock bell hung in the clock-tower, or steeple, over the church.

On June 18 following it was decided to sell three of the four bells for the repair of the church, a thing frequently and unfortunately often done in those days, and even later.

More than half of the volume is taken up with full-page illustrations, no fewer than 123 of these being placed at the end of the book, after the index and imprint of the printer. Several of these illustrations are from original drawings once forming part of the celebrated Gardner Collection of London prints, recently dispersed by auction, and it is a matter for congratulation that since the major part of the volume was printed those drawings relating to St. Helen's have been secured by the Merchant Taylors' and Leathersellers' Companies, who have lent them for reproduction.

In addition, there are several measured drawings by the late J. L. Pearson, R.A. (traced and rearranged by P. K. Kipps), and Messrs. E. R. B. Harris, F. S. Eden, Robert Pearsall, T. O. Thirtle, E. L. Wratten, G. Gordon Godfrey, Percy W. Lovell, Max Judge, Ellis Marsland, A. E. Bullock, J. W. Bloe, P. S. Hudson, F. S. Morden Green, T. Frank Green, and Ernest A. Mann. There are also numerous photographs and heraldic illustrations, some in the text. The frontispiece is a well-executed coloured representation of stained glass, with the Merchant's Mark of Sir John Crosby in the border, and a Shield of the Arms of Lady Crosby, drawn by F. S. Eden.

We look forward to the forthcoming publication on the parish itself, so full of topographical interest. If these beautifully produced volumes could be issued bound in cloth, instead of stiff wrappers, it would be an advantage.

* The Parish Church of St. Helen's, Bishopsgate. Survey of London, Vol. IX. compiled by Miss M. and A. W. Clapham. (London. B. T. Batsford. Price Two Guineas.

The Death Watch Beetle.

Mr. Leslie Moore, the architect, recently suggested the use of a vacuum machine for the purpose of ridding Peterborough Cathedral of the death watch beetle. It is fitted with a special apparatus which extracts the beetle from positions otherwise inaccessible. This beetle has already caused the cathedral restoration committee an expenditure of £10,000.

LEWIS WAR MEMORIAL, STORNOWAY

This memorial takes the form of a Scottish baronial tower rising to the height of over 85 ft. The lower portion, 18 ft. square and strongly buttressed at each of the angles, reaches to a height of 21 ft., at which height the face width is reduced by intake courses, above which the walls rise uninterruptedly with a slight tapering to the parapets which overhang on triple coursed corbels. On three of the angles the parapet is further corbelled out into circular bastions, and on the remaining angle a circular turret containing a spiral stair gives access to the open platform within the parapets. This turret, with spiral stair, is continued up from the platform level a further height of 10 ft., and with an increased diameter, also terminates with a corbelled and embrasured parapet forming a flag turret, from the platform of which rises a strong steel mast, to which the lightning conductor is connected.



Lewis War Memorial, Stornaway.
Mr. J. Hinton Gall, Lic.R.I.B.A., Architect

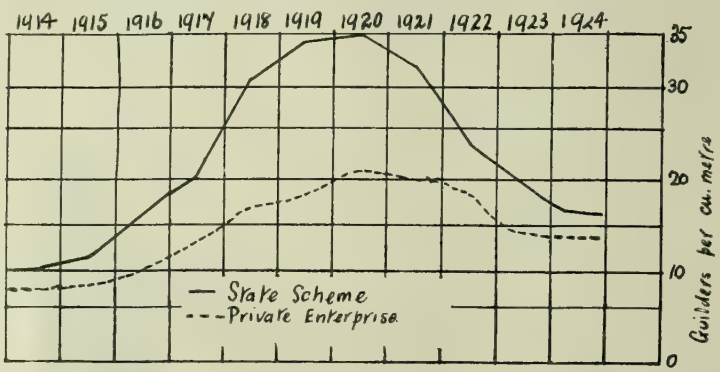
Internally, the tower is divided into an arched entrance chamber, 20 ft. high, and four upper chambers reached by square and circular steel stairs, until the granite turnpike stair is reached in the turret. In these chambers bronze panels containing the names of the fallen, numbering upwards of 1,200, belonging to the four parishes of Lewis, will be fixed—a separate chamber being allotted to each parish.

The entrance to the tower on the south face is by a richly moulded arched doorway containing a massive door of Scottish oak, above which are two moulded panels; on one is cut the dedication inscription in English, and on the other in Gaelic. All the dressed work is of fine axed Aberdeenshire granite, and the walls are of native rock (*gneiss*), while the floors are of reinforced concrete. The scheme cost—exclusive of bronze panels—over £4,300. The architect is Mr. John Hinton Gall, Lic.R.I.B.A., of Inverness.

HOUSING IN HOLLAND

At a recent international conference of hygienists in Holland, Mr. H. van der Kaa (Chief State Inspector of Housing) delivered an address on the progress of housing in the Netherlands from the beginning of the present century.

Soon after the outbreak of the war, he said, the prices of building materials began to increase, and building costs increased to such an extent that gradually the building of houses came to a standstill and the Government had to intervene and give assistance. This assistance was not given to private builders, who, until then, had always had a large share in the building of houses, but exclusively to public utility societies and local authorities for State-aided housing schemes. In 1916 the Government agreed to advance to public utility societies a yearly grant towards the building of working-class houses to an amount of half the difference between the annual loan charge and the annual loan charge that would have to be paid if the price of building materials had not increased since August, 1914; provided that the local authority should pay the other half of the difference. By this support the dwellings could be let for the same rent as if they had been built before the war. In 1917 the share of the Government was increased from one-half to 75 per cent. of the whole grant till December 31, 1921.



Cost of Erection of Complete Houses in Amsterdam

Housing regulations of the Government took no measures to prevent the cost of building from increasing, and the cost of building of a house in 1920 amounted to three times the cost in 1914; the yearly deficit on each house paid by the Exchequer amounted to 200 guilders, and in some cases it rose to 300 guilders. In 1919, therefore, the regulations were altered, and loans under the Housing Act were advanced at a rate of 5 per cent.; grants on behalf of material prices and rate of interest were done away with and replaced by a yearly grant towards any deficit. The yearly deficit was paid as to 75 per cent. by the Government and 25 per cent. by the local authority.

Rents of existing houses were fixed by the Rent Restriction Act on a low level, with the result that rents remained low and the deficit was paid by the Exchequer, so that this regulation did not prevent the building costs from increasing. In 1920 a minimum rent was fixed for every type of dwelling; for houses not above a cubic space of 225 m. the rent had to cover at least 30 per cent. of the yearly expenses; for houses of a cubic space of 225 to 275 m., at least 60 per cent.; for houses of a cubic space of 275 to 300 m., at least 70 per cent. It was, however, generally known that in case of a rise in building trade wages the Government would be willing to increase the advanced loans and grants, so this regulation had no influence on the rising building cost. Prices of materials began to fall in the course of 1920, but wages increased. The wages paid surpassed those stipulated by contract, and were much higher than the wages of skilled labourers in other trades.

The fall of building costs did not set in until 1921, partly owing to the limitation of the State aid for housing schemes. In 1922 the Government increased the rents of houses built at a time when house-building was not so expensive, in order to decrease the high grants which were required from the Exchequer. Moreover, for the advancing of a loan a stipulation was made that the cost of building should not exceed an amount separately fixed for each municipality, while the Government refused to take into consideration requests for raising loans or grants advanced under these stipulations. In this way building costs were forced down.

The continuation in the rise of building costs during 1917 and 1918 gradually prevented private builders from building houses for the middle classes, and the Government drew up regulations for subsidising the building of houses for the middle classes. For this purpose, in 1918, a subsidy was granted to local authorities, provided that the local authority granted to the party concerned a subsidy to an extent of four-thirds of the subsidy which the Government granted to the local authority. By a regulation in 1919 it was stipulated that a percentage ranging, as a rule, from 150 to 180 per cent. of the pre-war cost of building, had to be covered by the rent. The difference was granted as a lump-sum grant, and paid by the Government and the local authority in the proportion of 3 to 1. In these regulations, too, no measures were taken to prevent the cost of building from increasing, as the whole difference between the actual cost and a fixed amount was paid by the Exchequer. Consequently, the cost of building experienced an excessive rise in some cases. Only in Rotterdam had private builders built on any large scale; for the rest, only local authorities and public utility societies had built houses under this scheme.

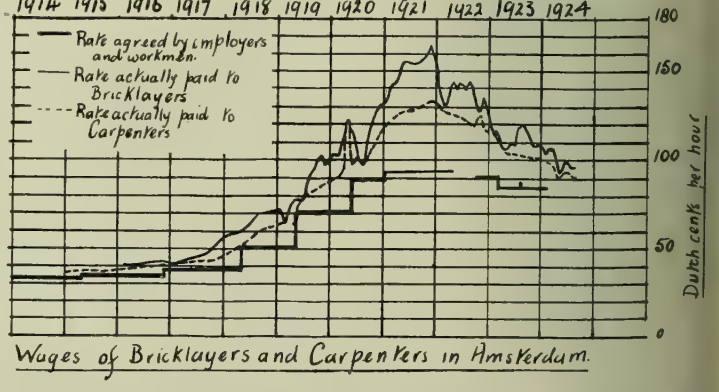
Since the increase of building costs set in, private enterprise was not able to carry on, as the subsidies granted to local authorities and public utility societies made it impossible for private builders to erect houses without subsidy. The supply of houses by private enterprise stopped, first for the working classes, then for the middle classes. The supply of dwellings remained entrusted to the public utility so and the local authorities, but it became and more obvious that they were not a solve the housing emergency in a sufficien Experience had taught that private build a rule built quickly and cheaply, and th years confirmed that in many cases authorities and public societies lacked qualities. It became more and more o that, without the help of private ente it would never be possible to succeed i quering the housing emergency. In therefore, a subsidy system was inaug by which grants and loans were advanced the Exchequer. The grant was fixed guilders per square metre area of a dw up to a maximum of 2,000 guilders for dwelling; the contents of a dwelling ava for subsidy could not exceed a cubic sp 450 metres, measured outside above the g floor level. If necessary a mortgage was gra not exceeding 90 per cent. of the buildin without the grant, but including the va the site.

The private builders' subsidy scheme founded on the principle that the State gr a fixed sum to everyone who was going to a house at his own cost and risk, the depending on the dimensions of the h The grant was considered as compensatio the depreciation to be expected in the f The private builder who obtained a gran obliged to keep the houses available for ha tion for at least 15 years, but for the re was allowed to sell or let. The grant entirely paid by the Exchequer. The hand for private builders proved to be an effi means to make the private builders' su scheme popular, and in a relatively short a great revival of private enterprise was ex enced.

The number of dwellings for which the pr builders' subsidy had been made in 1921, and 1923 was 25,281, 29,946 and 33,366 pectively.

Altogether, since the Housing Act came force 225,193 houses had been built by authorities, public utility societies, and pr persons.

On January 1, 1924, more than 2 dwellings were under construction. On A 1924, more than 12,000 dwellings were u construction without financial support complete revival of private enterprise, how is obstructed by difficulties as regards c



Wages of Bricklayers and Carpenters in Amsterdam.

For this reason a number of local auth had established a municipal mortgage which granted credits and mortgages for ing on municipal leasehold grounds. A difficulty as regarded credit was caused b restrictions which depreciated the value dwellings, so that as a rule this value was than the actual building cost. In ord meet these difficulties the Government resolved to supply second mortgages, whi builders must try to get their first mortg another way. The second mortgage amount to 20 per cent. of the buildin and to the maximum of 600 guilders. amount of first and second mortgage to are not to surpass 85 per cent. of the esti cost of a completed house.

CHITECTS' & BUILDERS' INQUIRY BUREAU

glad to give questions and answers, but cannot ponsibility for contributed replies, especially on ers.

e appeal to our correspondents to submit their paper of a size easily filed, and written as possible, or better still, in typescript.—ED.

Made Ground.

Y TO MR. SOUTH, NOVEMBER 14.]

I think Mr. South is hardly in order in hat the weight of the superstructure in accordance with the carrying power oil. As a rule an architect is given a a certain size of structure to place and it is part of his problem to so hat superstructure that its weight is ver so much of the soil as its strength ess demands, or alternatively to increase ng capacity of the soil by piling. It is to build soundly the same plan of on a rock or a marsh. The difference hat in the one case the rock will be and the walls started direct therefrom, the other the weight of the building pread over a large area by means of a the ground consolidated by means or ing.

calculate the weights of the various your building, then determine the apacity of your ground, and treat your ns accordingly.

"PRACTICE."

"Hot Plates."

The question of adequate heating ents for plates and dishes on a gas is reached a crisis, and is a source of ouble to many housewives who cook I should be more than obliged if er could help solve this difficulty. I inted with many of the modern gas but excellent as they are in many this lack of plate accommodation is parent. The usual space allowed is or anyone who values their dinner If a rack is fixed above the cooker, I can see, very little heat reaches it. ny method of improving on this and so oking by gas a pleasure?

"BAFFLED."

Old Beams.

TO "INQUIRER," NOVEMBER 21.]

here are to be found some very useful the restoration of old work in the pamphlet upon the Restoration of Monuments, issued from the office of , price 9d. "ASSOCIATE."

Damp Walls.

O "HOUSEHOLDER," NOVEMBER 21.]

Your correspondent should consult a chitect, in order that the real cause of e may be correctly diagnosed and steps remedy it. It is almost impossible to n opinion from the data given, and it most simple matter, such as an eaves ked and splashing over, or an overflow ping, or merely a case for re-pointing of the wall. Whatever it is, the cause moved and the wall allowed to dry out sting further money or re-plastering orating. "M.A."

Brick Footings.

TO "PROVINCIAL," NOVEMBER 14.]

h reply to "Provincial." The District has no power in his own discretion to the omission of brick footings.

9 of First Schedule to L.B.A., 1894, s: "Unless with the consent of the ery wall other than a wall carried on mer shall have footings. . . ." Your lient's course would be to make application to the L.C.C. for its consent to the omission of the footings.

The writer recently endeavoured to obtain consent, amongst other things, to the omission of brick footings to simple one-story garages, without success. It has been repeatedly shown that footings may be safely dispensed with in many cases, and it is to be hoped that sufficient pressure will be brought to bear in the near future which will result in amendments to meet the economic and practical needs of the present day, and also to avoid glaring inconsistencies in methods adopted by authoritative bodies. Compare the law relating to footings under the L.B.A. with clause 37 of the standard specification for State-aided housing (*The Builder*, September 12, 1919):—

"Footings.—No brick footings are to be provided to any walls."

"LONDON."

Hollow Walls.

SIR,—The correspondence you are publishing with regard to defective hollow walls is timely, for I notice that a very large proportion of small houses are now being erected whose outer walls consist of two half-brick skins, bound together by "galvanised" iron ties. It is, of course, exceedingly difficult to get workmen to build such a wall well, for it is a matter which calls for much more care and thoroughness than the average workman is ever likely to give to it. In addition, there are the very considerable practical difficulties which occur at every point where there are windows, doors, &c.

But that is not all. The almost universally used galvanised iron tie is a perishable product. Everyone who has had experience of exposed galvanised iron knows that the ordinary commercial product can be given a life of ten years or less. I have known galvanised wire to lose its coating and rust in seven years. What is to prevent the galvanised tie from sharing the same fate, especially as mortar is almost invariably dropped on it to hold and convey water.

These things being so, I invite your readers to say what experience they have had of such hollow walls after a term of years. The subject is of great importance, for tens of millions of public money are being sunk in such walls. My own opinion is that, as usually built, they are unsound, but that careful building and the use of earthenware ties might completely change their character and make them desirable.

"L. C. M."

Church Buildings.

SIR,—I wonder if any reader could inform me of the current cost per cubic ft. of church buildings?

I have in mind the smaller type of brick-built church seating from 300 to 400.

"F. C. B."

Brushes.

[REPLY TO "NEMO," NOVEMBER 28.]

SIR,—No. You have clinched the bargain, which is supposed to include tear and wear of brushes and plant.

JOHN M. FIFE.

SIR,—Brushes would come under the head of plant, depreciation of which should be accounted for in the establishment charges, the percentage allowed for which should be largely assessed by previous figures of experience in the business. It is assumed that the agreed percentage of 15 per cent. was to cover builders' profit and establishment charges. I am afraid your correspondent will have to make up his mind to grin and bear the loss (surely a very slight one) into which his oversight has involved him.

"ARCHITECT."

Building By-laws.

SIR,—I shall be much obliged if any of your readers could kindly inform me whether a sectional wooden building standing upon the ground but not in any way attached thereto is generally regarded as being a "building" to which local by-laws relating to construction, &c., would apply. The building referred to is used as a garage, and is the property of the owner of the land. It could be dismantled and re-erected complete on other land if need arose. Would the position be in any way affected if the said building were standing upon wheels (of small diameter)?

Gloucester. "A. G. L."

A Damp Party Wall.

[REPLY TO "BUILDER," NOVEMBER 28.]

SIR,—"Builder" does not state where the property is situated. If in London, it would be controlled by Statute Law (The London Building Act, 1894) regarding party walls; but if outside London the local authority may have by-laws in force made under Section 157 of the Public Health Act, 1875, which would affect his case. The Common Law appertains everywhere unless superseded by Statute Law. There is no question that the wall dividing B and C is a party wall, being a wall of which two adjoining owners are tenants in common. Although, as is stated, the wall is on B's ground, it is nevertheless a party wall, and B is subject to an easement or right to maintain it in its nature of a dividing wall between the two tenements. There is also no doubt that the defective rainwater pipe is for the common use of both B and C, and although it also is on B's property, C has an easement over it by implied grant or reservation; and cannot be restrained from letting surface water from his house pass to and down it. Now it is stated that owing to the rainwater pipe being out of repair and becoming stopped, and the water from the roofs of B and C not being able to get away, injury to the party wall has been caused. On C's side papering, &c., is required to arrest the continuance of the damage.

The principle of contributions by adjoining owners to the expense of erecting a party wall depends at Common Law upon contract express or implied. In this case there is an implied obligation on the part of B to keep the rainwater pipe clear, and to keep the wall in repair on his side of it. Further, the damage on C's side of the wall being directly due to B's negligence, C can recover from present owner of B the loss incurred by papering, &c. B cannot so deal with his tenement as to render the easement over it incapable of being enjoyed by C, and although, in general, B is not bound to repair to ensure such enjoyment by C, here there are special circumstances which impose on B a duty to repair. The present owner of B could, of course, in turn recover from the previous owner of B, unless the former had had notice of the defects, &c., when purchasing. Portions of the party fence are stated to be set back on C's land; this does not cause C to forfeit his ownership of the piece of land so cut off; and since he also owns the fence (by whomsoever it may have been erected), he can, if he wishes, set back the fence to the true dividing line between the two tenements, if that, as it appears, can be distinguished.

"PARTY WALL."

SIR,—In my opinion, if conditions as shown on plans of "Builder" have existed for 20 years, "B" has an easement of roof drainage over "C's" roof, and "C" has an easement for discharge of roof drainage of "B" and "C" over "B's" land—unless the R.W.P. enters "C" premises before reaching the ground. The projecting portion of wall against which the R.W.P. is fixed is "C's" external wall, as are the back addition walls (presumably built in place of fence). "B" should allow the water to take its course to drain, as "C" cannot trespass; also by allowing the "pipe" to be impeded he is preventing the enjoyment of his own easement. "C" is responsible for con-

dition of the R.W.P. and for the pointing and papering. The light iron fence, if in existence in position shown for above-mentioned period, has given "B" the enjoyment of the extra strip and "B" is entitled to that enjoyment.

If these conditions have not existed for the above period "B" is trespassing on "C's" land at the rear. But the roof drainage must stand as the construction of "A," "B," and "C" as one block with roof drainage as existing cannot now be altered without the consent of all parties, and the sale or purchase no doubt provides for *status quo*.

G. G. WIMBOURNE.

Girders.

[REPLY TO MR. R. C. ARNOLD, NOVEMBER 28.]

SIR,—The perforation of the web of a girder at the point of maximum bending moment does actually reduce its resistance to bending, though to a very slight degree. A small area of the web is included in the section modulus of a section, though in rough and ready calculation, with no tables to which reference can be made, it is usual to neglect the web for this purpose. Actually that portion of a ½ in. web on, say, a 20 ft. span lost by such a 3 in. perforation would reduce the bearing capacity by about ⅛th of a ton. A similar perforation at the point of maximum shear would, however, reduce the bearing capacity of the girder by about 9 tons, so that the choice of position for the perforation is obviously the centre, or near it, of the beam. There is actually a position just off the centre of the beam on each side where the maximum efficiency might be secured both as to bending or shear, but the loss of efficiency against bending is so slight as to be almost negligible.

"TABLES."

SIR,—The correct cutting of the 3 in. hole in the joist depends upon the span. For example, assuming a 14 in. by 6 in. by 46 lb. section, the safe distributed load at 24 ft. span amounts to 13.1 tons, resulting in a shear stress of 6.55 tons. Calculating out the net web area after deducting for the 3 in. hole, we have 3.7 sq. in. to resist this shear. The allowable shear stress to resist web buckling amounts to 4.3 tons to the sq. in. times 3-7 area giving a safe carrying capacity of 15.9 tons, approximately 2.5 times actual load to be carried. The minimum span for cutting at the supports is 10 ft. If the joist is below this span and heavily loaded, inquirer's suggestion holds good; above 10 ft. span cutting away at the centre means a reduction in carrying capacity, admittedly small, being near the neutral axis of the section.

F. C. D.

Decay in Stone.

SIR,—I should be very grateful if you could inform me where I can obtain reliable information and help as to the best means of preserving stone against decay. I should prefer this to come from private sources rather than from a commercial firm interested in the subject.

"CONSTANT READER."

Thickness of Lead.

SIR,—Can you inform me of the respective thicknesses of sheet lead of 4 lbs., 5 lbs., and 6 lbs. weight, and also of the best method of measuring the same. It is a matter upon which a supervising architect can be very easily deceived if his experience is limited like my own.

"YOUNG ARCHITECT."

Wall Paper.

SIR,—I have been under the impression that wall papers are of a standard size of 12 yds. long to the piece by 21 in., and had ordered material accordingly, only to find myself sadly short on the job. I then discovered that the pieces were only 8 yds. long and 18 in. wide. Surely this is an unusual size?

"AMATEUR."

BUILDING CONTRACTS

CAPTAIN W. T. CRESWELL, Barrister-at-Law, recently gave a special lecture at the College of Estate Management on "Building Contracts."

A building contract or agreement was, he said, a legally binding instrument which had for its subject matter the conditions governing the erection of a building, and by which one person undertook, for a consideration, to erect for another person the said works in conformity with the said conditions. The terms "Contract" and "Agreement" had the same legal significance; but, in practice, "Building Contract" had come to be used where the work to be done was for the use and benefit of the landowner; whereas, when the intention was that a lease, or other interest in the land, was to be immediately granted to the contractor on completion of the building, then the instrument was called a "Building Agreement." The term "Contractor" was popularly applied only to persons in a large way of business, but legally, any person entering on a contract or agreement to carry out work, for a consideration, was a contractor.

The usual course was that the employer or prospective building owner invited lump sum tenders, providing plans, drawings and specification (and sometimes bills of quantities) giving full details of the work proposed, so that contractors might prepare satisfactory estimates for tendering. The most difficult task in preparing these estimates was to compute the "on costs" item. That was the sum required to be laid out before the actual work of construction began. The cost of labour, materials, and the contractor's profits were more easily ascertainable. In the case of a measurement contract the "on costs" must be proportionately distributed amongst the schedule items. There was ample opportunity for anyone who had the ability to do these things.

Tenders were legally "invitations to treat," or offers to receive offers, and did not bind the person inviting them. Therefore, though it was customary to state that the employer did not bind himself to accept the lowest or any tender, this precaution was not essential to his freedom to reject all. When the offer or tender had been sent to the employer, and he had accepted, and not until then, the contract became binding on both parties; the contractor might, however, recall his tender up to the moment when acceptance could be proved to have been sent or given to him. In order that a contract might be legally binding, the offer thereby defined and accepted must refer to a fixed consideration; though that consideration need not necessarily be of money, but might be wholly or partly of "kind." The exception to this rule, however, occurred when the contract was under the seal of a corporation, in which circumstances the remuneration or consideration need not be definitely named. If a date were named in the invitation, at which the offers would be accepted or rejected, the decision must be made promptly, or the tenders could be revoked. If no time was fixed, then only reasonable delay could be claimed, or the employer might for a further consideration contract for the holding over of all or any of the tenders received during the further period. Proof of posting a strayed or delayed letter of acceptance was final evidence; also, acceptance could be alleged if either party had shown by his conduct that he intended to accept. The same restrictions applied to revocation of a tender.

In a ruling case, Croshaw *v.* Pritchard, the contractor had sent in a letter headed "Estimate." Finding later that an error had been made, he sought to revoke his offer, as being only an estimate. The employer refused to comply, and was able, in an action in court, to recover from this contractor the sum in excess of this "estimate" which he, the employer, had paid to another contractor to complete the work. But release from a contract had been given by the courts error was of such magnitude tha obvious to a reasonably minded pe was always open to the contractor in his tender any additional conditio should govern his carrying out of If he tendered without reservation bound by the terms of the contrac the other hand, the employer did his unwillingness to accept the co conditions of service, these condition part of the contract.

A tender must be definite—for in it were advertised that the lowest ten be accepted, and a person offered to "at £200 less than the lowest name that was not a bona-fide tender; and tractor, having named the lowest actu could claim the job.

The documents at first laid before tractor were not necessarily a formal This document was often drawn u but all that was necessary, to esta existence of a contract, was to prove parties had "a contracting mind" tain date. Misrepresentation by the or his authorised agent released the c from his bond; whilst acceptance b authorised agent did not bind the emp an architect accepted a tender on be client, he should always state that contract was to be signed later, and it was done. The stamping of within prescribed periods was leg manded, and a heavy penalty was im non-stamping.

It was perfectly legal for several to confer amongst themselves and to conditions whereby one of their numbe tender, and the others abstain on that they should provide part of the materials asked for, or abstain altoge long only as their arrangements v against public policy, or in restraint they were legally binding.

An interesting point was made in tinction of "liquidated damages "penalties"—two terms often interchanged in building contracts. dated damages" were fines which and evidently were, ascertained by tracting parties before signing the "Penalties" were fines of uncert and did not assess the loss, but were as security for the due performanc contract. Whichever term had been the phraseology of the contract, t would, if necessary, correct it in c with these definitions. The point b "liquidated damages" were re in the exact amount named, "penalties" might be recover on the assessment of the court in r the actual damage or loss sustained penalty clause for delay in comple building contract, the fines should "liquidated damages," and in that c not be interfered with by the court.

Town Planning.

The Ministry of Health state tha of the general importance of town not only to local authorities and the but also to private interests concern development of land, the part of th Report of the Ministry of Health for which deals with this subject has lished separately.

The report contains a stater only of the position of town schemes throughout the country at t the year and of the progress of regi ning, but also of the attitude of the on a number of points of general i which have arisen in connection v planning and with appeals relating t developments.

Copies of the publication may be price 6d., direct from H.M.S.O.

THE BUILDING TRADE

UICK-HARDENING ORTLAND CEMENT

ew of the great saving in time and, , of money which could be effected ent were available which would harden idly than the Portland cement we know great deal of attention has been given roduction of a quick-hardening cement ould not be prohibitive in price for building and constructional purposes. derable amount of research in this has been undertaken recently by manufacturers in this country, as a which the Cement Marketing Co., Ltd., nd House, Tothill-street, S.W.1, are on the market a new quick-hardening cement of the "Ferrocrete" brand.

s of tests on this new cement is now dertaken at the City and Guilds En- College at South Kensington, under tion of Professor Dixon. A number of nd cubes were cast on Monday last best ordinary Portland cement and the ck-hardening Portland cement, the ne being to test two of each type at 2 days, 4 days, 7 days, 28 days, and nths approximately. The beams are g by 10½ in. deep by 6 in. thick for ose of the test, supported on knife 6 in. from each end and the load t a point 2 ft. 6 in. each way from the The beams were designed by Dr. ber, O.B.E., D.Sc., and are reinforced n. rods.

'days' and 4 days' tests were made on ay and Friday last week, and the ests on Monday last.

erage results of the beam tests so far ut are approximately as follows:—

	Age 54 hours. lbs.	Age 100 hours. lbs.	Age 7 days. lbs.
Cement	4,000	7,000	9,260
rdening			
ete ..	14,000	19,000	21,000

sults of the tests on 6 in. cubes so far oximately as follows:—

	Age 56 hours. lbs. per sq. in.	Age 100 hours. lbs. per sq. in.	Age 7 days. lbs. per sq. in.
Cement	700	1,200	1,050
rdening			
ete ..	2,450	4,000	5,100

ams and cubes were all made of a ix by the same workmen and of the regates, the only difference being in nt.

thus be seen that the new quick- cement under practical conditions greater strength at 48 hours than is by the British Standard Specification s, and as this is a true Portland cement th will undoubtedly be maintained and with age. It is an entirely British pro- the price, we understand, will be not n 25 per cent. more than best quality ortland cements. It is of interest to this new quick-hardening cement is d by the Westminster City Council in , where the work of reconstructing part d foundation commenced on Monday; ps in road works that the greatest use nd for the material, and the inconveni- ed by roads being "up" for lengthy lleviated, for with such a cement it possible to lay the wood blocks or face the day after the concrete has ed. In building construction, too, a ith such rapid-hardening properties rmit of more speedy erection in many , and is likely to give an impetus to concrete construction, which has een somewhat handicapped on account e required to allow shuttering to be

APPRENTICES IN THE BUILDING INDUSTRY

THE following scheme for the training of apprentices in the building industry was submitted by Councillor Mitchell (Manchester City Council) to a Conference of Lancashire and Cheshire local authorities, and has now the unanimous approval of conferences organised by the National Housing and Town-Planning Council, representing Yorkshire, Lancashire and Cheshire, Midlands, North-East Coast, and the West of England.

The objects of the scheme are to co-ordinate by means of a committee the functions of the local education authority as to the technical training of youths entering the building industry with those of the Manchester, Salford and District Building Trades Apprenticeship Joint Committee, and to secure (*a*) the efficient training of apprentices in both the theory and practice of the craft, and (*b*) the continuance of such training through all the stages of apprenticeship.

The scheme would be controlled by a committee consisting of twenty-four representatives, selected as follows: (*a*) Four to be appointed by the Education Committee of the Manchester City Council; (*b*) sixteen by the Manchester, Salford and District Building Trades Apprenticeship Joint Council; (*c*) four by the Housing Committee of the Manchester City Council.

The committee would from time to time consult with the Manchester, Salford and District Building Trades Apprenticeship Joint Council as to the number of apprentices required to be trained in the several branches of the industry, and of the steps to be taken to secure the necessary number of apprentices. They would also keep a panel of employers willing to train apprentices, and advise as to the conditions of apprenticeship and agreements between employers and indentured apprentices. The number of apprentices to be trained under the scheme in any one year would be estimated annually by the committee, who would have power to make arrangements for securing the objects of this scheme as they might deem necessary.

The scheme would be available to youths resident within the City of Manchester between the "school leaving age" and 20 years. Youths under the age of 16 would be required to serve a probationary period of not less than six months before articles of apprenticeship were completed. Applicants before being admitted as probationers would satisfy the Committee of their fitness for the craft selected, and afterwards the Education Committee of their ability to benefit by the technical education to be provided. Youths desiring to enter the industry after attaining the age of 16 would satisfy the committee of their ability to become efficient journeymen within a period not exceeding four years from the date of their apprenticeship.

Training would be available as follows: (*a*) Technical training provided by the Manchester Education Committee under the Regulations of the Board of Education; and (*b*) practical training provided by employers.

Youths admitted under the scheme would observe the following conditions, namely: (*a*) Attend on days required at the centre where technical instruction is to be given; and (*b*) become indentured as the committee may approve, abide by the terms of such indentures, and where necessary be willing to be transferred to another employer as the committee might determine.

The apprenticeship period, in the case of youths under the age of 16 years, would begin at the end of the probationary period, and in other cases on such date as the Committee might determine. The rate of pay for probationers and apprentices would be that fixed by the Manchester, Salford and District Building Trades Apprenticeship Joint Council. Where the application of a youth above the age of 16 years were approved, and he was subsequently indentured, the rate of pay might be varied by arrangement between the Committee and the Joint Council.

No apprentice would be required or permitted to work overtime during the first three years of his apprenticeship, or when his attendance at a centre of instruction was required, and in no case until he had attained the age of 17 years, or contrary to the decision of the Joint Committee. Where overtime was worked the apprentice would be paid for the time worked at a rate proportionate to the increase allowed to journeymen in the same craft.

The rate of wages would start at 10 per cent. of the journeyman's rate at the age of 14 years, increasing every six months until 70 per cent. of the journeyman's rate was reached at the age of 21 years.

NATIONAL HOUSE BUILDING COMMITTEE

THE Ministry of Health state that on November 27 the Minister of Health and the Secretary for Scotland received a deputation from the National House Building Committee that was set up by Mr. Wheatley to assist him in carrying out the scheme embodied in the Housing Act of last Session. The deputation consisted of: Messrs. W. H. Nicholls, Barron, Strange, Coppock, and White.

Mr. Nicholls, on behalf of the deputation, said that their object in seeing the Minister was to discover whether they wanted the Committee to continue in being and carry on the work of arranging for the augmentation of skilled craftsmen in the building trade, with which they had already made considerable progress. They felt themselves that it was useless for them to continue in being if the Government contemplated any sudden reversal of housing policy or any slowing down of the provision of houses. On the other hand, they felt that they could make a valuable contribution to the solution of the housing problem if the present Government intended to carry on in its essentials the scheme which had been started by the late Government.

Mr. Chamberlain, replying to the deputation, said that he thought nothing was more likely to hinder an early solution of the housing problem than a series of sudden reversals of policy, and he did not contemplate making any violent changes in the existing legislative provisions. There was no question that the provision of houses must be pressed on as rapidly as possible, and the immediate problem was the augmentation of the supplies of labour and materials. To this end he agreed that the Committee could make a valuable contribution, and while thanking them for the work that they had already done he assured them that he was most anxious for it to continue and would give them every support possible. The question of the progress that had already been made and the contemplated procedure was briefly discussed.

New Stirling Infirmary.

Proposals for a new infirmary for the town and district were made at the annual meeting recently of subscribers to Stirling Royal Infirmary. Mr. James Millar, architect, reported on a plan for extending the present infirmary by taking in the Girls' Industrial School and grounds; the estimated cost of the scheme was from £40,000 to £45,000, and the extension, when completed, might only suffice for the needs of the district for fifteen or twenty years. The question of an entirely new infirmary on a new site was then faced, and the cost ascertained to be from £65,000 to £70,000, exclusive of the cost of the site. After a full consideration of the schemes, the directors recommended the adoption of the larger proposal, being convinced that only in this way could they meet the needs of the district. The meeting unanimously approved of the scheme outlined by the directors.

PUBLIC WORKS AND THEIR CONSTRUCTION IN WINTER

By G. M. FLOOD, B.Sc.Eng., A.M.Inst.M. & C.E.

In view of the fact that public works form more than 25 per cent. of all construction, their proper control is therefore of the greatest importance in any programme to distribute general constructional activity more evenly throughout the year. The essential requirement for a good public policy is that contracts for public works should be let when the work can be performed economically and with the least possible interference with private construction. On analysis, it will be found that public improvements are rushed right along in the peaks of the annual building season, and further, that many public works are initiated without regard to the private demands upon the building and constructional industries.

The execution of public works is well adapted for long-range planning, for expansion in years of depression, and for slowing up in years of general business activity. It is equally possible and most desirable that public works should be planned with special regard to seasonal conditions, and that all work which is not urgently required be either held up until the peak season is passed, or started early enough to take advantage of the general mid-winter slump. With the intelligent use of new methods of construction and of protection of both men and buildings during the winter season, much of this work is well suited for economical prosecution during the winter season. That work which is not suitable to carry on actively during winter weather can still be planned so as to proceed at maximum capacity during the intermediate months rather than during peak periods in private work.

With reference to seasonal conditions, one obstacle that has been found to prevent such conscious scheduling is the limitation imposed either by statute or customary procedure in preparation for public works construction. Thus, where work is dependent upon legislation through Parliamentary agents and is dependent upon a Royal Assent, or by the simpler procedure, *i.e.*, a provisional order of the Board of Trade, it may not be invested with the authority of an Act of Parliament until late in May or June, and the work, if carried forward promptly, is likely to come within the peak of private building activity.

In many other instances the number of necessary legal steps which must be taken before the work can commence, and the length of time either required by law or made necessary by the procedure itself, so delay the work that it is considered necessary to rush it on to completion as rapidly as possible after the awarding of the contract. In cases of this sort, if the procedure could be simplified, or if each step were not dependent upon a preceding step, this delay would be eliminated and time enough remain so that construction could be scheduled from a seasonal standpoint and, though sometimes stretched out over a longer period, still permit completion at a date as early as under present practice. A very definite step to improve such situations is the provision, either general or specific, that funds be made available to administrative officials for the preparation of plans and specifications well in advance of the time actual construction is to begin, in order to reduce the delay after the appropriation is made.

The public administrative officials in charge of construction works can play an important part in making such changes as are indicated by the needs of economy and employment. Foresight in planning the work, the collection and use of information showing exactly what the seasonal trend is in construction of that particular kind, and the efforts made to change customary or legal requirements which operate to accentuate the seasonal tendency in their construction work, are having a considerable influence in the right direction. If the administrative officials in charge of public works construction were possessed of discretionary powers governing both the letting of the contract and the time limit within which work must be completed, they could effectively be made responsible for the practice of economies and the pursuit of a policy of relieving unemployment through the best timing of the work. Contractors on public works, as well as those on private work, can greatly assist by making a thorough study of the most successful methods employed in winter construction as well as of the problems of management and organisation involved.

Where there are opportunities to take advantages of lower prices of materials, and where greater efficiency is secured from labour during times when employment is less plentiful, the contractor has it in his power to encourage public work in off seasons by passing on these benefits in the form of lower bids. Since his overhead cost per job or unit of work is considerably lessened when his organisation is kept together throughout the year and his machinery and equipment are idle for a shorter period, he can, by taking on winter work, cut his customary margin of profit and still make more money as a result of the full year's work. Contractors, by their general attitude, their willingness to take work during the winter and perform it satisfactorily, and probable lower bids and other inducements, can exert a considerable influence upon the officials with whom contract letting rests, to the end that work shall be timed when it can be carried out most economically.

Amended, revised and new legislative measures will play an important part in bringing about a change in the present methods of handling public construction jobs, and it is only reasonable to assume that with stable government the Public Health Act and the various amending Acts will be revised, amended and consolidated with the Housing and Town-Planning Acts into a simple legislative measure, as near perfect as a combination of legal, engineering and architectural minds can bring it, *i.e.*, a "National Health Consolidation Act."

Where continuing appropriations for a particular kind of work are required in order that such work may be intelligently scheduled to come as largely as practicable in slack seasons, they should be provided. In some cases the granting of greater discretionary powers to the administrative officials in charge of work is needed, and where the legal requirements surrounding the methods of contract letting are unnecessarily complicated or obsolete active steps should be taken to change them. In cases of cities where construction funds are not available until the beginning of a fiscal year, or where construction work is dependent upon the Ministry of Health granting the necessary powers to obtain a loan, at a time which makes contract letting coincide with the peak in private letting, provision should be made for contracts to be let and work to start before the beginning of the fiscal year when the money is to become available.

Where changes are advocated by administrative officials in order to allow them to schedule their work more effectively, attention should be given to the seasonal conditions in question, and every possible allowance made, so that the construction year may be lengthened. In this problem of the seasonal aspects of public construction works the attitude of the general public is of the utmost importance. It is the general public which pays the bills for expensive construction during peak periods, and which suffers because of unemployment in slack times. An active interest in the whole subject, and realisation of the large losses and waste involved in a seven to ten months' building year, should result in bringing sufficient weight of opinion to bear, so that all concerned will be accept the new viewpoint.

The leadership of civic bodies w community, and of newspapers and ot agencies, would help in moulding tallising public sentiment, and would only in lower costs of construction efficient work, but in lessened unem during slack seasons, and in the el of such wasteful competitions for la materials between public and priva as was witnessed during the past three years every time the words ment subsidy" were mooted. Whi buildings and works for the use of and local governments are subject to climatic limitations as private build works, and, in addition, to limitation ing the authorisation and expend money, this field contains probably possibilities for off-season cons Although the amount of building of is small when compared with the to kinds of construction, yet the erect large public building in a small co is likely to have an important influ stabilising construction.

The result of public buildings so would be more economical construction the public and the private builder, overhead costs, actual savings to t payers, and diminished unemployme community during the winter period. a case where the real remedy lies in in the point of view of the public an legislative bodies and officials directly i of this construction work. Contract do this kind of work, ratepay civic organisations, and individuals, help to develop this point of view. T of such work carried on at the m possible speed during the winte slackening up when private dema greatest, would be very important, si are employed who would otherwise b one period of the year and are rele other purposes during the busiest sea

The construction of sewers and wa systems is another important type works in cities. This work is entirel doors and subject to the fullest e weather conditions. The argument severity of the climate is generally as making impossible the successful tion of such work during the winte number of cities with the most climates have a contrary experienc favourable experience of these latt seems to indicate that there are differe of view and different experiences in ing the same work under similar co This appears to show that the habi contractors and the attitude of those of the work need to be changed in carry on winter work of this kind suc That it can be done successfully is the cases mentioned above.

Until methods are changed as a experience, it is not unlikely that ex might not prove wholly successful. W experience to draw upon, with labour itself to new conditions, with the mo sive use of modern machinery for ex back filling and work of that kind. increased understanding of the pub served, it is probable that most of could successfully carry on this work out the year. Even in the cases wher desired actually to carry on outd during a period of two or three month deal can be accomplished adopting a organised programme.

During the winter months the con the pipes, special castings and mach be let, so that delivery is made in in part during the winter months. for pipe laying, building foundations be drawn up during the winter, so materials are received work may as soon as the season will permit. is definitely known that a certain pi struction is to be carried on in ep highly desirable that arrangements and orders given during the winter fo

pipe and other materials that will be

not only has the effect of enabling be started as soon as the season will but it has far-reaching effects in pipe and equipment manufacturers to their work more fully during what is ly an off season. In the case of cast-pe, at least, the winter is the most manufacturing season, and a policy er ordering would have far-reaching This is a case for the attention of mmediately in charge of public works character, and also of those adminis-officials who shape the policies of their ents. Some effort is bound to be re-to change existing habits, but if the ce of some cities is a true guide the us spent will have a widespread bene-fect.

certain, however, that the problems of tration, the training and organisation ur, the necessity for revised and d legislative measures affecting con-n, the proper control of contract letting, public and private works can be ically constructed, must be thoroughly and applied by the Government and overnment departments concerned if t progress is to be made in the ex-acute question of national housing.

Building Labour Augmentation.

recent meeting of the L.C.C. Major moved that it be referred to the Housing tee, the Education Committee, and the Committee on Unemployment to con-id report, in view of the deficiency of labour in the building trades and the ed prevalence of unemployment in other what action the Council can take, in co-n with the building trade employers and es or otherwise, to augment the supply of abour in the building trades available for ding of houses under the Housing Acts.

TEMPORARY BUILDINGS

Mr. Percy C. Culver, of Messrs. William Harbrow, Ltd., recently read a paper at the Northern Polytechnic on this subject. The lecturer first defined a temporary building as one which did not conform to the statutory requirements of the London Building Acts in London, or to the local by-laws elsewhere, so far as these by-laws related to construction. Buildings in this category could be erected under licence granted usually for three to five years, renewable at the discretion of the local authority. Temporary buildings, the lecturer stated, were popularly described as wooden huts or tin buildings and, therefore, it was well to recognise from the commencement that there were several classes of these buildings, ranging from those whose purpose would be filled in a relatively short time to others which were required for periods of fifty to sixty years. This difference in purpose led to substantial differences in construction, and to indicate these variations temporary buildings were classified under the following headings:—(*a*) The entirely timber building; (*b*) the iron building, which was a timber or steel fabric covered externally with galvanised steel sheeting; (*c*) the composite building, either constructed wholly of timber or a combination of steel stanchions and trusses and timber intermediate framing. In each case the framing forming the external walls would be covered with weather boarding, asbestos sheeting, plaster slabs, or lath and plaster, the internal walls and ceilings being finished with plaster slabs, lath and plaster, asbestos sheeting or one of the many types of wall boarding on the market. The roof of such a building would be covered with asbestos slating, ordinary slating, or red earthenware tiling; (*d*) the semi-permanent building, constructed with a skeleton framing of steel stanchions and trusses, and a filling to walls of 4½ in. brickwork or breeze concrete blocks. The roof would be covered with materials similar to those described under the heading of (*c*)—composite building.

In dealing with (*a*)—timber buildings—the lecturer referred to the fact that many examples of old timber buildings existed, constructed of English oak framing, weather boarded sides, and thatched or tiled roofs, and that some of these buildings had been in existence for more than 200 years.

In dealing with the iron building, the lecturer stated that the patenting of galvanised corrugated iron sheeting about 1829 quickly led to its adoption as an external covering. In modern practice the original iron sheet had given place to steel, and he had many experiences—some quite recently—where galvanised iron sheeting had been fixed for some forty years, and after being removed was found to be in extremely good condition. He pointed out the necessity for proper maintenance of the sheeting by regular painting, the length of the intervals being governed by the situation of the structure. Notes were given on standard practice in the proper fixing of this material and attention was drawn to the methods employed to prevent the entry of water over the heads of doors and windows, &c., and the methods employed in forming valleys in the roofs, fixing of skylights and ventilators.

After referring to the great variation between the weight of a brick wall and that of the wall of an iron building, the lecturer proceeded to deal with the question of foundations required for such a structure, and pointed out various methods which could be adopted which, whilst being economical in cost, permitted conformity with the various by-laws, this being specially necessary in cases where 6 in. of concrete over the site was obligatory. For buildings required only for a short period creosoted plates were mentioned as being sufficient. As conducive to economy and speed, the use of light cast iron columns was recommended where concrete over the site was a necessity.

Taking, as a basis, a hall measuring 60 ft. by 30 ft., a description was then given of the various sizes of scantling timber required in the construction of the walls, roof trusses, purlins, &c., mention being made of the various ways in which the timber framework could be prepared. It was emphasised that the standard practice of morticing and tenoning the framework was particularly advantageous in allowing the framework to be erected with the use of relatively few nails, and upon being dismantled the value of the timber would be greater than if the framework had been entirely nailed together. Where the mortice and tenon method was employed for buildings which had to be erected by foreign workmen abroad, a careful system of marking (which conformed to key plans) enabled those erecting the building to proceed without greater difficulty than a child building up a simple picture with blocks. Attention was directed to the advantage of employing three thicknesses of timber in the construction of "built-up" tie beams and principal rafters for large spans, with the main posts formed of two scantlings blocked apart to form a seating for the tie beams; also to the fact that owing to trade conditions the cost of steelwork varied considerably from time to time as compared with the cost of timber, and that it was important (where fire risks or other special conditions did not demand steel trusses) to consider the relative costs, the speed of manufacture, and other points of comparison between the steel and timber trusses for larger spans.

The advantages of the various materials of the composite buildings were explained, particular attention being drawn to the importance of the use of a backing board to all asbestos sheeting when used as an external covering. The economical advantages possessed by the semi-permanent building, as well as the gain to be obtained in the time required for construction were fully dealt with. The present need for economy emphasised the advantages of such buildings and enabled them to fulfil successfully many purposes for which heavier constructions had been hitherto adopted.

PARISON OF PRICES OF BUILDING MATERIALS WEEN AUGUST 4, 1914, AND DECEMBER 1, 1924

Material.	Aug. 4, 1914. £ s. d.	Nov. 11, 1918. £ s. d.	Nov. 1, 1924. £ s. d.	Dec. 1, 1924. £ s. d.	Rise or Fall during Month. (Per cent.)
Stocks	1 16 6	3 3 6	4 3 6	4 3 6	—
ns	1 14 0	2 7 8	2 13 3	2 13 3	—
l	13 0 0	17 17 6	23 0 0	23 0 0	—
Ballast	5 9	17 0	10 6	10 6	—
Sand	7 3	17 0	15 6	14 6	—6.45
(¼ in.)	—	15 0	14 0	12 9	—8.93
l Cement	1 17 0	3 8 0	2 18 0	2 18 0	—
Blue Lias Lime	1 0 0	2 2 6	2 4 6	2 4 6	—
one Lime	1 8 0	2 7 0	2 11 9	2 11 9	—
one	1 7½	1 7	2 9½	2 9½	—
l Stone	2 4½	2 10½	4 4	4 4	—
und Building Timber—					
11 in.	16 10 0	53 0 0	32 0 0	32 0 0	—
7 in.	13 0 0	46 0 0	23 0 0	23 0 0	—
11 in.	15 0 0	50 0 0	28 0 0	28 0 0	—
11 in.	—	51 0 0	28 0 0	28 0 0	—
7 in.	—	46 0 0	23 0 0	22 0 0	—4.35
4 in.	—	—	24 0 0	24 0 0	—
12 in.	—	—	37 12 6	37 12 6	—
12 in.	—	—	34 0 0	34 0 0	—
10 in.	—	—	25 12 6	25 12 6	—
10 in.	—	—	17 12 6	17 12 6	—
8 in.	—	—	13 15 0	13 15 0	—
sts	9 10 0	—	13 10 0	13 10 0	—
on Bars	9 0 0	16 10 0	13 10 0	13 10 0	—
teel Bars	9 5 0	21 0 0	12 0 0	12 0 0	—
rs	9 5 0	19 10 0	12 10 0	12 10 0	—
s	11 10 0	29 0 0	20 10 0	20 10 0	—
ad	22 15 0	40 0 0	47 10 0	51 0 0	+7.37
Sheet	2	7	3⅜	3⅜	—
„	3	8	5	5	—
„	3¼	9	6	6	—
seed Oil	2 4	8 4	4 4	4 4	—
ne	2 6	11 0	5 7	5 5	—3.10
English White Lead	30 5 0	60 10 0	57 0 0	59 0 0	+3.51
ead Paint	—	83 10 0	79 5 0	81 5 0	+2.52
d	28 10 0	47 0 0	47 10 0	52 10 0	+10·52

NEW BUILDINGS IN LONDON.

Euston-road.—A new public market is being built on a site in Euston-road, N.W.1, on the corner of Mabledon-place, with frontages of 280 ft. and 90 ft. respectively. The construction will be in brick on a steel frame. The roof will be in three spans and will be of asbestos cement tiles with patent glazing on the peaks of the roofs. The floors will be of concrete. Four entrances will be provided, fitted with collapsible gates. Glazed bricks will be used round each entrance, and along the lower part of the exterior walls. The upper part will be cemented. Parallel and transverse gangways will divide up the interior and there will be accommodation for 154 stalls. Water, sewerage, gas, and electric lighting will be laid on. Lavatory accommodation for both sexes will also be provided. The general contractors are Messrs. Kirk & Randall, Ltd., of 146, Grosvenor-road, S.W.1. The steelwork is being supplied and erected by Messrs. The Aston Construction Co., Ltd., Eagle Wharf-road, London, N.1. The electric lighting installation is being carried out by Messrs. Cecil Cooper & Co., Ltd., 14, Gloucester-road, S.W.7. Sanitary fittings, &c., are being supplied by Messrs. Stitson, White & Co., 102, Victoria-street, London, S.W.1. The architect is Mr. S. Gordon Jeeves, 4, George-street, Hanover-square, London, W.1. The quantity surveyor is Mr. W. H. Webber, 33, Furnival-street, London, E.C.4.

Regent-street.—New premises are to be built for the American Shoe Company in Regent-street, W.1. One section of the building is being carried out, and it is expected that work on the remaining portion will be started shortly. The new building will comprise shops and showrooms on the ground and first floors, with basements for storage, and five upper floors, suitable for offices, &c. Elaborate show and shop window fronts will be fitted, executed in bronze and art metal work and bordered in marble. The remainder of the principal elevations will be of Portland stone. The floors will be all carried on a steel framework and will be of fireproof materials. Heating, electric lighting, vacuum and sprinkler systems will be installed, The roof will be covered with slates placed on a concrete covering. The general contractors are Messrs. the Monnoyer British Construction Co., Ltd., of 6, New Burlington-street, London, W.1. The steelwork will be supplied by Messrs. The Astor Construction Co., Ltd., of Eagle Wharf-road, Hoxton, N.1. The architects are Messrs. Henry Tanner, of 3, Hanover-square, London, W.1.

Thornton Heath.—Funds are being raised for the provision of a new Wesleyan Church School at Thornton Heath, Surrey. It is contemplated to raise sufficient money to erect a building to accommodate about 500 children. A brick building, with slated or tiled roof and wooden floors, with central heating, and electric light, is suggested, costing about £5,000. Plans have been prepared by Mr. F. P. Bailey, 17, Norman-road, Thornton Heath.

King William-street.—It is proposed to erect a large office building on the vacant site in Arthur-street and Miles-lane, King William-street, E.C.2, to be known as "Arthur House." The new building will be erected on a steel framework with elevations in Portland stone. There will be five main floors with a further story in a mansard roof, which will be covered with concrete and Cumberland slates. Heating and hot-water supplies, electric lighting equipment, &c., and passenger and goods lifts will be installed. The architects are Messrs. Gunton & Gunton, of Finsbury House, Blomfield-street, E.C.2. The site covers an area of 16,000 square ft., and the estimated cost of the building is £130,000.

Harrow.—The proprietors of the *Harrow Observer* propose to extend their premises in Station-road, Harrow. The new block will be of three stories and will be erected in brick with a certain amount of steelwork to carry the principal loads. The frontage will be about 20 ft. and the area will extend back to 60 ft. from the road. A shop front will be installed on the ground floor. Wood blocks will be used on the ground and top floors, with ordinary wood boarding for the first floor. Electric lighting and central heating will be installed. Extensive top lights will be fitted into the roof. The architect is Mr. S. Poynton Taylor, of Roxeth Hill, Harrow.

Ebury-street.—A new building is to be erected alongside the Goring Hotel, in Ebury-street, Victoria, S.W. 1, as an extension of the hotel. The addition will cover an area of about 1,200 sq. ft., and will have frontages both in Ebury-street and in Victoria-square. A brick structure is to be evolved, so as to be in conformity with the existing hotel, with the introduction of stone dressings for doorways, cills and jambs to windows, strings, cornice, &c. Steel frame work will carry the weight of the building and the floors, which will be of reinforced concrete. Electric lighting and power will be introduced, and heating and hot-water services laid on. A service lift will run between the kitchens and dining room. The architects are Messrs. Giles, Gough & Trollope, of 28, Craven-street, Strand, London, W.C.

Bishopsgate.—New headquarters are to be built in Bishopsgate, E.C.3, for the Hudson's Bay Co. The site has a frontage on each side of St. Helen's-place, and the feature of the new building is the arched entrance-way into St. Helen's-place. The plans show a block of premises extending to seven stories, with basements requiring excavation to a depth of 40 ft. A comprehensive hot-water heating system, operated by oil-fired boilers, will be installed. Two back hoists are also provided for. The elevation to Bishopsgate will be carried out in Portland and Bath stone, richly carved and chased and ornamented with bronze art metal work and castings. The steel work will amount to about 1,000 tons. The windows will mostly be of steel. The roof will be partly asphalted and partly slated, and will also contain two large water tanks. The interior woodwork will be carried out in Italian, Burma, Austrian, and English hardwoods. Ventilation will be provided by an air-washing plant, and wiring for vacuum cleaner installations will be made. The electrical installation will include lighting and power, telephones, burglar and fire alarms, clocks and bells. The floors will be of fireproof, hollow tile ware, reinforced with steel and levelled with concrete. Three large ornamental lamps and a two-dialed clock will be fixed to the street frontage. The architects are Messrs. Mewes & Davis, of 22, Conduit-street, London, W. 1. The consulting engineer is Dr. Oscar Faber, of 5, South-street, Finsbury-pavement, E.C. 2.

Leadenhall-street.—Work has started on the foundations for the new building in Leadenhall-street and Lime-street, E.C. 3, for the Corporation of Lloyds. The site, which covers an area of about one acre, has now been cleared of old buildings, and the first contract—for the foundations—has been given to Messrs. John Mowlem & Co., Ltd., of Ebury Bridge-road, Westminster, S.W. 1. The new building will be of six stories and two basements will be constructed below ground. A steel-frame building is proposed with the street frontages executed in Portland stone. The architect is Sir Edwin Cooper, F.R.I.B.A., of 4, Verulam-buildings, Gray's Inn, London, W.C.

Regent's Canal.—The Gas Light and Coke Co are to construct a large coaling wharf on the Regent's Canal Dock, to be equipped for unloading colliers, &c. Plans have been prepared by Messrs. Rendel, Palmer & Tritton, of 12-14, Dartmouth-street, Westminster, S.W. 1, for a structure, with a deck of reinforced concrete, supported on steel cylinders, filled with concrete, resting on a gravel foundation. The wharf will be nearly 200 ft. long and will be equipped with two electrically-operated coal transporters, fitted with grabs.

Golder's Green.—Among the building work proceeding at Golders Green is a scheme for the erection of two blocks of shops and flats in Finchley-road. Each block will consist of eleven shops, over which will be two stories of flats. The buildings will be in brick with best facing stocks and stone dressings for the str tion. The floors will be of concrete an will be flat and asphalted. A balus run along the top of each block, the of the proposal being about £30,000. tects are Messrs. North, Robin & W 35-39, Maddox-street, London, W. 1.

Exhibition-road.—A large site in E road, South Kensington, S.W. 7, chosen for the erection of the new Museum, which is at present housed in off Piccadilly, W. 1. The new museum a building of three stories and baser will be carried out in Portland stone, tecture conforming to that of the Natural History Museum. The roo flat and asphalted. Large lantern l illuminate the upper floor. The Go have already voted a provisional es £270,000 towards the cost, and plans being prepared by H.M. Office of W Storey's-gate, Westminster, S.W. 1.

Regent-street.—A large block of s offices and showrooms is to be buil site in Regent-street, W. 1, at No A fire-proof building of six floors and with a Portland stone front elevation, to the Crown's Reconstruction Scheme thoroughfare, is proposed. The con will be on the steel frame principle and will be of hollow tile and concrete. The be of Mansard type, of concrete and covered with Westmorland slates. Th of the ground floor will be richly tr fibrous plaster decorations, and will with art metal shop fronts to suit the tenants. The upper floors will be fi plain plaster and distempered. The will all be of the steel or cast-iron type. ate entrance will be provided, to give the upper stories, and a lift will b Electric lighting, central heating, and cleaning plant will be installed. F lights will be provided for the basemen together with the foundations, will b inforced concrete construction, finish asphalte. The architects are Messrs Cook & Darbyshire, of 43, Great Marl street, London, W. 1. The contractor Messrs. Arthur Vigor, Ltd., of 20, Knigh London, S.W.

Hammersmith.—It is proposed to the present licensed premises in Dall Hammersmith, W. 6, owned by Messrs & Co., Ltd., and to erect an entirely modern public house, to be called the of Wales." The cost of the propo premises is £10,000. Brick will be p used for the exterior walls, whilst th roof will be covered with tiles. Accom will be allocated to a private and sa several public bars, and a luncheo The joinery and counter and partition be carried out in mahogany and o woods, whilst the flooring will also be Cellarage will be provided and a da laid. Electric lighting will be used. P been prepared by the owners' archite Kirby.

Cornhill.—A block of office premises built on the site of Nos. 45, 46 & 47 E.C. 3. A building of five stories and with a frontage of about 65 ft. is The elevations will be carried out in stone with a granite base. The floors fireproof construction. The ground have a height of about 17 ft. Centr and electric lighting will be installed. will give access to basement and all fl roof will be asphalted and provided escape staircase. The steel framewo supplied by Messrs. Redpath, Brow Ltd., of 3, Laurence Pounteney-hill E.C. 3. The general contractors a Trollope & Colls, Ltd., of 5, Coler London, E.C. 2. The architects a Campbell Jones, Son & Smithers, of 9. hill, Cannon-street, London, E.C.

Pall-mall.—Messrs. Moreland, Hay Ltd., inform us that they have bee tractors for the steelwork for thi throughout, and not as stated in o last week.

HE INSTITUTION OF HEATING AND VENTILATING ENGINEERS

r. H. W. S. Martin recently read a paper on r Washers and Air Filters," at a meeting he Institution of Heating and Ventilating neers, at the Engineers' Club, London, . The lecturer said that in any of their towns the necessity for washing and ing the air to cleanse and remove the soot smoke before passing it into a public ding was fully recognised. The smoke, of se, should never be allowed to be put into air, but they had not yet generally realised great harm done by this pollution. Very n, possibly, the health authorities would st on the smoke nuisance being stopped, or east very greatly mitigated, but until that e came air washers or filtering apparatus in nection with a plenum heating and ventilat- plant for a public building was essential. most desirable conditions for a public ding required humidity for the air. The rt, dry cough heard repeatedly in a theatre hurch was a clear indication that the air too dry. Taking the lowest winter tem- ture obtained in England, and the Home ce humidity regulations for cotton factories, ch might be regarded as the maximum rable, the degree of humidity to be aimed nd regarded as the standard condition for lth lay between those two extremes. It , however, the medical man who should rmine what was the best and most healthful dard condition, and then the heating and ilating engineer should design his apparatus naintain that condition.

TRADE NEWS

he Casskaid Barrel Skid, manufactured and ributed by Messrs. R. Wickens & Sons, of el, Tonbridge, Kent, is, they state, the most ul all-round appliance for handling 40-gallon s on the market. They claim that it will he work of four men, and that it is simple, g and cheap. With the aid of this skid s can be either conveniently unloaded from cles or emptied from the side.

e have received from Messrs. The Elsan nufacturing Co., 34–5, High Holborn, some resting particulars regarding their indoor tary appliances. They claim—and it is orted by the Institute of Hygiene—that Elsan Closet makes sanitary methods ible for those unable to depend on any public em of drainage. It is portable, well- gned, and can be easily fixed. They state those interested in the promotion of hygiene bound to be interested in this invention. ils are given of a number of installations.

e have received from Messrs. General ors, Ltd., London. a brochure dealing with G.M.C. trucks. This firm are, as is well n, the largest makers of high-class cars and ks in the world, and produce the Buick, illac, Chevrolet, and Oldsmobile cars. claim that in the G.M.C. trucks they have rporated at least seven distinct pioneer ures which give these trucks an unchallenge- superiority over any other truck at present he market. The brochure incidentally gives intending truck purchaser an invaluable dard by which to measure up the qualities y motor truck. General Motors, Ltd.. say kly that in their opinion the more an nding purchaser knows about motor trucks more certainly will such a man be attracted G.M.C. trucks.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters. Joiners	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/4½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8½	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam. (Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London :—								
within 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
From 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

(For rates of wages in the Building Trade in Scotland, see page 919.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

DECEMBER 6.—**Flegg.**—HOUSES.—For erection of non-parlour houses at Martham (two pairs), Hemsby (pair), Winterton (pair), Repps (pair), Ormesby St. Michael (pair), Burgh St. Margaret (pair), Rollesby (pair), for the E. & W. R.D.C. Mr. R. Gournay Ferrier, Clerk, 16, South Quay, Great Yarmouth. Deposit 10s. 6d.

DECEMBER 6.—**Hove.**—HOUSES.—For erecting 22 small houses in Portland-road, and 70 at the Housing Estate in Old Shoreham-road, for the Borough of Hove. Borough Surveyor's Office, Hove. Deposit £1 1s.

DECEMBER 6.—**Stafford.**—ALTERATIONS.—For alterations and additions to the fire station, for the T.C. Mr. H. H. Battle, Town Clerk, Borough Hall. Deposit £1 1s.

DECEMBER 6.—**Stevenage.**—HOUSES.—For erection of 32 houses, for the U.D.C. Mr. Reg. A. Gandy, M.Inst.M. and Cy.E., Engineer and Surveyor, Council Offices, Stevenage. Deposit £2 2s.

DECEMBER 8.—**Ashton-in-Makerfield.**—DISTEMPERING.—For papering and distempering of the rooms of 80 houses, for the U.D.C. Mr. A. Sykes, Clerk to the Council, Council Offices. Deposit £1 1s.

DECEMBER 8.—**Aylsham.**—REPAIRS.—For repairs and alterations to the old outside Infirmary block at the Workhouse, for the B.G. Mr. H. J. Gidney, Clerk.

DECEMBER 8.—**Barnes.**—COTTAGE.—Erection of a keeper's cottage at Sheen Common, East Sheen, for the U.D.C. of Barnes. Mr. G. Bruce Tomes, A.M.Inst. C.E., Surveyor to the Council, The Council House, High-street, Mortlake, S.W.14.

DECEMBER 8.—**Bridgend.**—ALTERATIONS.—For alterations at the Cottage Homes, for the B.G. Mr. R. Harmar Cox, Clerk to the Guardians, Union Offices, Bridgend.

DECEMBER 8.—**Dublin.**—ADDITIONS.—For erection and completion of a new sanitary block and other works at the Christian Brothers' Schools, North Brunswick-street, for the Rev. Brother Curley, Superior. Mr. J. J. Robinson, architect, 8, Merrion-square. Deposit £3 3s.

DECEMBER 8.—**Farnborough.**—COTTAGES.—For erection of six cottages in Queen's-road for the U.D.C. Mr. J. E. Hargreaves, Surveyor, Town Hall. Deposit £1.

DECEMBER 8.—**Haslingden.**—HOME.—For erection of a new nurses' home at their Moorland Infirmary, Rawtenstall, for the B.G. Mr. A. N. Rothwell, Clerk to the Guardians, Union Offices, Rawtenstall. Deposit £2 2s.

DECEMBER 8.—**London, N.1.**—ALTERATIONS AND CONVERSION.—Alterations and conversion into offices and garage of No. 2, Burnard-place, Eden-grove, Holloway-road, Islington, N.1, for the Metropolitan Borough Council of Islington. Mr. E. C. P. Monson, Council's Architect, Finsbury Pavement House, 120, Moorgate, London, E.C.2. Deposit £2.

DECEMBER 8.—**London, N.1.**—VARIOUS WORKS.—Works in connection with the erection of the extension of the Islington Municipal Offices, Tyndale-place, Upper-street, London, N.1, hardwood joinery, electric installation, strong room doors, metal shelving, bronze grilles and caps. Mr. E. C. P. Monson, Council's Architect, Finsbury Pavement House, 120, Moorgate, London, E.C.2, upon payment of a deposit of £1 for each of the above items.

DECEMBER 8.—**Long Ashton.**—HOUSES.—For erection of 10 houses at Claverham, for the R.D.C. Mr. A. E. Hicks, Clerk to the Council, Flax Bourton, Bristol.

DECEMBER 8.—**Naas.**—REPAIRS.—For new works and repairs to cottages in Scheme No. 45, Naas No. 1 Rural District. The Engineer, Sailors and Soldiers Department, Colonial Office (Irish Branch), 30, Lower Fitzwilliam-street, Dublin. Deposit £1 1s.

DECEMBER 8.—**Penistone.**—ALTERATIONS.—For adaptation of certain rooms and buildings as changing room, library and cycle sheds, for the West Riding E.C. Education Department, County Hall, Wakefield.

DECEMBER 8.—**Reigate.**—COTTAGE.—For erection of a foreman's cottage at the Council's depot, Kingswood Cross, Kingswood, for the R.D.C. Mr. F. C. Morrison, Clerk, 46, High-street.

DECEMBER 8.—**Upton Pyne.**—BUILDING.—For erection of a small administrative building, for the Devon C.C. County Architect (Public Health), 1, Blackall-road, Exeter. Deposit £1 1s.

DECEMBER 8.—**Wokingham.**—ALTERATIONS.—For alterations and additions at the rear of the premises, Rose-street, for the Wesleyan Chapel. Mr. F. F. Burland, Trustees' Secretary.

DECEMBER 8.—**Worsborough.**—GARAGE.—For construction of a garage at Furnace-yard, Worsborough Bridge, for the U.D.C. Mr. A. Clegg, Clerk to the Council, 31, Regent-street, Barnsley. Deposit £1 1s.

DECEMBER 9.—**Aberdeen.**—SHED.—For works in connection with the erection of a tramway car shed at King-street, as follows: Mason, iron and steel, carpenter, cement concrete, slater, plumber, heating, and painter works, for the T.C. Mr. J. Gordon, Burgh Surveyor, Burgh Surveyor's Office, Town House.

✱DECEMBER 9.—**Birmingham.**—HOUSES.—Erection of 117 non-parlour type houses under Contract 167, on Monica-road extension, Haybarn Farm Estate, Birmingham, for the Public Works and Town Planning Committee, of the City of Birmingham. Mr. Herbert H. Humphries, M.Inst.C.E., City Engineer and Surveyor and Executive Officer for Housing Schemes, The Council House, Birmingham. Deposit £1 1s.

DECEMBER 9.—**Glasgow.**—HOUSE.—For erection of a tennis club house at Mosspark, for the Corporation. Mr. J. Lindsay, Town Clerk, City Chambers.

DECEMBER 9.—**Liverpool.**—PAINTING.—For outside cleaning, painting, and repairs, &c., at the City Chambers, 59 and 67, Church-street, for the T.C. Mr. Walter Moon, Town Clerk, Municipal Buildings.

DECEMBER 9.—**Portsmouth.**—SHELTERS.—For provision and erection of tramway shelters on different sites, for the Corporation. Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 10.—**Basingstoke.**—COWSHEDS, &c.—Erection of additions to farm buildings, consisting of cowsheds, piggeries, &c., at the Park Prewett Mental Hospital, Basingstoke. Mr. A. Turner, Clerk of Works, Park Prewett Mental Hospital, Basingstoke. Deposit £2 2s.

DECEMBER 10.—**Belfast.**—SHED.—For erection of a goods shed on the east side of the Dufferin Dock, for the Harbour Commissioners. Mr. M. J. Watkins, General Manager and Secretary, Harbour Office.

DECEMBER 10.—**Beeston.**—HOUSES.—For erection of 22 houses, for the U.D.C. Clerk. Deposit £2 2s.

DECEMBER 10.—**Boston.**—HOUSES.—For erection of 20 houses, in blocks of two, on the Corporation Woodville-road site, for the C.B. Mr. G. E. Clarke, Borough Surveyor.

DECEMBER 10.—**Bournemouth.**—GREENHOUSE.—For erection of a greenhouse and propagating house adjoining the present greenhouses in King's Park, Boscombe, for the C.B. Mr. F. P. Dolamore, Borough Engineer and Surveyor, Town Hall.

DECEMBER 10.—**Bradford.**—SUB-STATION.—For erection of a sub-station at Four-lane Ends, for the T.C. Mr. N. L. Fleming, Town Clerk, Town Hall, Bradford.

DECEMBER 10.—**Dewsbury.**—RETORT HOUSE.—For demolition of an existing retort house and supply and erection of a steel and brick retort house, for the C.B. Mr. H. Booth, Town Clerk, Town Hall.

DECEMBER 10.—**Hambledon.**—BUILDING.—For erection of a small building at the Institution, for the B.G. Mr. Ferdinand Smallpeice, Clerk, 138, High-street, Guildford.

DECEMBER 10.—**Liverpool.**—HOUSES.—Erection and completion of houses based on the Corporation standard cottages of 950 and 814 super ft. floor area, built in brickwork or other sound materials, giving a satisfactory finish, and suitable for a life of 75 years, for the Housing Committee of the Liverpool Corporation. Tenders, which should be for lots of 50 or upwards, City Engineer's Office, Municipal Buildings, Liverpool.

DECEMBER 10.—**Middlesex.**—HOSPITAL.—Erection of a hospital for 173 beds, nurses' home, and children's probation block, Edgware, Middlesex, for the Guardians of the Hendon Union. Mr. C. W. Wyles, Clerk to the Guardians, Union Offices, Edgware. Deposit £5.

DECEMBER 10.—**Nottingham.**—PAINTING.—For internal cleaning and painting at the following schools: Bath-street Council, New Basford Trust, Sneinton Dale Council, Sneinton Special, Sneinton Trust, and Wollaton-road, for the T.C. Mr. A. H. Whipple, Director of Education, South-parade.

DECEMBER 11.—**Consett.**—VESTRY.—For erection of a new vestry at Consett Parish Church. Mr. J. D. Jarvis, Hon. Sec., 17, Stratford-terrace.

DECEMBER 11.—**Manchester.**—HOUSE.—For construction and erection of a boiler-house and pump-house extension at Bradford-road Works, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 11.—**Rowley Regis.**—HOUSES.—For erection of 12 houses and incidental works of house drainage, road kerbing, making-up road to proper level, forming footpaths in Macmillan-road, Black Heath, for the U.D.C. Mr. D. Wright, Clerk to the Council.

DECEMBER 11.—**Southend-on-Sea.**—PUBLIC CONVENIENCE AND SHELTER.—Erection and completion of public conveniences and shelter and works incidental thereto at Shorefields, Western Esplanade, for the Corporation of Southend-on-Sea. Mr. Robert H. Dyer, Borough Engineer, Municipal Buildings, Southend-on-Sea. Deposit £2.

DECEMBER 12.—**Erpingham.**—COTTAGES.—For erection of 10 cottages, for the R.D.C. Mr. H. N. Bridgwater, Clerk to the Council, St. Peter's-road, Sheringham.

DECEMBER 12.—**Farnworth.**—HOUSES.—For erection of 30 houses at Highfield, Farnworth, for the U.D.C. Mr. W. Tyldsley, Clerk to the Council, Town Hall, Farnworth. Deposit £2.

✱DECEMBER 12.—**Gloucester.**—HOUSES.—Erection of 100 houses upon Corporate land adjoining roads already made within the City boundary, for the Corporation of the City of Birmingham. City Surveyor, Guildhall, Gloucester. Deposit £5 5s.

DECEMBER 12.—**Liverpool.**—POINTING.—For pointing brickwork, &c., at the Balfour Institute, Smithdown-road, for the Corporation. Mr. W. Moon, Town Clerk, Municipal Buildings.

DECEMBER 13.—**Blything.**—ROOMS.—For two bath rooms, in wards at the Union, for the B.G. Mr. J. W. Tallop, Clerk to the Guardians, Clerk's Office, Bulcamp, Halesworth.

DECEMBER 13.—**Newcastle-upon-Tyne.**—PAIN—For painting work required at the Relief O 130, Byker-bank, and 71, Park-road, and at the dren's Home, "Louisville," Ponteland, for the Mr. Gladstone Walker, Clerk to the Guardians, Pilgrim-street, Newcastle-on-Tyne.

DECEMBER 13.—**Plymouth.**—EXTENSION.—For tension to the wholesale meat market, for the Mr. J. Wibberley, Borough Engineer and Sur Municipal Offices. Deposit £2 2s.

DECEMBER 13.—**Wallingford.**—ALTERATIONS alteration and extension of the pump-house a Waterworks, for the C.B. Mr. F. R. Hedges, Clerk, Wallingford.

✱DECEMBER 13.—**Westgate-on-Sea.**—PAVILION BATHING ACCOMMODATION.—Erection of (1) pa (2) bathing accommodation and public conveni for the Westgate-on-Sea Council. Mr. F. J. Cor Town Hall Buildings, Westgate-on-Sea. De £1 1s.

DECEMBER 15.—**Banbridge.**—ADDITIONS.—For terations and additions to Banbridge R.U.C. Bar for the Government of Northern Ireland. Mr. W Maconkey, Assistant Secretary, Ministry of Fin Belfast.

DECEMBER 15.—**Barnsley.**—PAINTING.—For p ing and decorating Buckley-street P.M. Church. J. T. Steel, 73, Commercial-street.

DECEMBER 15.—**Bournemouth.**—HOUSES.—For tion of 21 pairs of semi-detached houses on the S hill estate, Winton, for the C.B. Mr. F. P. Dola Borough Engineer and Surveyor, Town Hall. De £1 1s.

DECEMBER 15.—**Dewsbury.**—ADDITIONS.—For excavators, bricklayers and masons, carpenters joiners, plumbers and glaziers, plasterers, slaters painters' work required in the erection and compl of proposed pavilion and mortuary at Whitley Gr Hospital, for the C.B. Mr. Holland Booth, Town C Town Hall. Deposit £1 1s.

DECEMBER 15.—**Guildford.**—EXTENSION TO SLI BATHS AND PUBLIC CONVENIENCE.—Extension slipper baths and public convenience, for the Bor of Guildford. Mr. W. G. Cross, Assoc.M.Inst.C Borough Engineer, Municipal Offices, Tuns G Guildford. Deposit £2 2s.

DECEMBER 15.—**London, E.C.2.**—REDECORATIO Redecoration of the Shoreditch Town Hall, Old-st E.C.2, for the Shoreditch Borough Council. Mr. T Hustler, Borough Surveyor, Town Hall, Old-st E.C.2. Deposit £2 2s., to the Borough Accounta Office.

✱DECEMBER 15.—**Maidstone, Kent.**—COU SCHOOL.—Erection of a Council School for 340 b at Rose-street, Sheerness, in the County of Kent, the Kent Education Committee. County Educa Architect (Mr. W. H. Robinson, F.S.Arc.), at Room Sessions House, Maidstone. Deposit £2 2s. in form of a cheque payable to the Kent Educa Committee, and crossed "National Provincial Ban England, Ltd."

DECEMBER 15.—**Middlesbrough.**—EXTENSION.— extension of Holgate institution nurses' home, for B.G. Mr. H. Bilson, Clerk to the Guardians, Poor L Offices, Municipal Buildings. Deposit £2 2s.

DECEMBER 15.—**Penarth.**—HOUSES.—For build of 30 houses proposed to be erected on sites in Andr road, Cogan, for the U.D.C. Mr. J. W. Morris, Cl Council Offices. Deposit £2 2s.

DECEMBER 15.—**Pontlianfraith.**—SCHOOL.—For e tion of a new secondary school, for the Monmouths E.C. Mr. C. Dauncey, Secretary, County Hall, N port, Mon. Deposit £2 2s.

DECEMBER 15.—**Saddleworth.**—POLICE STATION For erection of a new police station, for the West Rid C.C. Mr. P. O. Platts, A.R.I.B.A., County Archit County Hall, Wakefield. Deposit £1.

DECEMBER 16.—**Chadderton.**—HOUSES.—For e tion of 8 houses, in two blocks of 4, in Taylor-str for the U.D.C. Mr. J. Schofield, Clerk of the Cou Town Hall. Deposit £1 1s.

DECEMBER 16.—**Dublin.**—ADDITIONS.—For erect of a new wing to the National Library, Dublin, for Commissioners of Public Works. Mr. J. J. Re Secretary, Office of Public Works, Baile Atha Cli Dublin. Deposit £1.

DECEMBER 16.—**Ludlow.**—POST OFFICE TELEPHONE EXCHANGE.—Erection of a new P Office and Telephone Exchange, at Ludlow, for Commissioners of H.M. Office of Works. Contr Branch, H.M. Office of Works, King Charles-str London, S.W.1. Deposit £1 1s. (cheques paya to the Commissioners of H.M. Works, &c.).

DECEMBER 16.—**Scunthorpe.**—HOUSES.—For erec and completion of 30 houses, for the U.D.C. Mr. J Auld, Clerk to the Council, Council Offices. Deposit

DECEMBER 16.—**Slaithwaite.**—BUILDING.—For or any trades in connection with the building refuse destructor plant, for the U.D.C. Mr. Ed Freeman, Clerk to the Council, Town Hall.

DECEMBER 16.—**Wakefield.**—ALTERATIONS.— alterations required at Queensbury Upper Cou School, for the West Riding C.C. The Education Dep ment, County Hall, Wakefield.

DECEMBER 17.—**Greasbrough.**—HALL.—For erec of a public hall, &c., for the U.D.C. Mr. John Jackson, Clerk to the Council, Council Offices. posit £2.

DECEMBER 17.—**Risca.**—HOUSES.—For erec of 150 houses on the Ty-isaf site, for the U.D.C. A. J. Dardis, Surveyor and Engineer, Council Offi Risca (Mon). Deposit £2 2s.

✱DECEMBER 18.—**Chelsea.**—PAINTING AND REPA —Internal plastering, painting and repairs to on the wards and annexes thereto, at the Hospital, C street, Chelsea, for the Guardians of the Poor Chelsea. Guardians' Architect, Mr. Edmund Harrison, Lic.R.I.B.A., 23, Berkeley-road, Cro End, N.8. Deposit £2.

18.—**Marsden.**—ADDITIONS.—For alterations to the sewage works, for the H. Greenwood. Clerk to the Council, ...es, Marsden, near Huddersfield. Deposit

19.—**Ireland.**—PAINTING.—For internal painting works at the Curragh Camp, co. the Commissioners of Public Works, ...aly, Secretary, Office of Public Works, ...liath, Dublin. Deposit £1.

20.—**Boston.**—HOUSES.—For 20 houses two on the Corporation Woodville-road T.C. Mr. G. E. Clarke, Borough Surveyor.

20.—**Rathdrum.**—REPAIRS.—For re...tages provided under the R.D. Scheme ...accordance with plan and specification the Engineer, Sailors' and Soldiers' Depart...al Office (Irish Branch), 30, Lower Fitz...t, Dublin. Mr. R. E. Beckerson, Chief ...sit £1 1s.

20.—**Rye.**—EXTENSIONS.—For enlarging ... for the T.C. Mr. W. Dawes, Town ... Chambers.

ER 22.—**Brighton.**—HOUSES.—Erection of ... Hereford-street, Brighton, for the County ...uncil of Brighton. Borough Surveyor, Brighton. Deposit £1.

23.—**Southampton.**—COTTAGES. — For ...wo pairs of cottages on a site at the corner ...ane and the main road 2 miles from Basing... C.B. Mr. A. L. Roberts, County Archi...tle, Winchester. Deposit £1 1s.

29.—**Worthing.**—SHELTER.—For erec...ed shelter in the Denton-gardens, for the ... Kennedy Allerton, Town Clerk, Municipal ...posit £1 1s.

ER 30.—**Burslem, Staffs.**—TELEPHONE Ex...ction of a telephone exchange at Burslem, ...the Commissioners of His Majesty's Office ... Contracts Branch, H.M.O.W., King ..., London, S.W.1. Deposit £1 1s. ...ayable to the Commissioners of H.M.

5, 1925.—**Bolton-upon-Dearne.**—HOUSES. ... of 74 houses, together with road and ...er drainage works in Barnborough-lane, ... for the U.D.C. Mr. J. Ledger Hawks... ...s of the Council, Council Offices, Bolton... ... Deposit £1 1s.

5, 1925.—**Goldthorpe.**—HOUSES, &C.— ...tion of 74 dwelling houses, together with ...urface water drainage works, in Barn... ..., or in sections (1) 30 houses, (2) 44 ...oads and surface water drainage works, ...lton-upon-Dearne U.D.C. Mr. William ... M.S.A., Council Offices, Bolton-upon... ...posit £1 1s.

—**Hoyland Nether.**—HOUSES.—For erection ... at Cobcar-lane, Elsecar, for the U.D.C. ... Raley, Clerk to the Council, Barnsley. ...s.

...TURE, MATERIALS, etc.

8.—**Rawtenstall.**—GRANITE.—For sup... 2,000 tons of 4 in. × 5 in. granite setts, ...oration. Mr. J. Whalley, Town Clerk.

9.—**Kettering.**—KERBING.—For supply ...ds. combined kerb and channelling, 820 ...ing slabs, 2,500 yds. stoneware pipes, ... 6 in. to 24 in. in diameter, for the U.D.C. ..., Clerk to the Council, Council Offices,

13.—**Kent.**—GRANITE.—For supply of ...ite, for the C.C. Mr. H. T. Chapman, ...eyor, St. Peter-street, Maidstone.

15.—**Rotherham.**—SEWERAGE. — For ...quired in the construction of (1) sewage ...ks (tanks and filters); (2) approximately ... 12 in. and 9 in. pipe sewers; (3) inserting ... under canal, for the R.D.C. Mr. C. O. ...ngineer and Surveyor, Engineer's Office, ...Moorgate. Deposit £3 3s.

16.—**Tottenham.**—BLOCKS.—For supply ...deal blocks, for the D.C. Mr. R. C. ...k and Solicitor of the Council, Solicitor's ... Town Hall.

18.—**Hull.**—STORES.—For supply of ...erials, &c., for the Corporation. Mr. H. ...lectrical Engineers, Sculcoates.

ER 18.—**London, E.1.**—SUPPLY OF VARIOUS WORKS.—Tenders for contracts ...months from April 1, 1925, except last ..., which are for the period from April 1, ...tember 30, 1925, for the Metropolitan ...Stepney. Items 1 to 23, Mr. Bernard J. ...ough Engineer and Surveyor, Municipal ...street, Old Gravel-lane, E.1; deposit. ... Note in respect of each tender. Items ... V. B. Bateson, Town Clerk, Municipal ...street, Old Gravel-lane, E.1; deposit, ... Note in respect of each tender.

...ERING, IRON AND STEEL.

6.—**Dewsbury.**—TANKS.—For construc...olating filters, humus tanks, and other ...works in connection with the construction ...sposal works at Mitchell Laithes, for the ...olland Booth, Town Clerk, Town Hall. ...s.

8.—**Castle Ward.**—RECONSTRUCTION.— ...ction of Milbourne Bridge, for the R.D.C. ...ilkinson. Clerk to the Council, 1, Mosley... ...astle-upon-Tyne.

...—**Herne Bay.**—LANDING STAGE.—For ...landing stage at the pier head in ferro... the U.D.C. Mr. Geo. H. Beetenson, ...Council, Clerk's Office, Town Hall, Herne ...it £2 2s.

10.—**Liverpool.**—SEATING.—For con...eating for three boilers, for the T.C. Mr. ...wn Clerk. Deposit 10s. 6d.

DECEMBER 11.—**Manchester.**—TOWER.—For supply, delivery, and erection of a cooling tower at Bradford-road Gasworks, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall.

DECEMBER 13.—**Near Penrith.**—BRIDGE.—For construction in ferro-concrete of a new bridge across the Dacre Beck in Dalemain Park, on the Penrith to Ullswater-road, about 3 miles from Penrith Station, for the Cumberland C.C. Mr. G. O. Lockwood, County Surveyor and Bridgemaster, The Courts, Carlisle. Deposit £2.

DECEMBER 15.—**Belfast.**—STEEL FRAMEWORK.—For steel framework for internal office building, for the Corporation. Mr. R. Meyer, Town Clerk. Deposit £2 2s.

DECEMBER 15.—**Rotherham.**—RESERVOIR.—For construction of a ferro-concrete reservoir, for the C.B. Mr. C. L. Des Forges, Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 15.—**Shrewsbury.**—MASONRY.—For erection of masonry bridges for the reconstruction of the English Bridge, for the T.C. Mr. R. F. Prideaux, Town Clerk, Guildhall. Deposit £10.

DECEMBER 20.—**Egypt.**—RESERVOIR.—For construction of a steel reservoir, for the Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 20.—**Southampton.**—STORES.—For erection of a steel framed electrical stores building on a piled foundation to the Western Esplanade, for the C.B. Mr. R. R. Linthorne, Town Clerk. Deposit £3 3s.

DECEMBER 20.—**Wilmslow.**—ADDITIONS.—For construction of screen chamber, suction wells, settling tanks, percolating filters and humus tanks, sundry lengths of pipeline and sundry auxiliary works, at the Southern Sewage Farm, for the U.D.C. Mr. H. Cliffe, Clerk to the Council, Clerk's Office. Deposit £5.

DECEMBER 22.—**Manchester.**—SHEDS.—For construction and completion of two five-story transit sheds, extension of the grain subway, and all ancillary works, at Manchester Docks, for the Ship Canal Co. Mr. F. A. Eyre, Secretary, 41, Spring-gardens. Deposit £10.

DECEMBER 31.—Hamilton.—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

DECEMBER 6.—**Aberfeldy.**—POND.—For construction of three-rink artificial curling pond, for the Breadalbane Curling Club. Mr. W. Lindesay Wood, Hon. Secretary.

DECEMBER 8.—**Crewe.**—ROADS.—For making-up part of Gainsborough-road, for the T.C. Mr. H. S. K. Feltham, Town Clerk, Municipal Buildings. Deposit £2 2s.

DECEMBER 8.—**Epsom.**—MAINS.—For providing, laying, excavating and jointing of about 2,829 yards of 4 in. cast-iron water main, including valves, fire hydrants, &c., for the U.D.C. Mr. E. G. Wilson, Clerk, 37, Church-street,

DECEMBER 8.—**Frinton-on-Sea.**—ROADS.—For works of private street improvement in St. Mary's-road, Eton-road, and Oxford-road, Frinton-on-Sea, for the U.D.C. Mr. P. O. Macdonald, Clerk to the Council, The Council House.

DECEMBER 8.—**Hendon.**—SEWER.—For about 1,900 yds. 9 in. by 12 in. stoneware pipe sewer, including manholes and other works, for the U.D.C. Mr. H. Humphris, Clerk to the Council, Town Hall, Hendon, N.W.4. Deposit £3 3s.

DECEMBER 8.—**Howth (Ireland).**—ROAD.—For construction of a ferro-concrete roadway, for the U.D.C. Town Clerk, Howth.

DECEMBER 8.—**Romford.**—SEWER.—For carrying out the laying of about 400 yds. of 9 in. stoneware pipe sewer and other works appertaining thereto in the main road, Hare-street, for the U.D.C. Mr. F. G. Beaumont, Engineer and Surveyor. Deposit £1 1s.

DECEMBER 8.—**Southampton.**—IMPROVEMENT.—For executing certain road improvement works in Churchlane, for the C.B. Mr. R. R. Linthorne, Town Clerk. Deposit £1 1s.

DECEMBER 9.—**Southgate.**—ROADS.—For making-up of (*a*) Doveridge-gardens, (*b*) Lynbridge-gardens, (*c*) Chimes-avenue, (*d*) Lawrence-avenue, (*e*) Hamilton-crescent, (*f*) Callard-avenue, for the U.D.C. Mr. A. E. Lauder, Clerk of the Council, Town Hall, Palmer's Green, N.13.

DECEMBER 9.—**Todmorden.**—PAVING.—For levelling, paving and making good Ramsden Wood-road (part of) and back streets at Rawson Fields Estate, for the C.B. Mr. H. Crabtree, Borough Engineer and Surveyor, Municipal Offices.

DECEMBER 10.—**Cardiff.**—POND.—For construction of a settling pond with contingent works at Ely Paper Works, for Messrs. Thomas Owen & Co. Mr. J. W. Rodger, Architect, Newton, Porthcawl, Glam.

DECEMBER 10.—**Heston and Isleworth.**—MAKING-UP.—For making-up part of Ridgeway-road, part of Church-road, part of Osterley-road, part of Sunnycroft-road, part of Elmsworth-avenue, for the U.D.C. Mr. H. J. Baker, Clerk of the Council, Council House, Hounslow. Deposit £2 2s.

DECEMBER 10.—**Leeds.**—PAVING.—For paving and flagging Victoria-square, Armley, and Dewsbury-street, for the T.C. Highways and Permanent Way Department, 1, Swingate. Deposit £1 1s.

DECEMBER 11.—**Barnet.**—SEWER.—For construction of approximately 2,345 lineal yds. of 3 in. and 12 in. diameter stoneware and cast-iron pipe sewer, manholes, and other incidental works in Totteridge-lane, Totteridge, for the U.D.C. Mr. H. W. Poole, Clerk of the Council, Clerk's Offices, 93, High-street, Barnet, Herts. Deposit £3 3s.

DECEMBER 11.—**Bournemouth.**—SEWER.—For laying and fixing cast-iron pipes, cradles, &c., for the C.B. Mr. F. P. Dolamore, Borough Engineer and Surveyor, Town Hall. Deposit £1 1s.

DECEMBER 11.—**Cannock.**—PIPES.—For construction of about 2¼ miles of 12 in. and 9 in. stoneware pipe sewers and appurtenances and sewage disposal works, for the R.D.C. Mr. A. W. Carver, Clerk to the Council, 202, Wolverhampton-road. Deposit £5 5s.

DECEMBER 11.—**Kensington, W.8.**—SANITARY WORK.—(1) Sanitary accommodation at the Guardians' Board Room in the Marloes-road, Kensington; (2) sanitary accommodation at the Marloes-road Institution, Kensington, for the Guardians of the Parish of Kensington. Mr. W. R. Stephens, Clerk to the Guardians, Guardians' Offices, Marloes-road, Kensington, W.8.

DECEMBER 13.—**Chester.**—ROADS.—For roads and sewerage works, for the City and County. Mr. J. H. Dickson, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 15.—**Baildon.**—SEWER.—For work in connection with the proposed construction of the 12 in. pipe sewer of an approximate length of 240 lin. yds., together with the necessary manholes, &c., for the U.D.C. Mr. R. Howard Moore, Clerk of the Council, Baildon. Deposit £1 1s.

DECEMBER 15.—**Chepstow.**—WIDENING.—For widening St. Lawrence-road from Newport-road to Tintern road, Chepstow, for the U.D.C. Mr. Fothergill Evans, Clerk to the Council, Chepstow. Deposit £2 2s.

DECEMBER 15.—**Hayfield.**—PIPES.—For providing and laying about 7¼ miles of 6 in., 5 in., 4 in., and 3 in. cast-iron pipes, with all necessary valves, hydrants and apparatus, and also for constructing two mass concrete tanks at Hayfield and Mellor, for the R.D.C. Mr. J. R. Bowden, Clerk to the Council, Council Offices, High-street, New Mills, via Stockport. Deposit £5 5s.

DECEMBER 15.—**Sleights.**—MAINS.—For providing, carting and laying of 1,760 lin. yds. of 8 in. cast-iron water mains and valves, for the Whitby Waterworks Co. Mr. J. Taylor, Secretary and Manager, Whitby Waterworks Co., 55, Baxtergate, Whitby. Deposit £2 2s.

DECEMBER 16.—**Birkenhead.**—SEWER.—For construction of a supplementary sewer in Borough-road, comprising about 700 lin. yds. of reinforced concrete sewer formed with 24 in., 27 in., and 30 in. diameter pipes, together with all manholes, gullies, &c., for the C.B. Mr. E. W. Tame, Town Clerk, Town Hall, Birkenhead. Deposit £3 3s.

DECEMBER 16.—**Devon.**—ROAD. — For work required in the reconstruction of approximately 4½ miles of the Exeter-Plymouth-road, for the C.C. Mr. Brian S. Miller, Clerk of the Council, The Castle, Exeter. Deposit £10 10s.

DECEMBER 17.—**Birmingham.**—ROADS.—For reconstruction of Billesley-lane, between Oxford-road and Wake Green-road; reconstruction of Rotton Park-road, between City-road and Dudley-road; and widening of Island-road, Handsworth. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2 each.

DECEMBER 17.—**Pass of Melfort.**—ROAD.—For construction of a new roadway, about 1½ miles in length, at the Pass of Melfort, for the Argyll C.C. Mr. W. Macdonald, District Road Surveyor, Columba Buildings, Oban. Deposit £2.

DECEMBER 17.—**South Mimms.**—SEWER.—For about 350 yds. of 9 in. stoneware pipe sewer, with manholes, &c., in Mutton-lane, Potters Bar, for the R.D.C. Mr. H. W. Poole, Clerk to the Council, 93, High-street, Barnet.

DECEMBER 19.—**Wood Green.**—CULVERTS.—For construction of about 724 yds. of reinforced concrete culvert and about 437 yds. of 42 in., 27 yds. of 36 in., and 70 yds. of 30 in. diameter granite concrete tube culvert, with the necessary inspection shafts and tumbling bays constructed to special details in reinforced concrete, for the U.D.C. Mr. C. Eric Staddon, Clerk of the Council, Town Hall, Wood Green, N.22. Deposit £1 1s.

DECEMBER 31.—**Cowbridge.**—MAINS.—For a covered service reservoir in mass concrete, and 18,900 lin. yds. of various cast-iron mains, for the Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s.

Competitions.

(*See Competition News, page* 888.)

Auction Sales, Tenders, etc.

DECEMBER 9.—**East Kent.**—Messrs. Hampton & Sons will sell, at the St. James' Estate Rooms, 20, St. James'-square, S.W.1, freehold residential and building property of over 14½ acres, to be offered in one or six lots. Auctioneers, 20, St. James'-square, S.W.1.

DECEMBER 9.—**Farnborough, Kent.**—Mr. C. E. Clark will sell, without reserve, opposite "New Inn," Farnborough, Kent, sale of prime new timbers. Auctioneers, Beddington House, Beddington, near Croydon.

★ DECEMBER 9.—**Stockwell.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, at 255, Clapham-road, stock of capital timber and building materials. Auctioneers, 365, Norwood-road, S.E.27.

DECEMBER 9 AND 10.—**London, E.C.4.**—Messrs. Fuller, Horsey Sons, & Cassell will sell, by order of the Ministry of Transport, road contractors' plant, at 11 o'clock each day, at the Merchants' Hall, Baltic Exchange, St. Mary Axe. Auctioneers, 11, Billiter-square, E.C.3.

★ DECEMBER 10.—**Croydon.**—Messrs. Veryard & Yates, F.A.I., will sell, by order of Frame Buildings Co., at Shirley-road, portable buildings, frames, &c.; also freehold land, Shirley-road, Croydon, and Stuart-road, Warlingham. Auctioneers, 365, Norwood-road, S.E.27.

✱DECEMBER 11.—**Brixton Hill.**—Messrs. Veryard & Yates, F.A.I., will sell, without reserve, timber and building materials, at 1.30 p.m. Auctioneers, 365, Norwood-road, S.E.27.

DECEMBER 11 AND 12.—**Berwickshire.**—Messrs. Perry & Phillips will sell (unless previously sold by private treaty), on the premises, Blackadder House, Berwickshire (in 600 lots), the whole of the interior and exterior fixtures and fittings previous to the demolition of the mansion, pine flooring, doors, oak flooring, marble, oak, granite mantelpieces, stone staircase, garden ornaments, iron gates, central heating boilers, the fabric of the mansion, balustrading, lead, &c. Auctioneers, Bridgnorth.

✱DECEMBER 12.—**Weymouth.**—Messrs. Fuller, Horsey, Sons & Cassell will sell nearly-new building material at the Whitehead Torpedo Factory, at 11 o'clock. Auctioneers, 11, Billiter-square, E.C.3.

✱DECEMBER 16.—**London, S.E.12.**—Mr. C. E. Clark will sell, without reserve, at Cooper's-lane, Grove Park, S.E.12, prime new timber. Auctioneers, Beddington House, Beddington, near Croydon.

✱DECEMBER 16.—**London, W.**—Mr. Richard J. Steel will sell, at Walmer Gardens, Midhurst-road, Ealing, W., the whole of the woodworking machinery and plant of a large variety. Auctioneer, 2, Plough-terrace, South Ealing, W.5.

✱JANUARY 14.—**London, E.**—Messrs. J. T. Skelding & Co., without reserve, owing to expiration of lease, at the Building Material Depot, Tredegar-square, Mile End-road, E., timber and building materials, including 200 tons of old oak beams and scantlings, R.S. joists, steam pipe and fittings, slates, scaffolding, trailer, vans, timber and corrugated iron sheets, &c. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

Public Appointments.

DECEMBER 8.—**Cape Town.**—Lecturer in building trades subjects wanted for the Cape Technical College, Cape Town. Messrs. Chalmers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

✱DECEMBER 9.—**Manchester.**—Clerk of Works required by the Barton-upon-Irwell R.D.C., in connection with the Council's Housing schemes. Mr. Chas. Faulkner, Clerk to the Council, Council Offices, Green-lane, Patricroft, Manchester.

✱DECEMBER 10.—**Battersea, S.W.11.**—Works Foreman required to act under the general direction and control of the Borough Engineer and Surveyor, by the Battersea Borough Council. Mr. Edwin Austin, Town Clerk, Town Hall, Battersea, S.W.11.

✱DECEMBER 13.—**London, N.9.**—Temporary General Foreman required by the Edmonton Urban District Council for the erection of 82 houses, the estimated cost of which is £50,000. Mr. Cuthbert Brown, M.B.E., M.Inst.C.E., Engineer and Surveyor, Town Hall, Edmonton, London, N.9.

DECEMBER 15.—**Durham.**—Two Assistant Architects and one Assistant Quantity Surveyor required by the county of Durham Education Committee. Director of Education, Shire Hall, Durham, enclosing stamped addressed foolscap envelope.

✱DECEMBER 15.—**London, W.1.**—Full-time Lecturer required (qualified Surveyor) at the Polytechnic, Regent-street, W.1, School of Architecture, Building and Surveying. Director of Education.

JANUARY 1.—**Cambridge.**—Assistant to the Master required by the Board of Architectural Studies at the University of Cambridge, School of Architecture. The Secretary of the Board of Architectural Studies, Mr. Edward Bullough, Gonville and Caius College, Cambridge.

✱NO DATE.—**Gold Coast.**—Building Foreman required by the Government of the Gold Coast, for the Public Works Department, for two tours of 12 to 18 months' service. Crown Agents for the Colonies, 4, Millbank, Westminster, London, S.W.1, quoting M/13228.

✱NO. DATE.—**Gold Coast.**—Foreman of Works required by the Government of the Gold Coast Public Works Department, for two tours of 12 to 18 months' service. Crown Agents for the Colonies, 4, Millbank, Westminster, London, S.W.1, quoting at head of letter M/13148.

Westminster Women's Housing Council.

At a meeting of the Westminster Women's Housing Council, held at 18, Carlton House-terrace, on Tuesday last week, Miss Picton-Turbervill, President, spoke of the powers which the City Council had under existing legislation to do away with many of the difficulties in regard to bad housing, without a great increase in public expenditure. Sir Arthur Griffiths Boscawen outlined a public utility scheme which the Church Army was in process of forming, for the purpose of housing the ex-soldier and the low wage earner with a family in such a house as he could afford. They had already sufficient funds to start about twelve cottages in Willesden and for the consideration of other building sites, but they were appealing for £300 to enable them to carry on the work, and they were hoping to build the next lot in Westminster, where the W.W.H.C. had promised their co-operation in the management of the cottages when built.

PROPOSED NEW BUILDINGS & OTHER W

In these lists care is taken to ensure the accuracy of the information given, but sionally happen that, owing to building owners taking the responsibility of comm before plans are finally approved by the local authorities, "proposed" works a publication have been actually commenced. Abbreviations: T.C. for Town Council Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committ Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. fo Health; M.T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board

ABERYSTWYTH.—Plans passed by the B.C.: Two houses on site of old skating rink, for Messrs. John Jenkins & Sons; new offices at the old Brewery, Trefechan, for C. Roberts & Sons; house at Infirmary-road, for Messrs. J. G. Thomas & Son.

ANNFIELD PLAIN.—Plans passed by the U.D.C.: Ten houses, Delight-rows, Dipton, Messrs. John Bowes & Partners; four houses, West Kyo, Messrs. Thompson & Brown; and two houses, West Kyo, Messrs. Lee & Dunn.

BEDFORD.—The T.C. approved plans: Usher & Anthony, for C. Wells, Ltd., boiler house, "Gordon Arms," Castle-road; Mr. E. H. C. Inskip, for Mr. G. Valentine, house, London-road; Mr. E. H. C. Inskip, for Mr. T. W. Matkin, house, Bradgate-road; Mr. G. P. Allen, for Governors of Harpur Trust, lavatory block, Boys' Modern School; Mr. E. H. C. Inskip, for Mr. W. P. Mayo, house, Bromham-road.

BEDWELLTY.—The U.D.C. has decided that in addition to the 100 new houses decided upon for the Cefn Forest Ward, the Housing Committee shall consider the question of erecting houses in all sections of the urban area.

BEXHILL.—The County Council has passed the plans for a secondary school at Bexhill, which is to cost £52,000.

BINGLEY.—Plans passed: House, Bailey Hills, Mr. Jowett.

BIRMINGHAM.—The E.C. has considered preliminary plans for the erection of a proposed new school at Hall Green; also plans for a proposed new secondary school at Belchers-lane, Saltley. A site has also been acquired at Witton Lodge, Erdington, upon which it is proposed to erect a new school with accommodation for 1,200 children, estimated cost of erection £40,000. The Health Committee of the Corporation has approved of plans for the erection of a new health clinic at Sheep-street, at an estimated cost of £7,100.

BLAYDON.—The M.H. has given sanction to the U.D.C. for the erection of 30 houses at Bleach Green. Permission is to be sought to build an additional 32.—A contract has been signed for the erection of 46 houses at Highfield, near Rowlands Gill.

BOLTON.—The T.C. is to borrow £28,000 for the proposed purchase of 10 houses in Bowgreave-avenue, now in course of erection by Messrs. William Gornall & Sons, Ltd., and 43 proposed to be erected in Singleton-avenue by Messrs. Gornall. A loan of £47,000 is to be sought for the purchase of land and 90 houses proposed to be erected thereon by Messrs. Leigh Bros., Ltd. The Housing Committee has agreed to grant subsidies for 28 houses to be erected in Forton-avenue by Messrs. Gornall. Tenders are to be obtained for the Harpers-lane improvement, estimated to cost £4,500. Plans passed: Boiler-house, Spa-road, Messrs. Jackson & Son, Ltd.; pavilion, Boundary-street, Messrs. Harwood & Sons, Ltd.; two houses, Bromwich-street, Mr. J. E. Paiton; six houses, Rydal-road, Messrs. Temperley & Son; addition to church, Loxham-street, for Primitive Methodist Trustees. Lord Leverhulme has sent plans prepared on his instructions by Messrs. Bradshaw, Gass & Hope, architects, showing arrangements surrounding the town hall and stating that it is his intention to proceed with the Causeway, which is an essential feature of the proposed scheme, and to provide £100,000 towards.—The Corporation are to build a new day school in Devonshire-road, at a cost of £14,800.

BRADFORD.—Estates are to be developed by Messrs. Croft & Keighley, at Idle-road, and the Pendragon Estate Co., at Bolton-road, Idle-road, and Pendragon-lane. Plans passed: Eight houses, Intake-road, Messrs. Cannfield & Sons; eight houses, Parkside-road, Co-operative Society; two houses, Speeton-avenue, Mr. E. Hallam; two houses, Bolton-road, Messrs. Sugden & Hartley; two houses, Norman-lane, Messrs. Hutchinson & Scott; two houses, Slack Side, Mr. H. Crowther; house, Shotcliffe-lane, Mr. Siddle; house, Westfield-lane, Mr. H. Lee; house, Westfield-lane, Mr. W. Cowbourne. The architect has been asked to proceed where necessary to inspect and report upon steel houses. The M.H. has sanctioned the White Abbey clearance scheme. Additional accommodation is to be provided at the Forster Central School at a cost of £870.——The Electricity Committee of the City Council propose to carry out a scheme for extensions in the Dudley Hill district, comprising new mains, switch-gear, erection of a new switch house and transformer chamber. Tenders for the building works are shortly to be invited. The Corporation are considering an increase of the capacity of the Scar House Reservoir, which is at present under construction. The scheme is estimated to cost £90,000. The M.H. has sanctioned a loan of £16,464 for erection of new warehouse at the Conditioning House in Canal-road, for which work a contract has recently been let.

BRIGHOUSE.—The T.C. approved plans: H. Castle, pair of semi-detached bungalows, Bracken-road West; H. Brooke, villa, Garden-road, Brighouse.

CALVERLEY.—Plans passed: Shop in Gain-lane, for Mr. Cansfield; five houses, for Mr. C. B. Smith, and four houses in Gain-lane.

CARRICK.—The Ayr E.C. has agreed that a new school and teachers' residence should be built in the parish of Dailly. The plans have been approved and forwarded to the Education Department for sanction.

CASTLEFORD.—Plans for the erection a new billiard hall at Sykes-street, Cast Kiosk Café Co., have been prepared Bickerton, architect, of Bank-street. T work are about to be invited.

CHARD.—The T.C. has received sanc M.H. for the erection of four houses at

CHESTERFIELD.—The T.C. passed plan near Cattle Market, for Mr. F. Churc Storr's-road, for Mr. F. Beaumont; "Decoy House," Tapton-park, for Mr. house, Paxton-road, Tapton-park, for C. house, Hasland Green, for Mr. Turner; side Bar, for Mr. F. Wilkins; four house avenue, for Mrs. F. Heath.

CHESTER-LE-STREET.—The R.D.C. permission from the M.H. to borrow a to for housing purposes at Edmondsley and

CROYDON.—Plans passed by C.B.: F. house, Norbury-avenue; G. & A. P Haling Park-road; F. W. Cattermole, Stanford-road; Crowley Bros., 58 houses road; Chesterton & Sons, six houses, No next Brooklyn; C. G. Allen, 31 gara workshops, London-road; G. & A. Parris Haling Park-road; C. E. Head, hous Close; Edmonds & Beale, 60 houses, So Hill, Howden and Auckland-roads, an avenue; A. Farley & Co., warehouse road; G. H. Dales, 12 houses, Waddon F. Roe & Sons, 10 houses, Waddon A. E. Bates, 22 houses, Tenterden-ro house, Addiscombe-road; R. B. Mans Haling Park-road; C. S. Fairman, two Farm; S. Jefferies, six houses, Ingram-r house, Monks' Orchard; E. Law, hou Park estate; Scratchley Bros., seven hou road; J. Midmer, two houses, Elgar-a Borough Engineer has been authorised to submit plans for the erection of 84 non 18 parlour type houses on the Waddon e

CUDWORTH.—The U.D.C. has decided new public convenience in Barnsley-r estimated cost of £150.

DARLINGTON.—The E.C. received intima plans for the new school at Cockerto approved by the B.E. The site of the sch new housing estate, and covers an area o The cost of the building is estimated at £9

DERBY.—The T.C. propose to erect 2 which 50 are for sale) in various parts of t

DEWSBURY.—Plans passed: Six dw South-street, J. Crossley, jun. The T.C. to make application for sanction to borrow housing subsidies, £14,000 for sewerage di and £7,000 for erection of a new pavilio Hospital.

DONCASTER.—The R.D.C. has approved the erection of 50 houses at Awkley in con the colliery company's developments.

DUMBARTON.—The Dean of Guild Cou plans presented on behalf of the T.C. for at West Bridgend district of four tenem

DUNDEE.—Plans and sections of pr buildings, &c., have been lodged at the City Engineer: Harefield-road, house, fo Bell, Mr. Alex. Lickley (architect); Lochee, shop, for Messrs. Stewart & Son Simpson (architect); Montague-street cottage for the Misses Hynd, Messrs. Hardie (architects); Muirfield-crescent, se cottage, for Adam Gordon, Messrs. Maclar Salmond (architects); Stirling-road, hous laren, Soutar & Salmond.

DURHAM.—The City Council has decided houses on the Whinney Hill site to house dispossessed by the demolition of the insanitary area.—Plans have been approve magistrates for the provision of a pictur room, and billiard saloon at the Old Durham, and adjoining premises. The is to accommodate 862 persons, the ballroom with seating accommodation for 300, and used for concerts, &c., whilst the billiar contain twelve tables.

EDINBURGH.—The Dean of Guild C plans: Animal Diseases Research Associati station at Greenend, Liberton; Board ture for Scotland, transformer hous Craigs, Corstorphine; R. E. Price, b Barnton-park, Davidson's Mains; W. house, South Inverleith-avenue; Scottish Printers, Ltd., dyehouse at Inglis Green-roa

EGHAM.—The U.D.C. passed plans for

EPSOM.—The R.D.C. has adopted a to scheme for Cobham, and they have recentl them a plan from Messrs. J. F. Palser & Son of London, for the erection of 34 houses in leading to Oxshott Woods, from the Fairm

FLEET.—The U.D.C. propose carrying ou drainage and sewerage disposal works. for sanction to a loan of £20,000 has been Major T. J. Moss-Flower is consulting eng work.

FOLKESTONE.—The T.C. are to invite a band pavilion in the Marine Gardens.

GILDERSOME.—Plans have been prepa Council Surveyor, Mr. Wilby, for the er houses (non-parlour type) on the Vicarag Tenders are now being invited for the erec

* See also our List of Contracts, Competitions, etc.

s and the construction of the necessary road s and sewers.

MORGAN.—The Barry U.D.C. has in consideration extension of the Barry Surgical and Accident ital. The Caerphilly U.D.C. has passed plans for rection of a new mixed school at Nantgarw and a oys' school and a handicraft centre at Hendre, all erected by the Glamorgan County E.C. (Architect . Pugh Jones.)—The Council is to erect 24 houses ncoed.—The Bridgend U.D.C. has passed plans for ouses in St. Marie-street, for Mr. P. Gaylard, and ungalow at Coychurch, for Mr. E. R. Plum.

SS HOUGHTON.—The M.H. held an inquiry into plication by the Pontefract R.D.C. for sanction rrow £26,000 for a scheme for the provision of ge and sewage disposal works.

LL.—The T.C. proposes the purchase of land at y Park, at a cost of £2,960, for a recreation d. The B.E. has intimated that it will consider for the extension of the Grammar School. ded plans are to be prepared for extensions at the l hospital. The Water Committee is considering odernising of the Cottingham pumping station, estimated by the Engineer to involve an outlay of 00. A site in Igglemire-lane is to be purchased rposes of an open-air school. The City Architect repared plans for the conversion of premises at gham into a maternity home. The Housing ittee has agreed to give subsidies in respect of ollowing schemes: Eight houses, Newcomen- Mr. G. Spruit; 16 houses, Summergangs-road, mmonite; four houses, Cottingham-road, Mr. M. t; eight houses, Southcoates-lane, Mr. R. n; four houses, Victoria-avenue, Mr. G. Spruit; houses, Southcoates-avenue, Messrs. Boddy & ; four houses, Beverley High-road, Mr. G. on; six houses, Southcoates-lane, Mr. Spruit; uses, New Rosmead-street, Messrs. Lawrence : two houses, Aberdeen-street, Mr. W. Pinder; es, Desmond-avenue, for Mr. W. Garbutt.

NBRIDGE.—A large super-electricity substation be erected at Ironbridge on the banks of the Severn as part of a large electrical scheme for dland Counties. The scheme has recently been oned by the Electricity Commissioners, and work commenced immediately.

ROW.—The T.C. has decided to open negotiations nction to borrow £5,460 for the erection of 14 type houses.

GHLEY.—The B.G. has approved the plan for tension of the Nurses' Home in Fell-lane, at an ted cost of £10,000. Application is to be made M.H. for sanction to the scheme.

ULTON.—A new cheese factory is to be built. have been drawn up for the new building by Burnett, architect, of Hickling.

NGTON.—The T.C. approved plans: House, mberland-road, for Mr. J. G. Lucas; house, ad, off Guy's Cliffe-avenue, for Mr. L. Overell.

S.—The T.C. has sold a site in Compton-road Maurice Sherwin for the erection of a house and — The T.C. decided to invite tenders for the of 500 houses, to be divided between the municipal estates at Middleton, Crossgates, and od.—It is proposed to sell an acre on the Cross ousing estate to the Catholic Education Com- for the erection of buildings for religious or onal purposes. Sixteen public conveniences e constructed in various parts of the city at a £6,700. Subsidies of £100 per house are to be respect of the following houses to be built: houses, Old-lane, for Mr. Booth; five houses, s-place, Mr. C. Smith; six houses, East Moor- t. Mr. W. Rogers; two houses, Cambridge Mr. Wm. Teal; house, Old-lane, Mr. W. bungalow, Stainbeck-lane, Mr. E. B. Verral. op property in Briggate has been acquired srs. J. Lyons & Co., Ltd., and the property e immediately converted into a modern cafe. lectricity Committee are about to accept for large extensions at the Electricity works 'ehall-road; the work is in two separate con- one being for the constructional steelwork, r being excavator, concretor and mason work, g the rock asphalter's work.

LLAW.—The Northern Government has given ior the erection of two new schools.

POOL.—The Corporation propose to erect and ew public baths and washhouses in Minshull- An inquiry has been held by the M.H. for to borrow £21,600 for the purpose.

LLY.—The G.W.R. Co. has notified the B.C. has instructed the preparation of plans and s for the improvement of Llanelly railway The Council has decided to press for the erec- a new station, the estimated cost of which is y the Company to be £300,000.

S.—The Metropolitan Asylums Board propose ion of two cottages at the Southern Hospital, d total cost about £1,200, including the value te.

N (KENSINGTON).—The L.C.C. has agreed to the borrowing by the B.C. of £23,150 in con- with the erection of houses comprising the tion of the St. Quintin estate housing scheme.

N (LEWISHAM).—F. Chappell & Sons, office; T. Dadd, house, Honor Oak Park; A. Marsh, es, Fossil-road; H. S. Mitchell, 12 houses, -road; J. G. Stephenson, for L.C.C., 115 Downham Estate; J. G. Stephenson, for 3 houses, Downham Estate; R. J. Aitchison, uses, Tatnell-street; W. J. Scudamore, Ltd., es. Manor-lane.

N (MUSWELL HILL).—The Church Council ames's propose erecting a new hall.

N (TOTTENHAM).—The U.D.C. approved six houses, by H. Hawthorn, in Ashfield-road; r for J. H. Robinson & Co., in Northumberland

N (WESTMINSTER).—The City Council passed Webb, Aston & Son, porch, Army & Navy lowick-place; Whinney, Son, & Austen Hall, g, corner of Buckingham Palace-road and street; Jeeves, S. Gordon, rebuilding, 252–262, Regent-street, 19–25, Argyll-street, and 1, Little Argyll-street.

LONDON (WOOLWICH).—The L.C.C. has recommended the borrowing by the B.C. of £37,000 for the purpose of concreting ditches at Plumstead-marsh.

MANCHESTER.—The final plans for the new extension of Lewis's, Market-street, have been passed by the Improvements and Building Committee of the C.C. The cost of the new building is estimated at £300,000, and apart from the site the total approximate cost will be £1,000,000. The extensive operations involve the demolition of a large number of buildings in Fountain-street, etc., and the floor space of the new emporium will be 11 acres. Messrs. Ferguson, Palin & Co., Ltd., switch gear manufacturers, Openshaw, have secured 7 acres of land at the Croft, Edge-lane, for proposed extensions to their works.

MANSFIELD.—The T.C. passed plans: Hardys Kimberley Brewery Co., Ltd., rebuilding of "Black Swan," Albert-street and Midworth-street; F. Lagar. house, Sheepbridge-lane; Mason & Whiting, two houses, Intake-avenue; T. Knighton, bungalow, Southwell-road; A. R. Roe, two houses, Waverley-road; J. Allison, house, Southwell-road; G. W. Dickinson, house, Intake-avenue.

MEXBOROUGH.—The U.D.C. has made application to the M.H. for sanction to a loan for 52 houses. Request has been made to the Ministry for permission to invite tenders for a further 110 houses.

MIDDLESBROUGH.—Included in the projects under consideration by the Education Committee for the next financial year are the following: Provision of premises for accommodating mentally and physically defective children; extension of the Kirby Secondary School site by the purchase of additional land; and the erection of a central school on the Fallows School site. The Committee is to apply for permission to borrow £58,722, the estimated cost of the new schools at Martongrove.

MILFORD.—Messrs. Machonochie Bros., Ltd., have acquired ten acres of land at the Priory, Milford Haven, and are, at once, to put in hand the erection of a factory for herring curing.

MIRFIELD.—The U.D.C. propose to erect new public conveniences, at an estimated cost of £415.

MYNYDDISLWYN.—The U.D.C. has passed plans for the erection of 46 houses by the Wyllie Estate Building Society.

NEWBURY.—Plans passed by T.C.: Two houses, Essex-street, Messrs. Cooke Bros.; house, Queen's-road, Mr. Slater; storeshed, Northbrook-street. Messrs. Blecket, Turner & Co.

NEWCASTLE.—The Corporation Town Improvement Committee has passed plans for the erection of a warehouse, stores, and office for Messrs. Gallagher, tobacco manufacturers, in Rutherford-street, Newcastle.

NORTHUMBERLAND.—The E.C. has resolved to prepare plans for the erection of the following schools: Shiremoor, Prudhoe, and Hirst. The authority has decided to expend £2,000 upon the establishment of two horticultural schools.

OLDHAM.—A new elementary public school is to be erected on a site in Ward-street by the E.C. Plans have been prepared by Mr. Fred Thorp, architect, Union Bank Chambers, Oldham, and tenders are now being invited. Sanction is to be sought by the Corporation from the M.H. in connection with the proposed extension of the heating system of the male and female infirmary wards, and certain alterations at the garage estimated to cost £1,559, and for an expenditure of £3,000 for the proposed electric light installation at the institution.

OXFORD.—The T.C. approved plans: C. Wright, outbuildings at house, Northmoor-road; G. H. Simmons, two houses, Lonsdale-road; Miss M. Fry, house, Victoria-road, Summertown; The Domestic Bazaar Co., Ltd., shop and store, corner of Cornmarket and St. Michael-streets; C. E. Rose, house, Duke-street, New Botley.

PEBWORTH.—The R.D.C. decided to abide by Government regulations with regard to the building of 28 houses at Willersey and Ashton-under-Hill. The estimate of Messrs. Espley & Co., Evesham, of £3,498, was the lowest for the Willersey scheme, and was accepted, and that of Mr. Crisp, Bretforten, at £5,388, was accepted for Pebworth.

PENRHIWCEIBER (GLAM.).—The War Memorial Committee have decided to erect a 60 ft. clock tower from drawings prepared by Mr. W. H. Williams, architect, Town Hall, Mountain Ash.

PERCY MAIN (NORTHUMBERLAND).—A new workmen's club and institute is to be erected at an approximate cost of £5,000. The building, which has been designed by Messsr. Marshall & Tweedy, architects, Newcastle, will contain meeting hall, recreation rooms, &c., and the contract has been placed with Mr. B. Peale, Tynemouth.

PORTADOWN.—The U.D.C. approved plans for the erection of new houses in the town.

PORTISHEAD.—The M.H. has sanctioned the borrowing of £5,500 for 10 houses.

PRESTON.—The T.C. passed plans: W. Houghton, house, Deepdale-road; J. Wignall, two houses, Portland-street; J. H. & W. Mangan, school, Blackpool-road; J. Miller, 14 houses, Winckley-road; J. Miller, two houses, Lytham-road; W. Smirk, two houses, Powis-road; H. Heaton, four houses, Heaton-road. —Application for sanction for a loan is to be made to the M.H. in connection with the Miller-road housing scheme for the following sums: Road surfacing, £1,147; houses, £24,000. The E.C. are considering a scheme of acquiring for educational purposes the premises adjoining Moor Park open-air school. The design of Mr. Hutchinson, of the firm of Messrs. James Powell & Son, Liverpool, has been accepted for the memorial window and tablet to be installed in the Broughton Parish Church, at a cost of £424.

RAWTENSTALL.—The Catholic school of St. James the Less is to be extended at an estimated cost of £3,500.

RHYMNEY.—The U.D.C. has applied for a grant of £2,500 from the Miners' Welfare Fund to lay out a recreation ground and develop the public park and erect a bandstand.

ROSSINGTON.—A Roman Catholic church is to be erected.

RUGBY.—The U.D.C. has decided to prepare a scheme for the provision of 100 houses on part of Eastlands estate.

ST. HELENS.—The Dawson Housing Schemes Co. are to erect 96 houses at Sutton, St. Helens, for sale to private purchasers, under an instalment plan. An immediate start is to be made.

SCARBOROUGH.—The Scarborough Spa Co., Ltd., is going to carry out a large scheme of improvements, comprising new shops, cafe, ball-room, &c. Plans have been prepared by Mr. F. Tugwell, architect, Scarborough.—Plans for the new school at Gawthorpe, Ossett, have been prepared by Mr. Edeson, the architect to the Ossett Council. The estimated cost is £12,500.

SEDGEFIELD.—The R.D.C. is to build 24 houses on a site at the end of Darlington-road.

SOUTH SHIELDS.—The nurses' quarters at Dean's Hospital are to be extended, at a cost of £300. The B.S. is to prepare plans for a convenience at Westoe. The B.S. has prepared a scheme for the lay-out of Gypsies Green, at a cost of £16,000. Tea rooms are to be erected at North Foreshore, at a cost of £7,500. The Education Committee is considering plans and estimates for a school of art, the governors having intimated that costs of schemes would be as follows:—Brick building £5,416, concrete building £4,874, neat, durable building, with wood framing, lined inside with asbestos sheeting, asbestos tiled roof, £2,500. Plans have been passed for roads and sewers on the housing estate, to cost £44,653.

SPENBOROUGH.—The Education Committee has decided upon the purchasing of two sites upon which it is proposed to erect a new Central School and a new Elementary School, subject to the approval of the Board of Education.

STIRLING.—The Royal Infirmary have decided to erect a new institution altogether on the most modern principle at a cost of from £65,000 to £75,000. The Stirling Education Committee propose to erect a new school in the Riverside district, at an estimated cost of about £40,000.

STOKE-ON-TRENT.—The T.C. has prepared a two-year housing programme, which includes the erection of 500 houses by the Council and 1,000 by private enterprise. It has been decided to lend Mrs. E. G. Brown £2,700 in respect of the erection of eight houses on the Harpfield Farm estate. A committee which has investigated the abattoir problem now recommends a comprehensive scheme on a site near the railway. Plans passed: 10 houses, Bagnall-street, N.S. Building Co.; eight houses, Longfield-road, Mr. G. Jones; house, Chapel-street, Mr. Hessell; house, Broadway, Mr. Cartledge; two houses, John-street, Mr. T. H. Buckley; two houses, Milton-road, Messrs. Shenton Bros.; two houses, Trentham-road, Mr. W. Edwards; house, Star and Garter-road, Mr. N. Clows; warehouse, Newcastle-road, Messrs. Twyfords, Ltd.; two houses, Stone-road, Mr. Cartlidge; four houses, Blurton-road, Messrs. Prestwood Bros.

STRETFORD.—The U.D.C. passed plans: Four shops, Moss-road, for J. Maunders; four shops, King-street, for Howard & Son.—Application has been made to the M.H. for sanction to the borrowing of the sum of £28,025 to defray the cost of the erection of the fifth and last instalment of 56 houses, and the construction of road and sewer works on the Seymourgrove housing site.—The B.E. approved plans for the erection and equipment of a new Central School at Gorse Hill, at an estimated cost of £16,130. Application had been made to the M.H. for sanction to a loan of £16,130.

SUNDERLAND.—The Board of Management of the Royal Infirmary are promoting a scheme for the extension of the infirmary, at an estimated cost of £150,000. The extension is to be on the present site. Plans have been prepared for building three new two-story pavilions on the south side of the main corridor, with balconies and roof wards, which, when completed, will increase the number of beds from 240 to 503. The scheme also includes the rebuilding of the administrative block, provision of ear, nose, and throat department, maternity wards, extended out-patient accommodation, wards for paying patients.—The Corporation Health Committee has approved plans for the erection of 18 houses onNewcastle-road, where a new building estate is to be developed; 18 on Barley Mow estate, Ryhope-road; and six in Inverness-street.

TANFIELD.—The U.D.C. has resolved to negotiate for the purchase of a site upon which to erect 30 houses, in blocks of six or eight houses.

THIRSK.—The Board of Guardians have decided to carry out extensions at the Union Infirmary in accordance with plans prepared by their architect, at an estimated cost of about £600, subject to the scheme being approved by the M.H.

THURNSCOE.—The U.D.C. has decided to build 50 houses, and purchase from Messrs. Taylor's Trust 27 acres of land adjoining the present housing estate.

WAKEFIELD.—Plans passed by R.D.C.: Bungalow, Doncaster-road, Sharlston, Mrs. Colley; extensions to pavilion at Overton, for the Denby Grange Colliery Athletic Club.—The M.H. has sanctioned the purchase of a site at Netherton upon which it is proposed to erect a housing scheme. The Wakefield Cathedral roof timbers are in urgent need of being renewed, and an appeal for £6,000 is being made to enable the work to be carried out.

WHICKHAM.—The U.D.C. has approved plans submitted by Messrs. Nordmann & Sons, Ltd., for the erection of 11 self-contained houses at Dunston.

WILLESDEN.—The U.D.C. approved plans: Three houses, Aylestone-avenue, Brondesbury Park, by Mr; F. Stanley Allen, for Western & Arnell; eight houses, Mount Pleasant-road, Kensal Rise, for Mr. W. Glanville; five houses, Chatsworth-road, and a house Coverdale-road, Cricklewood, for Mr. C. W. B. Simmonds; new offices, High-road, Willesden Green, by Mr. G. A. Sexton, for Pendleton & Co., Ltd.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—E

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£	s.	d.
Best Stocks	4	3	6
Second Hard Stocks	3	18	6

Per 1,000. Delivered at London Goods Stations.

	£	s.	d.
Flettons, at			
King's Cross	2	13	3
Do. grooved for plaster	2	15	3
Do. Bullnose	3	8	3
Best Stourbridge Fire brick :—			
2½ in.	8	11	0
3 in.	10	3	0
GLAZED BRICKS—			
Best White Ivory and Salt Glazed Stretchers	23	0	0
Headers	22	10	0
Quoins. Bullnose and 4½ in. Flats	29	10	0
Best Blue Pressed Staffs.	9	5	0
Do. Bullnose	9	15	0
Blue Wire Cuts	7	5	0
D'ble Str'tch'rs	31	10	0
D'ble Headers	28	10	0
One Side and two Ends	32	10	0
Two Sides and one End	33	10	0
Splays and Squints	31	0	0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s.	d.		s.	d.
2 in. per yd. super	2	1	3 in. per yd. super	2	11
2½ in. "	2	6	4 in. "	3	6

	s.	d.	
Thames Ballast	10	6	per yard.
Pit Sand	13	9	" "
Thames Sand	14	6	" "
Best Washed Sand	14	6	" "
⅜ in. Shingle for Ferro-Concrete	12	9	" "
½ in. "	14	0	" "
⅝ in. Broken Brick "	11	6	" "
Pan Breeze	7	6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0	10	0
Super Cement (Waterproof)	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
" Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
" " White	3	12	6
" Fine	5	12	0
Sirapite, Coarse	3	9	0
" Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	11	9
Best Ground Blue Lias Lime	2	4	6
Hair	17	0	0
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s.	d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2	9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2	11½
PORTLAND STONE—		
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4	4
Do. do. delivered on road wagons at above stations, per ft. cube	4	5
White basebed, 3d. per ft. cube extra.		

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7	/-
Random blocks from 10 ft. and over "	17	/-
Sawn two sides "	27	/-
Sawn three or four sides "	32	/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s.	d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5	6
6 in. rubbed two sides, ditto "	6	0
3 in. sawn two sides slabs (random sizes) "	2	3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1	6½
1½ in. to 2 in. ditto, ditto "	1	4
HARD YORK—		
Delivered at any Goods Station London.		
Scappled random blocks Per Ft. Cube	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5	1½
6 in. rubbed two sides ditto "	6	1½
4 in. sawn two sides slabs (random sizes) "	2	10
3 in. ditto. ditto "	2	1½
2 in. self-faced random flags. Per Yard Super	9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube :—Plain, 6s. 6d. ; Moulded. 7s. 9d. ; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	22 0	3 × 4	24 0

PLANED BOARDS.

1	×	11	£31 0	1	×	9	£30 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
⅝	16/6
¾	20/-
1	25 -

Inches	BATTENS	s.	d.	
⅞ × 2		2	6	per 100 ft.

SAWN LATHS.

Per bundle					0	2 6
Dry Wainscot Oak. per ft. super, as inch	0	2	0	to	0	2 6
¾ in. do. do.	0	1	6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1	9	to	0	2 6
Cuba Mahogany	0	3	0	to	0	3 6
Teak (Rangoon, Moulmein or Java), per cube	0	14	0	to	—	
American Whitewood planks, per ft. cube	0	12	0	to	0	14 0
Best Scotch Glue, per cwt.	4	10	0	to	—	
Liquid Glue, per cwt.	4	7	0	to	5	10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	6	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

Per 1,000 f.o.r. London.

	£	s.	d.
Best machine-made tiles from Broseley or Staffordshire district	5	12	6
Ditto hand made ditto	5	17	6
Ornamental ditto	6	2	6
Hip and valley tiles (per dozen) Hand made	0	9	6
Hip and valley tiles (per dozen) Machine made	0	9	0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£	s.	d.
R. S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
" Stanchions	17	10	0
In Roof Work	20	10	0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
¼ in.	16	10	0	⅜ in. to ½ in.	13	10	0
⅝ in.	14	10	0	⅝ in. to 2½ in.	13	0	0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ⅜"&up. ½"to¾" inclusive.	Fittings. ⅜"&up. ½"to¾" inclusive	Flanges ⅜"&up. ½"to¾" inclusive
Black Gas	50 %	50 %	47½ %	60 %
Blue Water	45 %	45 %	42½ %	55 %
Red Steam	40 %	40 %	37½ %	50 %
Galv'd Gas	35 %	40 %	37½ %	50 %
" Water	28½ %	35 %	32½ %	45 %
" Steam	22½ %	30 %	27½ %	40 %

	57½ % 52½ % 47½ % 47½ % 42½ % 37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2¼	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2¼	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s.	d.	Bends, stock angles. s.	d.	Branches, stock angles. s.	d.
2 in. per yd. in 6fts plain	3	0½	2	2½	2	8
2½ in. " "	3	6½	2	5½	3	3½
3 in. " "	4	2½	2	8	4	0½
3½ in. " "	4	7	3	3½	4	8½
4 in. " "	5	1	3	9½	5	5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s.	d.	Bends stock angles. s.	d.	Branches stock angles. s.	d.
3 in. per yd. in 9ft. lengths	4	9	5	8	8	10
4 in. " "	6	3	6	8	11	4
5 in. " "	7	6	11	6	18	2
6 in. " "	8	10	14	4	23	5

Per ton in London.

IRON—	£	s.	d.		£	s.	d.
Common Bars	13	10	0	to	14	10	0
Staffordshire Crown Bars—good merchant quality	14	10	0	..	15	10	0
Staffordshire "Marked Bars"	17	0	0	..	18	0	0
Mild Steel Bars	12	0	0	..	13	0	0

METALS (*Continued*).

	£	s.	d.		£
Steel Bars, Ferro-Concrete quality, basis price	12	10	0	..	13
Hoop iron, basis price	16	10	0	..	17
" Galvanised	31	0	0	..	32
Soft Steel Sheets, Black—					
Ordinary sizes to 20 g.	14	10	0	..	15
" " " 24 g.	15	10	0	..	16
" " " 26 g.	17	10	0	..	18
Sheets Flat Best Soft Steel, C.R. & C.A. quality—					
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21	0	0	..	22
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22	10	0	..	23
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24	10	0	..	26
Flat and Galvanised Corrugated Sheets—					
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20	10	0	..	21
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21	0	0	..	22
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23	0	0	..	24
Sheets Galvanised Flat, Best quality—					
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23	10	0	..	10
Best Soft Steel Sheets, 22 g. and 24 g.	24	10	0	..	10
Best Soft Steel Sheets, 26 g.	26	0	0	..	27
Cut Nails, 3in. to 6 in.	20	10	0	..	22

(under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suitable for plate houses, including all fittings, painting coats, and delivery to job, average price abou to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£
LEAD—Sheet, English, 4 lb. and up	51
Pipe in coils	51
Soil Pipe	54
Compo pipe	57

NOTE—Country delivery, 30s. per ton extra ; lots 3 cwt., 2s. per cwt. extra and over 3cwt. and u cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt.

Old lead, ex London area, at Mills per ton	37	10	0 ..
Do., ex country, carriage forward per ton	38	10	0 ..

COPPER.

Seamless Copper tubes (oasis)	per lb.
Strong sheet	"
Thin "	"
Copper nails	"
Copper wire	"

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCK IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/	45/-	76/-	153/-	246/-	510/- per

NEW RIVER PATTERN SCREW DOWN STOP COCK UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per

NEW RIVER PATTERN SCREW DOWN MAIN FEED.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1½ in.	1¾ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per d

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per d

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz

NEW RIVER PATTERN CROYDON BALL VALVES.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEAN SCREW.

	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-
8 lbs. S. traps	35/-	45/-	66/-

	101/- per
	126/-

TIN—English Ingots, 2/6 per lb. SOLDER—Plu 1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0
" " " in barrels	"	0
" " " in drums	"	0
Boiled " " in barrels	"	0
" " " in drums	"	0
Turpentine in barrels	"	0
" " in drums (10 gall.)	"	0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		59
GENUINE WHITE LEAD PAINT—		
"Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt lots per ton delivered		81
Red Lead, Dry (packages extra)	per ton	52
Best Linseed Oil Putty	per wt	0
Filocol	per cwt	0
Size. XD Quality	/kn	0

[*Continued on next page.*]

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ICES CURRENT OF MATERIALS (contd.)

GLASS.

LISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
z. fourths ..	3½d.	32 oz. fourths	8½d.
thirds	4½d.	32 „ thirds	10½d.
fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
thirds	6½d.	„ 21 „	5½d.
fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
thirds	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

a price according to size and substance for squares from stock.

LISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
olled plate	4½d.
ough rolled	5½d.
ough rolled	5½d.
igured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white..	6½d.
Ditto, tinted	9d.
olled Sheet	6d.
Vhite Rolled Cathedral	5½d.
'inted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon. £ s. d.
Varnish ..... Outside	0 14 0
ditto ..... ditto	0 16 0
Copal ..... ditto	0 18 0
Copal ..... ditto	1 0 0
Copal Carriage ..... ditto	1 4 0
Ditto ..... ditto	1 12 0
Varnish ..... Inside	0 18 0
Pale Paper ..... ditto	0 18 0
Copal Cabinet ..... ditto	1 2 0
Copal Flatting ..... ditto	1 0 6
Drying Oak..... ditto	0 18 0
Hard Drying Oak ..... ditto	0 19 0
Copal Varnish ..... ditto	1 0 0
ditto ..... ditto	1 2 0
ditto ..... ditto	1 12 0
Japan Gold Size	0 10 0
Black Japan	0 10 6
and Mahogany Stain (water).....	0 12 0
swick Black.....	0 7 6
Black	0 14 6
ting (patent)	1 5 0
h and Brush Polish	0 17 0
Dryers in Terebine.....	0 9 0
ss Black Enamel.....	0 7 0

New Scottish Schools.

rres Dean of Guild Court recently approved ls for the erection of a new school in that on at a cost of £18,000. Plans have also been d for the Fife Educational Authority by u haven Dean of Guild Court for a new mining hol, fully equipped, to be erected in Buckan, at an estimated cost of £5,000.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Perth.—The Dean of Guild Court has passed plans for extensive alterations to the County and City of Perth Royal Infirmary. The extensions include the extension of the sterilising room in the operating theatre, the nurses' dining-room, and the drying room of the laundry.

Brodick.—Operations will commence shortly in connection with the repairing of the little harbour at Brodick. The Marquis of Graham has made arrangements for the renovation, and the dues exacted should maintain the financial position of the harbour.

Falkirk.—The Town Council is preparing a new scheme for the erection of 282 houses which are to be erected on the sites of previous housing schemes at Merchiston, Thornhill and Carmuirs, as well as on the Stirling-road and Union-road site, which was recently acquired by the Council. It was stated at the last meeting of the Council that it has been the custom to keep the housing contracts inside the burgh, but the progress had been so slow that it was suggested that a different system should be adopted this time and labour obtained from whence it was most plentiful.

Glasgow.—The Housing Committee of the Corporation have approved of a big slum clearance scheme, which will mean the provision of new houses for a population of 16,246 people. It is proposed to erect 4,143 houses under this new scheme, and the houses will be spread over 127 different areas, 87 of these areas will be reserved for purposes of open spaces, mainly the sites of back lands; 23 areas, when cleared, will have houses erected on them; and 17 areas will be devoted to the construction of business premises only.

Elgin.—The Town Council has decided to invite offers for the erection of three blocks of four houses, similar to those already erected at Maisondieu-road, on the remainder of the unbuilt ground between Maisondieu-road and Victoria-road. The Council are aiming to erect about 20 houses of the cottage type.

Stirling.—The Housing Committee of the Town Council has resolved provisionally to proceed with housing schemes for 100 houses, of which 25 per cent. will be room and kitchen. The sites which have been proposed are, Butt Well Park, alongside Raploch-road; Borestone-crescent; Raploch Farm; Drip-road; Rockvale Mills; Craigs; Bannockburn-road, West Side.

Fifeshire.—The need for more houses in Dunfermline is very acute and a report to this effect was submitted to the Dunfermline Committee at their last meeting. It is estimated that about 500 houses are needed immediately. The needs of the mining areas especially are very great, and it is proposed to attend to these immediately. The Public Health Committee suggest a scheme for 100 houses to be erected, comprising 60 at Kelty and 40 at Crossgates. It is also suggested that the Fife Coal Co. should be asked to continue their present building operations at High Valleyfield to relieve the congestion there.

GLASGOW MASTER BUILDERS

THE annual meeting of the Glasgow Master Wrights' and Builders' Association was held recently in Glasgow. Mr. Hugh D. Findlay, president, in the chair. The annual report stated that during the past year the position in the building trade had been slightly better, but prices were still being cut to such a degree that the profit, if any, was almost nil. On the one hand, the public was crying out for houses; on the other, the contractors were not nearly fully occupied. Repair work to property had also been better, but proprietors and house factors were still bound to be careful regarding repairs as their profit margins were extremely small. This would continue until the restrictions on property were cancelled and some settled policy adopted that would give the people confidence to invest their money in it with some hope of a return. Mr. James L. Cowan and Mr. Robert Brown were elected president and vice-president respectively for the coming year.

Scottish Architects.

A meeting of the council of the Incorporation of Architects in Scotland was held recently at 15, Rutland-square, Edinburgh, Mr. John Keppie, F.R.I.B.A., President, in the chair. Reports were submitted by the Practice Committee and the Housing and Town Planning Committee. There were admitted to membership one Associate and four Students. A frame drawing of the Wallace Monument, Stirling, designed by the late Mr. G. T. Rochead, F.R.S.A., Glasgow, was presented by Mr. H. R. Williamson, architect, Edinburgh, and there was also presented by Mr. R. G. Wilson, jun., architect, Aberdeen, a portrait of Archibald Simpson, an early nineteenth-century Aberdeen architect, being a steel engraving by the late James Giles, R.S.A.

Victoria Infirmary.

Additional accommodation to Victoria Infirmary—for which plans were prepared in 1914, but discontinued owing to the war—is now in course of construction. The new pavilion, with its adjuncts, will involve an approximate expenditure of £100,000.

Roman Architecture.

A lecture on "The Roman and Italian Orders of Architecture" was recently given at Glasgow University, under the auspices of the Workers' Educational Association, by Professor Charles Gourlay, of the Royal Technical College, Glasgow. Professor Gourlay said that Roman architecture began with the conquest of Greece in 146 B.C., and lasted until the transfer of the capital of the Roman Empire to Constantinople in A.D. 328. Its full magnificence was displayed during the reign of the Emperors between 50 B.C. and A.D. 328, but the most defined work was done during the Augustan age, although there were culminating periods during the reigns of Trajan, Hadrian, and Antoninus Pius, when splendidly conceived buildings were erected.

UILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of cotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors at may occur:—

	Masons.	Brick-layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Masons' Plasterers' Labourers.
deen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
ire	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
lendria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
rbath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
yr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
rvate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
lowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
s	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
ridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
rarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
ries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
ne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
rmline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
burgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
lk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
rvilliam	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
hiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
aw	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
rcock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
anton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
awk	1/6	1/6	1/6	1/6-1/6½	1/6	1/6	1/6	1/2	
lsburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
veess	1/5	—	1/4½	1/4	1/5	1/5	1/4	1d. to 1/2	
lmnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
rkldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
rkall	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0	
ng	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
it	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
otwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
rt	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
rg	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
rkshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
sby	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

*The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 913

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1⅛ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.
Deal wrot moulded and rebated	per foot cube	14

		1"	1¼"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8
Deal shelves and bearers	"	1/4	1/6
Add if cross tongued	"	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8

		s.
Housings for steps and risers	each	0
Deal balusters, 1 in. × 1¼ in.	per ft. run.	0
Mahogany handrail; average 3 in. × 3 in.	" "	6
Add if ramped	" "	11
Add if wreathed	" "	23

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.
Rolled steel joists	per cwt.	16
Plain compound girders	"	19
Do. stanchions	"	21
In roof work	"	27

RAIN-WATER GOODS.

		3"	4"	5"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7
Ogee Do. Do.	"	2/4½	3/1	3/10
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3/7
Do. nozzles for inlets	"	2/2	2/7	3/10

PLUMBER.

		s.
Milled lead and laying in flashings and gutters	per cwt.	64
Do. Do. in flats	"	63
Extra labour and solder in coated cesspools	each	6
Welt joint	per ft. run.	0
Soldered seam	" "	1
Copper nailing	" "	0

		½"	¾"	1"	1½"	2"
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					
Bends in lead pipe	each					3/3
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6
Red lead joints	"	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws	"				14/7	19/6
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.		
Do. Do. Sirapite	" "		
Do. Do. Keen's	" "		
Add sawn lathing	" "		
Add metal lathing	" "		
Portland cement screed	" "		
Do. plain face	" "		
Mouldings in plaster	per 1 girth		
One-and-a-half granolithic pavings	per yard sup.		

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.		
26 oz. Do.	" "		
Obscured sheet	" "		
⅛ in. rolled plate	" "		
¼ in. rough rolled or cast plate	" "		
¼ in. wired cast plate	" "		

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.		
Knotting and priming	" "		
Plain painting 1 coat	" "		
Do. 2 coats	" "		
Do. 3 coats	" "		
Do. 4 coats	" "		
Graining	" "		
Varnishing twice	" "		
Sizing	" "		
Flatting	" "		
Enamel	" "		
Wax polishing	per foot sup.		
French polishing	" "		
Preparing for and hanging paper	per piece 2/—to		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges, percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of information given on this page is copyright.

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& SONS (BEXHILL-ON-SEA), LTD. Registered October 22. Builders and , engineers, &c. Nominal capital,

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CORAH & SON, LTD. (201,176) October 22. Builder and contractor, pital, £8,000.

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Co. (BUILDERS), LTD. (201,623). ovember 11. 4, St. Mary's Parson- ester. Builders and building con- ominal capital, £1,000.

D. (201,592). Registered Novem- ncer House, 4, South-place, Moor- Builders and contractors, &c. pital, £100.

VILLIAMS & Co., LTD. (201,583). November 8. 61, Imperial Build- e-hill, E.C. Builders and decora- rnal capital, £100.

THE NATIONAL INSTITUTE OF PLUMBERS

THE National Institute of Plumbers recently held its half-yearly meeting at the Cutlers' Hall, Sheffield. The delegates were welcomed by the Master Cutler (Mr. W. W. Wood), who said that the Institute sought to maintain a high standard of efficiency in plumbing work, and took a keen interest in the training of apprentices. When so many skilled men were leaving this country because they could not find employment, it was of the utmost importance that the supply of technical and skilled men should be maintained.

A vote of thanks to the Master Cutler was proposed by Mr. R. H. Rowell, of Newcastle, and seconded by Mr. J. C. Smith, of London.

Mr. William Terrey, the general manager of the Sheffield Water Department, emphasised the point that only thoroughly efficient craftsmen should be allowed to do plumbing work. Unskilled persons should not be allowed to jeopardise public health by meddling with that of which they were not complete masters. In these days there was a tendency to make first cost and profit the main consideration, but in plumbing that was a tendency which was disastrous both in the interests of the plumbers and of public health. They were in the midst of great housing activity, and special emphasis should be laid on the need for theoretical and practical tests for those engaged on the important work of plumbing and sanitation. Health, protection against fire, and the general safety of the people depended largely upon the maintenance of an adequate water supply, and sound plumbing work contribute largely to this result. It was a weapon of no small importance in the struggle against disease in all its forms.

INDUSTRIAL HOUSING

A NEW form of industrial housing has been originated in the United States. The houses under this scheme are all detached, but sufficiently large to accommodate two families. The reason is that it has been found that the purchasers like to have tenants. For a house of the size now being built, the buyer rents out one of the apartments, and the rent helps to pay off his first mortgage, and in time he becomes the sole owner. After that the extra remittance brings in a regular income. Thirty-five of these two-family houses have been erected. Each house covers an area 35 ft. wide by 100 ft. deep. Gas, electricity, and separate heating plant are laid on. A porch, enclosed by glass, so as to make what is known in America as a "sun parlour," is included. On the first floor is the vestibule, the enclosed porch, a hall, living-room, dining-room, kitchen, two bedrooms, and a bathroom. The second floor has a third bedroom over the porch. The cost of each house is 11,750 dollars—a sum that is said to be far below normal prices. The first block of 35 houses was completely sold out before completed, and many of those who secured homes have already received far higher offers than they have paid. A special company, with a board of directors, is responsible for the financial control of these houses. Shares in the company, of the par value of 10 dollars each, are sold only to employees, who can pay by a deduction from the weekly earnings. Thus the capital has been provided and the employees have in the shares valuable securities, on the strength of which they are able to buy one of these houses.

Derby Commercial Scheme.

A contract has just been arranged by the architects, Messrs. Naylor, Sale & Woore, for the erection of a block of shops to be erected at the Market Head, Derby, at a cost of about £28,000. The builders are Messrs. S. Gee & Sons, Ltd., Derby. The constructional steelwork is to be provided and fixed by the Fawcett Construction Co., Ltd., Westminster.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

BANSTEAD.—For modernisation of male blocks J and K at the Mental Hospital, for the L.C.C.:—

W. Lawrence & Son, Ltd.	£34,510	0	0
Holliday & Greenwood, Ltd.	34,326	0	0
J. Garrett & Son	33,926	0	0
G. E. Wallis & Sons, Ltd.	30,540	0	0
Prestige & Co., Ltd.	30,427	0	0
Cropley Bros., Ltd.	30,320	0	0
F. & H. F. Higgs, Ltd.	30,153	0	0
J. Carmichael (Contractors), Ltd.	29,073	0	0
Leslie & Co., Ltd.	28,327	0	0
W. J. Maddison, Ltd.	27,989	0	0
W. Akers & Co., Ltd.	26,890	0	0
Burnand & Pickett, Ltd.	24,892	3	9
*W. H. Gaze & Sons, Ltd.	24,263	0	0

BEXHILL.—Erection of 10 houses at Little Common, for the T.C.:—

	With Slate roofs.	*With Tiled roofs.*
White Bros.	£4,900	£5,800
W. J. Simms Sons & Cooke, Ltd	4,480	4,580
‡W. C. Greed	4,450	4,490

BEXHILL.—Erection of pavilion at the Palegrove, for the T.C.:—

T. McCormick	£895
White Bros.	875
E. Godwin & Sons	838
F. Banks	836
*W. C. Greed	785

BONEHURST.—Improvement of county bridge, for the Surrey C.C.:—
*A. Streeter & Co., Ltd., Godalming.... £6,794

CHORLEY.—For erection of a post office on a site off High-street, for H.M. Office of Works:—
*Baxendales, Ltd., Chorley.

CONGLETON.—For 40 non-parlour houses, for the B.C. Plans by Mr. W. H. Duncan Arthur, Borough Surveyor:—

*C. W. Machin & Son, Biddulph, for 20 houses, north aspect	£10,300
*H. Smith, Congleton, for 20 houses, south aspect	9,640

CROCKFORD.—Construction of a bridge to replace the ancient manorial bridge, for the Surrey C.C.:—
*A. Streeter & Co., Ltd., Godalming £9,707

CROYDON.—For construction of a railway siding, for the T.C.:—
*R. H. Neal & Co. £1,750

EAST GRINSTEAD.—For erection of six cottages, for the R.D.C.:—
*G. Wells £2,862 12

GREENFORD.—For sewerage scheme, for the U.D.C.:—
*Municipal Contracts, Ltd..... £25,544

INCE.—For erection of a presbytery for the Rector of St. William's Church. Messrs. R. C. Ralph & Co., Architects:—
*A. Wigan.

LEICESTER.—Construction of four concrete bridges for the T.C.:—
*J. J. Shardlow & Co. £8,274 10

LONDON.—For works in connection with the erection and completion of proposed flats at 34 and 36, Bosworth-road, for the Kennington B.C.:—

Arthur Vigor, Ltd.	£6,510
G. & E. Kent, Ltd.	5,989
B. Colley & Sons, Ltd.	5,890
F. J. Barrett	5,780
Lane Bros.	5,538
G. N. Watts, Ltd.	5,398
G. Potton & Sons, Ltd.	5,240
*J. P. Williams, Ltd.	5,180

LONDON.—For the completion of West Park Mental Hospital, for the L.C.C.:—

Kirk & Randall, Ltd.	£115,279	7	9
Patman & Fotheringham	109,761	0	0
Foster & Dicksee, Ltd.	111,118	5	4
Holloway Bros., Ltd.	109,677	0	0
Leslie & Co., Ltd.	104,560	2	10
Bovis, Ltd.	100,922	9	9
Jas. Carmichael, Ltd.	100,163	7	7
Wilson Lovatt & Sons	99,291	13	0
*Wm. Moss & Sons, Ltd.	98,774	15	7

(All of London.)

LONDON.—For erection of a block of dwellings, to be known as Archer House, on the Whitmore estate, Hoxton, for the L.C.C.:—

H. C. Horswill	£22,399	0	0
L. H. & R. Roberts	22,096	0	0
W. M. Brand	21,258	0	0
Holliday & Greenwood, Ltd.	20,787	0	0
Prestige & Co., Ltd.	20,274	0	0
Albert Monk	19,964	0	0
Allen Fairhead & Sons, Ltd.	19,890	0	0
J. E. Billings & Co., Ltd.	19,716	0	0
A. E. Symes	19,629	0	0
Rowley Bros.	19,598	0	0
*R. Woollaston & Co.,	19,585	10	4
Fred. & T. Thorne	19,481	0	0
Walter Jones & Sons, Ltd.	19,304	11	2

(All of London.)

LONDON.—For reconstruction of conveniences in Great Marlborough-street, for the Westminster Council :—

R. M. Pearson	£4,596
B. Finch & Co.	4,525
‡Sims & Russell	4,450

LONDON.—For erection of a schoolkeeper's house at Balham High-road school, for the L.C.C. The architect's comparable estimate is £1,094 :—

F. D. Hidden & Co., Ltd.	£1,341	0	0
W. H. Gaze & Sons, Ltd.	1,322	0	0
J. Garrett & Sons, Ltd.	1,295	0	0
A. Logan	1,294	14	10
Holliday & Greenwood, Ltd.	1,239	0	0
J. Carmichael (Contractors), Ltd.	1,214	0	0
J. Potterton & Sons	1,197	10	0
Sims & Russell	1,197	0	0
J. & C. Bowyer, Ltd.	1,173	0	0
*G. E. Wallis & Sons, Ltd.	1,096	0	0

LONDON.—For repairs to facades at Caxton Hall, for the Westminster Council :—

Alternative restoration in Metallic Composition—

Townsends, Ltd.	£2,005	0	
Stone Preservation Co., Ltd.	1,825	0	
John Daymond & Son, Ltd.	1,019	0	
Sims & Russell	980	0	
A. Dreyfus, Ltd.	431	0	
E. D. Hook, Ltd.	121	0	

Restoration of defective stonework with Red Hollington Stone—

E. D. Hook, Ltd.	£9,962	10	
A. Dreyfus, Ltd.	3,600	0	
John Daymond & Son, Ltd.	3,475	0	
‡Raines & Porter, Ltd.	2,637	10	
Frank Mortimer, Ltd. (for Corsehill stone)	2,443	15	

LONDON.—For repairs at Ebury Bridge-road, for the Westminster Council :—

Burton Bros.	£635
J. L. Catterall & Sons, Ltd.	587
Townsends (Builders), Ltd.	575
Walter Lilly & Co.	520
Sims & Russell	465
T. W. Heath, Ltd.	433
‡E. D. Hook, Ltd.	429

LONDON.—For erection of steel fire-escape bridges, &c., for the Metropolitan Asylums Board, at Tooting Bec Hospital :—

Mitchell Bros., Stratford	£1,276	9	9
J. Bates & Sons, Aylestone	1,184	10	0
T. W. Palmer & Co., Merton Abbey	1,047	0	0
J. Westwood & Co., Ltd., Mill-Wall	995	0	0
A. D. Dawnay & Sons, Ltd., Battersea	960	0	0
Somerville-Barnard Construction Co., Ltd., New Cross	880	0	0
*G. Pauling, Ltd., Wimbledon	755	10	0

MANSFIELD.—For erection of 100 houses at Bull Farm estate, for the T.C. :—

*C. Hill.

(Subject to M.H. approval.)

MAPPLEBOROUGH GREEN.—Erection of picture house, for the Warwickshire C.C. :—

‡John Lamb, Ltd., of Studley £745

NETHERNE.—Provision of accommodation for nurses at mental hospital, for the Surrey C.C. :—

*Mullen & Lumsden, Ltd., Holborn £5,378

NEW WHITTINGTON.—For erection of a new sewerage disposal works, for the Chesterfield Corporation :—

*W. Moss & Sons, Loughborough .. £64,040

PAIGNTON.—Repairs and decorations at the isolation hospital, for the U.D.C. :—

*G. Macers £185

PORTISHEAD.—For erection of 10 houses, for the U.D.C. :—

*Burston & Hawkins, Clevedon £4,993

PORTSMOUTH.—For the building fellows' Hall, Kingston-road, Portsmo Dyer, architect, Southsea :—

Day & Sons.....
Corke & Co., Southsea.....
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Dash & Sons, Gosport.....
Jas. Crockerell, Southsea .....
E. & A. Springings, Portsmouth...
John Hunt, Ltd., Gosport.....
John Lay & Co., Portsmouth.....
Jno. Croad, Portsea.....
A. E. Porter & Son, Portsea.....
F. J. Privett, Southsea .....
Davis & Sons, Southsea.....
*S. Salter, Southsea .....
Tanner Bros., Southsea .....

STRETFORD.—For erection of t Hill Central School, for the U.D.C. :—

*J. Partington & Co., Middleton Ju tion .....

STRETFORD.—For erection of 56 U.D.C. :—

*Grimshaw & Thomas, Ltd. .....

TOTTENHAM.—For erection of 104 D.C. Mr. S. Couchman is the architec

*Perry Bros. .....

WHITLEY.—Completion of housing Whitley and Monkseaton U.D.C. :—

*Calderwood, Chapman & Co., Ltd., Newcastle £11,

WREXHAM.—For the erection of 56 T.C. :—

H. Higgins & Son .....



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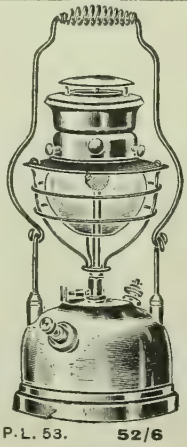
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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

L.—No. 4271. DECEMBER 12, 1924.

SAVE THE CITY CHURCHES

THE controversy over the future of the City churches will shortly reach its climax. Probably the majority of architects and others who are interested in these buildings as monuments of art are by now thoroughly fogged as to the position in which we stand. This has o lucidly explained by Sir Reginald Blomfield in his letter e *Times*, of November 21, that we quote the following t: "The Union of Benefices and Disposal of Churches ppolis) Measure, 1924, was passed on Tuesday (Novem-3) by the Church Assembly by a very large majority. neasure deals (1) with the redistribution of benefices, ter with which the layman is not concerned, and (2) with pulling down or removal of any church,' and 'the sale posal of its site,' with which all who care for our beautiful hurches are very much concerned. The *modus operandi* is latter purpose appears to be as follows: In the first the Metropolitan Benefices Board is established, consisting cty members, of whom twenty-three are appointed by astical or quasi-ecclesiastical bodies, and seven by lay In addition, if the church is wholly or partly within y of London, four members are to be appointed by the Council and one by the L.C.C. Reckoning these five nal members as laymen, this gives twelve lay to twenty-clerical representatives. The Bishop, having marked his church, gives not less than one month's notice either Ancient Monuments Board or the Royal Fine Art Com-(it is not clear which), and to the Benefices Board. The t Monuments Board may advise the Benefices Board he value of the building in question, and the Benefices may, 'if in its discretion it thinks fit,' advise the Bishop rd to the recommendations of the Ancient Monuments ; or, on the other hand, it may put these recommendations e waste paper basket. After this, the Bishop appoints nission consisting of five members to enquire into and on the scheme. If the commission reports to the Bishop ur of the scheme, the Bishop may require the Ecclesi-Commissioners to frame a scheme in accordance with ort of the commission. Notice has to be sent to various and bodies named in a schedule, who shall have not less ree months within which they can appeal to the Bene-oard. If the latter body approves the scheme, the calls on the Ecclesiastical Commissioners to certify the and its approval by the Bishop to the Privy Council. right of appeal to the Privy Council within one month is , but in the face of the powerful organisation of the es Board, the Bishop, and the Ecclesiastical Com-ers, it seems very improbable that an appeal would be ful. If, on the other hand, the Benefices Board does prove the scheme, the scheme is dropped for the time, er an interval of five years the Bishop can set the ball again by appointing another commission. The destruc-City churches, which so far has proceeded in a somewhat manner, will, if this measure be passed, be regularised very dangerous principle formally recognised."

Reginald remarks that the measure was first introduced e report of the Phillimore Commission in 1919, and he us that if the recommendations of Lord Phillimore's sion were carried out only thirty of the parish churches g or rebuilt after the Fire would be left. The Bishop's contention that he has to choose between his respect for a beautiful building and his longing to save living souls is hardly justified. How can it save souls to pull down monuments of past religious zeal to make room for commercial buildings? In "Notes," in our issue of November 28, we suggested that such a contention amounts to an admission that the Church of England is a dying institution, and this we do not believe.

It is unfortunate that the sale of these churches and the necessity of reducing the cost of their upkeep should be so much associated with their destruction. We all admit that things cannot go on as they are, but there are numerous alternatives to pulling the churches down. We prize them not only as the creations of our greatest architect, but as witnesses to spiritual life in a great city. If they were sold, subject to safeguards as to their retention, to other religious bodies, or to suitable secular bodies, such a course could not reasonably be objected to; neither could the most exacting churchman object to their use for secular purposes when the same churchman is prepared to see these consecrated sites used to accommodate offices and warehouses. The site values when the buildings are demolished would in any case be much less than may be imagined, because they would be subject to rights of light in every direction.

Supposing that these churches had been old Gothic buildings, would we hear so much talk about pulling them down? One doubts it. Wren's architecture is little appreciated by the ecclesiastical mind to-day, and the architect's grievance is that it is wrong for their fate to be left ultimately in the hands of ecclesiastics, who are laymen where architecture is concerned. As regards reasonable alternatives, why is it not possible for the Church to press for the inclusion of many of these buildings in the list of Ancient Monuments, to be kept up as such? If St. Vedast's, St. Magnus, St. Anne and St. Agnes, St. Nicholas, St. Mary-at-Hill, and St. Dunstan-in-the-East, were taken over and the Church relieved of all responsibility concerning them it would ease the burden materially and save these six fine buildings from the destruction to which the Commission of four years ago attempted to consign them. If the State in some way made itself responsible for these six, the City of London might itself relieve the Church of the burden of six more, and the Church's difficulties would thus be removed. It will be argued that, even if the Church were relieved of upkeep, it would still be without what it needs most—money locked up in the sites. The value of these sites represents an unearned increment, on the enjoyment of which the Church should be the last to insist, lest it be open to the charge that it is as greedy of gain through the more speculative of commercial methods as commerce itself.

The piecemeal destruction in the past has been bad enough; under it we lost seventeen churches; but if the Church, which already commands such powers of destruction, is still unsatisfied, is it astonishing that we should be alarmed at the possibilities that await us in the future, when the power to destroy is immensely increased? We sincerely hope that Parliament will give expression to the determination of the mass of architectural and instructed opinion and refrain from handing over such arbitrary powers to those who neither by training nor knowledge are competent to decide upon the future of our great national monuments.

NOTES.

The President of the Royal Academy.

We regret that it is necessary for Sir Aston Webb to resign his Presidentship of the Royal Academy owing to his having passed the age-limit. The Academy was fortunate in his appointment to its presidency, for in all his official capacities—and they have been numerous and varied—Sir Aston has always exhibited fine qualities of tact, sense, and imagination. These are things which do not always go together, but in such matters as have been the main business of his life they have given Sir Aston Webb an influence which few attain. We are glad to know that he is now back in active work.

Town and City Development.

The great importance of foresight and imagination in regard to the future development of our towns is continually being impressed on our thoughts. We have just now been confronted by the more or less imminent sale of the Foundling Hospital, with its large acreage of land set free, the surprising suggestion for traffic roads through the parks, the possibilities of some fairly exhaustive consideration of the Thames bridges, and possible drastic action, and the possibilities which underlie future changes in the Broad at Oxford. Such considerations, with all the possibilities for good or ill which face us in the not distant future, call for serious and active work by such bodies as the London Society, whose great aim is to make our towns and cities more beautiful, more convenient, and more worthy of our modern civilisation.

Roads Across the Parks.

The proposal to make use of the public parks for new roads will, we feel sure, call forth strenuous opposition. In fact, we should hardly suppose it to be put forth seriously. From the interminable hustle and roar of the streets the parks offer us almost the only refuge and quiet left, and contrast with and compensate for the endless unrest of the crowded thoroughfares. The charm and seclusion of St. James's Park would be lost were a road driven, as has been proposed, right through it from Buckingham Palace to Piccadilly. It is also very doubtful whether much traffic pressure would be relieved thereby. In a letter to a contemporary, Mr. Geoffrey Faber says, with great truth, "The value in a city, such as mechanical transport has made" of London of these large areas free, or nearly free, from the noise and the smell "of motor traffic is beyond computation." Life would cease to be endurable in London, and lose what is almost its chief attraction, were the parks drawn into the welter which mechanical transport has created. The Home Secretary appears to us singularly ill-advised in suggesting that any adequate solution of the traffic difficulty is to be found in cutting up the parks.

City Improvements.

The Foundling Hospital is to be removed, and the property is, we believe, already sold; and it appears to us that the rightness or wrongness of such changes altogether depends on what spirit and purpose the site thus acquired is made use of. We are sorry, as all must be who ha familiar with this old and very landmark, that it should be tak us; but it is difficult to decide t altogether undesirable, the requi of London being so much altered. Oxford, on the south side of "The opposite Balliol College, a row shops, the leases having fallen in danger of replacement. One po the property has already been so unless the owners of the property— case, the City of Oxford—make conditions in their covenants in to rebuilding, the owners of the p can put up any building they It is evidence of the existing ana our urban conditions that this sh so; that property situated in the sity part of the town is in peril kind of use which the owner's interest directs him to make of it, therefore, important for the City of to respect its obligations to the a of an ancient city, already gr disfigured by the vandalisms suffered in recent years. Othe cinema house may be erected o Balliol College, or the municipality ing to increase its rates, may en the erection of great buildings, d all the surroundings. Best of all, possible, for the University to b property, so that it may be reta University use.

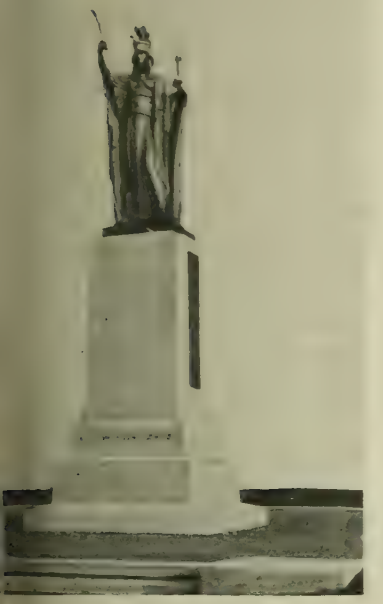
The London Building Act.

Those interested in ing construction in will be looking forv the report which M ham Forrest, Architect to the County Council, is preparing



Lancaster War Memorial. Messrs. Thomas H. Mawson & Sons, Architects.

[Unveiled recently at Lancaster, the bronze figure was executed by Messrs. Martyns, of Cheltenham, the bronze panel by Me Singer, of Frome, and the stone work by Mr. Arthur Tomsy, of Lancaster. The stone is "Stancliffe."]



Troon War Memorial.

MR. WALTER GILBERT, Sculptor.

[The bronze figure is 10 ft. 6 in. high, standing on a granite pedestal, 13 ft. high.]

of the two months' visit to the d States from which he has just ned. It will be admitted that the n Building Act is in need of amend- to bring it up to date, and it was the object of investigating modern ng methods in America with a view certaining how best the London ng regulations could be revised to them into line with developments in uctional methods that the visit ndertaken. We understand that opham Forrest is more than ever nced of the necessity for the removal anomalies in the Act which hinder ogress of London. Theatres, hotels, s, railway stations, traffic regula- and small houses have all been d by him, and he will no doubt some valuable recommendations ese subjects to make in his report.

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erican pressions.

MR. TOPHAM FORREST has brought back many impressions from America, and is of the opinion that we have to learn from that country. In ional buildings and their equip- he thinks America is far ahead of nd the same applies to theatre ng and means of escape in case of The latest New York "skyscrapers" thinks, extraordinarily fine archi- as regards detail, and those built he zoning laws came into operation ry fine compositions as a whole. lanning of railway stations, too, ried out wonderfully well in the d States, where the architect is considerably helped by the fact that in most cases the tracks are below ground level. There is at least one subject, however, in which we are in advance of the cities of the United States, and that is in slum clearances, although the fittings and domestic appointments of American tenements are generally far superior to anything found in this country in similar classes of dwellings. Concrete is used considerably in America for small houses, and Mr. Forrest says he wants to employ concrete to a much greater extent for the thousands of new houses to be built by the L.C.C.

Higher Buildings.

ALTHOUGH Mr. Topham Forrest thinks very highly of the New York "skyscrapers," he does not foresee their adoption in London; nor, indeed, does he desire to. "I never wish to see 'skyscrapers' in London," he tells us, "and I do not think we shall ever see them. I never want to see London look like New York, but that is a different thing from allowing slightly higher buildings in London."

The Fine Arts in Ireland.

WE note that a Fine Arts Course in a Free University has just been instituted in Dublin under the direction of Count Plunkett, Hon. A.R.I.B.A. We understand that, after dealing with the general theory of art, this course proceeds to examine the progress of the arts in Ireland, beginning with metal work and primitive architecture in Pagan times. Subsequent lectures deal with the gradual changes and developments of the arts after the coming of St. Patrick, and the assimilation of Christian ideas from other nations, showing the persistence of racial methods and styles. Ireland is rich in early architecture, and the course of study, which includes the Romanesque churches, round towers, crosses, and incised slabs, with their relationship to similar work elsewhere, should be extremely valuable. The course is to carry on to the present day, and we hope that it will help Ireland to mould a modern architecture expressive of her own needs and aspirations. She can learn a good deal from England, but let her beware what she learns!



Clonfert Cathedral, Ireland: West Doorway.

GENERAL NEWS

Professional Announcements.

The address of Mr. Edwin J. Dod, A.R.I.B.A., is now Cunard Building, Liverpool.

The firm of Messrs. William Hill & Son has been dissolved as from November 1. Mr. Victor Bain, A.R.I.B.A., who was a member, is continuing in practice at 38, Albion-street, Leeds.

Manchester Infirmary.

The Public Health Committee of the Manchester Corporation recently decided to proceed with its proposal for a big extension of Abergele Sanatorium. The scheme is to provide 546 more beds for children, at an estimated cost of about £180,000.

Aberdeen Building Scheme.

Plans for the erection of buildings at the cost of £10,000 by the Royal National Mission to Deep Sea Fishermen, at the corner of Palmerston-road and Market-street, Aberdeen, were passed recently at a meeting of the Lands and Fishing Committee of Aberdeen Harbour Board.

Rotherham Technical College.

In connection with the proposed erection of a technical college and school of art on a site in Howard-street, the Rotherham E.C. recommend that architects be invited to submit competitive designs, premiums to be £200, £100, and £50. It is suggested that an assessor should be nominated by the President of the R.I.B.A.

William Booth Memorial.

Messrs. Fleetwood, Eversden & King, F.S.I., surveyors, of 3, New-court, Lincoln's Inn, W.C.2, have been appointed quantity surveyors for the William Booth Memorial Training College, which is to be erected shortly at Denmark Hill, at an approximate cost of £250,000. The architects are Messrs. Alex. Gordon and G. Morriss Viner, with Sir Giles Gilbert Scott, R.A., consulting architect.

In Memoriam.

A memorial service for Sir Thomas Graham Jackson, Bart., R.A., was held at 2.30 last Monday, at St. James's, Piccadilly. In the congregation were Sir Aston Webb, P.R.A., Sir Reginald Blomfield, R.A., Sir George Frampton, R.A., Sir William Goscombe John, R.A., Sir John Burnet, A.R.A., Viscount Dillon, Sir D. Y. Cameron, R.A., Mr. Ian MacAlister (representing the Royal Institute of British Architects), Major Corlett, (representing the Australian Architects), Sir Hugh and Major Jackson. The Ven. C. E. Lambert, Archdeacon of Hampstead, assisted by Canon Monroe, officiated.

R.I.B.A.

At a general meeting of the Royal Institute of British Architects, held on Monday, December 1, the following members were elected :—

As Fellows (20).—A. Archer-Betham; A. E. Biggs; W. D'Arcy Cathcart; L. A. Culliford, F.S.I.; N. J. Dawson; G. D. G. Hake; J. W. Hays; E. F. Knight; J. M. Lethbridge; T. F. MacLennan; H. F. Murrell; G. Nott; W. S. Owen, M.A., P.A.S.I.; R. M. Pigott, M.C.; C. G. Ripley; J. Smith; H. Thornton, B.A.; S. Toy, F.S.A.; H. A. Welch; and E. B. Wetenhall, F.S.I.

As Associates (15).—C. K. Bhedwar; S. L. Blackburne; J. P. Blake, P.A.S.I.; K. A. Braden; C. H. Brightiff; A. A. V. Campbell; S. S. Careless; R. S. Cobb, M.C.; C. M. Cooper, M.A. (Oxon); R. S. De Burgh; C. G. W. Eve; A. G. Geeson; A. W. Hodges; E. Reily; and J. M. Wilson.

As Hon. Associates (6).—Frank Brangwyn, R.A., R.P.E., Hon. R.S.A.; E. D. MacLagan, Director of the Victoria and Albert Museum, South Kensington; J. C. Squire; Sir Charles Walston, Fellow of King's College, Cambridge, Litt.D. (Cantab.); J. Wells, M.A., Warden of Wadham College and Vice-Chancellor of the University of Oxford; and F. R. Yerbury.

As Hon Corresponding Member (1).—Ragnar Ostberg, Professor at the Royal Academy of Art, Sweden.



Hamilton War Memorial Competition.
Design placed First: By Mr. T. Harold Hughes, A.R.I.B.A.

HAMILTON MEMORI

The Hamilton War Memorial Com having invited designs for the p memorial, received in reply 45 sets o These were submitted to the assessor competition, Mr. George A. Paterson, P of the Institute of Architects in Glasgow award we announced in our issue of last

The site for the memorial was fixed so ago near to the main entrance of the park. The assessor's report congratula committee on receiving so many e designs, which showed a great variety o After carefully considering the selecti design placed first, he reported, was sim dignified in character, refined in det proportion, and embodied all that was e to make a permanent and satisfying me The style adopted reflected the spirit age, and was in sympathy with the tradi the district. The lay-out of the ad ground had been carefully considered.

The designs placed second, third and showed great originality in design and and thoroughly deserved the premiums

The author in submitting his design g following information :—

Site : "The memorial has been pla approximately the site indicated by th mittee. The main front faces north, ar suggested that on the main axis the gra on the opposite side of the drive mi deepened and a site fixed for a mast a for ceremonial purposes. To the back memorial a slightly sunk and paved ga indicated, the centre of which would be and flower plot of cruciform shape. Rig left of the main axis are formal garden to the east extending to the park bou its southern hedge forming a strong line with the flower bed, would lead up memorial from the entrance gates.

The Memorial : "The memorial tak form of a cenotaph with simple enrich and designed to accord with the archit traditions of the neighbourhood. On th a panel projects flanked by decorative leaves and with the arms of the Burgh in the centre. The dedicatory insc would be in large Roman letters deeply on this panel, and at the sides and ba names of important battles in which Ha men took part would be inscribed. The ing would be gilt. Provision for wreat been made by sinking the upper surface lower base and leaving a check to hold t position."

COMPETITION NE

The Constantine Technical College.

Architects are invited to submit desi this competition. Mr. Percy T F.R.I.B.A., has been appointed assesso conditions can be obtained from the Sec on the payment of £1 1s., not later than ber 27. (See advertisement this week.

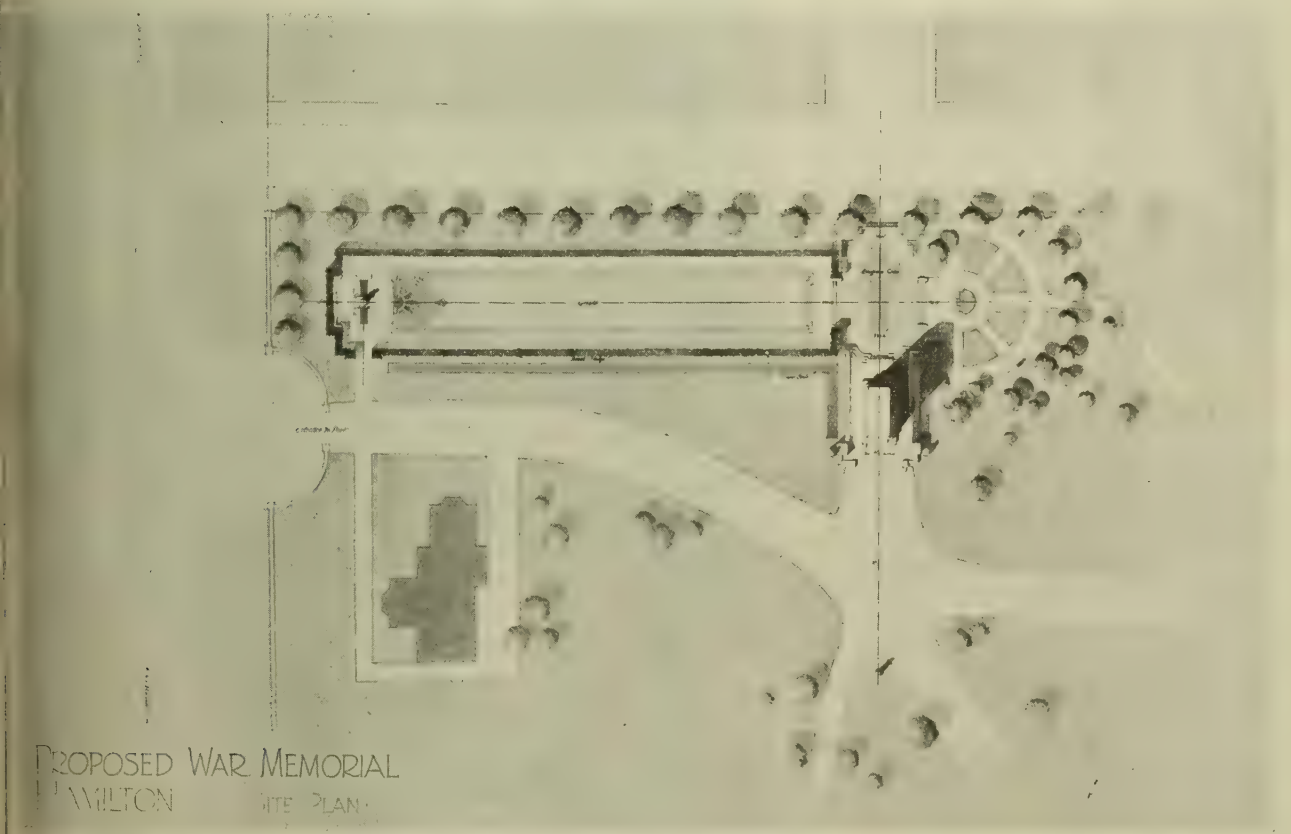
Willesden Town Hall.

The Establishment Committee o Willesden U.D.C. has again had unde sideration the regulations issued by the R and its allied societies with regard to th motion and conduct of architectural petitions, and recommends the Council t these regulations and to at once consi question of asking for competitive des connection with the proposed new town

Other Competitions.

Other competitions still open include t lowing (the dates given are, first the sen date, and second the issue of *The Buil* which full particulars were given) :—M Hall (May 1). Manchester Art Gallery 28; Aug. 22). Offices at Nairobi (Fe Nov. 7). Jugo-Slav Landscape (Dec Nov. 7). Church at Southport (no sen date; Nov. 7). Argentine Institute Blind (Dec. 31. 1925; Nov. 28) Leeds (Feb. 16, 1925; Dec. 5). Valletta (June 30, 1925; Dec. 5).





Hamilton War Memorial Competition.

Design placed First: By Mr. T. Harold Hughes, A.R.I.B.A. (*See p.* 926.)

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Queen Margaret Statue, Lincoln.

SIR,—It was a pleasure to see *The Builder* lending its aid to establish the claim of the Lincoln "Queen Margaret" to rank among the masterpieces of sculpture. I examined the statue at close quarters from Mr. Hodgson's scaffolding in September, and am assured that it belongs to the best period of English Gothic. Not only is there no justification for suggesting "restoration," but only the beauty of the queenly head gave rise to the belief. The "Margaret" is as lovely as the Torel bronze of "Queen Eleanor" in Westminster Abbey, and, in English sculpture, is of the same order of beauty as Donatello's "Saint George" or Michelangelo's "David" in Florentine art. The memory of these works adds point to Mr. Hodgson's plea that the "Queen Margaret" should be placed inside Lincoln Cathedral and replaced by a replica in the exterior niche next to the Edward and Eleanor statues. Both the Florentine statues were designed for the open air, but, in recent years, have been put under cover for their better preservation, the "Saint George" being represented by a replica in the niche on Or San Michele for which Donatello carved it.

There is a tendency to argue that because a stone carving has remained in a certain place for six hundred years, more or less unharmed, it may safely be left another six hundred years. This argument loses sight of the fact that when once the surface of a statue is lost disintegration proceeds very quickly. More damage can be done in fifty years than was done in five hundred years under original conditions. Already the hands and part of the lower draperies of the "Margaret" show signs of damage, though the head has lost none of its beauty. In the retro-choir at Lincoln, overlooking the site of the shrine of the well-loved Bishop Hugh, this glory of English Gothic sculpture would make its full beauty felt for many generations, whereas in its present position it is doomed to certain decay. The very fact that your article has been necessary to draw attention to this supreme example of English craft suggests that its present position is far from ideal. The graces of "Queen Margaret" have been hidden too long. To be appreciated they need to be seen, and that is not possible at present, though lovers of English sculpture will be tempted to the Cathedral Close in increasing numbers by Mr. S. Smith's beautiful photographs. In the retro-choir Edward's second Queen would be seen by every visitor to Lincoln, and her charms would become a possession of the many rather than the few.

London. ERNEST H. SHORT.

Local Museums.

SIR,—May I, through your paper, make a plea for the encouragement of local museums on or near sites of great archæological interest? I am aware that on the score of expense it is, unfortunately, probably useless to wish for representative collections on those sites where no museum now exists, but where they are already established it should be possible to make them really valuable to the student and pilgrim, and attractive and stimulating to the interest of casual visitors.

The present tendency seems still to be to carry off all the more interesting and beautiful objects—in fact, almost everything of value—to the British Museum or to other distant centres, where the better-known types are seldom noticed and virtually lost. It is, I think, a matter of common experience that the objects discovered about, say, the ruins of a Roman town or villa have a very much greater appeal if seen near the place where they were found than they would have in a great city museum. Surely this must be so to an especially great degree when, as in the cases of the castles of the Saxon shore, great ruins set amongst romantic and little-changed landscape help the least imaginative to reconstruct the past.

To take an instance that has been much before our notice of late. Richborough Castle, the Roman-British Rutupiæ, is a place of perhaps unsurpassed interest in the contemplation of that high civilisation in our land which reached its culmination in the days when Rome was decadent and which faded under conditions that baffle our studies in a fog of folk-lore and fable. Yet the museum in the castellum does not contain at all a representative collection of the very numerous objects that have been found here, even since it came under the control of H.M. Office of Works. Though well kept by a custodian who takes an interest and pride in her work, it is, relatively, a poor little collection. Many thousands of coins, covering most of the period and the mysterious transition that followed it, have been found about the site. There are, if I remember right, five coins in the museum. Two privately-owned coins, discovered long ago, just outside the preserved area, were borrowed by the British Museum officials two years ago under the promise that they should be returned to the curator of the Richborough Castle Museum after examination. Perhaps it would not be too much to hope that before long, out of its great stores, not only these two coins, but as complete a Richborough series as possible, including some of those minimi and sceattas which are of peculiar interest as belonging to a series some new example of which may yet help us to correct our theories of the beginning of the dark ages, might be returned for exhibition to the place where they were found.

Though the site of Rutupiæ is under State control, with an entrance fee, I noticed a form in the Museum asking for subscriptions of any sum, for the excavation work. I think that there are probably others besides myself who would be more anxious to make some small sacrifice for an alternative list to preserve spot objects duplicates of which the Museum possesses than to hasten on the excavation of a preserved area.

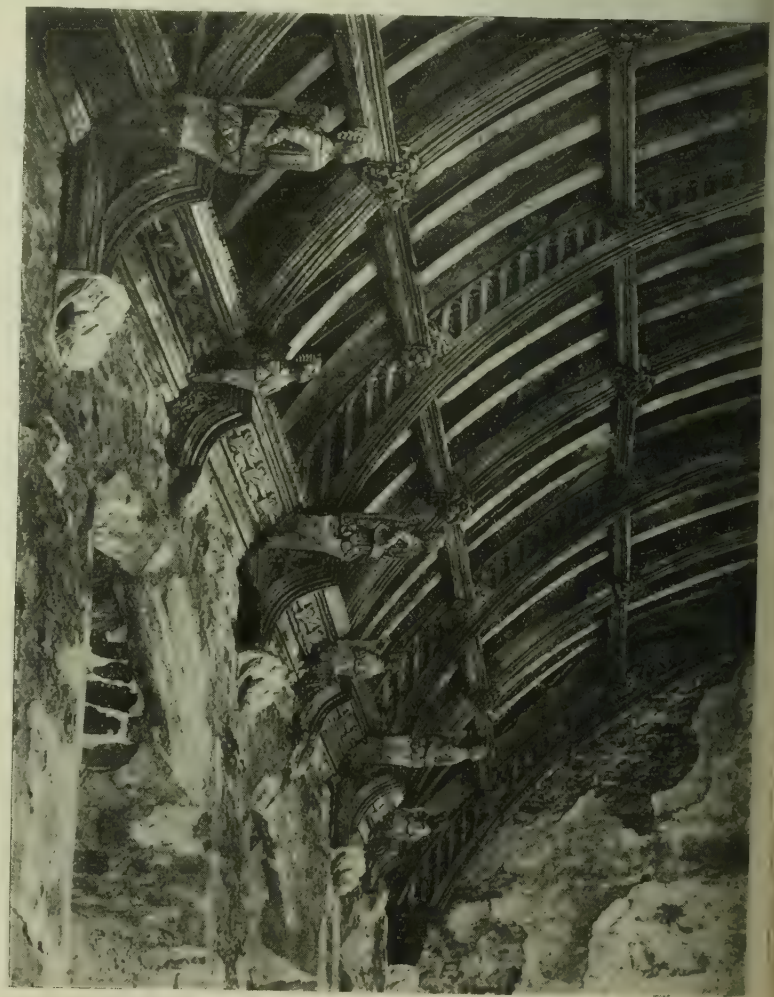
I only mention the case of Richborough as being one of those that have lately brought before the public attention by not the excavation work in the Press. The many other places, Roman and mediæval, the same conditions prevail.

BERTRAM C. G. SH

Waterloo Bridge.

At a recent meeting of the London Council, the following recommendation Special Committee on Thames Bridge agreed: "That the Council of the Insti of Civil Engineers be asked to express benefit of the Council their views on the qu whether, having regard to the present con of Waterloo Bridge, it would be practicabl reasonable to underpin all or some of the of the bridge, so as to render the structur manently safe and to enable it to be re to its original form."

In their report, the Special Committee that they had received a deputation fro Society for the Protection of Ancient Buil whose views were favourable to underpi as a safe, permanent, and economical re which could be applied to the whole of the with the exception of pier No. 4, and po pier No. 5. The society urged that an e ment should be tried on one pier. The mittee expressed the view that the C Council would be wise to ask for the assis of the Council of the Institution of Civil neers on the question of underpinning, in of the outstanding importance of the pre tion of the bridge.



Cleeve Abbey, Somerset: Refectory Roof.

ARCHITECTURAL EDUCATION.—III

By W. S. PURCHON.

E various schools of architecture in the sh Empire, while resembling each other ly in many particulars, vary in a number ays. While it is well that there should be general family resemblance, it will probably be considered well that there should be tions in certain details of the courses and methods of conducting them. It will be ly understood that the schools are subjected arious influences, some acting towards irmity, others towards variety. Among more important of the latter are various conditions, such as the regulations of ersities and other institutions, local opportunities for conducting special courses of struction, local architectural traditions (of using import with the development of the l system throughout the Empire), and the idualities of the members of the staffs of schools. The latter is perhaps the most rtant of the factors tending towards variety, ge, vitality and consequent development. while it may be argued that great improvements may, and do, result from the persistent ving of a uniform method, developments of mental importance are more likely to under conditions permitting of a considerable measure of freedom. Vitality is tially good, variety and change not sarily so; there is thus always a risk in the ing of additional freedom, but it is a risk worth taking. In the case of the recognised ls of architecture, the risk accompanying easure of freedom under which they work ply covered by the conditions under which students enjoy exemption from the inations of the Institute.

dealing with the various subjects of an ectural course, one point rapidly emerges; of course, the relative claims of art and ce. A very great deal—perhaps more enough—has already been written on this some urging the superior claims of art, those of science, and others, yet again, ing that the two are essentials, and that g essentials there are no degrees of import- In the latter apparently logical statethere is the possibility of the lurking y; it may be, for instance, that there are vo distinct things in question. One party ay that no matter how strong, useful and ry a structure may be, it is of no avail has not beauty, while the second party n reply that the converse of this is also As a matter of practice it will probably reed that, so far as the schools are con-l, while two types of mind—that of the and that of the scientist or engineer—e needed on the staff, the best results will ieved when the former is the dominating nce.

he early days of the schools in this country rious subjects in the course were frequently with little consideration of their relationto each other, only gradually did this nship become clear, and no clear-cut d of achieving a wise inter-relation of the s subjects has as yet emerged and been lly accepted. It is probable, indeed, there are various ways in which this end e reached, and there is even the possiof "co-ordination" being ranked among essed words, with the consequent risk of gration and obsession. The logically-d might perhaps start with Egyptian gs and study their design, construction, tion, &c., and produce designs in the ian manner. A repetition of this process h the various styles would finally result study of the various aspects of modern and the production of a modern design last term of the five years' course. Somehort of this is clearly indicated. We many would say we should—learn some-of the construction of famous buildings study the history of architecture, but at me time we should—again in the opinion ny—begin our studies of modern con-on as soon as we begin our studies of ancient architecture, and begin them with simple matters and gradually proceed to more difficult ones, while the history of architectural development will be found to be by no means a study of buildings in which the difficulty of construction gradually increases.

It is, of course, possible to make a good case for the basing of early design subjects on the historical periods under consideration at the time, but there are those who hold strongly that this method violates a fundamental principle, and that the notion of successive period designing should not be encouraged. Possibly the right approach to the whole subject of co-ordination of subjects lies rather in the direction of the investigation of "prerequisites." The main principle at the back of this method is the settling of the nature and amount of work which a student should undertake before he proceeds to a further stage, or before he undertakes a new type of work. It may, for instance, be argued that the student should attempt no architectural design of any kind until he has passed successfully through an outline course dealing with the whole of the main current of architectural development, and until he has similarly passed through elementary courses in architectural form, construction, mechanics, &c.

It will probably be found, again, that once design starts, it tends to outstrip construction, unless a deliberate attempt is made to retard rather than stimulate the imagination of the student. The latter may, for instance, introduce vaults and domes into his designs at a comparatively early period. He may, of course, be shown how they are constructed, but he will not be able to calculate the strength of such structures until a later period in his studies. Under the early method of co-ordination there was the temptation to produce graphic diagrams showing the stresses in such structures, before the student had had the opportunity of studying adequately the theory of construction.

It is of considerable importance, however, that each subject be studied on systematic and more or less formal lines; historical subjects proceeding in chronological order, constructional subjects proceeding from the simple to the more difficult, and subjects such as theory of structures gradually developing from first principles. This naturally leads to an apparent lack of co-ordination, but provided the lecture courses are kept within reasonable time limits, each of them dealt with on the clear understanding that it is leading towards modern design, and a proportion of the designs, as is normally the case, continued to the working drawing stage, the advantages would seem to outweigh the disadvantages. It may perhaps be argued that such a subject as Theory of Design could readily be largely dealt with in the courses on Architectural History, but such a suggestion would hardly be agreed to by the most vigorous advocates of co-ordination.

The main difficulty of co-relation arises in the early years of the course, and it may well be that we shall have to admit that during this early period the student is necessarily viewing architecture with a varying degree of clearness from various angles—historical, constructional, and theoretical—the latter both as regards design and also with reference to the calculations of strengths of structures. If, during these early years, each subject is studied and taught with a clear realisation of the end in view—the designing of modern buildings—it may perhaps be of little moment if his rate of progress along one approach (possibly a longer one) is more rapid than along another. Possibly at about the end of the third year the student will be able for the first time to see the building he is designing with approximately equal sharpness of vision from some three or four points of view. He may, for instance, be able to realise the historical developments which have made possible the style of his design, to give full details of the constructional methods he has adopted, and, if his design is a comparatively simple one, to calculate the strength of all its parts.

Another fundamental point which requires some thought before a consideration of the individual subjects of the course can be undertaken, is the question of dogmatic teaching. On the one hand it may be argued that right through the school course the student should be taught definitely and dogmatically, in order that he may have no shadow of doubt in his mind that the course he is following and the information he is assimilating are in every particular precisely accurate, and that any who may be following another path, no matter how slightly it may diverge from the true one, are preparing for themselves a hopeless future outside the pale. On the other hand, there are those who not only indicate to their students from the beginning that some of the views put forward are matters of opinion, but who also put before the student the opposing points of view. This divergence of method applies in the main to such subjects as Architectural History, Theory of Design and Architectural Construction; but even in such a subject as the theory of structures there is the possibility of indicating or refraining from indicating, the use of a variety of methods of solving a given problem.

The question is then, shall our teaching be entirely dogmatic, or entirely the reverse. Shall it be dogmatic in some subjects and not in others, or shall it be dogmatic in the early part of the course, and cease to be so in the later periods? These are interesting and important points, for whatever the method adopted may be during such a malleable period of the student's life, its effects will be long-lasting.

Closely connected with the above point is another almost equally interesting one. Should a student be encouraged to use his imagination and his inventive faculties right from the beginning of his course, or should there be a period of one, or perhaps even two, years during which his activities are entirely limited to the acquiring of information about the great works of the past and modern methods of construction, &c., and to the acquiring of facility as a draughtsman? If, for instance, architectural design is not started during the first year for the reasons previously given, it is at least a matter for consideration as to whether the students should work during this first year on simple design of a non-architectural type.

Allied to the above questions is the further one of the extent to which memory drawing tests can serve a useful purpose in the curriculum of a school of architecture. If, for instance, it is agreed that there are certain architectural forms which a student really ought to know—for the purpose of the argument it may be agreed that these forms are, for the time being, certain examples of the Greek, Roman and Renaissance orders—does it help the student to learn these forms if he has regular memory drawing tests dealing with them, and do such tests help him in other directions?

London School of Economics.

The following public lectures (open to the public without fee or ticket) on the Principles of Design have been arranged for 1925 by the London School of Economics and Political Science (University of London), Houghton-street, Aldwych, W.C.2. They will take place on Wednesdays, at 5 p.m.

January 14.—Introductory lecture, by B. J. Fletcher, Director of the Municipal Art School, Birmingham. 21.—"The Principles of Design as Applied to Buildings," by W. H. Ansell, M.C., F.R.I.B.A. 28.—"The Principles of Design as Applied to Textiles." Lecturer to be announced later.

February 4.—"The Principles of Design as Applied to Furniture," by H. P. Shapland, A.R.I.B.A. 11.—"The Principles of Design as Applied to Pots and Pans," by John Adams, late of the Pretoria School of Art. 18.—"The Principles of Design as Applied to Books and Printing," by Joseph Thorp. 25.—"The Principles of Design as Applied to Our Homes," by C. H. Collins Baker, Keeper and Secretary of the National Gallery.

March 4.—"The Principles of Design as Applied to Our Cities and Towns," by Frank Pick.

EXHIBITION OF AMERICAN WORKING DRAWINGS

A MOST interesting series of American working drawings has recently been on view at the Liverpool School of Architecture. These drawings have, for the large part, we understand, been collected and brought back by students of the School who, according to their excellent custom, have been working during the summer vacation in the offices of leading American architects, though one particularly fine set of prints has been presented to the School by Mr. Cass Gilbert. In such an exhibition as this, one is brought face to face with the fundamental differences between American and English practice. To the eyes of the English draughtsman unacquainted with American details, these drawings seem so overcrowded with information as to be unintelligible without the closest study. Upon investigation, however, several facts emerge to make the situation clear.

In the first place, it appears that drawings for presentation to the client are prepared to $\frac{1}{16}$ in. scale, together with an estimate of cost as, perhaps, is general in this country. When the scheme and probable cost are approved, work is started at once on $\frac{1}{4}$ in. scale drawings, and upon them practically every detail is carefully shown—steelwork, heating, plumbing, electric lighting, and vacuum installations, &c.—all indicated by means of symbols or a carefully devised system of *hachuring*. With the almost universal use of blue prints, colouring is unknown. In point of fact, these $\frac{1}{4}$ in. scale drawings seem of themselves sufficient for the carrying out of the whole job. Studies of various details, chiefly architectural as opposed to structural, are drawn out to $\frac{3}{4}$ in. scale and transferred to the $\frac{1}{2}$ in. Full size details are drawn out at the same time and everything is made to correspond. The $\frac{1}{4}$ in. and $\frac{3}{4}$ in. scale drawings are completely tied up with dimensions in every direction, minute fractions of an inch appearing in some cases to be accounted for.

While this work is going on, the specification writer in the office is engaged in drawing up the specification, and the steelwork expert, often also in the office, makes his calculations and prepares a separate set of details. When this work is all completed and not till then is the job sent out to tender. No bills of quantities are prepared, the contractor estimates, we understand, on a lump sum basis, or takes out rough quantities of his own. Of late, however, we learn that there is a movement on foot to introduce the English system of quantity surveying, it being thought by this means to get closer bids for work.

One can see at once the advantage to everybody of the architect having all his details worked out before the job is started. Much more time is, of course, allowed to the American architect for the work than is often the case here. It is held, and quite rightly we think, that progress is quicker that way, and valuable plant is not held up or a job kept waiting for further details to be sent along. Extensive alterations made by the client after the work is started must, of course, hold up the work very considerably, and one can only suppose that such alterations are discouraged.

Perhaps the most interesting set of working drawings in the exhibition was that by Mr. Cass Gilbert for the well-known Detroit Library, a building which is, probably, his masterpiece. One would say that these drawings represent the highest skill of the draughtsman's art, and there can be no doubt that the painstaking manner in which every detail is worked out and set down in its proper place in relation to the whole, contributed a great deal to the success of the building. Criticism of the working drawings for being overcrowded and fussy is easy, but the achievement, as illustrated by the photograph which accompanied the drawings, fully justifies the care expended.

The work of Messrs. York & Sawyer was illustrated by drawings of the Chester County Hospital. The most intimate knowledge of all hospital details was shown on the $\frac{1}{4}$ in. scale plans and sections, including the "cuspidor" in the dental room. It was noticed in this connection that all soil and waste pipes were carried down inside the cavity between the inner and outer linings of the external walls, a convenient way of disposing of them and, apparently, also a healthy one.

The Greenwich Savings Bank also by Messrs. York & Sawyer, was fully illustrated, the full size details for the interior bronze work being remarkably well drawn. The plan of the banking hall, it will be recalled, is in the form of a vast oval, a severe test for draughtsmanship. Here, again, all dimensions were fully figured, many, unobtainable otherwise, being calculated by trigonometry.

There were also included in the exhibition working drawings of the Bush Building in New York, by Messrs. Helmle & Corbett, together with several monuments by Van Buren Magonigle, including the famous McKinley Memorial. Amongst the working drawings of domestic work, drawn out with the same meticulous fullness of detail, were some residences by Messrs. Delano & Aldrich.

One is forced to the conclusion, after seeing such an exhibition, that there is the most intimate connection between the fine quality of the finished product of an American architectural office and the thoroughness and competency of the draughtsmen's work.

BRISTOL SCHOOL OF ARCHITECTURE

THE annual exhibition and prize-giving of the Royal West of England Academy School of Architecture took place at the Academy, Bristol, on December 1. Mr. Maurice Webb, F.R.I.B.A., who presided, said the school had made astonishing progress. When, last summer, the Travelling Board of Architects toured the country visiting the schools and reporting how they were getting on, and if they were good enough to receive exemption from the intermediate examination, they came from Liverpool, where the school was one of the largest and best. They did not expect Bristol had in three years reached the stage to qualify for that exemption, and they were, therefore, astounded at the progress made. The work of the school was fully up to the standard of others; indeed, it was better than some, and quite as good as any other. In its own particular class it showed up as well as any school at the London Conference on Architectural Education, and there was one drawing in the Exhibition which was universally admitted to be the best of its type, and it was the work of a Bristol student. Though the work of the school was satisfactory, the financial position was not; it was the only school of architecture in the West of England, from Liverpool to Land's End, and considering the importance architecture played in our daily life every encouragement should be given to those who took up that calling. It was hoped to raise an endowment fund and so put the school permanently on its legs.

Dame Janet Stancomb Wills presented the prizes, and advised the students not to be above consulting their womenfolk when preparing plans for houses, as the little details which men always overlooked made all the difference in a house. The new Winterstoke House at Mill Hill was beautifully planned because the Matron had been consulted by the architect.

The following were the prize-winners:—The Dame Janet Stancomb Wills Travelling Studentship, value £25, Mr. A. J. Saise; the Architectural Association design prize, value £5 5s., Mr. R. H. Brentnall; the R.W.A. Silver Medal and the B.S.A. prize of £3 3s., Mr. R. T. Green; the Savory Design Medal, F. Bowden; the R.W.A. Bronze Medal and B.S.A. prize of £2 2s., Mr. J. H. Bourne; the Headmaster's prize for the most marked progress, Mr. A. E. Powell. Special prizes for proportion were awarded to Messrs. W. J. Thrasher, Mr. H. Brentnall, A. J. Saise, and F. Bowden.

SOUTH WALES INSTITU OF ARCHITECTS

THE annual prize distribution and exhib of students' work of the South Wales Insti of Architects, Central (Cardiff) Branch, and Department of Architecture and Civic De at the Technical College, Cardiff, was recently in the Assembly Hall, at the Techn College.

The Chairman (Mr. T. Alwyn Li F.R.I.B.A.) referred to the excellent work by the Cardiff School of Architecture du the 4½ years that it had been in existe under the direction of Mr. W. S. Purchon, A.R.I.B.A., and thanked the City Cou through the Lord Mayor, for founding developing the School, and expressed the that before long it would be possible for students to work for University degrees.

The Lord Mayor (Alderman W. H. Pe bridge, J.P.), who distributed the prizes, pressed high appreciation of the valu services to the School of Messrs. Percy Tho F.R.I.B.A., Ivor Jones, A.R.I.B.A., Al Lloyd, F.R.I.B.A., and Harry Tea F.R.I.B.A., who have acted as honorary turers, and helped the School in nume other ways.

A vote of thanks to the Lord Mayor was posed by Mr. Percy Thomas, F.R.I.B.A., seconded by Mr. J. H. Jones, Secretary of South Wales Institute of Architects (We Branch).

In proposing a vote of thanks to the Chair Councillor G. Fred Evans undertook to before the next meeting of the University Co Council the suggestion with regard to award of Degrees in Architecture.

The South Wales Institute of Architects, Ce (Cardiff) Branch: Design, fourth year, prize, B. W. Thomas; second prize, W Oakley. Third year, first prize, V. Ba second prize, J. B. Wride. Measured Dra Prize, P. G. Budgen.

Department of Architecture and Civic De President's Prize for Draughtsmanship sented by Mr. Percy Thomas, F.R.I.B.A Banks; The Architectural Sketching (presented by Mr. H. Teather, F.R.I. J. B. Wride; The Architectural Constru Prize (presented by Mr. Sidney Willi F. W. Harper; The Batsford Prize for A tectural History (presented by Messrs. Batsford, Ltd.), E. B. Byrd; Civic I Prize (presented by Mr. Alwyn F.R.I.B.A.), D. J. Williams; The Wo Drawings Prize (presented by Mr. Ivor A.R.I.B.A.), V. Banks. Certificate in tecture (carrying with it exemption fro Intermediate Examination of the R.I.B. V. Banks (with distinction), James B. (with distinction), Harry A. Barton, Byrd, F. W. Harper.

MEETINGS

FRIDAY, *December* 12.

London Society.—Major H. Barnes on "B of London." 18, John-street, W.C.2. 5

Town Planning Institute.—Mr. F. Mars "Bradford Town Planning Schemes." Victoria-street, S.W.1. 6.30 p.m.

MONDAY, *December* 15.

Royal Institute of British Architects A. J. Davis on "Shop Fronts and their ment." At 9, Conduit-street, W.1. 8

Surveyors' Institution (Junior Section) F. W. Kuphal on "Town Planning in E Cities." 6.30 p.m.

WEDNESDAY, *December* 17.

British Society of Master Glass Pain Mr. B. Rackham on "Stained Glass Victoria and Albert Museum." At 6, square, W.C.1. 6 p.m.

Edinburgh Architectural Association. fessor L. B. Budden on "Future of Archit Education." At 15, Rutland-square.

THURSDAY, *December* 18.

Architecture Club.—Dinner. At Hotel Strand, W.C.2. 7.30 p.m.



THE ENTRANCE TO THE MAIN BLOCK.



THE MEMORIAL ARCH.



DETAIL OF EAST FRONT.

Clare College, Cambridge. SIR GILES GILBERT SCOTT, R.A., Architect.

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ILLUSTRATIONS

New Nottingham Exchange Scheme.

This scheme, the illustrations of which we give this week, was unanimously adopted by the Nottingham City Council on December 1. The site comprises an area of approximately 4,260 square yards. On the western frontage is the Market-place, an open space of about five acres; on the Smithy-row frontage the site extends to the boundary of the land which will be occupied by the National Provincial Bank when these premises are rebuilt in connection with the widening of High-street. The site extends to the centre of the High-street frontage, with sufficient width to provide an entrance to the Arcade, with small shops on each side. On the Cheapside frontage the site extends from the building recently erected by the Commercial Union Assurance Company to the Market-place frontage, opposite Exchange-walk.

The widening of High-street will be continued at its new width of 60 ft. Smithy-row will be widened, the building line being improved; the very irregular frontage line of Cheapside will also be straightened, and the thoroughfare considerably improved. The site is of good proportion, and the scheme has been treated on bold and simple lines. The whole of the upper floors of the front portion of the site, west of the Arcade and facing the Great Market-place, together with adequate areas of the ground floor and basement, will be used entirely for civic purposes.

On the Great Market Place front a loggia treatment will be introduced, and the main entrance vestibule approached from this loggia will lead into a large entrance hall. On each side of this hall there will be controlled cloak rooms for ladies and gentlemen, and these cloak rooms will have private staircases leading to retiring rooms in the basement. Leading from the entrance hall will be the grand staircase hall, with its wide central marble staircase and electric elevators on either side.

The whole of the first floor on the western side of the arcade will be used for civic receptions. From the grand staircase a reception lobby will lead into the pillared reception hall (82 ft. by 42 ft.), stretching across the main front and overlooking the Great Market Place. In the front of the reception hall and leading from it there will be a wide open terrace with a Speaker's projecting balcony. At one end of the reception hall there will be a gallery for guests, and at the opposite end a musician's gallery with the necessary retiring rooms for artists. Leading from the reception hall and the grand staircase will be the dining room (56 ft. by 28 ft.). Overlooking Smithy-row, and approached from the grand staircase, will be the Mayor's quarters, which consist of a waiting room, the Mayor's parlour, and a private room. A large service room, served from the kitchens by electric lifts and a private staircase, will be suitably planned so that the uses of the dining-room and the reception hall could be conveniently reversed. Overlooking the main arcade will be the staircase leading to the second floor.

The second floor will be reached by two large electric elevators in addition to the staircase, and this floor will be used for the work of the Council. The Council Chamber will be situated on the main front, surrounded by a corridor and two lobbies for members. The chamber will have a seating capacity for 108 members, with space for the necessary officials. A gallery will be arranged for the public, and a special gallery with a private room will be planned for the Press. The semi-circular plan adopted for the chamber will have the advantage of placing the Mayor within a minimum distance of all members. The chief entrances to the chamber will be from the members' lobbies, and adjacent to the lifts there will be a private entrance for the Mayor. On the southern front there will be a large ante-room (39 ft. by 28 ft.), and on the northern front the members' room and library (39 ft. by 28 ft.). Surrounding the Council Chamber, small private rooms will be arranged, including small rooms for the Mayor, the Sheriff, and the Town Clerk.

The third floor will be planned with the necessary kitchens and administrative stores for the whole of the civic quarters. This floor will have two private lifts and staircases direct from the special entrances in Cheapside and Smithy-row.

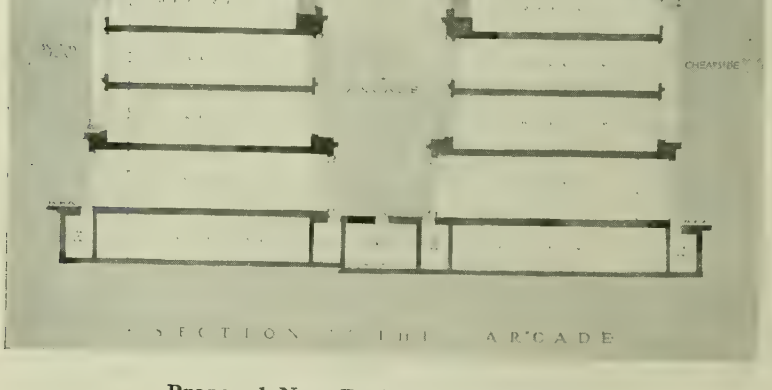
The back portion of the site will be developed to provide the maximum amount of shop frontage. Two large shopping arcades of considerably greater proportions than any other arc in this country will be provided to give c munication between Smithy-row, Cheaps and High-street. The arcades will be 6 high, with an effective width of 28 ft.

The existing buildings on the site have a s frontage of only 390 ft., whereas the propo scheme offers a shop frontage of approxima double the present amount, viz., 753 ft. development on the lines suggested concentr the administrative work for the shops into basement, and allows the fullest value to obtained from the ground floor space. important point of an adequate goods entra for each shop will be dealt with by the introd tion of a wide subway under both the arca and from the subway an entrance to the b ment of each shop will be provided. The s way will be fitted with two extra large go elevators at the main entrances, and the use these could be restricted to certain hours if fo desirable. In addition, at the south-eastern co of the site in Cheapside there will be an incli road suitable for trolley traffic leading into subway. The whole of the space for shops the ground floor will be constructed so as to al the greatest possible scope in sub-dividing area, varying from the small lock-up shop say, 18 ft. by 15 ft., with a small basement, to a large shopping store of, say, 115 ft. by 50 comprising five or six floors in height. Betw the main piers, the shop fronts will be arran exactly as desired by the various tenants, a the internal divisions for the shops will be light as possible to conform with the usual insurance regulations.

The division of the site by arcades will ren the upper floors very suitable for showrooms offices, and this division will have the advant of giving a maximum number of front rooms compared with the usual development w internal wells or light areas. The outer w surfaces of these rooms will be arranged wit very large percentage of window space to ens a maximum amount of light and natural vent tion.

The building will be erected in Portland sto The shop fronts and the upper windows will in metal with uniform bronze letters on the sh fascias. The various apartments in the ci quarters will be finished in a manner to give correct expression required in each room. T whole of the building will be steel framed w fire-resisting floors.

Mr. T. C. Howitt, D.S.O., A.R.I.B.A., is architect.



Proposed New Exchange, Nottingham.
MR. T. C. HOWITT, A.R.I.B.A., Architect.

Clare College, Cambridge.

We give this week several illustrations of new memorial buildings at Clare Colle designed by Sir Giles Gilbert Scott, R.A. T form the first portion of a new court, m possible by the gift of £12,000 by Colonel A Banham, C.M.G., in memory of his son. new buildings were opened on Armistice I by Lord Balfour, Chancellor of the Univers and Visitor of the College.

Messrs. Coulson & Son, Ltd., Cambridge, the contractors.

Dundee School Competition.

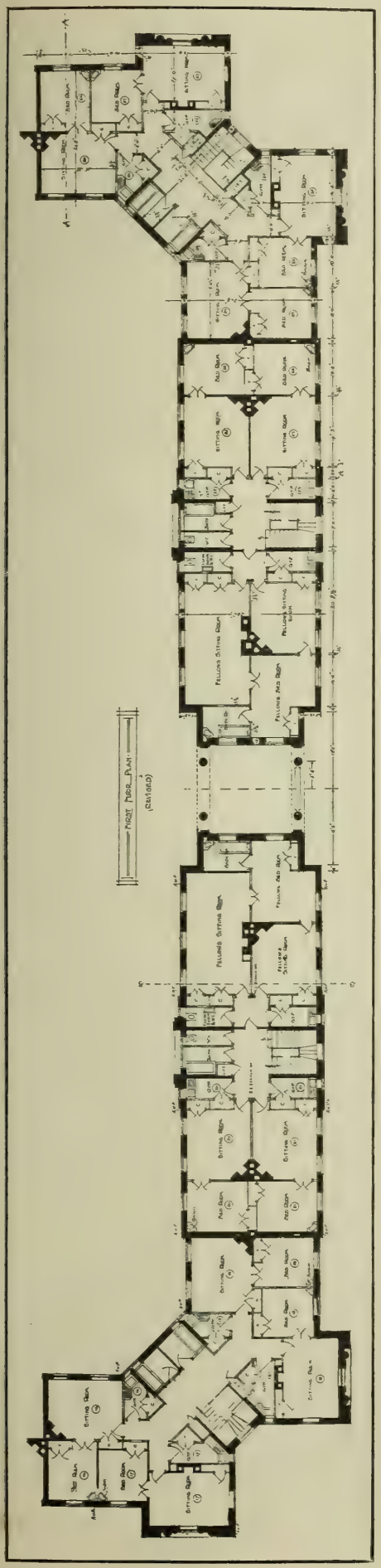
We give this week a perspective drawing the proposed new school at Dundee. T drawing is a perspective of the design submit by Mr. Chas. G. Soutar, F.R.I.B.A. (Mes Maclaren, Soutar & Salmond), and placed i in the recent competition. Other drawings this design were given in our issue for October

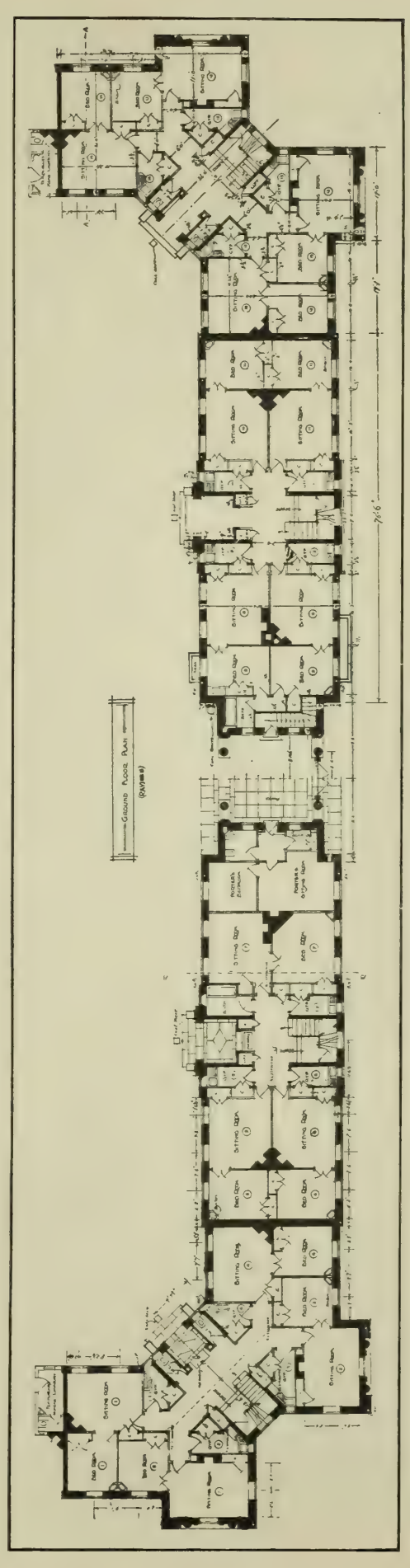
London Hotel Competition.

The sketch of the centre block of the propo "Royal" Hotel, Woburn-place, is part of design by Mr. C. A. Rowbotham, placed i in this recent competition. The length of hotel is some 700 ft. The original scheme to have been carried out in cream-white te cotta, but the actual facing material is now un discussion.

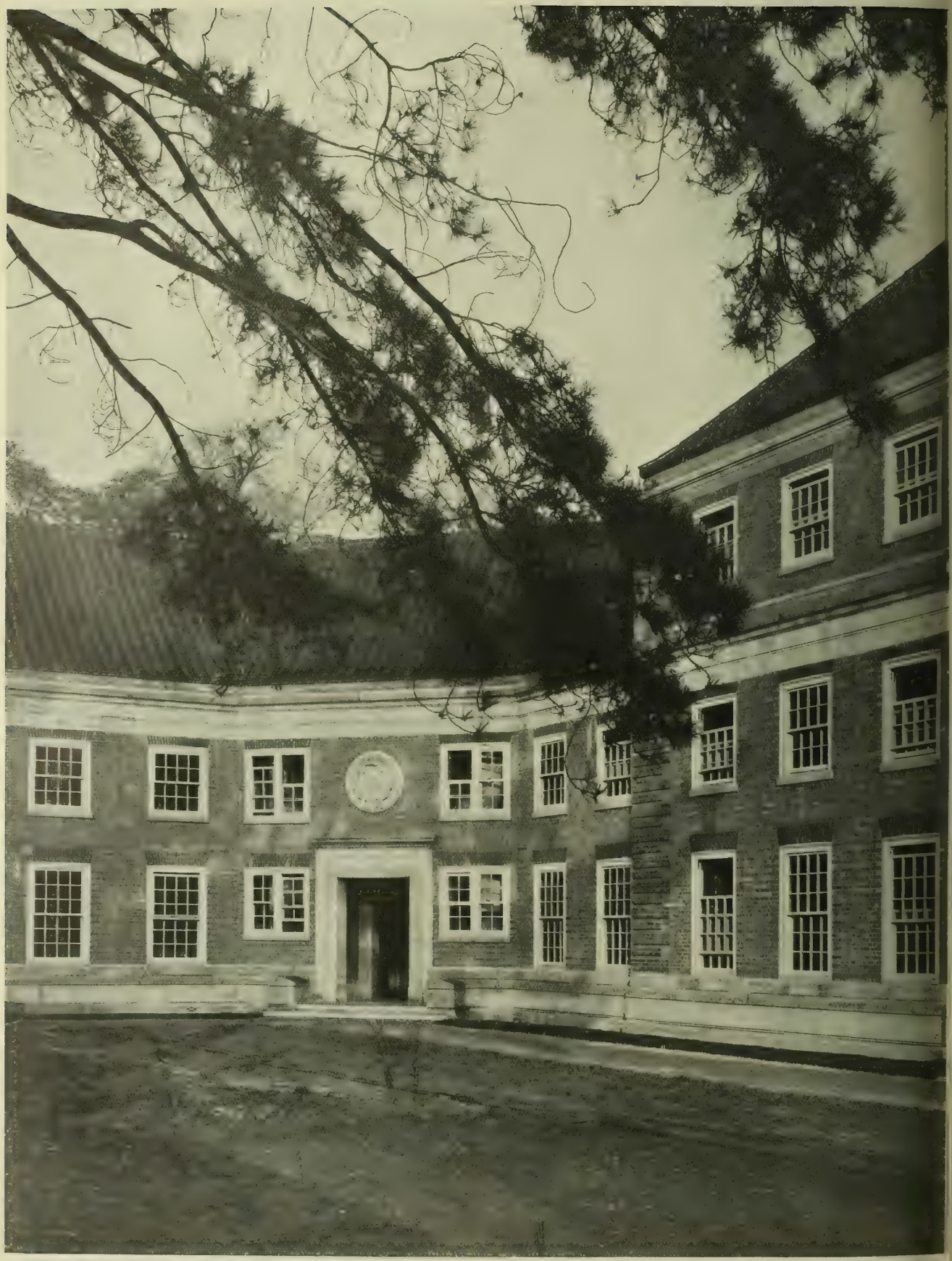
The Chenil Galleries.

In reference to our description of this worl our issue of the 28th ult., Messrs. Stuart's Gre lithic Co., Ltd., inform us that they w responsible for the cast stone-work to some the elevations.

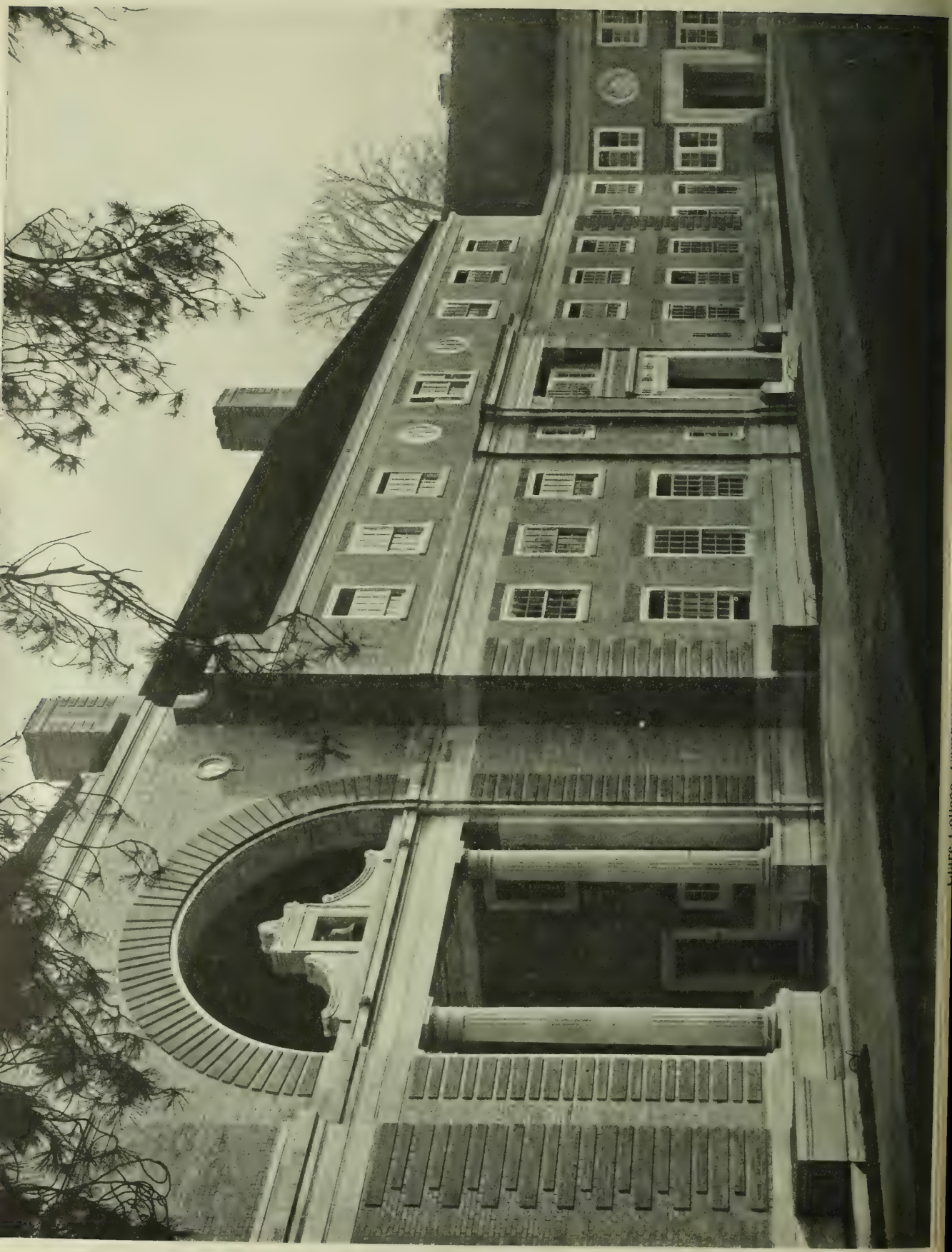


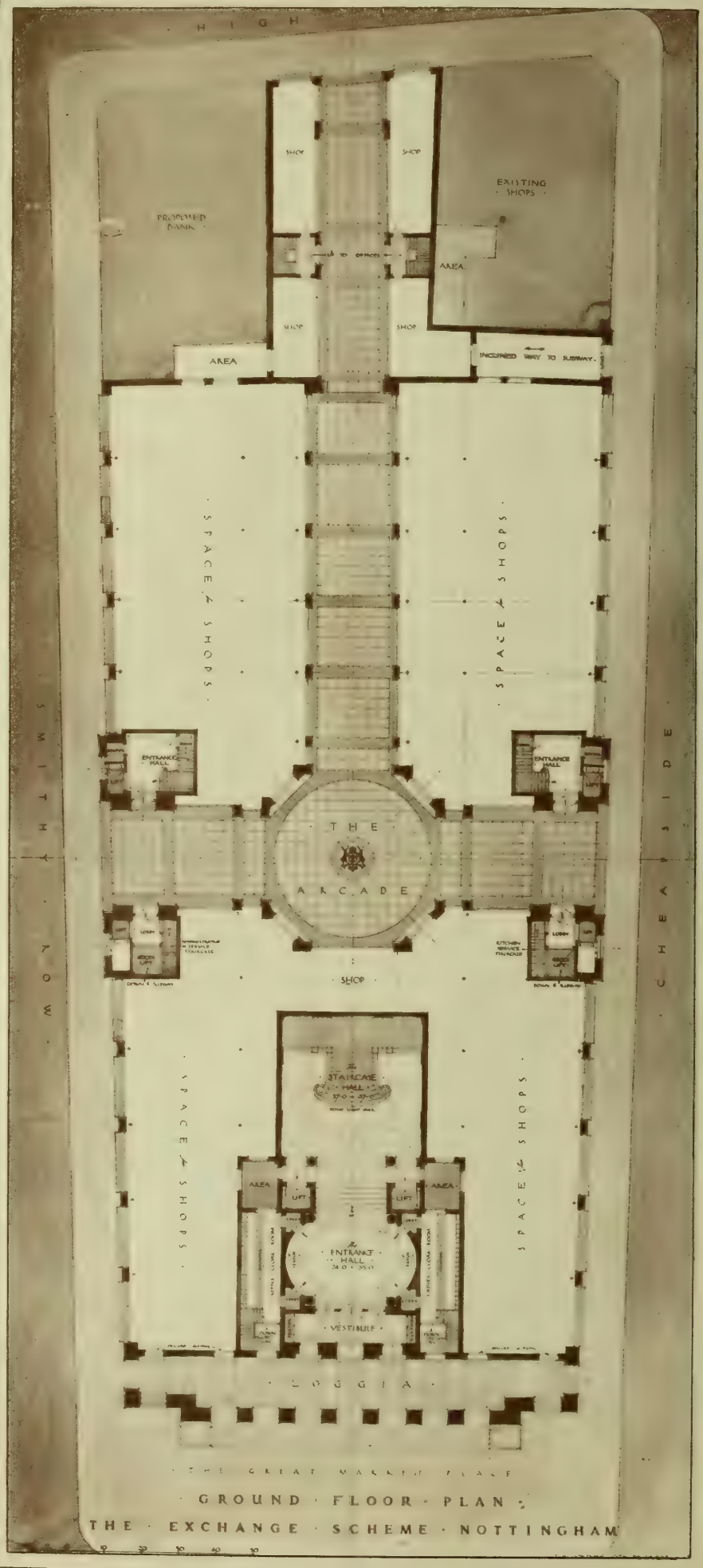


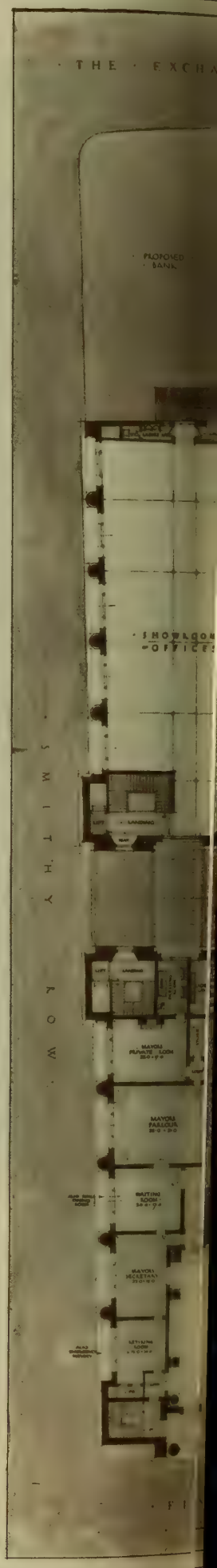
Clare College, Cambridge. SIR GILES GILBERT SCOTT, R.A., Architect.

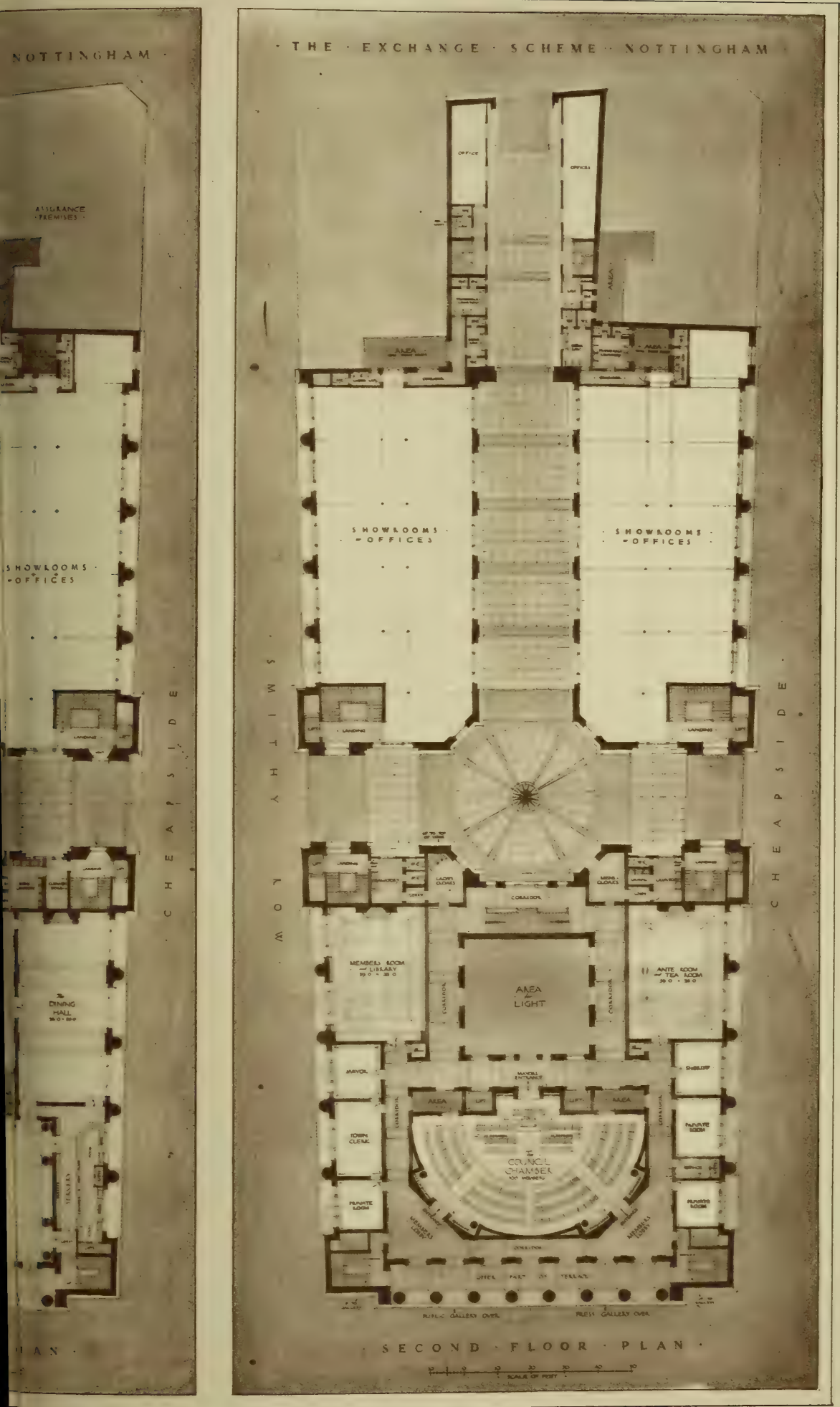


Clare College, Cambridge. SIR GILES GILBERT SCOTT, R.A., Architect.




HIGH
SHOP
SHOP
EXISTING SHOPS
PROPOSED BANK
AREA
SHOP
SHOP
AREA
INCLINED WAY TO SUBWAY
SPACE & SHOPS
SPACE & SHOPS
ENTRANCE HALL
ENTRANCE HALL
THE ARCADE
SHOP
STAIRCASE HALL
SPACE & SHOPS
SPACE & SHOPS
AREA
LIFT
LIFT
AREA
ENTRANCE HALL
VESTIBULE
LOGGIA
SMITHY ROW
CHEAPSIDE
THE GREAT MARKET PLACE
GROUND FLOOR PLAN
THE EXCHANGE SCHEME NOTTINGHAM


THE EXCHA
PROPOSED BANK
SMITHY ROW

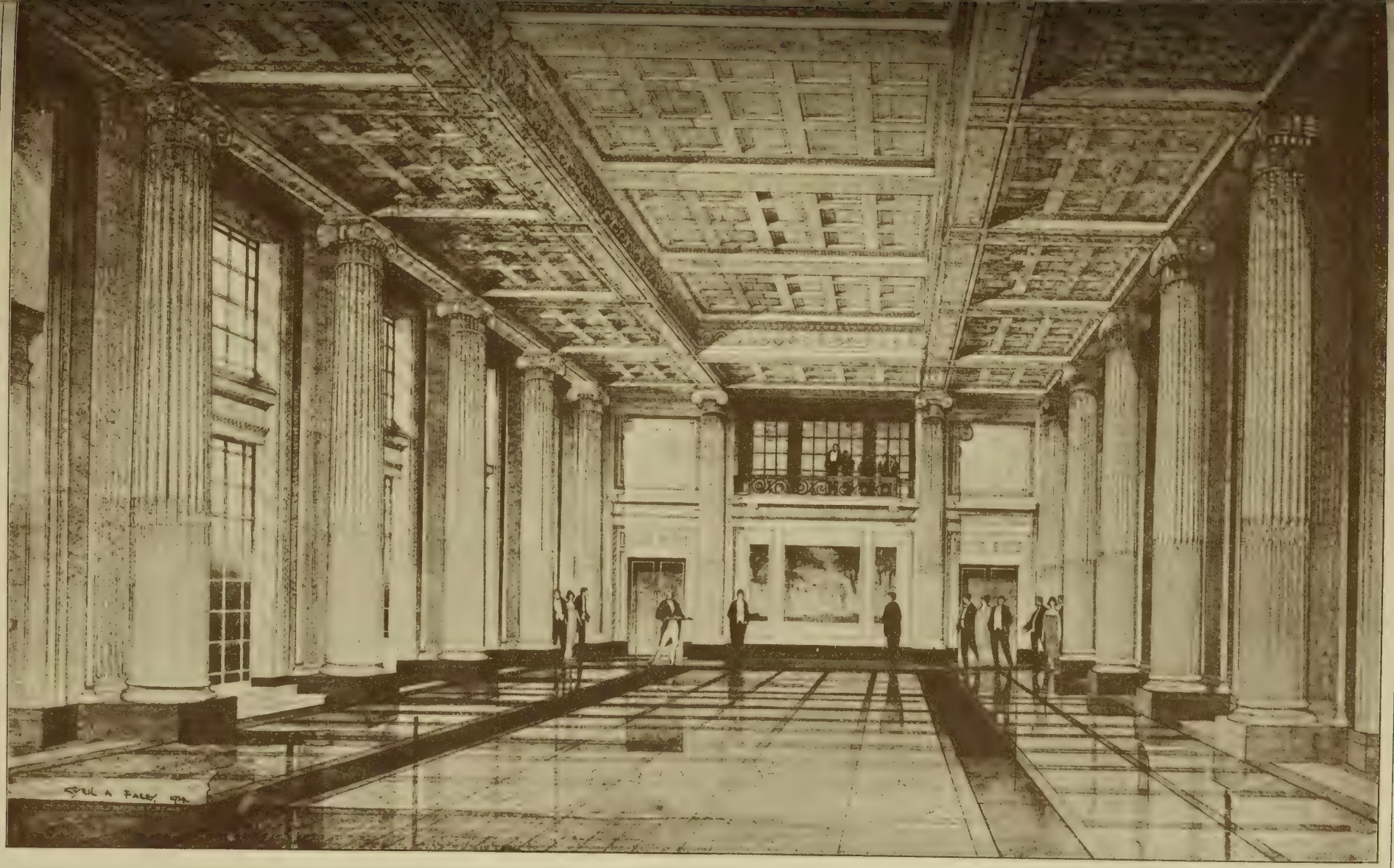


C. HOWITT, A.R.I.B.A., ARCHITECT.



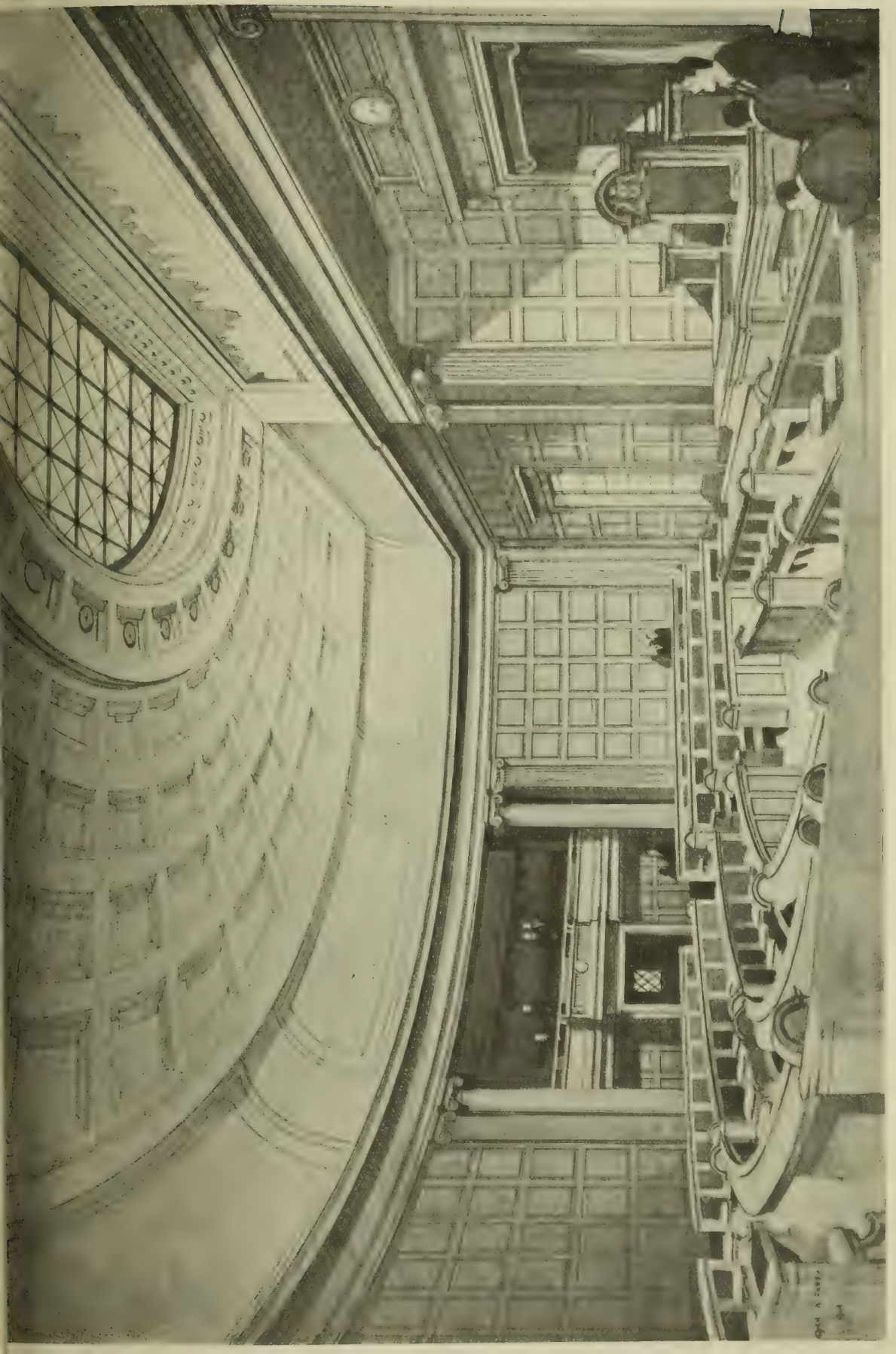
Clare College, Cambridge : East Front. Sir Giles Gilbert Scott, R.A., Architect.





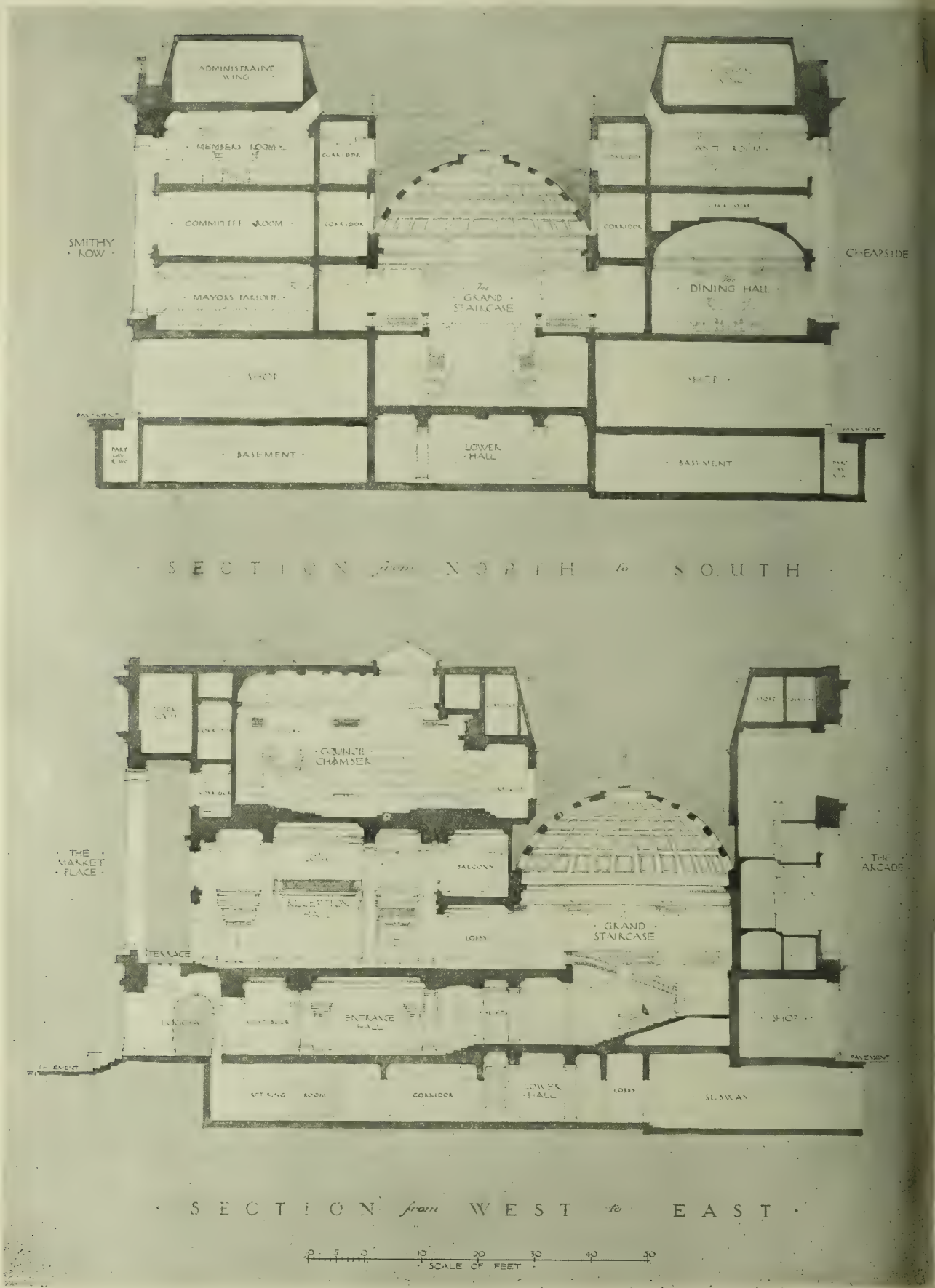
RECEPTION HALL.

THE PROPOSED NEW EXCHANGE, NOTTINGHAM. MR. T. C. HOWITT, A.R.I.B.A., ARCHITECT.



The Council Chamber.

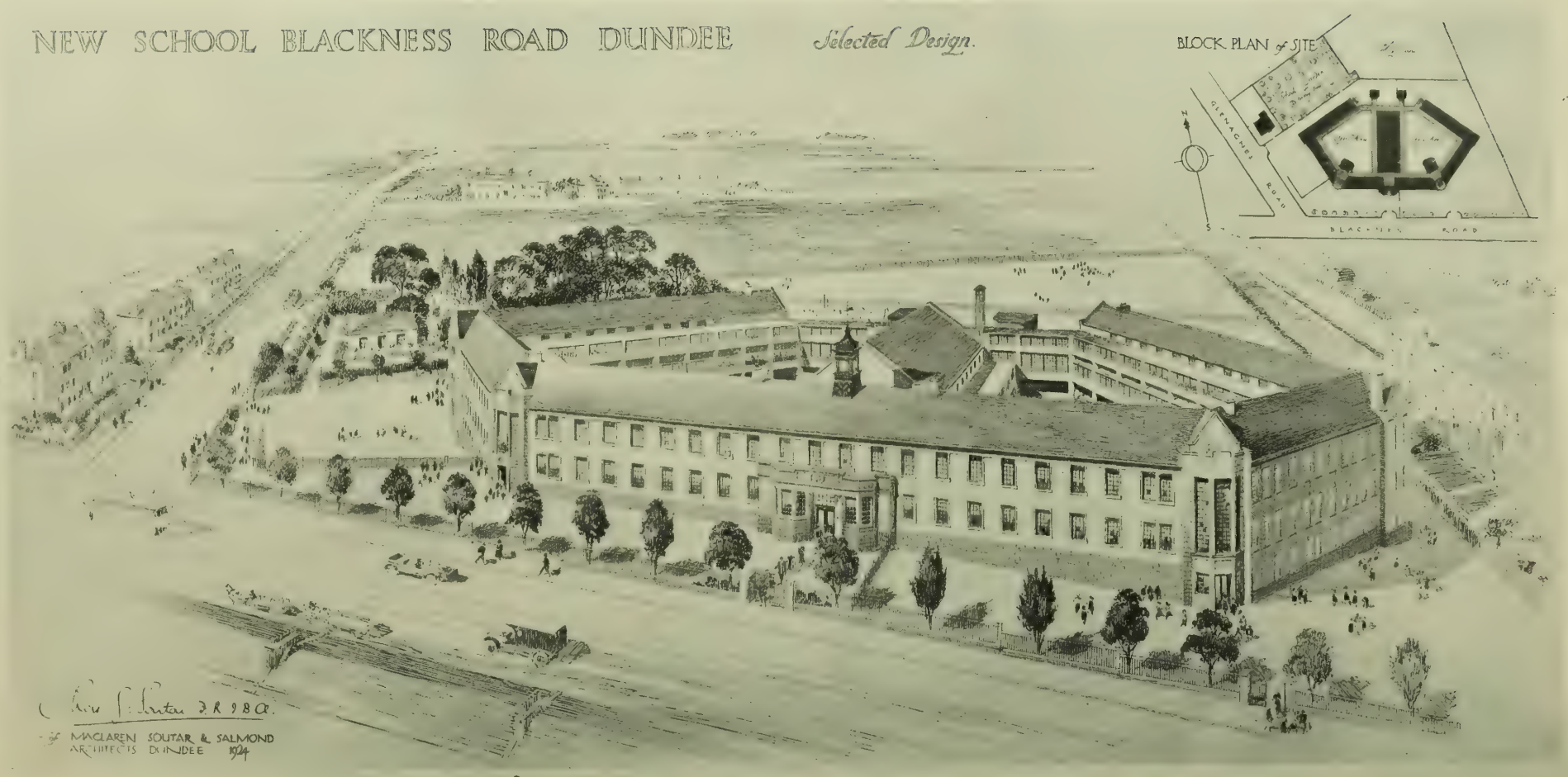
The Proposed New Exchange, Nottingham. Mr. T. C. Howitt, A.R.I.B.A., Architect. (*See p.* 932.)



The Proposed New Exchange, Nottingham.

Mr. T. C. Howitt, A.R.I.B.A., Architect. (*See p.* 932.)

London Hotel Competition. Design placed First: By Mr. C. Allerton Rowbotham.



Dundee School Competition.

Selected Design: By Mr. Chas. G. Soutar, F.R.I.B.A. (Messrs. Maclaren, Soutar & Salmond).

WESTMINSTER ABBEY RE-EXAMINED.—X

By W. R. LETHABY.

MOSAICS AND STAINED GLASS.—PART II.

From many precise orders recorded in the iberate Rolls," it appears that Henry III a special love for stained glass. In 1237, instance, a command was issued "to make hamber with beautiful glass."

There is evidence to show that the King st have glazed his church at once with ined glass. Much of it was ornamental, for re work, as usual, would have been reserved special positions. Most of it, too, was very r, either "grisaille" just touched with nts of colour, or white quarry work. The ss was attached to wooden frames in the ts. Several window irons in the foiled les still retain "lugs" to which the leaded zing was attached by wedges, some of which ve actually been found. In two of the ceried compartments of the north walk of cloister such irons with lugs may easily be n. The early glass at Canterbury was fixed he same way. The window lights are of large le varying in width from about 3½ ft. in e to 5½ ft. in the north bay of the aisle of the th transept.

Grisaille.—Some precious fragments of the ginal stained glass, which used to lie in the orium, were in 1908 carefully framed and up in a window in the west aisle of the th transept. There are about 20 ft., being tions of three different patterns. They were en out of one of the south-east apsidal pels in Scott's time and show what the zing of those chapels was. Set up as they v are it is easy to see how the patterns were anged to fill the lights. (Fig. 1.)

When I gave some sketches of the details ore, I did not allow for the exceptional lth of the window lights; the patterns would e been arranged as in Figs. 1 and 2. This ubling of the units agrees with windows at isbury and elsewhere. Fig. 3 is a diagram the third variety. Full-sized drawings of

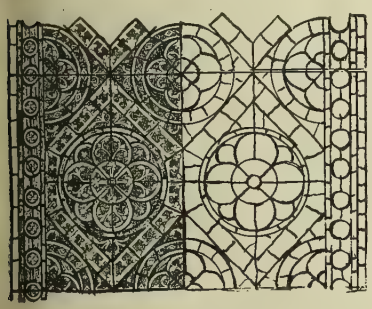


FIG. 1.



FIG. 2.

beautiful grisaille glazing made many years may be found in the Print Room of South nsington Museum.

Shields.—The glass now in the windows of apse, besides containing some late mediæval res, have backgrounds made up in part of gments dating from the thirteenth to the enteenth century. When these windows were en out in 1916, I was able to draw many ient quarry patterns and three beautiful lds. (This glass may now be studied in otographs sold at the Victoria and Albert Museum.) The three early shields of arms which now exist are those of Henry III, of his wife Eleanor of Provence, and of Richard of Cornwall

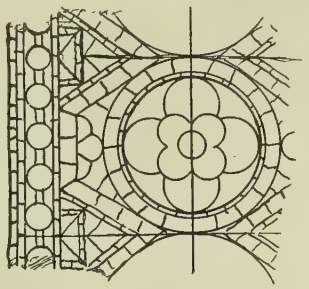


FIG. 3.

(his brother). They are about 16 in. high and are precious examples of the earliest heraldic glass which we have; they are probably twenty years earlier than the similar Salisbury shields. The King's shield is, fortunately, very complete, and so is that of Cornwall. Figs. 4 and 5 show these, and Figs. 6 and 7 are enlarged details. The Queen's shield is in worse condition, but



FIG. 4.



FIG. 5.

enough remains to allow of a drawn restoration being made. There were four red pallets on a gold ground. Three pieces of deep yellow glass, which are still associated with the red



FIG. 6.

stripes, are patterned a good deal like borders, and examination shows that they are, in fact, parts of the diapered golden field on which the ruby pallets were charged. In Fig. 8 the three upper pieces of diaper pattern are original. From records we know that such shields were set in the ground story windows, which we have seen were of grisaille glass; at Salisbury, some of the windows were practically copies of those at Westminster, and these had two shields to a light.

Sandford records that there remained many royal shields in the windows of the Westminster Church and Chapter House, and mentions particularly that one of Eleanor of Castile was in the aisle of the north transept. The ground floor windows, we may suppose, were mostly of this lovely kind of "jewelled grisaille," with pairs of shields set on the lights. In the British Museum (MS. Lansdowne, 874) are sketches of about a dozen of these shields on a sheet signed William Camden. Here, besides the three now existing, are England with a label (for Prince Edward); the castles and lions of Castile and Leon and the three bends of Ponthieu (both for his wife Eleanor); the black eagle of Germany (for his brother Richard of Cornwall); the cross and birds of the Confessor; and the three chevrons of Clare and the quarterly coat of De Lacy. Some were twice repeated. Fig. 9 shows the varieties other than the three existing ones. The selection of arms must mark a date earlier than the death of Henry III, and the three now existing in the apse windows were doubtless made before the consecration of the church in 1269. In the orders of Henry III shields of arms in glass are frequently specified.

Quarries.—Following a usual custom the clerestory windows were probably simpler than those below, as at Salisbury and York. In the much "made up" later glazing of the high apsidal windows are a large number of early fragments, including several varieties of thirteenth-century quarries. These, according to the early custom, are squares which were set diagonally. This is shown by analogy with examples at Lincoln, &c., and also by the fact that some of the pieces seem to have been half

quarries. One of these early quarries was found in my time at the clerestory level on or in the masonry. For similar quarries, see Winston, plate 31, Fig. 15. "The quarry is generally bordered on all or only two of its sides." These windows of diapered glass also



FIG. 7.

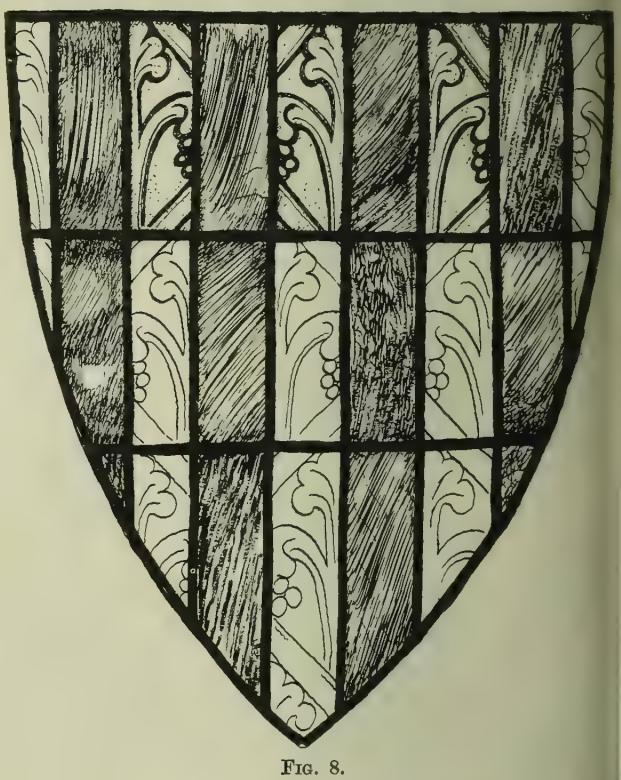


FIG. 8.

probably had one or two bright heraldic shields set in each light. See Figs. 10, 11 and 12; 13 may be from a border, and 14 shows two fragments.

Kings.—Among the fragments in the east

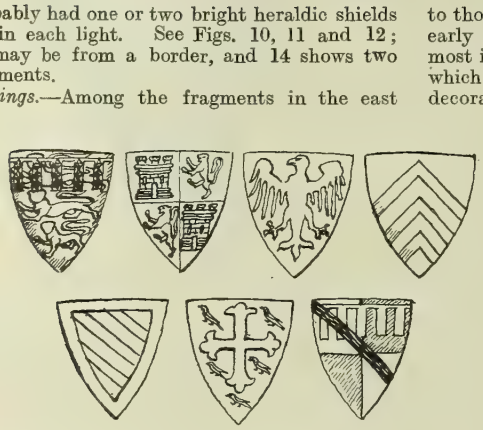
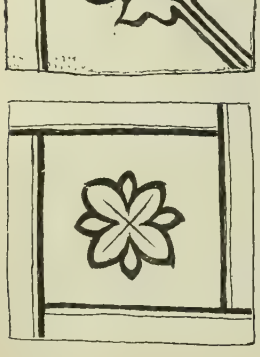


FIG. 9.



FIG. 10.

wndows are also some pieces of large crowns, on deep golden glass, which are certainly of mid-thirteenth - century style. Fig. 15 is a restoration of one of the crowns; three or four



to those on the circular bands are found on the early glass in Jerusalem Chamber. A further most interesting point is the form of the knops, which are roses. As we have seen before, rose decoration was a special characteristic of the work of Henry III; roses appear on his coins and the Chapter House inscription shows that he was a rose admirer. The large figures which wore these crowns can hardly have been anywhere else than in the apsidal windows, and we reach the conclusion that there was a King in each of the lights. Possibly they were the saint Kings of England, among whom Edward and Edmund would appear; or the founders, Edgar, Edward, and Henry III himself, may have been included. These figures would have



FIG. 12.

of the central knops and two or three of the low intermediate ones exist, but I have not found any part of the end knops. These crowns must have been 12 or 13 in. wide, and the figures which bore them can hardly have been less than 8 ft. high. Exactly similar jewel patterns

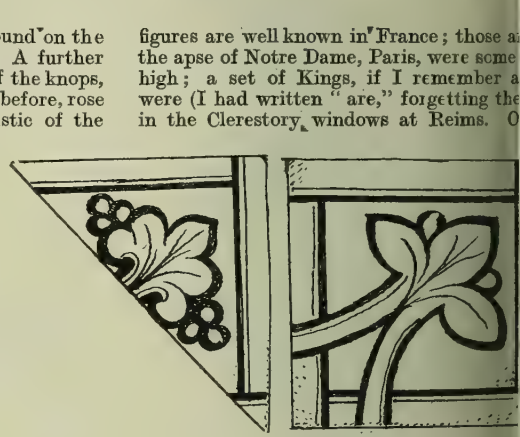


FIG. 11.

been named by inscriptions, and there is at one fragment existing in the present win of an early letter (R ?) which must have full 6 in. high (Fig. 16). There are also fragments of later naming inscriptions in letter as big or bigger. Such large sta

figures are well known in France; those a the apse of Notre Dame, Paris, were some high; a set of Kings, if I remember a were (I had written "are," forgetting the in the Clerestory windows at Reims. O

the figures at Westminster assuredly have been the C sor, and taking a large temporary painted head o white-haired King in the Cl at Windsor as a guide, I "see" him in his place ap ing above his golden coffin.

Medallions. — In Jeru Chamber are preserved, s its big northern window, pieces of the finest thirteenth-century med work with small figures. These pr panels are first described in *Archæologia*, but they must have been here long b

appear in an engraved view of the Chamber it was in the Strawberry Hill style, and ne of the panels (St. Nicholas) is scratched n. Miles, glazier, May 12, 1794." Now ne of the apsidal windows in the church cratched "Wm. Miles, No. 20 Tufton t, Westr., Repaired this, 1797." On the panel in the Chamber other glaziers have



FIG. 13.

heir names and the dates 1762 and 1746, on another (Murder of the Innocents) is en "Thomas Manning [?] glasd. this win. " Winston dated these medallions 0–70, and we may be confident that they part of the original glazing in place when nurch was consecrated in 1269. They are

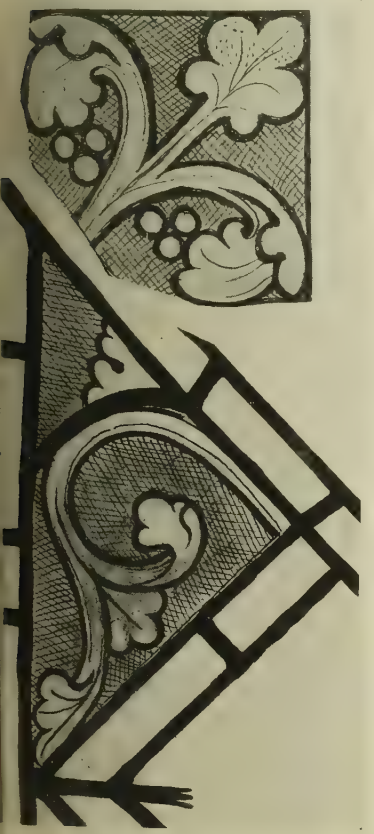


FIG. 14.

indows of big scale, and could only have rom a church of the first rank. The s show that they were parts of special ogical windows" in such a church. Two panels form a pair which would require from 4 to 4½ ft. wide, and the other ons associated in pairs (compare Fig. 1) be suitable for such lights.

The two panels, which make a pair, are of the form shown in Fig. 17, and they contain as subjects the Ascension and Descent of the Holy Spirit. In the centre of the former stands the Virgin with Apostles on either hand, and the feet of the ascending Christ appear above. The second panel has eleven Apostles with the head and wings of the descending Dove, from which fall red streams—the tongues of fire. The pair were bound together by a quatrefoil containing coloured foliage, and the filling



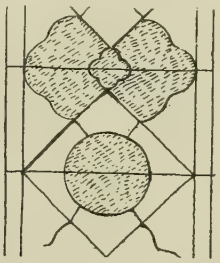
FIG. 15.

between the medallions would doubtless have been of the same kind. A third piece is a circular medallion (1 ft. 9 in. diameter) of the Resurrection. Christ rises from the Tomb holding a long Cross and having a ruby nimbus crossed with white. At the head and foot of the tomb is an angel, a very pretty pair, and



FIG. 16.

the whole is as good as may be. From the subject we may suppose that this medallion was associated with the pair just described; they may have been arranged as in Fig. 17. This type of arrangement is found in France and at Canterbury, Beverley, and Salisbury (Fig. 18). There are drawings of two or three of these



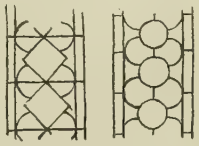


FIG. 18.

FIG. 17.

panels in the Winston collection at the British Museum, made in 1839–43, and these are valuable as evidence of condition before restoration.

The fourth and fifth panels are pointed quatrefoils about 2 ft. by 1½ ft. These contain St. Stephen's stoning and the execution of St. Paul, and they doubtless belonged to one light devoted to St. Paul or SS. Peter and Paul.

The sixth panel is a pointed oval, and contains the Murder of the Innocents. This belongs to the Infancy group of subjects, and probably occupied a separate light. A persecutor in one of the panels has a monk's head. Was this leaded up by mistake, as Winston supposed, or is it a craftsman's malicious joke?

The seventh panel is of similar form but different size; the subject is St. Nicholas and a drowning man, and it must be from yet another light. The sea is formed of wavy bands of blue and white.

These medallions all have blue backgrounds and ruby outer borders, with an inner strip of white pearling; nimbuses are red, green, yellow and white. Hems of the garments of Christ and Apostles have jewel patterns. Fig. 19 is a figure of the Virgin in the Ascension group.

In the later windows many small pieces are leaded in which may have come from "mosaic" grounds of medallion windows. Some medallions at Lincoln have similar borders to ours. One of these is illustrated by Winston with part of the surrounding ornamental foliage; such foliage would have formed the filling between our medallions. This glass must have been in some place of honour, possibly in the Lady Chapel or in the windows of the south transept directly opposite the gallery which, I suppose, was the King's pew. By comparison with Lincoln and Salisbury, we may form some imaginative thought of the fair interior full, flooded with light through windows mostly of pearly white heightened here and there to dazzling splendour of colour.

We probably learn who was the glazier of the church at the time of its consecration from a charter witnessed by Robert de Beverley (the mason), Edmund, goldsmith, and William le Verrer, in 1272.

Later Glazing.—In the east and west windows are several small fragments of fourteenth-century glazing, such as oak-leaf borders. Fig. 20 is from a piece of fourteenth-century grisaille found in 1907 over the vault of the south walk of the cloister. It may very well represent the glazing of the refectory as transformed about 1350–60.

The new work of building the nave was begun in 1376, but went forward very slowly, and it is doubtful if any glazing was done for nearly a century. In 1462 an entirely new



FIG. 19.

rose window in the south transept was glazed by Thomas Pedeler for 1½d. a foot, except for the arms of England at the centre in colour, which was 4s. In 1469 two glaziers worked 92 days glazing two windows of the nave (probably the aisle). Glass of "Rene" and English glass are mentioned; also a plate of *auricalco* (brass) for grinding colours, an "anelyng herth" and "papiro" bought for the glaziers. The next year Thomas, the glazier, worked 42 days, and in 1489 a glazier employed in the church is still called Thomas.

From 1506 to 1510 the windows in the

western part of the church were glazed. In 1505–6, 3s. 4d. was paid to a glazier coming from Malvern to see the windows. In 1507–8 Richard Twyge, glazier, received £37 6s. 8d. for the glazing of fourteen windows in the upper story of the church. In 1509–10, Richard Twyge filled the great west window with glass, for which he received £44, and also

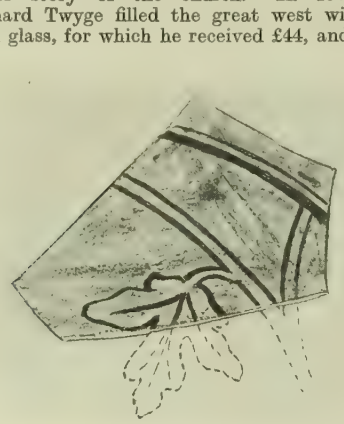


FIG. 20.

one window in the upper story for £3 (Rackham).

In April, 1643, Parliament appointed a committee to demolish monuments of superstition in the church. In May the copes were burnt. It was then used as a "preaching house," and bills for "cleansing out pictures" suggests much destruction of glass, although the only specific notice I find of this, apart from Henry VII's Chapel, is for 40 ft. of new glass in 1646 for a window next the "Redd-Door."

The nave at least retained many windows with figures up to the beginning of the eighteenth



FIG. 21.

century, but any within reach seem to have been of the nature of royal portraitures. Hatton (1708) says that the windows of the nave were "finely painted but now ruined. The windows were adorned with various portraits, of which there yet remain such at the east and west ends, and many on the south side in the upper range westward from the cross roof; and in the south-west window below is the portrait of Edward the Confessor."* Hatton's text may have been written just before the transfer of the figures of the Confessor and the Pilgrim to the apsidal end, or he may have followed Caxton's Chronicle, from which it also appears that there was a representation of the Confessor giving his ring on the south side. Dart (1723) states that the story of the Confessor had been in the glass of the south aisle, but implies that it was no longer there. Another of these windows, according to Sandford, contained a portraiture of Richard II with his badge of the White Hart.

Gathering together the large stained-glass figures into the east and west windows appears to have been done by Wren, when most of the church was largely reglazed from 1700 to 1722.

Edward Drew was the glazier, and in 1700 he repaired 34½ ft. of painted glass "in the Spiritual Court." In this year ironwork was put to "the eight windows over the altar." A board was provided "to draw out the glass," and also a model of one of the windows. In 1701 "the lights of old glass in several places" were "fitted up." Much glazing now and later was done in Henry VII Chapel. In 1703 Edward Drew was paid for 1,650 ft. of new glass "in seven windows over the altar or shrine: which finishes the east end entirely above at 9d." These must be the seven clerestory windows of the Confessor's Chapel, so it appears that the stained glass was not yet there. In 1704, nine new windows on the north side required 2,202 ft. of glass. In this year an item appears for "new leading the figure of Edward the Black Prince in the west window and putting a border and the College arms under the same." This was the west window of the south aisle. In 1705 new glass worth £42 was used "for the great west window with twelve figures of old painted glass." According to Dart, the glass in the big west window was fragmentary in 1723.

In 1706 £70 was paid "for 566 ft. painted glass amended at the east end of the church." This must refer to the three stained-glass windows in the apse. The lights are here narrower than the average, and 188 ft. for each window seems a full allowance. Names and the dates, 1709–11–13–35 are scratched on these windows, which are here easily reached from the leads. That they were there from the earliest date is confirmed by entries in 1716: "For mending painted glass east end that the boys broke." "Six frames for the wires for the three painted glass windows at the east end over the altar." It is interesting to find windows protected at so early a time; the Westminster boys were already at it! In this same year other entries occur as follows:— "Taking down the old glass next the cloister garden" "Figure work done over mason's shed next to the east door" [of Nave? this is under the heading Spiritual Court]. "Work done in the belfrey [lantern] for a painted window taken down from top of the church and fitted up."

The three eastern apsidal windows have six large single figures in as many lights. They are surrounded by work which even from below is seen to be semi-modern, but the whole is of pleasant colour for the glass of which the added work is made up is mostly ancient. Even the figures in the first window are of the semi-modern kind.

The figures in the two central lights are ancient (sixteenth century) and of fine quality and colour. They represent the Confessor giving his ring to St. John disguised as a pilgrim. The King stands before a green curtain in a blue robe and crimson mantle. St. John, with blue mantle, is in front of a crimson curtain. The colours of the curtains seem to have been counter-changed in the backgrounds above them. The figures were about 7 ft. high and their nimbuses 1½ ft. in diameter. They stood on castellated pedestals. On the garments the distinctive letters E and J are scattered.

These two figures are very fine of their kind, the King being developed portraiture, the faces and hair highly wrought, and the eyes in three-quarter aspect with high lights. There is an approach to perspective in the pedestals and the curtains bent back behind the figures. These lights have a German look, and the initial letters which powder the garments seem to be of renaissance character (Fig. 21). These letters and a coarse damask pattern on a robe are ground through flashed ruby into the white glass beneath. The other two figures ar late, but they are in a more conventiona painting manner. One looks like an Ap he is without headdress, carries a long sta seems to have had bare feet (a fragment is i in, out of place). The sixth figure is a bis mitred abbot, on his robes are letters E (po out of place) and C (?) ground into the fi ruby glass (Fig. 21). These two lights m nearly of the same date as the other However, the second pair of figures does no to have been done to range with the middle there are no curtains behind them ar pedestals for their feet.

In the work around the panels of a glass is a collection of fragments fro thirteenth to the seventeenth century. are several broken inscriptions. O Sanctus Greg . . . . . ecclesia . . . fragments which may have belonged tog are the tantalising words—

Regina M . . . . . me fecit R . . . therefo . . . anno re . .

Can these be Margaret, wife of Henry VI Richard Twyge, the glazier?

One fragment of inscription, Tho (Fig. 21), appears from the initial to be b same hand which ground out the bigger le

The making up of the glass to fit these is quite interesting, bold and workmanlik with an effort to harmonise new work wit place and the old figures. Mr. Drew shoul a place in the history of glazing.

A further record of the nave windows given to me about 1910 by Dean Arm Robinson. This is a photograph of a dra by Ashmole in the Gough Collection a Bodleian, of two armed figures. It is inscri "A draught of the pictures of St. George the Black Prince taken from a glass windo the South Isle at the west end of the Ch Westminster Abbey." There is no doubt the identification of the former, for his appeared in big black letter beneath. second figure still exists in a badly rep state with a new face in the S.W. tower it is good to have it authenticated. quoted Walpole (1762) for the identifica but objected that the armorial surcoat ha label. The label, however, was there whe drawing was made and the figure seems to been in perfect condition. It stands on a agonal base, which doubtless was the top pedestal somewhat similar to those under central pair of figures in the apse; which bably ranged with it and its companion.

These two figures—St. George and the Prince—certainly filled the lights of one win they match exactly; indeed they seem to been drawn by the "trace and turn o method. The St. George has gone whe glass goes, but the data are so full for thes figures that it might be worth while to a reconstructed drawing of them.

It seems from the evidence that the nave were glazed at a late time with a series of traitures of English kings and patron s Above in the clerestory may have been eccl tics, and the second pair of figures in the could have come from this range. In this they are probably the work of Richard T (1506-10), as may also be the figures o Confessor and St. John. The west windo the N.W. tower is made-up as a compani the Black Prince, but the figure here is lik semi-modern pair in the apse and was dou by Drew. Below it is a big portcullis wit chains and a handsome arched crown—a panel of Tudor work. From its scale this may very well have been in this light, is probably part of the work of Richard T (1506-10). There are other big badges i east windows which were probably transf from the west end.

Islip's Chapel, finished about 1530. stained window panes. In Keepe's MS. vo which I have, he says, "In the windows Chapell above, where several of the King Quenes of England are placed in Effegie in presses [the waxworks] you shall find some an Eye with the slip of a tree; then a g with the aforesaid slip, and sometime slipping from a tree with the wordes in a coming out of his mouth (I slip)." One of

* According to Grel the Confessor's shield of arms was also in this window.

es has recently been restored to the Abbey is in the Jericho parlour window. (See also llustration given by Malcolm and *Gent. Mag.* 2, sup., p. 1,185.)

alcolm's description of the glass in Henry s Chapel, published in 1803, before the t restoration, confirms my view that there e coloured badges in all the lower windows he East end and in the aisle windows, too. *northern* apsidal chapel " windows contain ted glass of the arms of Edward the Con-or, Henry VII his initials, a crown on a , with the red rose and *fleur-de-lys*." In the



FIG. 22.

s the large west windows had " many panes ainted glass; and those on the sides have os still remaining. They are representations he red rose, *fleur-de-lys*, a rose half red and white, portcullis, and the initials H.R." he existing badges as before said have now gathered into the eastern chapel. The e prophet's figure in the east clerestory low was already in place. Fig. 22 is from te quarry, and Fig. 23 is a fragment of ground.

connection with glazing, there are refer-s to the Palace workshops. Thomas, of cester, did some work in Westminster Hall, ding " flourished glass " in 1398-9. John lde was appointed to " the office of glazier ir works " by Henry VI in 1433, to hold it Roger Gloucester had held it with a shed d the " glazier's lodge " standing " upon the side within our Palace of Westminster." er Richard III, in 1484, " a house which Prudde late had " within the Palace of tminster is again mentioned (Brayley's lace," p. 337). For Prudde also see *inton Magazine* about 1912. A palace in middle age was a school of art and uni-ty of crafts.



FIG 23.

The Richard Baxter Memorial.

memorial tablet to the Rev. Richard ter, of Kidderminster and London, was iled in Christ Church, Greyfriars, New-street, recently by the Rev. Principal E. Garvie, President of the National ncil of Evangelical Free Churches. The et was designed by Mr. R. Palmer Baines, Arc., of Messrs. George Baines & Son, itects, Victoria-street, S.W.1.

SHEFFIELD*

THE scheme, started in 1916 for the betterment of the city of Sheffield, has advanced as far as the production of an authentic monograph. In this book the need for scientific research in the handling of municipal problems is ably demonstrated and the exact science of town development is made clear. The task of collecting statistics and of preparing maps and diagrams has been under the direction of Professor Abercrombie, assisted by a competent staff well versed in local details. It is to be hoped that the municipal authorities, supported by the people of Sheffield, will lose no time in putting the excellent proposals into effect on the lines suggested. The book is divided into two parts. The first is a Civic Survey based on conditions as they exist to-day; while the second part centres upon ideas for the improvement of the city and the retention of its urban amenities. The book opens with the picture of Sheffield, framed in an historical background connoting geographical and geological facts. It gives the reasons for the selection of the site and the start of the town's prosperity as a manufacturing centre. As the Professor states: " The natural conformation of the ground upon which the city of Sheffield is built has been at once the origin of its prosperity and the prime determinant factor of its growth." Plate I shows a plan of the city in its relation to the hilly region on the west and the plain on the east, and further on in the book stress is laid on the geography of the district, the geology and surface formation, the coal measures and the working of the same. It is made clear that Sheffield has been associated with the manufacture of steel knives from the Roman times. Fairbanks plan of 1771 and Bucks view, taken from the high ground of the Manor, with the spire of the Cathedral dominating the centre, afford a fair idea of the aspect of Sheffield a hundred and fifty years since. A very different view is presented to-day. Plate VI shows the historical growth of the city from 1736 to 1921, which growth is described in the text. In 1840 the first railway connection with Sheffield was made, but it was not until 1850-60 that the railway system was fully developed, when a fresh departure of local industry followed. From that time to the present Sheffield, like most other English manufacturing centres, has been allowed to grow without regard to the housing needs of its workers. In the concluding paragraph of the historical chapter there is an interesting reference to " the ingrained aptitude of the population for technical work, requiring a high degree of skill—what might be termed its 'Mass Inheritances.'" As Professor Abercrombie is careful to explain certain factors have assisted the receiving and maintaining of a tradition, not always by a direct line of workers. From a study of the plates and photographs forming part of the historical survey, information is gathered that the intensity of the urban development in proximity to open country is in marked contrast. It will be obvious, therefore, as the Professor's proposals show, that the gradual transference of the working population to urban districts must form the basis of reorganisation.

Chapter III deals with the municipal boundary, and Chapter IV describes the natural zoning. There are traffic diagrams and accessibility maps, and plans showing the density of the population, which rises from 10,000 in 1725 to 520,000 at the present day.

The remainder of the historical section deals with existing housing conditions and suggestions for periods of reconstruction. Health conditions, open spaces and parkways are described. There is a plea for the extension of the Survey, which, exact as it is, is nevertheless one of those things

" Which always must be carry'd on
And still be doing, never done."

Part II of the monograph is the most illuminating of this excellent work. The main theory is the founding of zones or districts of different occupational character. " The problem, therefore, is not here to find out what to zone for, but how to arrange the separate parts of the city so that they form one satisfactory mechanism, each part performing its functions in the best way." The scheme has been followed up in the suggestions for development by studying the balance that should exist between the industrial and commercial interests of Sheffield and at the same time endeavouring to secure the best residential amenities for the people. As previously mentioned, the proximity of the heart of Sheffield to the surrounding country can be made subservient to the readjustment of housing values; but the transference of residential quarters to the outskirts of the city can only take place gradually. There is also the allocation of definite factory areas, where new works are projected, to be taken into consideration. In the plan for improving the roads, the scheme has been influenced by local conditions; thus all the roads shown on Map No. 2 have a distinct value. The improvements suggested at the heart of the city are few, but they touch upon the essentials of the case. Only one central improvement of magnitude is suggested, the proposal being the replanning of the central station on a high level; for the city requires such a terminal, and in this differs from places like London and Paris, both of which have a ring of terminals.

The monograph on Sheffield contains theories applicable to almost every town in the country, for it shows the absurdity of dealing with towns piecemeal, without regard to a comprehensive scheme. The enterprise of the municipal authorities will have one good result if it is productive of inquiry on the part of the authorities of other cities in the direction of town development and control. The monograph is produced with taste; the diagrams and maps, while highly technical, are easy to read, and summarise the expert knowledge of the director, as well as the industry and skill of those who collectively have contributed to the success of the work.

* A Civic Survey and Suggestions Towards a Development Plan. Report by Professor Patrick Abercrombie on the scheme prepared for the Development Committee in collaboration with R. H. Mattocks. (The University Press of Liverpool, Ltd.; Hodder & Stoughton, Ltd., London.) 1924. 20s. cloth; 15s. paper.

REIMS CATHEDRAL

SIR BANISTER FLETCHER, F.R.I.B.A., in a recent lecture, at the Central School of Arts and Crafts, showed that all the principles of Gothic architecture, at the period of its greatest perfection, were exemplified in the construction and decoration of Reims Cathedral, to which he solely devoted this lecture.

Great among the many great cathedrals which cover France, and third among them in actual size, the cathedral overlooked the town which took its name from the Remi who submitted to the Roman legions. The first church was probably of timber; the second church on the site was destroyed at the beginning of the thirteenth century, just when the time was ripe for building a cathedral in the free Gothic style which was so well suited to French freedom in ideas. Archbishop, architect, masons and citizens set to work to rebuild their old cathedral, which had already attained such a proud position as the coronation church of France; and the church they erected proved to be the greatest tirumph of Gothic art in France.

Piccadilly, New Premises.

We understand that Messrs. Higgs & Hill have secured the contract for the new building work at the premises of Messrs. Swan & Edgar, and that Sir Reginald Blomfield will be the architect.

GOOD AND BAD MANNERS IN ARCHITECTURE*

By PROFESSOR C. H. REILLY.

While we are all discussing Modernism and wondering how we can express our valuable selves in our new buildings without resorting to the cast-off garments which used so conveniently (as it is now said) to cover up the emptiness of our invention, Mr. Trystan Edwards comes along with a new working hypothesis which we can all accept. It may not be the ultimate revelation, but it seems to me very good as far as it goes, especially for those of us who build in cities. It is one of those very obvious things which, once it has been pointed out, makes us wonder that we have not all had it before our eyes from the very start. It is simply this, that, whether we are modernist or traditionalist, the town as a whole is more important than any of our single buildings. Our towns are indeed the most self-revealing products of our civilisation, because in spite of all the new town-planning Acts we still make our towns to a very large extent unconsciously. Each ant adds a little piece to the pile without realising the ultimate shape of the whole, or, indeed, what the vast majority of his neighbours are doing. The ant-heap conception of the town might be all very well for the nineteenth century, with its ideas of unlimited individualism and competition, but it would not have done for the aristocratic eighteenth century, and it certainly will not do for the democratic twentieth. Our modern towns, spoilt as they have been by our immediate predecessors, not to mention our own shortcomings, are nevertheless the property of us all, and we as architects are their chief guardians. Mr. Edwards' book is a direct call to us to understand our responsibilities in this respect. It is a call expressed with a great deal of quiet humour and incisive wit, which makes the lesson he has to teach very good reading, however unpalatable to our pride on quiet reflection. Unless we have some reasoned conception of the town as an entity and of the relative social values of its component buildings, we are not likely to design those buildings so that they form parts of a consistent whole. The resulting whole will not express our ideals, however truthfully it may mirror our achievements. Some things will be too blatant and vulgar, some too small and insignificant. If we have no settled conviction as to the basis of good architecture, at least let us cultivate good manners and build with a reasonable urbanity and consideration of our neighbours.

Good manners are of two kinds. The less valuable are the manners which are the result of habit. They can be taught by rule and precept. Perhaps the eighteenth century, with its good architectural manners, relied too much on rules dictated from above. That was infinitely better, of course, than the period of simple barbarism which followed. The better sort of good manners, however, are those that come from an inner harmony of spirit. Such are the manners most needed to-day, and only by acquiring them can democracy really flourish. Very few of us seem to realise this in our buildings. Acting for our immediate clients, we are apt to forget our responsibility to the whole community. Architects should feel themselves to be a priesthood standing between God and the people. It is their business to translate into material forms only such aspirations of their clients as are worthy. If a client demands a building which, from its size and shape, will destroy a whole neighbourhood, and if he cannot convince his client of his folly, he should resign the work.

The detailed working out of this theory of the placing of the rights of the community before those of the individual will be found in Mr. Edwards' book, with many amusing and striking illustrations. He analyses architectural features for their social import. He restores the Orders to their right function as developed historically from temple, palace and forum. He carries his researches into the suburbs and exposes the rudeness of the unsociable gable, and towards the end of his illuminating treatise pillories a good many of the unfortunate Ruskinian doctrines of last century, such as the Seven Lamps of Vulgarity. Obviously Mr. Edwards is maintaining his reputation as a vigorous and courageous writer. In these days, when everyone is looking round for some solid ground on which to build, it is a great advantage to us all to have an architect with a trained philosophical mind exploring the subsoil for us. It is one of the things we are most proud of at Liverpool that after his career at Oxford Mr. Edwards went through the Liverpool course and afterwards worked with Professor Abercrombie at Civic Design. Civic Design in its broadest sense might be said to be the keynote of his teaching.

* "Good and Bad Manners in Architecture." By A. Trystan Edwards. (Philip Allen & Co.) Price 6s.

TOWN-PLANNING

In his ninth Town-Planning lecture at Birmingham University, Mr. William Haywood, F.R.I.B.A., said the Town Planning Act of 1909 marked an important date in town development. Government approval was then secured for a policy of progress, subject to a preconceived plan, and embodying certain new principles of house design and site arrangement, the excellence of which had been advocated and tested by reformers during the preceding twenty years.

Prior to 1909 town-planning conditions in all countries were represented by the development of characteristic local tendencies, and had not the comprehensive form that they had to-day. Since 1909 these tendencies had matured, and had been augmented by the interchange of international experiences making for progress on broader lines. For example, the feeling for corporate expression which was so marked a feature of Continental life, and out of which arose the very conception of town planning, had been supplemented abroad by the adoption of the best fruits of English individualism. The individual home, the limitation of houses to the acre, and the economic design of exclusively residential roads, were now universally accepted, as preferable in most cases to tenement buildings and roads for all purposes. In a similar manner, American schemes for municipal recreation, and her experiences with zoning, were valuable aids to wider views elsewhere. Town planning, in the modern sense of the word, was of comparatively recent growth, yet actual work upon town problems already showed that in some respects it was closely related to wider regional needs, as these in their turn were related to the still greater problem of national organisation.

In one respect the Town-Planning Act of 1909 was deficient. Although largely inspired by a desire for greater amenity, the promoters of the Act failed to provide any adequate method for giving legal assistance to this end. Public opinion, however, was moving towards an appreciation of beauty in future work, and in this new interest they should find scope for giving to their towns an uplift in outward expression which so many of them lacked.

ARCHITECTS' BENEVOLENT SOCIETY

Architects who have not yet insured through the Architects' Benevolent Society will, it is hoped, do so at an early date, either by effecting new policies, or, in the case of policies already placed, by transferring them to the agency of the Benevolent Society. The Society is in touch with most of the leading insurance companies, and is in a position, with the help of an advisory committee of insurance experts, to offer advice on all insurance matters, the interest of the insured receiving special consideration in every instance. In life assurance, the Society allows a rebate of half of the commission. The other half of the comm as is the whole of the commission on p other than life, is retained by the Societ credited to the fund in the published donors and subscribers as a contribution the architect who has insured.

Since the insurance scheme first starte sum of £100,000 has passed through the a of the Society, which has received in comm close on £300. In addition, nearly £200 ha returned in rebate.

These figures, though encouraging, ar it is considered, proportionate to the num architects now practising in this country. Architects' Benevolent Society urgently money; and while appreciating the exte which architects in the ordinary way su it with subscriptions and donations, the S does, at the same time, appeal to them for support in the effort it is now making th its insurance scheme to help itself. A £ life assurance brings in £10 (half of whi returned as rebate) the first year, and £1 15 in subsequent years; a motor car polic £500 brings in two guineas; and a £1,00 policy effected through the agency of Society brings in the small amount of 2s. so that, obviously, before any real bene felt to the Fund, it will be necessary for a large number of people to give their insura

Particulars of any kind of policy will be by return of post on application to the Secre of the Benevolent Society, 9, Conduit-stree

EXHIBITION NOTES

Amongst the current exhibitions there two or three of a decorative kind which appeal to our readers. At the Beaux Gallery, in Bruton-place, is a fine collectio modern pottery by Mr. Reginald Wells, w shows with what admirable feeling he grasped the essential qualities of Chi pottery. The colour, form and glaze are indicative of the sympathetic study the a has bestowed on Chinese art, and though t is little or no divergence from the oriental we feel that the designs are not the resul mere copyism, but show a keen sense of possibilities which are open to those who sympathetically follow old traditions. M of these pots have a delightful simplicity breadth with a refinement of form and co which give them in many instances a decorative value; in both delicate tone colour as well as in quite rich examples effect is nearly always pleasing and refined. Mr. Wells is gifted with a real sculptural inst the modelled animals and figures will appe those who desire something better tha merely clever naturalistic treatment. Som his little horses and cattle have quite an ar tectural value.

There is also a good collection of distinc pottery shown in the Greves Gallery, so tha may gather from these and other recent e bitions that we are witnessing a renaissanc design in the best kind of pottery. The p cipal feature of the Greves Gallery is a va collection of Mr. A. J. Rowley's brilliant w inlay. There is a wide field open to beau work of this kind, not so much, we think wonderful renderings of pictorial subjects in real decorative work as applied to furni and buildings. Attractive and clever as is m of Mr. Rowley's work, it is only right to p out that much of the work still leaves someth to be desired in the matter of form outlin the tree shapes are often lacking in really satisfactory suggestion of tree grow whilst sometimes the wood grain is rathe disturbing element instead of a help. Brangwyn's panels have a strong decora value, but for real achievement in tone colour it would not be easy to surpass Rowley's own work in "Westmorland" (which anyone might be glad to possess. such things as "The Sower" and "St. Chri pher," by Mr. A. Chase, we find a keen s of the value to be obtained by these w inlays.

RCHITECTS' & BUILDERS' INQUIRY BUREAU

'e are glad to give questions and answers, but cannot pt responsibility for contributed replies, especially on l matters.

Tay we appeal to our correspondents to submit their ies on paper of a size easily filed, and written as ly as possible, or better still, in typescript.—ED.

Aberdeen Granite.

EPLY TO "ENGLISHMAN," NOVEMBER 28.]

IR,—The following are the chief varieties Aberdeen and Peterhead granites:—Rubis-—Dark greyish blue in colour, and with grain. This variety is much in demand monumental work, and is, I believe, used in balustrade of Waterloo bridge. Dancing rns—Light bluish grey in colour to a darker v. This is, I believe, the granite used on Thames Embankment, and is also used as nite setts. Kemnay—Light grey with dark ticles of mica.

"ANOTHER ENGLISHMAN."

IR,—*Re* Scotch granites, the following ticulars may be of use:—County of Aber-ishire—Red granites quarried in Peter-d, Huntley, Cruden, Buxburn, Aberdeen. y granites quarried in Buxburn, Newhills, tore, Cluny. The true granites from rdeen and Peterhead are especially noted their durability and beauty.

"F. C. D."

Stone Flags.

REPLY TO "GARDENER," NOVEMBER 28.]

R,—Stone paving should be laid on a good of sand well levelled and packed up to orm with the different thicknesses of the , the corners of which should only be led up in lime mortar, and the joints made he mortar, and finally grouted up. This nod is much less likely to result in cracked , as the sand will accommodate itself to underside irregularities and provide con-ous support without subsequent shrinkage h may occur where the stones are bedded continuous bed of mortar.

"PAVIOUR."

Thatching.

[REPLY TO DEVON, NOVEMBER 28.]

R,—I noticed in the letter on "Thatching," ed by "Devon," that the water from a ched roof is not worth retaining. Does this n that the quality of the water is not satis-ory, or that the amount is very small on unt of it soaking into the thatch? I am ng a roof thatched with Norfolk reeds, and ld be glad to know whether "Devon's" rks apply to this kind of thatching. The s in this job will project 24 in.

F. C. P.

A Damp Party-wall.

[REPLY TO "BUILDER," NOVEMBER 28.]

R,—It is unfortunate the points of the com-are not given; also the thickness of the y-wall between C and B. According to the h plan, there are two dimensions given for same width, but they do not agree by 4 in. ıs call them the north and south dimensions. north dimension reads 24 ft. 7 in.; the h, 24 ft. 3 in.; thus the north dimension is longer than the south, although they are figured to the centre of the party-wall. thickness of the party-wall not being given, rather difficult to get an idea of the situation. flank wall to the basement addition may not ıe same thickness as the party-wall between d C. If this is the case there may be a set-of 4½ in. to the said flank wall, and the pipe in question would be on C's ground, ıe would be the owner of the pipe, and would to make good all damage done to his wall. ıy case, C would be entitled to fix his R.W. on his wall, to the extent of his boundary, which would be the outside edge of the footings, although they are not seen.

There appears to be an easement for rain-water from the roof of B's house to the R.W. pipes on the flank walls of A and C's houses.

If the dimensions are correct, someone has erred in setting back the iron fence 2 ft. or more on C's ground; but as the new owner of B's house bought it as it stands, this is a matter of settlement.

A. SOUTH.

Thickness of Lead.

[REPLY TO "YOUNG ARCHITECT," DECEMBER 5.]

SIR,—The thicknesses of the weights desired are .069, .085 and .102 in., respectively. To measure, cut a portion of, say, the 4 lbs. weight 6 in. square. If it is "according to Cocker," its weight will be 1 lb.

JOHN M. FIFE.

SIR,—Four lbs. lead is .068 in. thick; 5 lbs. .085, and 6 lbs. .101. The best and handiest method of measuring is by means of a lead gauge, obtainable from any firm of instrument makers. This gauge takes the form of a brass or gun-metal plate cut with V incisions, the inner edges of which are graduated in lbs. The sheet is inserted into the V, which tells the weight per ft. super.

"FATHER."

Wall Paper.

[REPLY TO "AMATEUR," DECEMBER 5.]

SIR,—The first dimensions are those of British-made goods. The second, 9 (not 8) yds. long and 18 in. wide, are of French manufacture.

JOHN M. FIFE.

SIR,—The paper supplied to Amateur was probably of American manufacture, as 8 yds. by 18 in. is the standard American size. The size which your correspondent anticipated is the standard English size, though there are some English firms who now, I believe, make their papers only 18 in. wide.

"ENGLISHMAN."

"Hot Plates."

[REPLY TO "BAFFLED," DECEMBER 5.]

SIR,—Most makers of gas cookers sell a hot closet in conjunction with a hood, that collects and disposes of the hot air from the oven and gas rings, by way of a flue pipe. This arrangement has generally proved satisfactory. Any good firm of makers of which names will be found in the advertisement columns of *The Builder*, would be glad to give full particulars.

"DISINTERESTED."

Decay in Stone.

[REPLY TO "CONSTANT READER," DECEMBER 5.]

SIR,—Brush down and apply two coats petrifying liquid, allowing a few days to elapse between each application to admit of the first coat's penetration.

JOHN M. FIFE.

SIR,—Your correspondent will find most of the information he requires if he applies to the Department of Scientific and Industrial Research 16, Old Queen-street, Westminster, which department places the results of the useful research work carried out under its auspices at the disposal of architects and others interested.

"LONDONER."

Hollow Walls.

[REPLY TO L. C. M., DECEMBER 5.]

SIR,—I am very glad to read your correspondent's letter calling attention to the lack of soundness in the construction of cavity walls in the generally accepted methods. There is no doubt that the life of such work is strictly limited, and that there should be a good market for earthenware ties manufactured in such bulk as to make their use a commercial proposition. It only needs the courage of repeated and insistent demand for such goods to ensure the supply, and we should then have the satisfaction of knowing that we are building to last. The price need not be compared tie for tie with the galvanised variety, as every earthenware tie would save one brick, the saving of which must be reckoned.

"SOUND BUILDING."

Cheap Roof Trusses.

SIR,—I should be glad if any of your correspondents could advise me of an economical and sound timber roof truss suitable for a building 20 ft. span with a battened and slated roof of 30 deg. pitch. The old forms of King post trusses seem very wasteful of material, and unnecessarily strong for the purpose, while their form does not seem to allow of the sizes being materially reduced if their own weight is to be carried.

PROGRESS.

Cement Flashings.

SIR,—Now that sound waterproofing materials to be used in conjunction with cement are on the market, can you advise me as to whether the use of cement so treated for flashings can be considered as a sound method of construction? In an age when economy is of such vital concern to building, such matters, I think, merit consideration.

"SAXPENCE."

Made Ground.

[REPLY TO "PRACTICE," DECEMBER 5.]

SIR,—I quite agree with all that is stated by "Practice" in his reply of December 5, to my letter of November 14, especially as regards the weight of the superincumbent building being first obtained, and then the bearing capacity of the soil to be built upon. If this is not good, precautions must be taken to distribute the load by concrete foundations, rafts, or piling, as the case may be. I did not deal with this important part of the subject in my short letter.

A. SOUTH.

Speculative Building.

SIR,—I shall be glad if some of your readers will kindly state the price per foot cube they are able to erect terrace-type houses of three bedrooms, 18 ft. frontage.

Owing to the fluctuation in wages and materials, it is difficult to obtain accurate data.

"BUILDER."

Building By-laws.

[REPLY TO "A.G.L.," DECEMBER 5.]

SIR,—A structure may be a new building under the Public Health Act, 1875, and, at the same time, a temporary building under the Public Health Act, 1907. See Andrews *v.* Wirrall R.D.C. (1916), 1 K.B. 863.

Section 27 of the Public Health Act, 1907, deals particularly with the erection of temporary buildings. This Act, however, only becomes operative in a district on the Order of the Ministry of Health; but it has become operative in very many urban districts and some rural districts.

In these cases, the question to be determined is, whether the structure can be a "building" or not; whether it is of a mere temporary character or not. A portable theatre, constructed of wood and erected for a short period only, was held not to be a "building" under the section above referred to. See Newell *v.* Ormskirk U.D.C. (1907), 71 J.P. 119.

So, too, in Whitehorn *v.* Smelt (1910), 74 J.P. 102, a "houp-la" with a canvas roof, and closed in on three sides with canvas, was held not to be a "building." And in general it was said in Southend-on-Sea Corporation *v.* Archer (1901), 70 L.J., K.B. 328, that structures erected

for temporary purposes, not having the character of buildings used or intended to be used for purposes of human habitation, are not "new buildings." But the fact that structures are not intended for human habitation does not of itself take them out of the category of new buildings; for, in South Shields Corporation *v.* Wilson (1901), 65 J.P. 294, a wooden shed intended for use as a stable only, was held to be "new building" within a by-law.

In Stevens *v.* Gourley (1859), 7 C.B. (N.S.) 99, a structure of wood intended as a shop, and laid on timber, and not let into the ground, was held to be a "building"; and, again, in Richardson *v.* Brown (1885), 49 J.P. 661, a wooden building, 30 ft. × 13 ft., *on wheels*, used as a butcher's shop, and having a supply of gas, spouts, and a fall pipe, was also held to be a building.

On a consideration of the above, it would appear that the structure described by "A.G.L." is a "temporary building," and subject to the by-laws of the locality. The fact that it can be taken down and erected elsewhere, and on wheels, does not affect his position. It may be added that, in recent years, many concessions have been made by local authorities in respect to temporary and wooden structures. "A.G.L." should ascertain what these are from the local authority concerned, for they may assist him in his difficulty. "L. J. C."

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

THE King opened Parliament in person, on Tuesday, December 9. The gracious speech from the Throne contained a number of references to housing, as is shown by the following extracts:

"My Ministers are deeply impressed by the continued shortage of housing accommodation. They are convinced that the encouragement of the private builder and the occupying owner is an essential element in the successful treatment of the problem, and substantial progress has been made in this direction. My Ministers will devote their attention to overcoming the rising cost of houses and the shortage in the available supplies of skilled labour. With this object, they will endeavour to supplement the building resources of the country by encouraging new methods of construction calculated to promote the rapid production of houses of approved design and moderate cost, and, at the same time, to assist in the reduction of unemployment.

"The housing problem is not merely one of overcrowding, but also of the existence of large numbers of houses which fall below modern standards of propriety and sanitation. Something is already being done under existing legislation to clear the worst areas and to remedy sanitary and structural defects in those which remain. As new building increases, it will be possible largely to develop this process, and my Government will take every opportunity of pressing it forward with vigour."

His Majesty added that measures would be presented for the consolidation of the Law of Property and of the enactments relating to the procedure of the Supreme Court, for the reform of the system of rating and valuation in England and Wales, and of rating in Scotland, and for the prolongation of the Rent Restrictions Act.

Mr. R. G. Ellis, the mover of the motion for the presentation of an address of thanks, in reply to the Speech, said that housing, so far, had been very much the sport of politics. The slow progress had been the subject of two schools of criticism, that which alleged that there had been profiteering in materials, and the other contending that "ca' canny" and restriction of output had raised the cost. If any private interest, springing either from the owners and producers of materials or from trade unionists, determined to hold up things for their own ends, or continued to obstruct in the way that had been suggested, the House would demand and the Government would be obliged to grant some form of legislation putting an end to that sort of exploitation.

THE AUCTIONEERS' INSTITUTE

MR. E. H. BLAKE, C.B.E. (Secretary) recently read a paper before the Auctioneers' and Estate Agents' Institute on "The Institute, 1886–1924." In the course of his remarks he said for the first three or four years of its existence the Institute had its home at No. 50, Moorgate-street, as it then was. In 1890 larger premises were taken at Nos. 57 and 58, Chancery-lane, and these served their purpose for nearly 16 years, although by 1898 there was a demand for increased accommodation. Suitable premises were looked for in all directions, but it was not until the end of 1905 that it was decided to acquire a lease of No. 34, Russell-square. Extensive structural alterations were made, and the Institute entered into occupation in the spring of 1906, remaining there for about 18½ years. There was no doubt that the members of the Council of 1905 thought those premises would serve the purposes of the Institute for a generation or two; its growth had evidently exceeded their most sanguine expectations. At the Birmingham Provincial Meeting in September, 1921, Mr. Chas. Osenton submitted the proposition that the Institute had reached a stage in its development when larger and more commodious premises had become an absolute necessity for the proper carrying on of its work.

Only three short years ago—but a good example of the promptitude with which their Council acted. Who, hearing Mr. Osenton's proposal at Birmingham in the autumn of 1921, would have thought that by the autumn of 1924 the Council would have found this fine freehold site, obtained possession from the numerous tenants, demolished the old buildings, erected and equipped the new building, and have been in the position of holding this, the first of their winter meetings of 1924–5 in the new premises?

The first effort of auctioneers to combine for their mutual benefit would appear to be indicated by a memorandum which was drawn up at the Piazza Coffee House in 1799. That memorandum resulted, he understood, in the formation of the Society of Auctioneers, a Society which was still in existence. The membership of the Society was limited, and its functions were, he believed, restricted to those of a dining club, at the dinners of which matters of professional interest were discussed. It was in 1886, eighty-seven years later, that a Mr. Ottley circularised the members of the profession in regard to the formation of an Institute of Auctioneers. A meeting was held at the Cannon-street Hotel, 120 members of the profession being present. It was decided to proceed. The first annual meeting was held on March 23, 1887, when it was resolved to take steps to secure incorporation under the Companies Acts. Matters moved slowly in those days, and although this Institute of Auctioneers and Surveyors of the United Kingdom published its first prospectus in the Press in April, 1887, it was not until two years later that really active steps were taken towards incorporation. On June 26, 1889, however, the organisation was duly incorporated as "The Auctioneers' Institute of the United Kingdom," and it continued its progress under that name until March 6, 1912, when, on the Estate Agents' Institute being amalgamated with it, it became the Auctioneers' and Estate Agents' Institute of the United Kingdom.

Northampton Polytechnic Institute.

On December 5, the annual prize distribution of the Northampton Polytechnic Institute took place at St. John-street, E.C. Mr. L. B. Sebastian (Chairman of the Governing Body), presided. The Marchioness of Northampton distributed the prizes, and an address was given by the Marquess of Northampton, D.S.O.

Among the degrees and certificates awarded by the University of London to students attending the day and evening courses in engineering, no less than twenty-nine students obtained the degree of B.Sc. (Eng.), of whom three obtained first class honours and seven second-class honours.

THE SURVEYORS' INSTITUTION

MR. E. P. WELLER recently read a pa "Agricultural Costing: An Aid to Management," at the Surveyors' Insti In the course of his remarks he said the ment of a farm might be divided into two g (*a*) those things which were usually own the landlord (buildings, fences, hedges, d drains, roads, &c.), and (*b*) those which usually the property of the tenant (w horses, milking and breeding stock, mech implements, tools, utensils, &c.).

With regard to the landlord's equipmen problem in the case of a tenant-f involved comparison of the value of the ment for production and the rent asked plus the tenant's share of the cost of mainte and incidental expenses such as rates and It had been said that buildings were unpr tive, but adequate and well-designed bui might so assist economical working of the particularly in regard to labour costs, that materially improved the financial results. farm so equipped was therefore worth an rent as compared with one which was not s provided. Similar considerations applie other kinds of equipment. Some might the effect of directly reducing outlay, others might enable a given outlay to pro larger returns. At the same time, the presence upon the land of buildings or equipment, even if of up-to-date design costly construction, was no reason at all the tenant should agree to pay rent for t He had to consider value for production and appearance or cost.

In the case of an owner-occupier similar siderations applied but sinking fund and int on purchase money or on cost of constru must be substituted for rent, and the full of maintenance, rates and taxes must be ad It might also be necessary to take into acc the value of the farm and equipment to owner for production compared with the it would realise if sold, due regard being ha alternative investments for the capital.

The question of the tenant's equipment bound up with the system and methods of duction adopted and the labour organisatio the farm. With regard to live equipment, farmer had to decide what classes of stock would keep and in what proportion. He n further consider the relative advantages disadvantages for specific purposes of diffe breeds and of pedigree stock *versus* ordi commercial stock. The considerations affec dead stock were similar to those applying buildings, &c., purchased or constructed by farmer. He must estimate the economy working which they would effect, or the proved results they would give, *i.e.*, their v for production compared with interest upon outlay involved, plus sinking fund and upk

A wrong decision upon any of these po caused waste. Costing was of the utmost v in assisting correct decision.

An Architects' and Builders' Diary.

The 1925 edition of *The Builder* Diary, wh has been so well received and appreciate former years, is now available (London: Catherine-street, Aldwych, W.C.2, price 2s. net). As in previous years, the first contains a great deal of valuable informatio everyday use to those engaged in the ar tectural and surveying professions and building industry. Full notes are given on the building trades, and there are mensura notes, notes on buildings and fire insura full particulars of the organisations in professions and trade, a list of scholarsl and prizes in the professions, postal informat &c. Pages are reserved for memora followed by calendars for 1924, 1925 and 1 The remainder of the book is occupied wit diary for 1925 (one opening to a week), space for a cash account. Altogether there about 180 pp. in the book, which is printed thin paper so that it is only three-eighths of inch thick; the book measures 6 in. by 4 a convenient size for the pocket.

THE BUILDING TRADE

THE TRADES' TRAINING SCHOOLS

annual prize-giving of the Trades' Schools, conducted by the following ilds—The Armourers and Brasiers, ers, Glaziers, Joiners, Paint-Stainers, rs, Plaisterers, Tylers and Bricklayers heelwrights, Great Titchfield-street, d at Carpenters' Hall on December 5, over by Mr. James Harris Browne, of the Carpenters' Company.

Frederick Sutton, J.P., chairman of ools Committee, read the annual report ted that the attendances during the reached 12,612, giving an average of At the Building Exhibition at Olympia Building Craft Schools took part, and ry successful in the competitions.

anister Fletcher, F.R.I.B.A., Director Schools. gave the thirty-first report of rk carried on during the session, and said the session's work was ad- d on May 8 by the judges, who t well up to the usual standard and ally above it. The judges were: Frederick Sutton, J.P. (Past Master Carpenters' Company, and Chairman of ools), G. C. Barnes (of the Joiners' y), J. Harris Browne (Master of penters' Company), E. Guy Dawber, esident, R.I.B.A., W. J. Englefield Pewterers' Company), W. R. Evans Master of the Carpenters' Company), orge Frampton, R.A., J. A. Gotch, .A.. F. T. W Goldsmith, F.R.I.B.A. Master of the Plaisterers' Company), wart Greene (of the Painters' Com- W. Grellier, F.R.I.B.A. (Past Master Tylers' and Bricklayers' Company), . Goscombe John, R.A., Bertrand (of the Pewterers' Company), E. Lancaster (of the Joiners' Company), Marsland (of the Tylers' and Brick- Company), W. J. Minn (Past Master Carpenters' Company), George Parlby, Plume (Editor of *The Builder*), Percy (Past Master of the Carpenters' y), E. S. Rider (of the Joiners' Com- Frank W. Robson (Past Master of heelwrights' Company), S. G. Castle , M.I.E.E., H. D. Searles-Wood, B.A., H. P. Shepherd (of the Wheel- ' Company), Sir Brumwell Thomas, B.A., A. R. Upjohn (of the Glaziers' ny), and Mr. J. Hutton Freeman, o the Carpenters' Company.

following trades and crafts met during sion. under the tuition of the under- —The Carpenters, under Mr. Henry S. ead, assisted by Mr. Archbold; the . under Mr. Charles E. Dunkin and puty, Mr. Smart, assisted by Mr. the Masons, under Mr. H. G. Bush; aziers. under Mr. J. Dudley Forsyth. l by Mr. Dankes; the Painters, under J. Fowler; the Plaisterers, under Mr. Pearson; the Plumbers, under Mr. g, assisted by Mr. Pardoe; the Metal rs' Class, under Messrs. H. Collins N. Coldwell; the Stone Carvers, under akley; the Life Modelling Class, under harles L. Hartwell; the Tylers' and yers' Clase, under Mr. F. W. Billing- the Wheelwrights, under Mr. R. C. ; the Wood Carvers, under Mr. F. A. am: the Electricians, under Mr. S. as, assisted by Messrs. Kemp and

ourse of demonstrations in various crafts again given by their instructors to ts of architecture from University Col- to impart that practical knowledge of rafts which is so important to the ect in practice.

Banister said the students' enthusiasm not in the least abated, and a steady n of apprentices and improvers poured y into their school in Central London from the most diverse quarters. All the widely scattered districts contributed their quota to the training ground in the crafts of building, which were in their entirety such essentially national industries. He would like to emphasise their peculiarly national character, for without any artificial or legislative interference, the building trade was, of its very nature, a protected industry, free from foreign competition, because it had to be carried out where it was actually required for use. This might not apply with equal truth to each individual contributory branch of the work, which went to the making of a building, especially in these days of modern methods. In England, in the variety of products required, they were face to face with the threatening danger to British building which their schools set themselves to combat by producing good craftsmen.

They could not import—at any rate at present—whole new buildings from overseas; they must be erected here. They could import raw materials, and their aim should be so to equip their own workmen that they could turn this raw material to the best possible use. This was the object of their schools—to equip their own men so that they could turn out the best work to the best advantage in all the interdependent crafts. They were all familiar with the saying that "Necessity is the mother of invention." They did not sufficiently realise, however, that if, from any cause, at any time, there was a shortage of any one particular material necessary for building, then that was the opportunity for the inventor to step in and supply a "substitute." Had not the war taught them that there was a substitute for everything except a good workman. It was their business in these schools to produce the good workmen, ready and willing to do the work required of them. From a variety of causes, there was now not only a shortage of bricks but also of bricklayers for building the houses for which the people were clamouring. Side by side with this there were, they were told, millions of bricks which only had to be shipped over from Belgium or even from Germany. They had often heard that you could not make bricks without straw, but there was now no difficulty in making houses without bricks, so there was a rush to supply all sorts of substitutes, and soon they might have the "all-steel house" of Lord Weir. This sort of production was something hitherto outside the building crafts, and was one of the results of the new desire for that mass-production which was both cheap and quick, and which was so largely independent of individual effort. It was to train the individual workmen that their schools existed; first of all to awaken and strengthen his capacity to learn, and then to develop his capability to work. They were not concerned with the political aspect of their industries, nor with trade union activities; but they were deeply concerned to develop the individual, both as to his outlook and to his work, so that he should be not only willing but able to give of his best for the best pay he could get. It had lately been said by a labour leader that "there are no employers who fail to understand that they had no right to demand the best from an employee, unless they were prepared to give the best in their turn." That was a warning which all engaged in any craft would do well to lay to heart. This was the spirit which they sought to engender in their schools. They sought to spread the propaganda of efficiency, and to cultivate a living loyalty to old British traditions of superiority in workmanship, so that British craftsmanship, by its reputation for thoroughness, might continue to challenge the world. In conclusion, there was no real pleasure quite like that which arose from unstinted expenditure of energy in a helpful environment and the application of one's powers to some objective worthy of them. Let them hope, therefore, that a life of active service, and of the enjoyment resulting from it, laid before every one of their students, so that in the days to come, each student might feel that he owed much to those who guided his mind and his hand in the training of his early days at the Trades' Training Schools.

Sir Kynaston Studd, O.B.E., then distributed the prizes, and said he had great pleasure in being with them for various reasons. He had intense respect for all the City Companies were doing in maintaining educational institutions, and he was particularly attracted to their school because it had for its object the training of those trades round which the Companies who maintained the schools were founded. He had also had a certain amount of experience of the value of technical schools at Titchfield-street where he was their nearest neighbour. There had been remarkable successes attained almost entirely due to training received in spare time. There was nothing more encouraging than to visit such an institution and see the type of man who, after a day's work, found time to equip himself so as to enable him to do something worthy both of himself and his country. They had had splendid successes in carpentering, metal work, and bricklaying, and had the advantage of studying with other young men of similar age and intelligence. Last week he had revisited their school, and had been delighted to find that no special preparation had been made. Nearly all the things they were doing had been done in The Polytechnic (Regent-street) in days gone by; they were acquiring knowledge and would use it in the manner most remunerative. Useful work enabled them to help, not only themselves, but people outside. He was much impressed with Sir Banister Fletcher's remarks about the teachers. There were two things needed in a teacher apart from knowledge: faith and inspiration. This ideal their teachers had attained. He would impress upon them that skill and intelligence in their own trades represented their capital. The more skill the greater the capital, and the greater the returns from that capital. There was much unemployment, and, he was afraid, many unemployables. They had had no education to enable them to command a living wage. If the students learnt their trade thoroughly they would never need to have any anxiety as to where to obtain work in order to enable them to obtain a living wage. He appealed to them not to be satisfied with merely learning a trade and studying things belonging to that trade, but to go in for general culture, including, particularly, constitutional history. Also to cultivate a taste for good books. On the other hand, they must not forget the athletic side. They must also study human nature: to be skilled craftsmen alone was not enough. Let them consider their present relationship with their masters. Did they consider him a decent fellow or a "washout"? If they had a good master let them hang on and give him more than value for money. If they had the other kind it would be wise not to worry too much but to do their best to give him more than value for money: by example they might bring him to a more reasonable frame of mind. In conclusion, he would remind them that the main thing to remember in life was to have a sound mind, body and soul. They could do nothing better than to remember the words, "I am the captain of my soul; the master of my fate." He commended the sentence of one of their teachers as a motto, "Erect square and fix securely."

Cordial votes of thanks were passed to Sir Kynaston Studd, the Companies, the Chairman, and others.

CONCRETE AND CEMENT AS DECORATIVE MATERIALS

MR. T. P. BENNETT, F.R.I.B.A., lectured recently before the Institute of British Decorators on this subject. In the course of his remarks, the lecturer said: with the rapid development of steel as a constructional material and the parallel development of reinforced concrete, architects and designers were faced with the necessity of studying surface treatment which could be used for the design of buildings which arise directly out of the constructional materials employed, and particularly out of cement. The rapidity with which these constructional materials had developed was something which was new in building construction, and the constructional revolution which had taken place was perhaps as yet only imperfectly realised by those who were faced with the responsibility of using it.

For some thousands of years brickwork and masonry had been the principal materials employed in the erection of buildings, and in the last century, when steel and iron first became prominent, they were regarded merely as supporting materials and were faced with stone or brick, producing what one might call pseudo brick or masonry buildings. The objections to this system of facing one constructional material with another constructional material were rapidly becoming evident, and the most active brains in design could not help seeing that the day was not far distant when steel and concrete building must evolve its own method of expression. This was being rendered increasingly important because they were realising that the use of steel and concrete did not merely alter the external appearance of the building, but it altered the fundamental proportions upon which the design must be based. Design was, of course, much more a matter of proportion than of surface decoration, and it was therefore impossible to employ steel economically and cover it with a masonry skin with any real chance of a successful result.

In examining the history of the subject, they found that concrete was used externally by Roman and Byzantine buildings, and that they evolved methods of decoration of their own which might be made a basis to their study of the subject. In Roman work, concrete was not reinforced with metal, and the proportions of the parts of their buildings therefore approximated to the proportions of masonry structures. Furthermore, the social conditions of the Romans demanded the use of excessive areas of concrete in order that they might safeguard themselves against possible failures from the employment of unskilled slave labour. As a result, piers were of massive proportions, vaults were sufficiently thick to eliminate thrust, and other parts of the structures were adjusted to give considerable effect from deep reveals and projections. From these social conditions sprang also the principle of Roman decoration, that was to say the Romans were able to command an unlimited supply of men, the majority of whom had little or no skill, but they were able also to command a supply of other men of highly developed skill. Thus it would readily be seen that the most economical method of producing buildings was to build the carcase and case it with ornament. In the Roman baths, in the Roman palaces, in the great Fori, they got, therefore, mass concrete as a base and plaster mosaic or marble sheeting as a finish. It seemed logical to accept those broad systems of the Romans as possible sources of inspiration for their own buildings, because, although they had not experienced similar social conditions, the scarcity of skilled craftsmen and the steady increase in the number of unemployed unskilled men tended to bring about a set of conditions which were not dissimilar.

With regard to modern treatments, the lecturer said they came upon some of the essays which had been made on the Continent to use concrete with stucco or other finish for industrial and other buildings, and they were introduced for the first time to that vital revision of proportion which he had indicated at the outset as an essential part of design of the future. It was idle to express a mere arbitrary opinion as to their likes or dislikes for these preliminary essays in the logical expression of a new building material. This material he called new, because it was new in the form in which they were using it; that was to say, they did not command either the unlimited labour supplies or the unlimited money which was typical of the Roman and Byzantine use of concrete. They were, further, employing steel in a way hitherto unknown, which reduced the mass of their structures to relatively minute areas.

It was not surprising that the architects of the world had failed to find immediately a perfectly logical, sound, satisfactory, and interesting solution of this problem. Investigation into the history of construction showed that it was the first time for 2,500 years that the proportions of building had been fundamentally altered. He found, therefore, considerable fascination in the essays of M. Eric Mendellsohn, the German architect, who had endeavoured to produce buildings which arose completely from structural necessities and which were to be executed in concrete. The first of these was an optical factory; the next an aerodrome; while Bruno Tant's was another scheme for an office building and cinema. There was a certain atmosphere of amusement about these essays. To their unaccustomed eyes, they hardly looked like sane structures, possibly they were not sane structures, and possibly they would have a relatively small influence upon future developments, but they showed a real attempt to grapple with the proportion problem and to give reinforced concrete some new and logical expression.

With regard to the possible methods of surface treatment the lecturer said the first of these was the possibility of colouring grey Portland cement used in blocks or used as a fixing material. The first difficulty they had to face was a tendency of the acid in the cement to destroy the colour in the material, and the second the tendency of the colouring material to destroy the setting powers of the concrete. He had arrived at a rough distinction in colouring materials which he believed to hold good universally, but which he had not yet completely tested. This distinction indicated that pure metallic colours were perfectly safe, both as regards permanence of colour and the absence of deleterious effect to the setting of the concrete. Lakes which were mainly aniline dyes superimposed on colloidal clay retarded and might even completely destroy the setting powers of the concrete with, of course, disastrous results to the block or the stucco. Earth colours had a similar effect. At the moment he was using a purple oxide of iron in concrete blocks, which appeared to be producing a very interesting warm red purple.

Mr. R. R. Butler, chemist, of the Northern Polytechnic, had, said the lecturer, commenced to build up some definite information on this matter, and although his investigations were in their infancy he was able to give a few details. He had experimented with certain dyes in an effort to mix cheap water dyes with the water and so colour the whole of the cement at a more or less nominal cost. They were continuing these investigations so far as the possibility of mixing ground colour with concrete was concerned, and the following list indicated that safe colours were difficult to obtain and that the colour range was at present very restricted. They hoped to be able to add to this list in the near future: Safe colours—Red oxide of iron, purple oxide of iron, chrome yellow (lead chromate), vermillion. Unsafe colours—Derbyshire ochre, American ochre, Italian sienna, American sienna, Turkey umber, Devonshire umber. Umbers and siennas in general were unsafe because they contained clayey matter. Ultramarine contained clayey matter, and Prussian blue would turn brown because of the presence of lime; it would not stand up to alkalis. Brunswick green was Prussian blue mixed with chrome yellow, and was therefore unsafe and would lose its colour. Lakes were colouring matter, and were mixed wit matter; they were, therefore, unsafe.

The next point which was of interest employment of the white cement. cement was valuable for two reasons provided an extremely attractive su itself; (2) it could be made the basis tive colouring contrasts. White cem been employed in a number of buil America and was finding its way to Its first possibility was as a pointing its second as a stucco. Scrubbed with marble chipping or with stone some extremely interesting effects. enquired into the possibility of using work upon original structural concr had found that considerable difficul experienced in striking the forms and the scrubbed face at the exact period process of setting which left the sufficiently hard for structural purpos was still sufficiently soft to enable scrubbed. So definite was this difficu the attempt to execute scrubbed structural concrete had been abandon it was usually employed upon a stucco subsequently added to the main st He had, however, succeeded in scrubb face of concrete blocks which were cas being put into the building. Attem also been made to obtain these surface by treating the concrete with muriat which attacked the cement and left the a untouched. Such a method might ha great value if one could be certain action of the acid could be permanently at the desired moment.

Everyone was familiar with the buildings at Wembley; although these ings might be of architectural merit the effect was unattractive and heavy bec the almost complete absence of colo defect being emphasised by the ind texture of the material. This lack of att ness was particularly to be regretted in some cases extremely interesting wo been done.

NEW BUILDINGS

Uxbridge.—It is proposed to exte works of Messrs. King & Hutchings, printers, in Vine-street, Uxbridge. building of one story, extensively lighted lights and side windows, is to be erecte site 40 ft. by 90 ft., to be used for book and warehousing. The architect is Mr. Eves, of 54, High-street, Uxbridge.

Liverpool.—The Ecclesiastical Commis have approved plans for the erection of church, dedicated to All Souls, at Sprin Allerton, a new parish formed out of th parishes of Garston, Allerton and Grass Liverpool. The new edifice will follo Neo-Byzantine style, and will occupy a Mather-avenue, which runs through the A Estate. Accommodation will be provid 750 worshippers, when complete. All th and piers will be built in brickwork, face externally and internally with rustic Very little stonework will be employed. floors to the nave and transepts will b with wood blocks on concrete. The c steps and floor will be of stone. The ex roof will be of timber, covered with red pa and will cover a barrel-vaulted interior o forced concrete. Work on the first port the building will be commenced as ea possible, and will provide accommodati 500 persons. The architects are Messrs. bell & Honeyburne, of 51, North John- Liverpool. The quantity surveyors are M W. M. Law & Son, 51, North John- Liverpool.

Richmond, Surrey.—Alterations and add to the old police station in George-stre order to adapt it as a dairy and restaurar the Express Dairy Co., Ltd., 26, Tavis place, W.C.1. Architects, Messrs. Taper Haase, 3, Gower-street, W.1. Messrs. Gri Son, 78, Manchester-road, London, E.14.

OUSING REPORT OF BOROUGH TREASURER, NEWPORT

GH the courtesy of Mr. C. F. Ward, ough Architect of Newport, we have rwarded a copy of a report on the Acts of 1923 and 1924 by the Borough er and Controller, which we find an ly interesting document, and we regret space will only permit us to give a rt notice of some of the points it con- We gather that hitherto the Corpora- der the Chamberlain Act of 1923, has itself to assisting private enterprise noting the construction of houses (1) ing lump sum grants of £110 in the the parlour type house, and £90 in the non-parlour type houses, and (2) guarantees to building societies. In case the Government grant of £6 was as a capital sum of £75, leaving £35 5 respectively to be provided by the ion, but all the applications granted he date of the Report, November 21, re in respect of parlour houses.

f the points which will be considered interest in this report is the com- of schemes it contains with a view to ing, if the Corporation build, whether uld do so under the Act of 1923 with nment grant of £6 for twenty years, the Act of 1924 with a Government £9 for forty years: the rent in the being unrestricted, but in the latter l. It may be noticed here that the un- l rent is taken as 9s. 9d. against a l rent of 8s. 8½d. As we have been o make use of this report, we now e the two tables in which this com- is contained (see Tables I and II).

ecessary now to quote from the Report nents upon and explanations of these les:—

E I.—From this it will be seen that he first sixty years there will be a loss r of a substantial character after the ent grant has been credited, but in twenty years there is a surplus owing oan periods being exhausted, for in obtain a true comparison with , it has been assumed that loans will for periods of twenty years to cover of roads; thirty years for sewers; buildings; and eighty years for land.

t these losses mean.—It is necessary o translate these losses and gains into g the mind will readily seize upon. herefore, calculated that these losses e charged with a certain percentage them each year, and that the gains st twenty years shall be credited with a certain percentage. The result is t if the local authority were to place f £7 3s. 3d. aside for forty years it quidate all the losses after the gains ted.

s under this Scheme.—It will be seen under this scheme the rents are not I have taken them to be at the 9s. 9d. per week, exclusive. It rgued this is not sufficiently high, but be borne in mind that it is assumed sum will be obtained for the period y years and is only 1s. per week of that which is taken into considera- Table II.

Gain and Loss under Table II.

er Table II, which deals with a house ject to ' special conditions ' in respect a State subsidy of £9 per annum for ars is received under the 1924 Act. re given showing the estimated de- over the first sixty years and the the last twenty. Adopting a similar o that used in connection with Table I, f £4 10s. per annum for forty years e out the losses after the gains have dited."

he conclusion to be drawn from these s that it is more economic for a local to adopt the provisions of the Act of 1924 than the Act of 1923, and this result should be anticipated, seeing that under the Act of 1924 the Government grant is £9 for forty years, whereas under the Act of 1923 it is but £6 for twenty years, and it appears to us the tax-payer may well ask, having regard to these figures, whether a case is made out for the larger and longer grant. Some little light is thrown upon this point by a further Table in this Report, giving the comparative annual cost for five hundred houses of the parlour type under the two Acts, and for this purpose the author of the Report has found it necessary for purposes of comparison to reduce the estimated annual deficiencies and surpluses to a common base of forty years. (See Table III.)

These figures surely raise the serious question whether the increased subsidy under the Act of 1924 is called for at all; or whether, having regard to the fact that private enterprise, if placed on an equal footing with the Corporations, would in all probability produce more houses if called for, it should not also apply to houses erected by private builders. The latest figures are given in this Report, showing that 54,287 houses had been authorised to be built by local authorities as against 107,258 by private enterprise. If the same stimulus were offered under the new Act to private enterprise as is offered to local authorities, there is no possible ground for not assuming that private enterprise would continue to lead the way. It really appears to come to this—that the largely increased subsidy and the prolonged period of subsidy are solely offered to secure houses being offered on rental, as it is alleged they are only offered for sale under the Act of 1923.

The increased and long-continued subsidy seems a high price to pay to attain what was the normal condition of things before the war—the letting of working-class dwellings at weekly rents. We are reminded in this Report that the Wheatley programme of 2,500,000 houses involves subsidies from Government and local authorities from 1923-4 to 1979-80 which would aggregate £1,376,240,000, or an average charge per annum for fifty-six years of £24,575,714, and we cannot see that such a commitment can be necessary. The provisions for breaks in the scheme have already done away with one of the reasons which, it was alleged, made it essential to lay down a scheme for so long a period; new methods and increased personnel are sure to be provided to meet a continued demand and, moreover, the sale of houses is a comparatively limited market, and private

TABLE I.

PARLOUR TYPE HOUSE NOT SUBJECT TO "SPECIAL CONDITIONS."
STATE SUBSIDY OF £6 PER ANNUM FOR TWENTY YEARS.
(Ordinary Loan Repayment Periods.)

	First 20 Years.	Next 10 Years.	Next 10 Years.	Next 20 Years.	Last 20 Years.
EXPENDITURE—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Loan Charges	29 19 4	27 3 5	26 12 2	26 12 2	1 5 4
Maintenance and Management Expenses	7 12 6	7 12 6	7 12 6	7 12 6	7 12 6
Total	37 11 10	34 15 11	34 4 8	34 4 8	8 17 10
INCOME—					
Rent 9s. 9d. per week	25 8 5	25 8 5	25 8 5	25 8 5	25 8 5
Government Subsidy	6 0 0	—	—	—	—
Total	31 8 5	25 8 5	25 8 5	25 8 5	25 8 5
BALANCE FALLING UPON RATES—					
Annual Deficiency	6 3 5	9 7 6	8 16 3	8 16 3	—
Annual Surplus	—	—	—	—	16 10 7

Note.—Calculated with accumulations at 3 per cent. per annum, the contribution required from rates to meet the annual deficiencies and surpluses shown above is equivalent to £7 3s. 3d. per annum for forty years.

TABLE II.

PARLOUR TYPE HOUSE SUBJECT TO "SPECIAL CONDITIONS."
STATE SUBSIDY £9 PER ANNUM FOR FORTY YEARS.
(Ordinary Loan Repayment Periods.)

	First 20 Years.	Next 10 Years.	Next 10 Years.	Next 20 Years.	Last 20 Years.
EXPENDITURE—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Loan Charges	29 19 4	27 3 5	26 12 2	26 12 2	1 5 4
Maintenance and Management Expenses	6 16 3	6 16 3	6 16 3	6 16 3	6 16 3
Total	36 15 7	33 19 8	33 8 5	33 8 5	8 1 7
INCOME—					
Rent 8s. 8½d. per week	22 14 3	22 14 3	22 14 3	22 14 3	22 14 3
Government Subsidy	9 0 0	9 0 0	9 0 0	—	—
Total	31 14 3	31 14 3	31 14 3	22 14 3	22 14 3
BALANCE FALLING ON RATES—					
Deficiency	5 1 4	2 5 5	1 14 2	10 14 2	—
Surplus	—	—	—	—	14 12 8

Note.—Calculated with accumulations at 3 per cent. per annum, the contribution required from the rates over the period is equivalent to £4 10s. per annum for forty years.

TABLE III.

Scheme for 500 Houses.	Equivalent Annual Cost per Annum for 40 years. Government Subsidy.	Corporation Subsidy.	Total.
Under the Act of 1923—			
(*a*) Assistance to private enterprise by lump sum grants	£2,178 17 4	£1,026 8 5	£3,205 5 9
(*b*) Provision of houses by Corporation	£2,178 17 4	£3,581 5 0	£5,760 2 4
Under the Act of 1924—			
Provision of houses by Corporation	£4,500 0 0	£2,250 0 0	£6,750 0 0

enterprise, if encouraged and reassured that rents would be secured, would inevitably revert to the practice of building houses which would be let.

The problem before the Government, therefore, appears to be how to combine all the schemes at present in existence so as to stimulate the local authorities and private enterprise alike, but at the same time, whilst giving reasonable security in the future which shall bring operatives into the building trade, not to pledge either the Government credit or that of the local authorities for such unreasonable sums or for such a long period. At present it appears to us that the nation is being asked to back the slowest horse. The local authorities have hitherto produced fewer houses than private enterprise, yet the subsidy to them has been increased, whilst that to private enterprise remains the same. Moreover, from the figures given in this Report, the difference between restricted and unrestricted rents appears to us to make the difference in the subsidy disproportionate.

We wish we could give more space to the matter contained in the Report itself, as we find it most suggestive and instructive. We have only given a few extracts, and although we have given the tables which show that the Act of 1924 places a less charge on the local authorities than the former Act, it must not be assumed that the Report approves one scheme more than another. There are some very practical criticisms of the Act of 1924, amongst which we may mention the effect on the general credit for all purposes of the local authorities if they are to raise such vast sums with the consequent rise in the interest they will have to pay on loans, and the risk of loss from loans sanctioned for such long periods to include such items as roadworks, sewers and buildings.

A HOUSING SUGGESTION

WE have received a little pamphlet which is entitled "Proposals for National Housing Rental Purchase," which contains a scheme under which by paying 1s. a week more than the economic rent tenants become owners of their houses in twenty years. This is not exactly one of the many untried schemes which are being put forward as suggestions to meet the present emergency, for it has its foundations on actual experiment, as it embodies a scheme initiated by Mr. Harold Morgan, the Secretary to the Shireoaks Colliery Co., Ltd., Worksop, which has been in successful operation for eighteen months in the Colliery Company's new village.

The pamphlet must be read by anyone who wishes to obtain accurate information as to this scheme, and we can only give a very imperfect idea of some of its features. Very briefly, the scheme appears to amount to this: The local authority on the application of a prospective tenant-purchaser would advance the money and pay the builder for the erection of the house, which would be registered in the name of the tenant, subject to a mortgage. The mortgage interest is graduated according to the price of the house Up to the value of £500 it is 2½ per cent., £501 to £600, 3 per cent., and so on. The Government subsidy is to be the difference between the mortgage interest paid by the tenant-purchaser and the interest payable by the local authority or other agency. As the mortgages under the scheme are gradually paid off year by year, and as the subsidy would be payable on the outstanding balance of loans, the subsidy would be a gradually diminishing amount. There are tables in the pamphlet which show in detail how the Government subsidy is arrived at, at varying rates of interest chargeable to the local authority, the maximum cost of the subsidy, and all other necessary questions including the charges, &c., according to the price of the house, but perhaps we can give the best idea of the scheme by quoting from a table in which the working of the scheme is given in reference to a house costing £500, at a weekly rent of 11s. 4d., which with the 1s. added, makes a weekly payment of 12s. 4d. This table gives the amount of the Government subsidy according to various rates of interest at which the local authority has borrowed and shows the working of the scheme for the whole twenty years, but we will take the rate of interest at 4½ per cent., and only show the working of the scheme for three years as the rest can be gathered from that :—

	Loan.	Mortgage interest charged to tenant at 2½ per cent.	Total.	Deduct payments at 12s. 4d. per week.	Balance at end of year.	Government subsidy 2 per cent.
1st year ..	£500 0 0	£12 10 0	£512 10 0	£32 1 4	£480 8 8	£10 0 0
2nd year ..	480 8 8	12 0 3	492 8 11	32 1 4	461 7 7	9 12 2
3rd year ..	460 7 7	11 10 2	471 17 9	32 1 4	439 16 5	9 4 3
20th year	31 9 4	15 9	32 5 1	32 1 4	3 9	12 7

We have given the first three years and the twentieth year.

We may mention that one great advantage claimed for the scheme is that there is no compulsory deposit, as even the finding of a small amount of capital is an obstacle in the way of a working man who desires to acquire a house. But if a deposit is voluntarily paid the tenant at once gets the advantage as the weekly payment is then reduced. It may be mentioned that the scheme provides for registration of title by the local authority, rendering conveyance simple and cheap, and this point bears upon another question, which is also dealt with in the pamphlet, as in cases of misfortune transfer of the house is simple and either a smaller house can be acquired or, as explained in the text, an alternative mortgage can be obtained. We endorse all that the author says as to the advantages of encouraging the working classes to own their own houses, and if these houses could be transferred readily and economically one great obstacle to the workman's purchasing his house, *i.e.*, his uncertainty as to whether he may have to change his neighbourhood, would be got over as, possibly, should this system become universal a sort of "Labour Exchange" of houses could be set up throughout the country.

We consider this scheme well worthy of consideration, and we may mention that the Caterham Urban District Council has in working a scheme somewhat on the same lines. That scheme includes an endowment insurance policy, but a deposit of £40 is required. Mr. Morgan shows how insurance can also be combined with his scheme. In conclusion, we should say that according to Mr. Morgan's pamphlet, where tables will be found showing the maximum cost of the subsidy, it is stated that the Government Subsidy will only be higher than in the 1923 Act in a few cases where 5 per cent. has to be paid for loans, by the local authority, but in only one case where the rate is 4½ per cent., whilst there is every reason to believe that the flat rate would be lower as the average subsidy must show a reduction. He further points out that there is no possibility of any future charge on the rates in the case of houses erected under his scheme.

Infirmary Extension.

Four foundation stones were laid recently in connection with a new wing to the Knaresborough Poor Law Institution Infirmary. The wing, at the north-west of the institution, is to provide thirty additional beds for the female ward at a cost of £3,000. Mr. J. Houfe is the architect.

THE PRIME MINISTER HOUSING

IN his speech at the Albert Hall on D the Prime Minister made an importa nouncement on housing. He is repo having said, "We differ profoundly f Socialists in one matter. We want to se own their homes, and we shall devise e means we can to extend the class of o owner. We want to see more and no private property. We want it more sp

Further on in the speech he is rep saying that for some time there must restriction, as not only in this country several countries in Europe, there has same sequence of events, "the falling building during the war; the resulting of houses; the threatened rise of rent; t vention of the State to protect the tena rise of prices of commodities generally, ing material in particular, and then th of rent to rise in correspondence, the of house building; the attempts of the fill the gap; the failure of the State t gap—and we shall not attempt to f direct building at ruinous prices. We set in action and to stimulate, as Mr Chamberlain has done, the resources o enterprise, and when we have subs increased the number of small houses feel free to decontrol."

This is a good summary of the housing position, and we need not say complete agreement with that part of th which supports private enterprise and ownership, but the subsidy plays an in part in both. Under the Housing Act the private builder has been deliberatel at a disadvantage compared with t authorities, as the avowed object of that to encourage the building and letting o by the local authorities or a society, trustees, or a company, and the increased of £9 in place of £6 only applies to such erecting houses to be let on the "spec ditions."

Various schemes have lately been some of which have been put into actu tice, to enable the working man to house, and the subsidy forms an essen ment in the success of such scheme enables the purchase to be made by the p of annual sums over a period of twent such sums, with the aid of the subsidy, e the economic rent by a very small These schemes have been based upon subsidy, and yet the annual sums pa "purchase rent" are not quite prohibiti it has also been shown that were such adopted on a large scale it is possible flat rate can be applied that the average might be capable of reduction. It is im to note that these schemes only conten subsidy for twenty years and not for f applied to the local authorities and other

No Government ever desires to re measure recently passed by its predeces the same objection cannot be applied amendment of that measure, and it appli less to the Act of 1924 than to ordinar since that Act is made subject to a pe review, and any amendment should be c to doing away with the inequality of the to private persons under the Act of compared with the subsidy to local aut and other bodies under the Act of 1924. increased subsidy of £9 could be given to persons erecting houses, even were the twenty years in place of forty years, an this subsidy take the form of a lump could the lesser subsidy under the Act o an incentive would be given to private to accept the "special conditions" as to which are imposed under the Act of 192 we imagine the object which the Prime M has at heart—the stimulation of private prise—would be considerably forwarded if his second object, "house owning," is be facilitated, we should suggest th "special conditions" also require amen so as to embrace such "rental purchase" s as we have referred to above.

W BUILDINGS IN LONDON

rk.—The Bishop of Southwark has appeal for funds to enable a much-eme of restoration and repair to the to be carried out. It is hoped to raise nd to make reparations to the fabric organ, install a better lighting system, plans have been prepared by the architect, Mr. Charles J. Blomfield, shburn-gardens, South Kensington,

—Messrs. John McManus, Ltd., are ut building operations on the following llis Hill-lane, Church Hall; Mr. W. aymouth, F.R.I.B.A., architect. The ford, alterations and redecorations; Ingram, A.R.I.B.A., architect. 15, reen-road, alterations and redecora-T. F. Ingram, A.R.I.B.A., architect. ad, Isleworth, extensions to bungalow. nith, additional accommodation for at the Electricity Department, lace-road, for the Borough Council. **Hill.**—The old "Crooked Billet" Tower Hill is being demolished. In being erected an up-to-date, modern se, for Messrs. Huggins & Co., Ltd., s and owners of the property. The uilding consists mainly of brickwork r construction, with a faience front, nd asphalted roof. Efficient systems lighting and heating are being The contractors for this work are A. Roome & Co., Ltd., of Hackney. ect for the scheme is Mr. Alfred Burr, , 85, Gower-street, E.C.2.

-place.—A large site in Waterloo-he east side, is now being excavated y to building operations being started. ding of offices is to be erected, of five height. The premises will be of a ilar to the building of Cox's Bank and are, in fact, designed by Mr. Crown, of 12, Regent-street, S.W.1, one t architects to the bank. A steel will carry the building, which will be Portland stone. The floors will all ncrete construction, finished with The interior equipment will include ve the floors above, heating and elec-g systems, &c. The windows will all steel casement type, and a certain art metal work will be introduced. ill be a mansard and will be covered . The contractors are Messrs. Holland and Cubitts, Ltd., of 258, Gray's Inn-lon, W.C.1.

h-street.—The site at the corner of -street and Billiter-street, London, been cleared of old buildings, the ses being expired, and a new block of be erected in their stead. The new ill incorporate all modern improve-will provide six floors of offices, all r letting purposes. A Portland stone ilding carried on a steel girder frame-be erected, with its entrance on the e site. Heating on the low-pressure system from a central boiler-house talled and a lift, worked by electrical l run from the basement to the top entrance and lobby will be paved in d the joinery work will be in mahogany. ects are Messrs. Gunton & Gunton, of House, Bloomfield-street, London,

l-street.—A five-story warehouse is to n the site of Nos. 6 and 8, Stamford-l, for Messrs. Burn Bros. (London), ary engineers, &c., of Blackfriars-road, he new building is to be of brick facings dressings for windows and doorways. l be accommodation for offices and space and the floors will be of fireproof he loads will be carried by a steel plied and erected by Messrs. Redpath Co., Ltd., of 3, Laurence Pountney-3. The roof will be of slate. The s are Messrs. Higgs & Hill, Ltd., of Crown Works, South Lambeth-road, London, S.W.8. The architect is Mr. T. H. Smith, of 17, Basinghall-street, London, E.C.2.

Regent-street.—Another new building in Regent-street is to be provided on the site of Nos. 149–151, Here will be erected a six-floored block of offices and shops, with extensive basements. The premises will be similar to all of those in this street, built of Portland stone facings, on a steel framework. The floors will be of fireproof construction, whilst the walls will be of fibrous and plain plaster decoration. Marble will be used for linings and skirtings on the principal entrances and corridors. All joinery will be in English and foreign hardwoods. Lifts will be fitted to serve all floors. Electric lighting will be installed and central heating on the low-pressure system will be provided. Points for fitting vacuum cleaning apparatus will also be wired on each floor. The shop windows will be of metal, of ornamental design, with bronze lettering. All other casements will be of steel, The general contractors are Messrs. Trollope & Colls, Ltd., 5, Coleman-street, London, E.C.2. The steelwork frame will be supplied and erected by Messrs. Moreland, Hayne & Co., Ltd., of 80, Goswell-road, London, E.C.1. The architects are Messrs. Skipwith, Gordon & Gordon, of 5, Old Bond-street, London, W.1.

Regent-street.—Building is to commence this month on the new shops and offices designed to replace the old premises at Nos. 93, 95, 97 and 97A, Regent-street, with large frontages also in Swallow-street. The new building will be six stories in height, and excavations to a depth of about 30 ft. is being made to provide for two basements. There will be four large shops on the street level, with showrooms above and below if required. The first to fifth floors will be used as offices, &c. The front elevation has been approved by H.M. Office of Works and Forests and will be executed in Portland stone, enriched with bronze ornamentations and art metal decorative work. The mansard roof will be covered with green Cumberland slates on the pitched slopes and will have a top roof of concrete, finished with asphalte. A steel-framed building, it will be rendered fireproof throughout by the provision of reinforced concrete floors, doors, sprinklers and hydrants. Steel casements will be used for all windows, whilst the display fronts for the shops will be of bronze or brass. There will be two lifts and complete systems of heating, lighting, ventilating and vacuum cleaning. The architect is Mr. S. Gordon Jeeves, of George-street, Hanover-square, W.1.

Sutton-lane.—The licensed premises, the "Queen's Head," at Sutton-lane, Chiswick, W.4. are to be rebuilt upon the present site and the accommodation practically trebled. The new building will be of three stories, and will be erected in brickwork with steel girders placed to carry the principal loads, A certain amount of timberwork on the front of the house is provided for. Inside the equipment and fittings will be of oak or mahogany. Plans have been prepared by Mr. Malcolm T. Sanders, architect, to Messrs. Watney, Combe, Reid & Co., Ltd., the owners of the premises.

Strand-on-the-Green.—The "Steam Packet" in Strand-on-the-Green is to be rebuilt. A building of the half-timbered style is proposed, erected in good quality facing brick, and a slated roof. Accommodation will be provided for private and public bars, luncheon room, domestic and staff quarters, lavatory, cellarage, offices, &c. The interior woodwork will be chiefly of oak, whilst the walls will be of plaster and distempered. The architect is Mr. Nowell Parr, of 42, Cranley-gardens, South Kensington, S.W.7.

Coldharbour.—The Coldharbour Estate at Croydon is to be developed for housing purposes and an expenditure of about £10,000 is anticipated on the lay-out of new roads and the provision of houses. Various designs for houses and residences will be adopted, providing three and four bedrooms, living room and parlour accommodation, &c. The surveyors to the Coldharbour Estate, Ltd., are Messrs. Hooker & Rogers, of 4, High-street, Croydon.

Haywards Heath.—A new church for the Roman Catholic denomination is to be built at Haywards Heath, and building operations are likely to start in the near future. Plans for an edifice of brick erection with stone dressings is proposed, to hold about 300. The interior will be finished in plaster and distempered. The furnishings will be in oak. The architect is Mr. John H. Beart Foss, of 9, The Common, Ealing, London, W.5.

Gray's Inn-road.—A row of shop premises is to be erected in Gray's Inn-road, constructed in brick, with artificial stone dressings and mahogany shop fronts. The contractors are Messrs. W. F. Blay, Ltd., of Spital-street, Dartford and Dowgate Hill, E C.4. The architects are Messrs. North, Robin & Wilsdon, 35–39, Maddox-street, W.1.

London Wall.—The premises known as Glendinning Restaurant at No. 34, London Wall, E.C.2, have been acquired by a building society for new offices. Internal alterations are to be made and electric lighting and heating apparatus installed. The architect is Mr. J. H. Lovegrove, of 374, Old-street, London, E.C.2.

Old Bond-st.—The large premises at the corner of Burlington-gardens and Old Bond-street, W.1, known as No. 24 in the latter street, and owned by Messrs. J. & E. Atkinson, Ltd., the perfumers, are to be rebuilt. The new building will be designed in the Tudor style and its Portland stone elevations to Old Bond-street and Burlington-gardens will be enriched with all the ornamentations of that period. There will be six floors in all, of which the ground floor will be used by Messrs. Atkinson as a shop and showroom. The fittings and shop windows will all be in oak and carved in the Tudor manner, Leaded and glazed window casements will also be in keeping with the architecture. The floors will be of concrete. The roof will be pitched, with dormer window openings, and will be covered wih lead sheeting. The rain-water pipes and heads will be cast-iron or lead. The architect is Mr. E. Vincent Harris, F.R.I.B.A., of 29, St. James's-square, London, S.W.1.

The Lodge, Aldershot.

In the advertisement of "The Edwardian Down Draught Prevention Chimney Pot" of the Fawcett Construction Co., Ltd., 65, Victoria-street, Westminster, S.W., in our last issue, an illustration was given of The Lodge, Aldershot. The name of the architects was printed incorrectly, and should have read Messrs. Kingham & Kingham, Aldershot.



Ionic Cap at New Premises at Broadway, Westminster.

[This Cap was designed by Messrs. John Daymond & Sons, Ltd. The architect of the building, which was illustrated in our issue for November 28, is Mr. H. J. S. Abrams.]

WORKMEN'S COMPENSATION

Winding up Orders.

An important point in connection with the new Workmen's Compensation Act of this year has been decided by a Divisional Court in the case in the matter of Clemmons Aluminium, Ltd. (*The Times*, November 26). A workman in the employ of the Company had suffered injuries by accident which had resulted in total disablement, and he had been paid weekly payments as compensation, until in September, 1923, the Company went into liquidation. Under section 5 of the principal Act, the Workmen's Compensation Act, 1906, sums due in respect of compensation were made debts entitled to preferential payment, but only to the extent of £100 in any individual case, and where the compensation was a weekly payment for the purposes of this provision it was to be taken to be the amount of a lump sum for which the weekly payments could be redeemed, as if the employer made an application under Schedule I par. (17) of the principal Act. The sum in this case so assessed amounted to £950.

Section 19 of the new Act has considerably amended section 5 of the old Act. Where the insolvent company has entered into a contract with insurers by subsection (1), the rights of the Company against the insurers are transferred to and vested in the workman, but where no such contract has been entered into the amount due in respect of any compensation, the liability wherefor accrued before the appointment of a receiver, or of debenture holders taking possession, shall be included amongst the debts which, under section 107 of the Companies (Consolidation) Act, 1908, are to be paid in priority to all other debts. Then in subsection (2) of the above section 19 it is provided "The limitation to £100 in any individual case on the amounts due by way of compensation which under section 5 subsection (3) of the principal Act are to be included in the debts to be paid in priority to other debts in the case of a bankruptcy or winding-up shall cease to have effect."

The question raised in this case was whether the new Act applied, the winding-up proceedings having commenced in September, 1923, but not been completed, nor the above lump sum paid, before January 1, 1924, when the new Act came into operation, and it will be seen if the old Act was to apply only £100 of this sum could be treated as a preferential debt, whereas if the new Act applied the whole sum would be so treated.

The Court held that the old Act remains in force where existing rights were in force before the new Act came into operation, for it was a general rule that an interpretation should not be placed on an Act which was prejudicial to existing and accrued rights if that could be avoided. There would be other rights which had accrued to other persons in such a case as this, and unless a contrary intention was expressed in the new Act, the rule of interpretation in section 38 of the Interpretation Act, 1889, applied that former Acts were not to be taken as repealed. Section 19 subsection (1) of the Workmen's Compensation Act, 1923, was clearly a prospective provision, and subsection (2) was in general terms and did not repeal the £100 limit.

The result was that until the new Act came into force the right to a priority in payment was governed by the old Act.

New Bridge Across the Tyne.

Newcastle City Council recently agreed to accept the tender of Messrs. Dorman Long & Co., at a price of £571,225, for the construction of a bridge across the Tyne between Newcastle and Gateshead, for which an Act of Parliament has been obtained. This was the lowest tender. The next was that of Messrs. Cleveland Bridge & Engineering Co., at £604,421. The highest tender was £743,938. The cost of the works will be approximately £1,000,000.

RATES OF WAGES IN THE BUILDING TR

Every endeavour is made to ensure accuracy, but we cannot be responsible for erro

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	La
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/9	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam. (Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London (12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	
London (12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 959)

CONTRACTS, COMPETITIONS, &c.

e contracts still open, but not included in this List, see previous issues. Those with an asterisk ised in this number. Certain conditions beyond those given in the following information d in some cases, such as that advertisers do not bind themselves to accept the lowest or any at a fair wages clause shall be observed; that no allowance will be made for tenders; and its are returned on receipt of a bona-fide tender unless stated to the contrary.

given at the commencement of each paragraph is the latest date when the tender, or the names ing to submit tenders, may be sent in; the name and address at the end is the person from whom ere quantities, forms of tender, &c., may be obtained.

LDING AND PAINTING.

R 13.—**Blything.**—ROOMS.—For two . in wards at the Union, for the B.G. Tallop, Clerk to the Guardians, Clerk's amp, Halesworth.

R 13.—**Newcastle-upon-Tyne.**—PAINTING. ring work required at the Relief Offices, bank, and 71, Park-road, and at the Chil- e, "Louisville," Ponteland, for the B.G. one Walker, Clerk to the Guardians, 127, et, Newcastle-on-Tyne.

R 13.—**Plymouth.**—EXTENSION.—For ex- the wholesale meat market, for the C.B. berley, Borough Engineer and Surveyor, ffices. Deposit £2 2s.

R 13.—**Wallingford.**—ALTERATIONS.—For nd extension of the pump-house at the , for the C.B. Mr. F. R. Hedges, Town ingford.

R 13.—**Westgate-on-Sea.**—PAVILION AND CCOMMODATION.—Erection of (1) pavilion, accommodation and public convenience, stgate-on-Sea Council. Mr. F. J. Cornford, Buildings, Westgate-on-Sea. Deposit

R 15.—**Banbridge.**—ADDITIONS.—For al- d additions to Banbridge R.U.C. Barracks, ernment of Northern Ireland. Mr. W. R. Assistant Secretary, Ministry of Finance,

R 15.—**Barnsley.**—PAINTING.—For paint- orating Buckley-street P.M. Church. Mr. 73, Commercial-street.

R 15.—**Bournemouth.**—HOUSES.—For erec- airs of semi-detached houses on the South- Winton, for the C.B. Mr. F. P. Dolamore, gineer and Surveyor, Town Hall. Deposit

R 15.—**Cardiff.**—HOUSES.—For erection of Ely, for the T.C. Mr. C. G. Brown, Town Hall. Deposit £2 2s.

R 15.—**Dewsbury.**—ADDITIONS.—For the bricklayers and masons, carpenters and nbers and glaziers, plasterers, slaters, and rk required in the erection and completion pavilion and mortuary at Whitley Grange r the C.B. Mr. Holland Booth, Town Clerk, Deposit £1 1s.

R 15.—**Dewsbury.**—PAINTING.—For exter- of shop premises in the covered market, rtment and switch-boxes in the open r the C.B. Mr. H. Booth, Town Clerk,

R 15.—**Guildford.**—EXTENSION TO SLIPPER PUBLIC CONVENIENCE.—Extension to s and public convenience, for the Borough d. Mr. W. G. Cross, Assoc.M.Inst.C.E., ngineer, Municipal Offices, Tuns Gate, Deposit £2 2s.

R 15.—**London, E.C.2.**—REDECORATION.— n of the Shoreditch Town Hall, Old-street, he Shoreditch Borough Council. Mr. T. L. orough Surveyor, Town Hall, Old-street, posit £2 2s., to the Borough Accountant's

R 15.—**Maidstone, Kent.**—COUNCIL rection of a Council School for 340 boys eet, Sheerness, in the County of Kent, for Education Committee. County Education Ir. W. H. Robinson, F.S.Arc.), at Room 69, ouse, Maidstone. Deposit £2 2s. in the cheque payable to the Kent Education and crossed "National Provincial Bank of d."

R 15.—**Middlesbrough.**—EXTENSION.—For Holgate institution nurses' home, for the . Bilson, Clerk to the Guardians, Poor Law icipal Buildings. Deposit £2 2s.

R 15.—**Penarth.**—HOUSES.—For building proposed to be erected on sites in Andrew- for the U.D.C. Mr. J. W. Morris, Clerk, ices. Deposit £2 2s.

R 15.—**Plymouth.**—REPAIRS.—For repairs 10, East-street, Stonehouse, for the C.B. ittall, Town Clerk, Municipal Buildings.

R 15.—**Pontllanfraith.**—SCHOOL.—For erec- secondary school, for the Monmouthshire . Dauncey, Secretary, County Hall, New- Deposit £2 2s.

R 15.—**Rhyl.**—TOWER.—For erection of a in reinforced concrete, for the U.D.C. Mr. nes, Clerk to the Council, Council Offices,

R 15.—**Saddleworth.**—POLICE STATION.— of a new police station, for the West Riding O. Platts, A.R.I.B.A., County Architect, Wakefield. Deposit £1.

ER 15.—**Warwick.**—SECONDARY SCHOOL. of a secondary school in Clifton-road, the Warwick C.C. Mr. A. C. Bunch, County Architect, 27, Binswood-avenue, Spa. Deposit £2 2s.

R 16.—**Bedwellty.**—REPAIRS.—For repairs omes, Blackwood, for the B.G. Mr. W. o the Guardians, Union Offices, Tredegar.

R 16.—**Carlton.**—HOUSES.—For erection on the Conway-road site, for the U.D.C. Turpin, Clerk, Free Library. Deposit

DECEMBER 16.—**Castleford.**—EXTENSIONS.—For erection of a new boys' department at Temple-street Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

DECEMBER 16.—**Chadderton.**—HOUSES.—For erection of 8 houses, in two blocks of 4, in Taylor-street, for the U.D.C. Mr. J. Schofield, Clerk of the Council, Town Hall. Deposit £1 1s.

DECEMBER 16.—**Dublin.**—ADDITIONS.—For erection of a new wing to the National Library, Dublin, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 16.—**Liverpool.**—ALTERATIONS.—For alterations, painting and decorating the interior of mansion house, Bowring Park Estate, Roby, for the T.C. Mr. W. Moon, Town Clerk, Municipal Buildings.

DECEMBER 16.—**Ludlow.**—POST OFFICE AND TELEPHONE EXCHANGE.—Erection of a new Post Office and Telephone Exchange, at Ludlow, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

DECEMBER 16.—**Newmarket.**—CONVENIENCE.—For erection of a public convenience in Fountain-lane, Soham, for the R.D.C. Major S. J. Ennion, Clerk to the Council, Deva Chambers.

DECEMBER 16.—**Scunthorpe.**—HOUSES.—For erection and completion of 30 houses, for the U.D.C. Mr. J. F. Auld, Clerk to the Council, Council Offices. Deposit £2.

DECEMBER 16.—**Slaithwaite.**—BUILDING.—For all or any trades in connection with the building for refuse destructor plant, for the U.D.C. Mr. Edgar Freeman, Clerk to the Council, Town Hall.

DECEMBER 16.—**Wakefield.**—ALTERATIONS.—For alterations required at Queensbury Upper Council School, for the West Riding C.C. The Education Department, County Hall, Wakefield.

DECEMBER 16.—**Witham.**—HOUSES.—For erection of 12 houses or any portion of that number on the Cocks's Farm site, for the U.D.C. Mr. F. H. Bright, Clerk.

DECEMBER 17.—**Greasbrough.**—HALL.—For erection of a public hall, &c., for the U.D.C. Mr. John H. Jackson, Clerk to the Council, Council Offices. Deposit £2.

DECEMBER 17.—**Risca.**—HOUSES.—For erection of 150 houses on the Ty-isaf site, for the U.D.C. Mr. A. J. Dardis, Surveyor and Engineer, Council Offices, Risca (Mon). Deposit £2 2s.

DECEMBER 17.—**Rowley Regis.**—BATHS.—For a concrete open-air swimming bath at Haden Hill Park, with the necessary dressing-rooms, for the U.D.C. Surveyor, Council Offices, Old Hill, Staffordshire. Deposit £1 1s.

DECEMBER 18.—**Chelsea.**—PAINTING AND REPAIRS.—Internal plastering, painting and repairs to one of the wards and annexes thereto, at the Hospital, Cale-street, Chelsea, for the Guardians of the Poor of Chelsea. Guardians' Architect, Mr. Edmund J. Harrison, Lic.R.I.B.A., 23, Berkeley-road, Crouch End, N.8. Deposit £2

DECEMBER 18.—**Marsden.**—ADDITIONS.—For additions and alterations to the sewage works, for the U.D.C. Mr. H. Greenwood, Clerk to the Council, Council Offices, Marsden, near Huddersfield. Deposit £1 1s.

✱DECEMBER 18.—**Poole.**—HOUSES.—Erection of 48 houses (non-parlour type) in Grove-road, Granville-road, and Blandford-road, Hamworthy, at an average price of £462 per house, inclusive of paths, drains and fences, for the Borough Council of Poole. Borough Surveyor, Municipal Buildings, Poole.

DECEMBER 19.—**Ireland.**—PAINTING.—For internal and external painting works at the Curragh Camp, co. Kildare, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 20.—**Abercrave (Glam).**—HALL.—For construction of a hall, for the Abercrave and District Miners' Welfare Committee. Mr. D. Thomas, architect, Ammanford. Deposit £2 2s.

DECEMBER 20.—**Boston.**—HOUSES.—For 20 houses in blocks of two on the Corporation Woodville-road site, for the T.C. Mr. G. E. Clarke, Borough Surveyor.

DECEMBER 20.—**Manchester.**—PAINTING.—For painting the dayrooms and dormitories at the Tame-street Institution, Ancoats, for the B.G. Mr. J. Macdonald, Clerk to the Guardians, Union Offices, All Saints.

DECEMBER 20.—**Rathdrum.**—REPAIRS.—For repairs to cottages provided under the R.D. Scheme No. 49, in accordance with plan and specification prepared by the Engineer, Sailors' and Soldiers' Department, Colonial Office (Irish Branch), 30, Lower Fitzwilliam-street, Dublin. Mr. R. E. Beckerson, Chief Clerk. Deposit £1 1s.

DECEMBER 20.—**Redcar.**—HOUSE.—For erection of a house at 150, High-street, Redcar, for Mrs. H. Randall. Mr. J. Jackson, architect, Marske.

DECEMBER 20.—**Rye.**—EXTENSIONS.—For enlarging engine house, for the T.C. Mr. W. Dawes, Town Clerk, Bank Chambers.

DECEMBER 22.—**Brighton.**—HOUSES.—Erection of 11 houses in Hereford-street, Brighton, for the County Borough Council of Brighton. Borough Surveyor, Town Hall, Brighton. Deposit £1.

DECEMBER 22.—**Bucklow.**—BUILDING.—For a veranda at the Institution Hospital, Knutsford, for the B.G. Mr. G. Leigh, Clerk to the Guardians, Union Offices, Knutsford. Deposit 10s. 6d.

DECEMBER 22.—**Edinburgh.**—EXTENSION.—For brick, &c., carpenter, joiner and glazier, plaster and harling, plumber at Tynecastle school, for the E.C. Mr. J. Stewart, S.S.C., Executive Officer, Education Offices.

✱DECEMBER 22.—**France and Belgium.**—HEADSTONES.—Tenders for a total supply of 20,000 headstones, packed and delivered (f.o.r.), to be divided into a number of contracts, none of which shall be for less than 100 headstones, for the Imperial War Graves Department. The Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, London, W.1, and marked "Headstone Contract, 5079/W."

DECEMBER 22.—**Manchester.**—BOILER HOUSE.—For erection of a boiler house, timber store, &c., at the Hyde-road car depot, for the T.C. Mr. P. M. Heath. Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 22.—**Shoeburyness.**—CONVENIENCE.—For the enlargement of the existing public conveniences upon the Common at Shoeburyness, and the construction of a public convenience and refreshment room on Whitakers-parade, Rampart-street, Shoeburyness, for the U.D.C. Mr. F. Gregson, Clerk, 46, Alexandra-street, Southend-on-Sea.

DECEMBER 23.—**Cork.**—BUILDING.—For building of new premises at 13-17, Patrick-street, for Messrs. Roches Stores, Ltd. Secretary, Roches Stores, Ltd., Patrick-street, Cork.

✱DECEMBER 23.—**Guildford.**—HOUSES.—For erection of three pairs of non-parlour houses on the Peaslake site, in the parish of Shere, for the Guildford R.D.C. Mr. John Anstee, Council Architect, Council Offices, Commercial-road, Guildford. Deposit £2 2s.

DECEMBER 23.—**London.**—SLATING.—For re-slating the roofs of the nurses' home and the out-relief offices and dispensary, Fulham Palace-road, for the B.G. Mr. E. J. Mott, Clerk to the Guardians, Guardians Offices, 129, Fulham Palace-road, W.6.

DECEMBER 23.—**Southampton.**—COTTAGES.—For erection of two pairs of cottages on a site at the corner of Dickens-lane and the main road 2 miles from Basingstoke, for the C.B. Mr. A. L. Roberts, County Architect, The Castle, Winchester. Deposit £1 1s.

DECEMBER 24.—**Huddersfield.**—HOUSE.—For erection of a detached residence in Thornhill-road. Messrs. J. Berry & Sons, 3, Market-place, Huddersfield.

DECEMBER 29.—**Kiveton Park.**—HOUSES.—For erection of 28 houses, for the R.D.C. Mr. A. Lawrence Lewis, Clerk to the Kiveton Park R.D.C., Council Offices, Kiveton Park, near Sheffield.

DECEMBER 29.—**Leeds.**—HOUSES.—For trades in connection with the erection in brick or other forms of construction of 150 houses on the Crossgates Estate, 250 on the Middleton Estate, and 100 on the Meanwood Estate, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings. Deposit £1 1s.

DECEMBER 29.—**Worthing.**—SHELTER.—For erection of a glazed shelter in the Denton-gardens, for the C.B. Mr. J. Kennedy Allerton, Town Clerk, Municipal Offices. Deposit £1 1s.

DECEMBER 30.—**Burslem, Staffs.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Burslem, Staffs, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners of H.M. Works, &c.)

DECEMBER 31.—**Blyth and Cuckney.**—DISPOSAL WORKS.—For construction of sewerage and sewage disposal for the parishes of Hodsock and Carlton, for the R.D.C. Mr. A. H. Styring, Clerk, 6, North Church-street, Sheffield. Deposit £5.

✱DECEMBER 31.—**Dartford.**—WEIGHBRIDGE FOUNDATIONS, &c.—Forming weighbridge foundations and visitors' waiting rooms at the Southern Hospital, Dartford, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4 Deposit £1.

✱DECEMBER 31.—**Kent.**—CLEANING AND PAINTING.—Cleaning and painting works at White Oak, Swanley Junction, Kent, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

JANUARY 1, 1925.—**Lincoln.**—ADDITIONS.—For additions to the C.C. Offices, Newland House, Lincoln, for the Lindsey C.C. Mr. Eric W. Scorer, Clerk of the County Council, County Council Offices, Mint-street. Deposit £2 2s.

✱JANUARY 2.—**Bolton.**—EMPLOYMENT EXCHANGE.—For adaptation of the old Post Office, Bolton, to form an Employment Exchange, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners of H.M. Works, &c.)

✱JANUARY 2.—**Plymouth.**—HOUSES.—Erection of 800 houses (whole or part) at North Prospect (Sections 2 and 3), for the County Borough Council of Plymouth. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth. Deposit £5 5s.

✱JANUARY 3.—**Swallowfield, Berks.**—SCHOOL.—For the erection of a new Council school for 104 children, at Farley Hill, for the Berkshire E.C. Mr. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £1 1s.

JANUARY 5.—**Bolton-upon-Dearne.**—HOUSES. For erection of 74 houses, together with road and surface water drainage works in Barnborough-lane, Goldthorpe, for the U.D.C. Mr. J. Ledger Hawksworth, Clerk of the Council, Council Offices, Bolton-upon-Dearne. Deposit £1 1s.

JANUARY 5.—**Goldthorpe.**—HOUSES, &c.—For the erection of 74 dwelling houses, together with road and surface water drainage works, in Barnborough-lane, or in sections (1) 30 houses, (2) 44 houses, (3) roads and surface water drainage works, for the Bolton-upon-Dearne U.D.C. Mr. William H. Adams, M.S.A., Council Offices, Bolton-upon-Dearne. Deposit £1 1s.

✱JANUARY 10.—**Congleton.**—SCHOOL.—Erection of an elementary school (based on firm prices) for 600 scholars, at New-street, Congleton, for the Corporation of Congleton. Mr. J. H. Walters architect, Moody-street, Congleton. Deposit £2.

JANUARY 12. — **Birmingham.** — ADDITIONS. — For building alterations and additions at Dudley-road Hospital, for the B.G. Mr. J. Curtis, Clerk to the Guardians, Union Offices, Edmund-street. Deposit £10 10s.

★JANUARY 14.—**Stafford.**—OPERATING THEATRE.—Tenders for new operating theatre and consequent small alterations at the existing Infirmary, for the Board of Management of the Staffordshire General Infirmary, Stafford. Secretary at the Infirmary. Deposit £2.

NO DATE.—**Fairfield.**—EXTENSIONS.—For erection of extensions to the girls' high school, Fairfield, near Manchester, for the Lancashire E.C. Mr. G. Hammond Etherton, Clerk of Lancashire C.C., County Offices, Preston. Deposit £2.

NO DATE.—**Kilmarnock.**—PAINTING.—For painter work in connection with the erection of 30 houses, for the T.C. Mr. W. Dunbar, Burgh Surveyor, Market Bridge.

NO DATE.—**Kirkintilloch.**—HOUSES.—For works in connection with the erection of six houses at Hillhead site, for the T.C. Mr. Wm. Baillie, Lic.R.I.B.A., architect, 2, West Regent-street, Glasgow.

★NO DATE.—**Portsmouth.**—ROOF.—For the erection of a Mansard roof at Chandos-street, for Messrs. Timothy White Co., Ltd. Construction Department, 20, Chandos-street, Portsmouth.

NO DATE.—**St. Albans.**—HOME.—For erection and completion of Children's Home, Oster Hill, for the B.G. Mr. E. F. W. Hieatt, Clerk to the St. Albans Board of Guardians. Chequer-street. Deposit £2 2s.

FURNITURE, MATERIALS, etc.

DECEMBER 13.—**Kent.**—GRANITE.—For supply of various granite, for the C.C. Mr. H. T. Chapman, County Surveyor, St. Peter-street, Maidstone.

DECEMBER 15.—**Edmonton.**—PIPES.—For supply and delivery of about 700 tons of cast-iron pipes and specials, for the U.D.C. Mr. C. Brown, Engineer and Surveyor, Town Hall. Deposit £3 3s.

DECEMBER 15. — **Rotherham.** — SEWERAGE. — For materials required in the construction of (1) sewage disposal works (tanks and filters); (2) approximately 2,500 yds. of 12 in. and 9 in. pipe sewers; (3) inserting 12 in. sewer under canal, for the R.D.C. Mr. C. O. Rawstron, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate. Deposit £3 3s.

DECEMBER 16.—**Tottenham.**—BLOCKS.—For supply of creosoted deal blocks, for the D.C. Mr. R. C. Graves, Clerk and Solicitor of the Council, Solicitor's Department, Town Hall.

DECEMBER 18.—**Hull.**—STORES.—For supply of builders' materials, &c., for the Corporation. Mr. H. Bell, City Electrical Engineers, Sculcoates.

DECEMBER 18.—**London, E. 1.**— SUPPLY OF GOODS AND VARIOUS WORKS.—Tenders for contracts for twelve months from April 1, 1925, except last two contracts, which are for the period from April 1, 1925, to September 30, 1925, for the Metropolitan Borough of Stepney. Items 1 to 23, Mr. Bernard J. Belsher, Borough Engineer and Surveyor, Municipal Offices, Raine-street, Old Gravel-lane, E. 1; deposit, £1 Treasury Note in respect of each tender. Items 24 to 32, Mr. V. B. Bateson, Town Clerk, Municipal Offices, Raine-street, Old Gravel-lane, E. 1; deposit, £1 Treasury Note in respect of each tender.

DECEMBER 18.—**Marlborough.**— LIMESTONE. — For 3,300 tons of Mendip limestone, 2 in. by 3 in. gauge. Mr. E. LL. Gwillim, Clerk, Silverless-street.

DECEMBER 29.—**Reading.**—SAND.—For supply of broken road material, gravel and sand, for the Berkshire C.C. Surveyor's Department, Shire Hall, The Forbury.

★DECEMBER 31. — **London, S.W.17.** — PORTLAND CEMENT.—Supply and delivery of about 175 tons Portland cement of English manufacutre, at Tooting Bec Hospital extensions, Church-lane, Tooting, S.W.17. for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

NO DATE.—**Thurnscoe.**—MATERIALS.—For supply of pitching stone, kerbs, flags and sanitary pipes, for the U.D.C. Mr. J. Ledger Hawksworth, Clerk of the Council, Council Offices, Bolton-upon-Dearne.

ENGINEERING, IRON AND STEEL.

DECEMBER 13.—**Near Penrith.**—BRIDGE.—For construction in ferro-concrete of a new bridge across the Dacre Beck in Dalemain Park, on the Penrith to Ullswater-road, about 3 miles from Penrith Station, for the Cumberland C.C. Mr. G. O. Lockwood, County Surveyor and Bridgemaster, The Courts, Carlisle. Deposit £2.

DECEMBER 15.—**Belfast.**—STEEL FRAMEWORK.—For steel framework for internal office building, for the Corporation. Mr. R. Meyer, Town Clerk. Deposit £2 2s.

DECEMBER 15.—**Rotherham.**—RESERVOIR.—For construction of a ferro-concrete reservoir, for the C.B. Mr. C. L. Des Forges, Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 15.—**Shrewsbury.**—MASONRY.—For erection of masonry bridges for the reconstruction of the English Bridge, for the T.C. Mr. R. F. Prideaux, Town Clerk, Guildhall. Deposit £10.

DECEMBER 15.—**Torquay.**—RESERVOIR.—For completion of a service reservoir and ancillary works at Great Hill, for the T.C. Mr. S. C. Chapman, Waterworks Engineer, Town Hall. Deposit £2 2s.

DECEMBER 16.—**London.**—STEEL.—For supply of about 547 tons of steel girders and other iron and steel work, for the G.W.R. Mr. A. E. Bolter, Secretary, Paddington Station.

DECEMBER 20.—**Dewsbury.**—TANKS.—For construction of percolating filters, humus tanks and other appurtenant works in connection with the construction of sewage disposal works at Mitchell Laithes, for the C.B. Mr. H. Booth, Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 20.—**Egypt.**—RESERVOIR.—For construction of a steel reservoir, for the Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 20.—**Southampton.**—STORES.—For erection of a steel framed electrical stores building on a piled foundation to the Western Esplanade, for the C.B. Mr. R. R. Linthorne, Town Clerk. Deposit £3 3s.

DECEMBER 20.—**Wilmslow.**—ADDITIONS.—For construction of screen chamber, suction wells, settling tanks, percolating filters and humus tanks, sundry lengths of pipeline and sundry auxiliary works, at the Southern Sewage Farm, for the U.D.C. Mr. H. Cliffe, Clerk to the Council, Clerk's Office. Deposit £5.

DECEMBER 22.—**Manchester.**—SHEDS.—For construction and completion of two five-story transit sheds, extension of the grain subway, and all ancillary works, at Manchester Docks, for the Ship Canal Co. Mr. F. A. Eyre, Secretary, 41, Spring-gardens. Deposit £10.

DECEMBER 22. — **Rhondda.** — STEELWORK. — For (*a*) Construction and delivery to Treherbert Station (G.W.R.) of about 160 tons of bridge steelwork; (*b*) and supply of bricks, stoneware pipes, pavings, kerbs, channels and pitchings, Portland cement and hydraulic lime, paints, oils, &c., for the U.D.C. Mr. E. Taylor, Engineer and Surveyor, Council Offices, Pentre, Rhondda.

DECEMBER 23.—**Merthyr Tydfil.**—STEEL.—For supply of about 5,000 tons of steel socket and spigot pipes of diameters ranging from 37 in. to 17 in., together with certain cast-iron pipes, valves and specials, all of British material and manufacture, for the Taf Fechan Water Supply Board. Mr. J. Colenso Jones, Clerk to the Board, Board's Offices, 101, High-street. Deposit £5.

DECEMBER 24.—**Marazion.**—For a new exit and fire escape at St. Thomas' Hall, for the Town Trustees. Architect, 11, Morrab-road, Penzance.

DECEMBER 31.—Hamilton.—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

JANUARY 5, 1925. — **Eastbourne.** — FLAPS. — For removal of existing tidal flaps, &c., in the valve chamber, Langney Point, and the supply and fixing of new tidal and sluice valves, for the C.B. Mr. L. Roseveare, Borough Engineer, Town Hall. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

DECEMBER 13.—**Chester.**—ROADS.—For roads and sewerage works, for the City and County. Mr. J. H. Dickson, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 15.—**Baildon.**—SEWER.—For work in connection with the proposed construction of the 12 in. pipe sewer of an approximate length of 240 lin. yds., together with the necessary manholes, &c., for the U.D.C. Mr. R. Howard Moore, Clerk of the Council, Baildon. Deposit £1 1s.

DECEMBER 15.—**Cannock.**—STREETS.—For making-up of Lyndhurst-road, Heath Hayes, for the U.D.C. Mr. R. Blanchard, Engineer and Surveyor, Council Offices.

DECEMBER 15.—**Chepstow.**—WIDENING.—For widening St. Lawrence-road from Newport-road to Tintern road, Chepstow, for the U.D.C. Mr. Fothergill Evans, Clerk to the Council, Chepstow. Deposit £2 2s.

DECEMBER 15.—**Hayfield.**—PIPES.—For providing and laying about 7½ miles of 6 in., 5 in., 4 in., and 3 in. cast-iron pipes, with all necessary valves, hydrants and apparatus, and also for constructing two mass concrete tanks at Hayfield and Mellor, for the R.D.C. Mr. J. R. Bowden, Clerk to the Council, Council Offices, High-street, New Mills, via Stockport. Deposit £5 5s.

DECEMBER 15.—**Hemel Hempstead.**—DRAIN.—For laying about 1,200 yds. of 9 in. drain with manholes at Apsley-end, for the Hertfordshire C.C. Mr. A. E. Prescott, County Surveyor's Office, Hatfield, Herts.

DECEMBER 15.—**Penarth.**—SEWERS.—For construction of street sewers, &c., at Cornerswall, Penarth, for Messrs. Mountjoy, Ltd. Mr. E. W. Corbett, 3, Castle-street, Cardiff.

DECEMBER 15.—**Sleights.**—MAINS.—For providing, carting and laying of 1,760 lin. yds. of 8 in. cast-iron water mains and valves, for the Whitby Waterworks Co. Mr. J. Taylor, Secretary and Manager, Whitby Waterworks Co., 55, Baxtergate, Whitby. Deposit £2 2s.

DECEMBER 16.—**Birkenhead.**—SEWER.—For construction of a supplementary sewer in Borough-road, comprising about 700 lin. yds. of reinforced concrete sewer formed with 24 in., 27 in., and 30 in. diameter pipes, together with all manholes, gullies, &c., for the C.B. Mr. E. W. Tame, Town Clerk, Town Hall, Birkenhead. Deposit £3 3s.

DECEMBER 16. — **Devon.** — ROAD. — For work required in the reconstruction of approximately 4½ miles of the Exeter-Plymouth-road, for the C.C. Mr. Brian S. Miller, Clerk of the Council, The Castle, Exeter. Deposit £10 10s.

DECEMBER 16. — **Normanton.** — WIDENING. — For widening and improvement of Pontefract-road, for the U.D.C. Mr. J. W. Martin, Clerk, Council Offices.

DECEMBER 17.—**Birmingham.**—ROADS.—For reconstruction of Billesley-lane, between Oxford-road and Wake Green-road; reconstruction of Rotton Park-road, between City-road and Dudley-road; and widening of Island-road, Handsworth. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2 each.

DECEMBER 17.—**Cullercoats.**—SEW struction of a concrete pipe main sewe storm water overflow chamber, &c., Cullercoats Boundary, for the Tyne Whitley and Monkseaton U.D.C. Clerk to the Council, Council Offices Deposit £2 2s.

DECEMBER 17.—**Dollar.**—FILTERS.— tion of slow sand filters, clear water other relative works, for the T.C. Graham, Town Clerk, Burgh Chambe

DECEMBER 17.—**Glamorgan.**—ROAD. tion of a new road from Nantymoel t Rhondda Valley. Mr. T. Mansel Fr the County Council, County Hall, Car

DECEMBER 17.—**Pass of Melfor** construction of a new roadway, about 1 at the Pass of Melfort, for the Argyl Macdonald, District Road Surveyor, Col Oban. Deposit £2.

DECEMBER 17. — **Rotherham.** — F materials required in the construction for the R.D.C. Mr. C. O. Rawstron Surveyor, Council Offices, Grove-r Deposit £1 1s.

DECEMBER 17.—**South Mimms.**—SEW 350 yds. of 9 in. stoneware pipe sewer, &c., in Mutton-lane, Potters Bar, Mr. H. W. Poole, Clerk to the Council, Barnet.

DECEMBER 17.—**Wembley.**—SEWERS tion of about 430 lin. yds. of 12 in. with branch drains, &c., for the U.D.C Chapman, Engineer and Surveyor, Deposit £2 2s.

DECEMBER 18.—**Manchester.**—PAVIN ing (with granite setts on a concr Ashton Old-road, Openshaw, for the T Heath, Town Clerk, Town Hall. Dep

DECEMBER 18.—**Penybont District** WIDENINGS.—For carrying out, for Widening of the road near the new schoo (2) the widening of the road near schools, Llangynwyd; (3) widening of the widening of a stone arch culvert, nea Aberkenfig. Mr. E. Jenkins, surveyo street, Bridgend. Deposit £2 2s.

DECEMBER 18.—**Plymouth.**—SEWER. tion of about 360 yds. of stonewa together with manholes and other inci Wellington-street, Waterloo-street, road, Devonport, for the C.B. Mr. Borough Engineer and Surveyor, Muni

DECEMBER 18.—**Roxburgh.**—For tra supply and laying of approximately 3,6 and 2½ in. water main and the erecti tank, for the Jedburgh District Commit Anderson, District Clerk, Jedburgh.

DECEMBER 19.—**Manchester.**—PAVIN and laying of granited rock asphalt p lane, Rusholme, for the T.C. Mr. P. M Clerk, Town Hall.

DECEMBER 19.—**Wood Green.**—C construction of about 724 yds. of rein culvert and about 437 yds. of 42 in., 27 and 70 yds. of 30 in. diameter granite culvert, with the necessary inspection sh ling bays constructed to special details concrete, for the U.D.C. Mr. C. Eric of the Council, Town Hall, Wood Gree posit £1 1s.

DECEMBER 20.—**Ilford.**—PAVING.— paving, metalling, channelling, and ma Crescent, Ilford, for the U.D.C. Mr. Ad Clerk of the Council, Town Hall.

DECEMBER 20.—**Rugby.**—ROADS.—F sewering, levelling, &c., of certain road be made in connection with the ho Eastlands Estate, Clifton-road, for th J. H. Sharp, Engineer and Surveyor, Su Benn Buildings. Deposit £1 1s.

DECEMBER 20.—**Stafford.**—SEWER. tion of two concrete storm water cul raising and metalling of the approac sewage farm, for the C.B. Mr. H. H. Clerk, Borough Hall, Deposit £1 1s.

DECEMBER 22.—**Birmingham.**—PAV construction of slag foundation, C reconstruction of carriageway, Br Augustus-road, and Westbourne-road concrete foundation to carriageway, and reconstruction of new road, for the T Humphries, City Engineer and Surveyo House. Deposit £2 each.

DECEMBER 23.—**Devon.**—ROAD.—For in the reconstruction and widening of Pinhoe section of the Exeter–Taunton C.C. Mr. B. S. Miller, Clerk of the Castle, Exeter. Deposit £10 10s.

DECEMBER 23.—**Dover.**—DRAINAGE. scheme, comprising about 400 lin. yds. lin. yds. of 9 in., and 700 lin. yds. of pipe, together with all manholes, hou &c., for the Corporation. Mr. Wm. B Borough Engineer, Borough Engineer's Dieu House. Deposit £2 2s.

DECEMBER 31.—**Cowbridge.**—MAINS. service reservoir in mass concrete, and 1 of various cast-iron mains, for the M Water Board. Messrs. Thomas & Morga Civil Engineers, Pontypridd. Deposit

DECEMBER 31.—**Totnes.**—ROADS.—F Jubilee-road, for the C.B. Mr. Geo. Town Clerk, Town Clerk's Office. Depo

JANUARY 5, 1925.—**Margate.**—PIPES. pipes, excavating for and constructing a of 48 in. by 32 in. egg-shaped intercept the C.B. Mr. E. Brooke, Town Clerk, Office.

RY 12.—**Caerphilly (near).**—SEWER CON —Constructing a sewer connection at Gwau ear Caerphilly, of approximately 280 lin. yds and 24 in. stoneware and cast-iron sewer, holes, for the Caerphilly U.D.C. Mr. T. H. Surveyor, Council Offices, Caerphilly. De- 2s.

Competitions.

e Competition News, page 926.)

tion Sales, Tenders, etc.

BER 16.—**London, S.E.12.**—Mr. C. E. Clark without reserve, at Cooper's-lane, Grove Park, prime new timber. Auctioneers, Beddington Beddington, near Croydon.

BER 16.—**London, W.**—Mr. Richard J. Steel at Walmer Gardens, Midhurst-road, Ealing, whole of the woodworking machinery and a large variety. Auctioneer, 2, Plough-terrace, aling, W.5.

EMBER 18.—**London, N.W.**—Messrs. J. T. & Co. will sell, without reserve, upon the remises of Messrs. Alexander Tompson & Co. Ltd., by their kind permission, at the Depot, L.M. & S. Railway (adjoining the r Station), Cricklewood, N.W., *re* S. M. & Co., in Bankruptcy, by order of the E. H. Hawkins, Esq., F.S.A.A.), the nearly uable tar macadam manufacturing plant and y, materials and effects. Auctioneers, 48, -street, Guildhall, E.C.2.

EMBER 22.—**London, S.W.**—Mr. Richard J. received instructions from Messrs. Demolition vation (Greenham), Ltd., to sell upon the Rosebank Wharf, Fulham, S.W., in 500 lots building materials of various kinds. Auc-, Plough-terrace, South Ealing, W.5.

EMBER 22.—**Shepherds Bush.**—Messrs. Charles & Co. will sell, by order of the Liquidator, tandard Timber Trading Co., Ltd. (in volun- uidation), stock of timber, plant and office , at the timber yard, at Wood-lane. Auc- 285, Borough High-street, S.E.

EMBER 30.—**Barnet, Herts.**—Messrs. Charles & Co., will sell, by order of the Receiver for enture Holder, *re* McCormick & Sons, Ltd., king machinery, motive power, builders' and rs' plant, timber, &c., at the yard and mill, e, High-street, at 11 o'clock. Auctioneers, ough High-street, S.E.

RY 14, 1925.—**London, E.**—Messrs. J. T. Skelding ithout reserve, owing to expiration of lease, ilding Material Depot, Tredegar-square, Mile , E., timber and building materials, including of old oak beams and scantlings, R.S. joists, pe and fittings, slates, scaffolding, trailer, ber and corrugated iron sheets, &c. Auc- 48, Gresham-street, Guildhall, E.C.2.

Public Appointments.

BER 13.—**London, N.9.**—Temporary General required by the Edmonton Urban District or the erection of 82 houses, the estimated hich is £50,000. Mr. Cuthbert Brown, M.B.E., E., Engineer and Surveyor, Town Hall, n, London, N.9.

EMBER 15.—**Coventry.**—Town Planning Assis- tside Engineering Assistant, Roads and Assistant, Two Building Inspectors and Clerk of Works required by the Coventry ncil, for the City Engineer's Department. erick Smith, Town Clerk, The Council House,

BER 15.—**Durham.**—Two Assistant Archi- one Assistant Quantity Surveyor required by y of Durham Education Committee. Director tion, Shire Hall, Durham, enclosing stamped foolscap envelope.

BER 15.—**London, W.1.**—Full-time Lecturer (qualified Surveyor) at the Polytechnic, reet, W.1, School of Architecture, Building eying. Director of Education.

EMBER 16.—**Hertford.**—Temporary Clerk of quired to supervise, under the direction of gh Surveyor, the construction of the Cor- Housing Scheme and other works, for the of Hertford. Mr. S. M. Senior, Borough and Engineer, Borough Surveyor's Office,

EMBER 22.—**Barrow-in-Furness.**—Temporary ural Assistant, with experience in the design elementary schools, required in the Borough s Department, for the County Borough of -Furness. Borough Engineer, Town Hall, -Furness, endorsed "Temporary Assistant."

MBER 22.—**Ramsgate.**—Town Planning required in the Borough Engineer's Depart- he Borough Council of Ramsgate, for town- scheme. Borough Engineer, Town Hall,

MBER 27.—**Enfield.**—Clerk of Works required .D.C. Mr. H. R. Crabb, Surveyor, Public nfield. Middlesex.

Y 1, 1925.—**Cambridge.**—Assistant to the quired by the Board of Architectural Studies iversity of Cambridge, School of Architecture. tary of the Board of Architectural Studies, rd Bullough, Gonville and Caius College, e.

DATE.—**Hong Kong.**—Overseer required Government of Hong Kong, for the orks Department, for three years' service, sible permanency. Crown Agents for the 4, Millbank, Westminster, London, S.W. 1, M/13281."

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board of Education.

ABERDEEN.—A large central bacon factory for Aberdeenshire is to be erected in Aberdeen by a company called the Aberdeenshire Bacon Curing Factory, Ltd., with offices at 14, Bon Accord-street, Aberdeen. The scheme is estimated to cost about £30,000. The architect is Mr. J. Wendelbo-Madsen, of Richmond, Surrey.—The T.C. passed plans: House, Craigie-park, for Mr. Frank Nicol, per Mr. George Watt, architect; house, Hammerfield-avenue, for Whyte & Connon, per Messrs. Sutherland & George, architects; bungalow, Oakhill-road, for Mr. W. G. F. Booth, per Mr. Roy Meldrum, architect; bungalow, Westburn-drive extension, for J. Bisset & Sons, Ltd., per Mr. William E. Gauld, architect; two bungalows, Westburn-drive extension, for Mr. J. H. Walker and Miss E. Walker, per Messrs. Sutherland & George, architects; bungalow, Westburn-drive extension, for Messrs. Williamson & Bell architects; bungalow, Broomhill-road, for Mr. J. Chalmers, per Mr. T. S. Sutherland, architect; two houses, Gray-street, for Mr. J. Duncan, per Messrs. J. & J. Cameron architects; bungalow, Norfolk-road, for Mr. A. Shivas, per Mr. T. S. Sutherland, architect; two houses, Deemount-road, for the Northern Garden Suburbs, Ltd., per Messrs. D. & J. R. M Millan, architects; three houses, Burns-road, for Mr. D. R. Allan, Mr. R. Cumming, and Mr. H. Ogilvie, per Mr. Arthur C. Bruce, architect; six bungalows, Burns-road, for Mr. A. Brown, Mr. A. Mutch, Mr. J. Addison, Mr. A. Silver, Mr. G. Cassie, and Mr. A. Thow, per Mr. A. C. Bruce, architect; bungalow, Craigshaw-road, for Mrs. E. W. S. Perfect; bungalow, Ellon-road, near Bridge of Don, for Miss E. M. Lamont, per Messrs. Tawse & Allan, architects; house, Ellon-road, near Bridge of Don, for Miss A. G. Mitchell, per Mr. G. Watt, architect.

ABERYSTWYTH.—The R.D.C. is to erect a new bridge at Lleneuaddau.

ACCRINGTON.—The M.H. has sanctioned the Council's proposed scheme for the erection of bungalows.

ALNWICK.—The Governors of Alnwick Infirmary have decided to enlarge the present accommodation at the Infirmary by the addition of a new wing on the south side, at an estimated cost of £1,600.

ALVERSTOKE.—The B.G. has informed the clerk to invite tenders for lavatory accommodation at the female infirmary. Application is to be made to the M.H. for sanction to loan of £2,000 for the building.

BANBURY.—Work has just started on the erection of a new auction mart.

BARNOLDSWICK.—A new secondary and technical school has been favourably considered by the West Riding County Council authorities.

BEDLINGTON.—The U.D.C. are seeking sanction from the M.H. for the carrying out of a proposed housing scheme for the erection of 76 houses at Sleekburn, at an estimated inclusive cost of £34,200.

BELFAST.—An important building scheme is now being planned for the erection of a large hotel in Donegall-square East, on a vacant site there. An expenditure of £250,000 is involved, and the proposed building will give accommodation for 250 bedrooms (most of which will have bathrooms attached), with the usual complement of public rooms, including a ball-room, dining rooms, grill rooms, and reception rooms. The hotel will be elaborately equipped and furnished. Electric lighting and heating from a central boiler house will be installed; and also telephones, bell systems, &c. There will be eight stories. The building will be fronted with local stone. The architect is Sir Brumwell Thomas, of "The Albany," Piccadilly, London, W.1., who designed the Belfast Linen Hall some thirty years ago. The site of the old Model school in Divis-street has been acquired for the R.C. Church, and it is proposed to erect new schools, at an estimated cost of about £12,000.

BIRKENHEAD.—Plans approved:—Laying-out a street proposed to be called Lingdale-avenue, between Ashburton-avenue and Lingdale-road; pair of semi-detached houses, Tollemache-road; boiler-house, Grange-road; three pairs of semi-detached houses, Lingdale-avenue; pair of semi-detached houses, Lorne-road.

BIRMINGHAM.—The waterworks engineer has been instructed to proceed with the arrangements for the placing of a contract for the construction of the proposed new Bartley reservoir.

BLACKBURN.—The R.D.C. has made application for sanction of a scheme for erection of 20 subsidy houses.—The T.C. are to seek sanction for the erection of 240 houses in addition to the 343 at present in course of erection.—An extension at the sanatorium for the B.G. has been approved, provision is made for an additional 25 beds, estimated to cost £4,000. Plans by Mr. W. Stirrup.

BLACKPOOL.—The Building Plans Committee has approved plans for the erection of 315 houses. Amongst the plans submitted was one for a batch of 82 houses at Marton.

BOLTON.—Messrs. Bradshaw, Gass & Hope, architects, Silverwell-street, Bolton, have submitted to the Council alternative plans for the £1,000,000 scheme for extension and improvement to the Town Hall.—The T.C. passed plans:—Deane Congregational Church, vestry, Wigan-road; C. W. Norris, two houses, Withins-lane; J. Horrocks, for two bungalows, Montserratt, Chorley Old-road; W. Draper eight houses, Hughes-street; W. E. Yates, 12 houses, Kirkby-road; Tramways Committee, 'bus station, Salop-street; Jos. Uttley, eight houses, Devonshire-road; N. O. Halliwell, four houses, Church-road; Electricity Committee, two transformer kiosks, Junction-road and Deane-road; R. H. Ainsworth, for amended layout plan, Bennetts-lane.

BRIGHTON.—It is expected that arrangements will shortly be made for the placing of the contract for the completion of the new church in Dyke-road. The architect is Mr. E. P. Warren, F.R.I.B.A., of 20, Bedford-square, London, W.C.

BRISTOL.—The Cadeva Cafes, Ltd., have bought a large block of property in Queen's-road, Clifton, for erection of a large modern restaurant. The architect is Mr. W. J. Stenner, A.R.I.B.A.

BURNLEY.—A new Employment Exchange is to be erected on vacant land in Hammerton-street.

BURY.—The T.C. passed plans for three houses in Blomfield-street.

CANTERBURY.—The Chislet Collieries, Ltd., of London, are carrying out a housing scheme at their colliery at Sturry, near Canterbury. The architect is Mr. G. J. Skipper, of 7, London-road, Norwich.

CARMARTHENSHIRE.—The Llandilo Fawr and Llanybyther R.D.C.s have decided to jointly erect a new bridge at Rhydcwmere.—The Llanelly B.C. is to erect 50 houses on the Llanerch site. The Council has been presented with a building site, and will proceed with the erection of a maternity home.

CHATHAM.—Messrs. Lloyds Bank, Ltd., are shortly to put in hand alterations, involving the provision of additional accommodation at their branch premises in High-street. Plans have been prepared by Mr. F. H. Shaun, architect to the company, at 71, Lombard-street, London, E.C.3.

CHELMSFORD.—The General Purposes Committee of the Essex C.C. are to consider the question of providing new office accommodation on the Duke-street site. The County Architect is to prepare plans.

CHELTENHAM SPA.—The County Council agreed to the purchase of a site for a new domestic science school.

CHERTSEY.—The U.D.C. are to erect 40 houses.

CLEVELAND.—The Cleveland Miners' Association is to erect a number of additional homes for aged workers in the industry.

CLEVELEYS.—Plans passed by the Thornton Council: House, Victoria-road, for Messrs. Handley & Scholes; two bungalows in Henley-street, for Mr. A. F. Gillett; two houses, Henley-avenue, for Mr. T. Barnes; three shops and houses in Nutter-road, for Mr. J. Eyres; house and shop in Queen's-road, for Mr. A. Banks; five pairs of villas in Devonshire-avenue, for Mr. T. Smith; five houses, Cleveleys-avenue and Alexandra-avenue, for Messrs. J. Cryer & Sons; and three houses and shops, Victoria-road, for Mr. W. Eastwood.

CLITHEROE.—The M.H. has approved of a Council scheme for the proposed erection of an additional 38 houses on the Henthorne estate. Sanction for the borrowing of £16,500 with which to carry out the scheme is being sought by the Council.—The Swan Brewery Co., Ltd., of Blackburn, propose to erect a block of shops in Castle-street.

COLCHESTER.—The old School of Art is being converted into a public hall.

CROMPTON.—The D.C. propose the erection of 24 houses on sites in Salt-street and Avis-street, Shaw.

DARLINGTON.—Plans passed by the T.C.: Two houses, Geneva-road, two houses, Longfield-road, four houses, Pierremont-gardens, for J. E. Chilton; house, Cleveland-avenue, 18 houses, Brinkburn-road, for the L.N.E. Railway; 12 houses, new road between Banklands-road and Cedar-road, for Bussey & Armstrong.

DARWEN.—Plans have been approved for the erection of 10 houses of which eight are for the Industrial Co-operative Society.

DEAL AND WALMER.—The scheme for opening up the sea front is being advanced by the demolition of houses in Beach-street and the extension of the pier parade.

DEWSBURY.—The T.C. passed plans: T. R. V. Parkin, house, Caledonian-road, Savile Town; A. Day, house, Leeds-road; Mr. Hodson, house, Tanhouse-street, Ravensthorpe.

DONCASTER.—The West Riding C.C. intimated to the R.D.C. of their intention to erect a new Council school at Askern Sutton-road.—It was recommended that the sites for the erection of houses at Edlington be purchased from the Edlington (Yorkshire) Land & Development Co., Ltd., for the sum of £1,300.—The clerk reported upon an interview with Mr. Shiffner with regard to the proposed plans for the erection of houses at Rossington, which are being prepared by the surveyor for consideration.

DUBLIN.—Plans passed by the City Architect: Shandon-road, off New-road, 17 houses, Mr. G. F. Byrne.

DUDLEY.—The T.C. has decided to erect 20 houses of steel construction upon a site in Trindle-road.

DUNFERMLINE.—The Fyffe C.C. has decided to place contracts for the erection of 100 houses, of which 60 are to be at Kelly and 40 at Crossgates.

DURHAM.—The City Council has resolved to take over the whole of the Whinney Hill building site, at a cost of £1,997 10s. In order to provide accommodation for residents displaced by the New Elvet improvement schemes, it has been decided to erect 120 houses on this site.

* See also our List of Contracts, Competitions, etc.

EASTLEIGH.—The D.C. are applying for the approval for subsidy in relation to the 58 houses to be erected, and that tenders be invited for their erection.

EDINBURGH.—The Dean of Guild Court approved plans for a new Lady Chapel, to be constructed, at an estimated cost of £2,000, in the interior of St. Patrick's Church, South Gray's Close, High-street; General Committee of the George-square Nursing Home for Women Trustees, steel house; Corporation, vertical retorts at Granton Gas Works; J. Ferguson, eight garages at 12, Horne-terrace; J. A. M'Lauchlan, two double bungalows at Traquair Park, Corstorphine; St. James's Episcopal Church Trustees, hall, &c., at Inverleith-row; T. J. Sampson, house at Boswall-road; F. B. Flood, houses at Claremont-road, Leith; W. Macdonald, house, hall, &c., at Royal Gymnasium Hall, Royal-crescent; Miss E. M. E. Todd and another, bungalow at Old Kirk-road, Corstorphine; W. J. Menzies, bungalow at new road, off Whitehouse-road, Cramond.

ELMSALL.—The Hemsworth R.D.C. has received official sanction from the M.H. for the erection of 166 houses at South Elmsall.

ELSECAR.—The Hoyland Nether U.D.C. are inviting tenders for the erection of fifty houses. Plans and specifications have been prepared by the Council's architect, Mr. J. R. Shepherd.

ETON.—Plans approved by the R.D.C.: House, Richings-park estate, Iver, for Mr. G. Thomerson; cottage, Iver, for Major E. Seymour; two bungalows, Farnham Royal for Mr. G. Mitchell; building, Farnham Royal, for the Peerless Trading Co.; bungalow, Burnham, for Mr. G. Gosheron; house, Langley, for Mr. T. A. King; bungalow, Wraysbury, for Mr. C. Joyner; bungalow, Stoke Poges, for Mrs. J. Stubbs; two houses, Farnham Royal, for Messrs. Turnbull & Sons; bungalow, Wraysbury, for Mrs. A. H. Ginn; bungalow, Iver, for Mr. E. Cotton; bungalow, Iver, for Mr. N. B. Ducker; house, Langley, for Mr. H. Street; 112 bungalows, Denham, for Messrs. Adams; bungalow, Langley, for Mr. C. P. Green; bungalow, Hitcham, for Mr. W. F. Haycock; house, Burnham, for Mr. J. E. Shuttleworth; house, Gerrards Cross, for Mr. T. W. Adams.

FAVERSHAM.—The Midland Bank, Ltd., have decided to erect a branch banking establishment in Faversham. The architects are Messrs. Whinney, Son & Austen Hall, of London.

FEATHERSTONE.—New buildings at Post Office Buildings for Messrs. Hill's trustees; house and shop at Halfpenny-lane, for Mr. Frank Greenwood; two houses at Purston, for Mr. Wood and Mrs. Bramley.

FOLKESTONE.—The General Purposes Committee adopted that tenders should be invited for the Marine Gardens Concert Hall. The Borough Engineer said the present estimate of the cost was £15,000.

FOREHOE.—The R.D.C. decided to employ Mr. Russell Bartram to draw out the plans for houses. The clerk was instructed to notify the Wymondham P.C. that sufficient land at the west end of the Browick site will be required for building purposes in the near future for the erection of 10 houses.—The Bridges Committee recommended the erection of a girder bridge at the Runhall Ford. The surveyor was instructed to get out detailed plans. The Council agreed that application be made to the Ministry for an approximate sum of £1,500.

GLAMORGAN.—The building programme decided upon by the County E.C. for the next financial year involves the erection of new schools and extensions of existing buildings, estimated to cost £785,370. In the Western Area of the County a new elementary school for 400 is proposed at Bridgend, the building cost being placed at £10,000. At Cadoxton extensions to provide for an additional 600 pupils will cost £13,000. At Clydach extensions and alterations, estimated at £3,000, and school at £10,000. At Dunvant a new department for 300, to cost £7,500. At Glyncorrwg the remodelling of an infant's school, at cost of £1,000; whilst at Glyn Neath a new department is estimated to cost £8,750. Additions to buildings at Gorseinon are estimated at £10,000. At Larleston a new department is estimated to cost £4,900, and a new department at Maesmarchog, £7,000. New accommodation at Pencoed is estimated to cost £6,520, and a similar amount is allocated to the provision of a new department at Pontlliw. A new elementary school for 350 scholars at Llangynwyd is estimated to cost £13,500, and extensions at Pontadulais are estimated at £7,000. A medical inspection room is to be erected at Tonmawr, and also additions to cost £1,000. A new school is to be built at Porthcawl, at an estimated cost of £10,000. In the Eastern Division new departments will cost £22,800. At Ffaldau remodelling of schools is estimated at £8,450, the sum including new domestic, science and handicraft centres. A new girls' department at Gwyndy (£14,500), a new boys' department at Hendre (£14,624), new departments at Llanharran (£18,000), addit ons at Llantrisant (£5,000), additions at Nantgarw (£6,600), remodelling of departments (£6,930), new departments for 400 children at Pantynawel (£10,200), new departments at Pwllcarn (£6,400), new school at Rhubina (£14,000), new school at Rhoose for 250 children (£8,250), extensions at Sully (£1,000), new departments at Tiryberth (£16,210), new school at Tre-Illtyd (£14,000), new department at Tymeinwr (£16,000), conversion of a building at Tymeinwr (£1,500), and a new department at Ystrad Mynach (£14,000), are also all included in the estimates and programme. The secondary education programme is as follows: New girls' school at Gowerton (£39,000), new boys' school at Neath (£43,000), new girls' school at Port Talbot (£39,000), and new secondary school at Pyle (£41,500). Additions to buildings of existing secondary schools that are scheduled are as follows: At Maesteg school (£10,500), at Pontardawe school (£4,000). New secondary schools in the Eastern Division will be erected at Caerphilly (£37,000), Pontyclun (£34,000), Tonyrefail (£32,900), and Ystrad Mynach (£37,000), whilst additions at Aberdare girls' secondary school will cost £1,500, a new laboratory at Bargoed school (£5,000), and at Ogmore and Garw schools (£2,625 each), are also to be provided. In the matter of engineering and mining education £25,000 is allocated to the erection of a new technical school at Barry, £8,750 for a metallurgical laboratory at Port Talbot, whilst £4,000 is ear-marked for the equipment of the latter. Mining and engineering laboratories at Gowerton, Neath and Bridgend will each cost £7,500, and one at Ystrad Mynach £7,950. A residential institute for the blind to be erected at Bridgend is expected to cost £35,000. The committee has applied already for a first portion loan of £65,000, approximately, in connection with the above detailed programme.

GLASGOW.—The Dean of Guild Court passed plans: Corporation Housing Department, bowling club-house, Tay-crescent, Cumbernauld-road, and a tennis pavilion and bowling green house at Mosspark housing scheme; Corporation Parks Department, bowling and tennis pavilion in Maryhill Park; Taylor & Wilson, eight terrace houses at Essex-drive, York-avenue, Jordanhill; Corporation Housing Department, house at Boulevard, Knightswood; James Finlay, 166, Buchanan-street, house, Mossgiel-road, Newlands.

GRAVESEND.—A new branch stores is to be built for the Gravesend and District Co-operative Stores, Ltd.

GREASBOROUGH.—The clerk of the Council has been instructed to invite tenders for the proposed new public hall.

GUILDFORD.—New branch premises are to be erected in North-street, for the West Surrey Central Dairy Co.—The T.C. has instructed the Borough Surveyor to submit for consideration alternative plans for the erection of flats on land at Grange-road and on the remaining land at Guildford Park.—Plans submitted:—Four houses, New Cross-road, Stoughton, for Mr. Hebburn; house, Clandon-road, for Mr. W. Astling; bungalow, Onslow Village, for Mr. Perry; house, Deerbarn-road, for Mr. Goucher; house, Newroad, off Nightingale-road, Guildford, for Messrs. Tribe & Robinson; pair of semi-detached bungalows, Grange-road, for Mr. Gaff; detached house and shop, for Hart & Co.; two detached houses, Weston-road, for Mr. E. Perdue; two semi-detached houses, Joseph's-road, for Mrs. A. Holford.

HAILSHAM.—R.D.C. approved plans: Two bungalows, Prinkle Farm, Bodle-street, for Mr. R. Keeley; house, Stocks Field, Ninfield Green, for Mrs. E. Gittens.

HALIFAX.—The Borough Surveyor has been instructed to invite tenders for the erection of 50 houses on the Nursery-lane site.

HARROGATE.—The Borough Surveyor has been instructed to prepare plans and estimates for the rebuilding of the Magnesia Well Pump Room, and the construction of a covered promenade.

HAVANT.—The R.D.C. propose the erection of 50 more houses.

HAY.—The R.D.C. is considering the erection of 18 or 20 houses.

HAYES.—A public market building is to be built on a large vacant site in Coldharbour-lane, to the design of Mr. D. Lewes, of Uxbridge.—The "Wagon and Horses" is to be rebuilt by the Isleworth Brewery Co.

HEBDEN BRIDGE.—The U.D.C. has decided to invite tenders for the erection of 12 houses at Eaves Bottom.

HORNSEA.—The U.D.C. are seeking borrowing powers for £7,500 for the purposes of providing bathing bungalows, retaining wall, lavatory accommodation, shelters, and the completion of the sea wall improvements.

HORSFORTH.—Plans passed:—Electricity sub-station in Featherbank-lane, for the Yorkshire Electric Power Co., Ltd.

HOUGHTON-LE-SPRING.—The U.D.C. has applied to the M.H. for permission to erect an additional 73 houses on the Hetton-road site, and to negotiate for a further site near on which the Council has an option, and where there is sufficient space for the erection of 150 to 200 houses.

KEIGHLEY.—The B.G. has approved plans for the extension of the Nurses' Home at St. John's Hospital at an estimated cost of £10,000.

KIDDERMINSTER.—Amongst other plans passed are new cabinet works and saw mill, Park-lane; and four houses.

LEADGATE.—The U.D.C. has resolved to make application to the M.H. for sanction for a loan of £13,500 for sewage works at Crookhall and Billingside.

LEEDS.—Messrs. Holt & Co., warehouseman, of East-parade, have purchased the adjoining property, and plans are now being prepared for the reconstruction work by Mesrs. A. & F. Mosleys, architects, Leeds.—The T.C. passed plans: J. H. Howcroft, detached house, Silver Royd-grove and terrace, Wortley; W. C. Rodgers, two semi-detached houses. Talbot-grove, Roundhay; M. Harrison & Co., four semi-detached houses, York-road; John Coates & Sons, detached and two semi-detached houses, Ash-road and Canterbury-road, Headingley; E. R. Parker, bungalow, Roman-avenue, Roundhay; Mrs. M. L. Webb, detached house, Vancouver-place, Chapel Allerton Hall Estate; E. Fish, three houses, Roman-gardens, off Street-lane.

LEXDEN.—Application is to be made to the M.H. for sanction to borrow the sum of £3,200 for the erection of eight houses at Wormingford, Peldon, and Little Tey.

LEYTON.—The U.D.C. propose erecting 130 houses.

LITTLEBOROUGH.—The Council are to erect 20 houses.

LIVERPOOL.—A new R.C. school for the Sacred Heart Parish is to be erected to provide accommodation for 200 more infants and 100 junior girls. The estimated cost is £20,000.

LONDON.—Police dwellings are to be built on a Tower Bridge site.

LONDON (FINCHLEY).—A public library is now being suggested.

LONDON (HACKNEY).—The B.C. passed plans: D. Morris, 18 shops and flats, Stamford-hill and Clapton Common; Wratten & Godfrey, mission hall, Hackney-grove; Mr. C. K. Codrington, lock-up garages, corner of Oldhill-street and Lynmouth-road; Mr. S. M and houses, corner of Mare-street and Deva

LONDON (LAMBETH).—The B.C. passed W. Wallis, houses upon sites abutting on leading out of Tulse Hill; Mr. Val Meyer, 16 to 24, Catherine-street; Andrew & Pea Baytree-road; A. G. Cole, building, No. 21 Hill; G. Spencer & Co., building, Norwoo

LONDON (LEWISHAM).—The hospital is to by the addition of two new wards, power-h tion department, and disinfecting station.

LONDON (STEPNEY).—The L.C.C. recon borrowing by the B.C. of £1,500 for the pur tributing towards the cost of a street widen

LONDON (WESTMINSTER).—The City Co erect a public convenience in Rochester-ro

LONDON (WOOLWICH).—The B.C. pas G. W. Keats, sub-station in yard, Town Ha ton-street; H. Kent, ambulance station, High-street; L. White, bungalow, Shree and Dallin-road, Plumstead; W. Chil Glenesk-road, Eltham; Thompson & Waffe church and school, corner of Griffin-road an road, Plumstead; G. Downs, two houses, road, Eltham.

LUTON.—A fish market is being erected.

MIDDLETON.—Memorials are to be er improvements carried out at St. Peter's R estimated to cost £2,000.

MIDDLETON-IN-TEESDALE.—A scheme is pared for the provision of a parish hall.

NEWARK.—An electricity transformer st be erected upon a site in Pelham-street for shire and Notts Electric Power Co., Ltd.

NEWCASTLE.—A new chapel is to be erect Moss, in the Brunswick Circuit, at an estim of £2,988.—An extensive building p including the erection of a large number o houses, has been decided upon by the Corporation Housing Committee. In order accommodation in Pilgrim-street, Liverpool- Prudhoe-street, it was agreed to build 84 Slater's Quarry, Barrack-road, and 467 dw the Cowgate housing site. The houses Quarry will be three story tenements, of four rooms each; and at Cowgate two a roomed flats, and three, four and five-room The Committee also resolved to build 300 houses on the High Heaton estate, and 15 Walker estate. These will be constructed Wright block system. The total number embraced by this new programme is 1,069.— agreed to spend £2,600 in improving t quarters at the Red Barns and Scotsw Police Stations.—The Town Improvements C has approved plans for the erection of 27 self houses in different parts of the city.

NEWMARKET.—The M.H. has approved th ing of £6,000 for the Stamford-street buildin of 10 cottages, for the U.D.C.

NEWPORT (MON.).—The Watch Comm approved sketch plans and a preliminary est the proposed erection of ten flats or maiso the rear of Maindee Police Station, for use quarters.

NEWRY.—The U.D.C. decided to consider arrangements for proceeding with the schem erection of 42 houses in Chapel-street and six High-street.

NORMANTON (YORKS.).—Plans passed additional houses, Snydale-road, for U.D houses, Dalefield-lane, for Mr. Banks.

NORTHAMPTON.—Plans passed by T.C. Harlestone-road, for Mrs. M. A. Blacklee Vicarage-lane, for Mr. Clarke; house, Cres Far Cotton, for Mrs. Abbott; two house avenue, for Mr. J. H. Welch; house, Chri road, for Mr. J. M. Burman; four houses, Beec for Mr. E. H. Tibbs.—The T.C. has approved for public baths, at a cost of £30,000.

NOTTINGHAM.—Subject to the approval of the Corporation has agreed to purchase As for conversion into an asylum.

OLDHAM.—The T.C. has decided to make a to the M.H. for sanction to a loan of £22,95 erection of the Ward-street centre.—The May to discuss the question of the provision of abattoir.—The Borough Surveyor submitted proposed house and conveniences at Water Recreation ground, and also of shelter and con in Alexandra Park.—The Committee also disc question of erecting a block at Westhulme for the treatment of ailing children, and th Officer of Health has submitted plans for the e a building, at an approximate cost of betwe and £5,000, which has been submitted to th The T.C. passed plans: Dr. H. Gill, hou road and Frome-street; W. Makin, bungalow, lane; I. Barber, six dwelling-houses, R road, Moorside; Hawthorne and W. & Ltd., nine houses, Langham-road.

ORSETT.—The M.H. are prepared to reasonable expenditure on the provision of isolation wards at the hospital, provided t specifications, and accepted estimates are s

OXFORD.—The T.C. passed plans:—H. & G. Ltd., boiler-house, Osney-lane; Rev. E. G. H vicarage house, Lonsdale-road; Miss Shepher Belbroughton-road; C. Wright, house, Belbr road; University of Oxford, bio-chemistry la in the Parks, at the rear of the University Parks-road.—A new school of pathology is bei at the University, at a cost of about £150,0 plans show a large building of stone on a ste work, with fireproof floors, consisting of thr and basement. Heating and electric lighting installed. Work on the building, which will ta eighteen months to complete, has now beg contractors are Messrs. Wooldridge & Sim Frenchay-road, Oxford. The architect is Mr. P. Warren, F.R.I.B.A., of 20, Bedford-square, W.C. 1.—Messrs. Fox, Lane & Co., of are to build new works and warehouses in St

—Additions are to be made to the Lady Mar- Hall, by the building of a block of premises e east end of Norham-gardens, to be used as nts' quarters.

MOUTH.—A new sorting depot is to be built e G.P.O., at a cost of £60,000.

TEFFRACT.—Plans passed:—House at Hillcrest for Mr. E. Betteridge; house at Slutwell-lane, . A. Batte; house at Ferrybridge-road, for Mrs. and house at Ferrybridge-road, for Mr. son.—Plans passed by R.D.C.: House, fields-lane, Glasshoughton, for Mr. S. Campy; low, Carleton, for Dr. Chrispin; house and shop, n-road, Airedale, for Mr. F. Harper; house, venue, Glasshoughton, for Mr. H. Robshaw; low, Hass-lane, Cutsyke, for Mr. J. Sennett.

TYFRIDD.—The U.D.C. has applied for sanction ceed immediately with the erection of 40 houses ydfelan Ward, and sanction to erect a further ouses in the same Ward during the next two

T TALBOT.—The B.C. has received M.H. sanction proceeding with the erection of 100 houses.

STON.—Extension to the Chestnuts Sanatorium, ted to cost £10,000, is proposed by the T.C. E.C. recommend the purchase of premises in ley-square as part of the Park School for the of £5,000. The E.C. are to apply for sanction row £35,000 for extensions of mains and services district.

E.—The Penybont (Glam.) R.D.C. is to reinvite s for the erection of houses, both parlour and arlour types, at Pyle and at Sarn.

ORS.—The U.D.C. received plans for eight houses stledine-avenue, for Thompson & Gamble, and se in Woodhouse-road.

MSGATE.—The Ramsgate Pier Co., Ltd., have ntemplation the rebuilding of their property. proposed to demolish the old pier and to erect ne.

VENSTHORPE.—The B.E. has approved the pur- of a site at Myrtle-road for the erection of a sed Council school.

WTENSTALL.—The D.C. propose to develop the Carr and Longholme housing estates.

ONDDA.—The U.D.C. has in consideration the sion of a mining institute.

HWORTH.—The Slithero bridge is to be widened trengthened at a cost of £10,000.

CHESTER (KENT).—Alterations and additions are made to the Bartholomew's Hospital, and the rnors have requested Mr. Herbert Read, of Messrs. & MacDonald, of 16, Cork-street, London, to submit a suggested scheme.

THERHAM.—The Education Committee has sub- l proposals to the Board of Education, which les for new schools at Thorpe Hesley (site and ngs, £12,500); new central school, Cranworth- (building work, £28,000); purchase of land for sions to the High School for Girls, estimated cost,); new class-rooms and laboratory, at Grammar l (buildings, £3,250).—A new technical college is proposed, together with school of art buildings, estimated cost of £50,000, the estimated cost rovision of a school for mentally and physically ive children is £4,00 (site and buildings).

ISLIP.—The Manor Cottage Society has obtained tenders for houses proposed to be erected. The y propose to proceed with 10 houses. A loan of 0 has been asked for.

TON.—The U.D.C. are to erect 30 houses on the am Old-road site.

HAM HARBOUR.—Plans passed by the U.D.C.: . for J. Robinson; house, for H. W. Laws; . for M. Irving; and groundsmen's house for on Recreation Committee.

DGEFIELD.—Plans passed by the R.D.C.: Bunga- Darlington-lane, Ferryhill, Mr. J. Bell; bungalow, gton-road, Ferryhill, Mr. J. Walters.—The M.H. nctioned the erection of 80 houses, for the Council.

THAMPTON.—Work is to start shortly on the scheme of extensions to the South-Western Hotel, uthampton, owned by the Southern Railway Co. w wing is to be erected to accommodate another d and bathrooms, together, on the ground floor, he requisite dining and public reception rooms, es, &c. The new building will be carried out in in conformity with the existing hotel, relieved by nd stone dressings. Fireproof floors, stair- and landings will be provided. Central heating, ic lighting, hot water, bells and telephones, and equipment will be installed. There will be three nd several goods and service hoists. Ths sanitary ering work will form an important item, whilst l hundred tons of steel work will be involved in onstruction work. Wood block flooring will be used in several of the principal apartments. The cost of the building and its equipment is estimated at £200,000. The general contractor is Mr. F. G. Minter, of Ferry Works, Putney, London, S.W.15. The designs have been prepared by Mr. J. R. Scott, architect to the Southern Railway Co.

SOUTHPORT.—Among the many building proposals of the National Provincial Bank, Ltd., is one for the provision of new branch offices at Lord-street, where a site has been purchased. The architects are Messrs. Finchett, Lancaster & Archer.

SOWERBY BRIDGE.—The Surveyor to the U.D.C. has prepared a scheme for the erection of 58 houses, spaced 18 to the acre.

SPENBOROUGH.—Plans passed: Institute at Halifax-road, Liversedge, for Liversedge Parish Church; two houses, Bradford-road, Oakenshaw, for Messrs. Gill & Howorth.

STOKE.—The U.D.C. has received a letter from the Stone R.D.C. asking for authority to support a resolution calling upon the County Council to widen the Trent Bridge at Walton.

STOKE-ON-TRENT.—The Housing Committee recommended the Council's acceptance of a tender amounting to £3,280 for the erection of six non-parlour houses in Jervis-street, Hanley, and a tender amounting to £3,750 for the erection of six parlour houses in Cowper-street, Fenton.

STOKESLEY.—Plans passed by the R.D.C.: Shop, Great Ayton, for J. Odgen; institute at Seamer.

STOURBRIDGE.—The T.C. propose erecting houses for which plans have been forwarded to the M.H. Plans passed:—Bungalow, Worcester-street, for Mrs. G. Butler; house in High Park-avenue, for Mrs. F. Gill.—A large new engine shed is to be erected at Stourbridge by the Great Western Railway Co. The building will be of brick and concrete, and will house a 65 ft. turntable already on the site. The shed will be 255 ft. long, 219 ft. wide, and will have a slated roof. From its centre will radiate about 28 tracks, each varying from 41 ft. to 100 ft.; a large lifting shop will be erected on the east of the main building, with accommodation for stores; on the other side will be mess rooms for mechanics, enginemen, &c., with kitchen and lavatory. A coal stage with an elevated roof will also be erected with a water tank above, with a capacity of 74,000 gallons. It is also proposed to provide coal-stacking grounds and outside engine pits: whilst the locomotive yard will be equipped with water supplies, cranes, &c. The total cost is estimated at £118,000. Plans have been prepared by Messrs. Lloyd Waddell, chief joint engineers to the railway company.

STOURPORT.—A contract is shortly to be placed for the superstructure of the new electricity generating station for the Shropshire, Worcester and Staffordshire Electric Power Co., Ltd. Plans have been prepared by Mr. C. W. G. Little, chief engineer to the British Electrical Federation, and Mr. J. T. H. Legge, chief engineer to the Shropshire, Worcester & Staffordshire Company.

STRETFORD.—The U.D.C. passed plans:—Two houses, Wordsworth-road, for Smith & Allcock; four houses, Addison-road, for Mr. T. Pollock; 52 houses, Ravenswood-road, for Mr. G. A. Russell; six houses, Seymour-grove, for Mr. G. A. Russell.

STROOD (KENT).—A new market hall is proposed to be erected on a site in the High-street, to the plans of Mr. G. P. E. Bond, of Rochester.

SUTTON.—The U.D.C. passed plans: Two houses, Benhilton-gardens, for Dr. Bathurst; three houses, Clensham-lane, for Mr. W. G. Carse; house, Aultone-way, for Mr. W. White; bungalow, Aultone-way, for Mr. E. Harrop; house, Thicket-road, for Mr. L. J. Jackson.

TADCASTER.—Plans passed: Two houses, Station-road, Scholes, for Messrs. Stockdale Robinson; two houses, Horner-avenue, Scholes, for Mr. Moss; houses, Milton-road, Scholes, for Messrs. Fryer Fairburn; two houses, Owlett Hall-lane, for Messrs. Elliot Revis; conversion of Grange Farm into three houses, for the Airedale Collieries, Ltd.—A site has been acquired at Allerton, Bywater, upon which it is proposed to carry out a housing scheme, comprising 120 houses (24 parlour type and 96 non-parlour type).—Another site, comprising 6.6 acres, is to be acquired at Micklefield, and a scheme for erection of 66 houses to be carried out there (18 parlour type and 50 non-parlour type).

TAUNTON.—New science buildings are being erected at the school as a war memorial, at a cost of about £12,000. The architect is Mr. E. Vincent Harris, of London.

TILBURY.—The Surveyor of the U.D.C. submitted and recommended for approval plans on behalf of the Governors of Tilbury Hospital of plans for new hospital accommodation.

TORQUAY.—The T.C. passed plans:—Two houses, Old Woods-hill, for Mr. J. Stoneman; house, Barrington-road, for Mr. S. Exall; house, Windsor-road, for Mr. W. Dart; six houses, St. George's-road, for Mr. Chas. Dear.—The Ministry of Health has given sanction to a harbour reconstruction scheme at Torquay, upon which the Corporation propose to expend some £17,000. Upon the construction of outer concrete walls, &c., at Beacon Quay £15,000 is to be spent; new reinforced concrete pitched decking is to be laid on Haldon Pier and South Pier, at a cost of £1,023 and £497, respectively, and a new concrete floor provided at the fish quay, at a cost of £450. Tenders for the work are to be invited at the earliest possible moment.—Funds are being raised for the erection of a large hospital at Torquay to serve the needs of the locality. A site has been selected, and plans have been prepared by Mr. H. Percy Adams, F.R.I.B.A., of 9, Knightsbridge, London, S.W.1

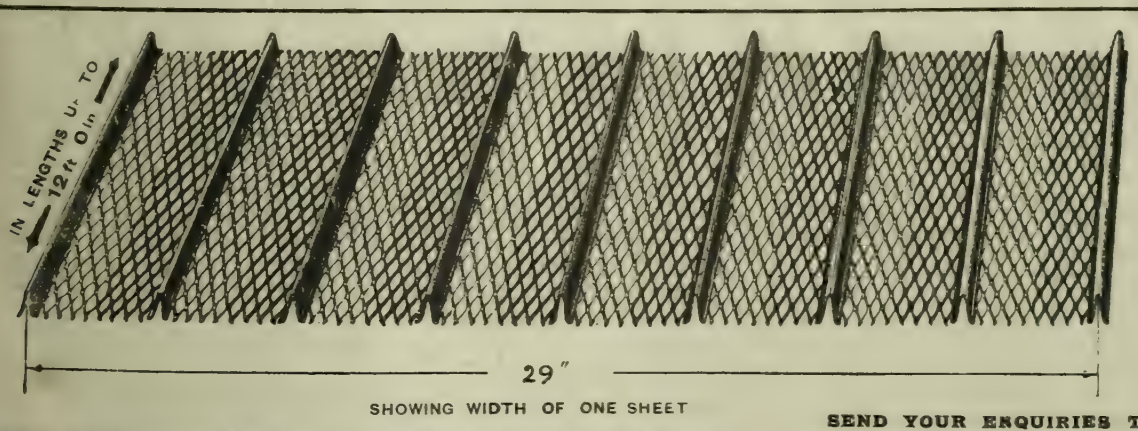
TYNEMOUTH.—The T.C. passed plans: Six houses Bamborough-terrace and Blanchland-terrace, for Messrs. F. R. N. Haswell & Son, for Messrs. Brannen Bros.; rebuilding of premises, 66 and 68, Bedford-street, by Mr. W. Stockdale, for Mr. R. Graham; two semi-detached houses, Hunt Hill estate, by Mr. W. Stockdale, for Messrs. Ball Bros.; police station, Albert Edward Dock, by Messrs. Marshall & Tweedy, for Tyne Improvement Commissioners; 13 self-contained houses, Lilburn-street, Chirton, by Mr. A. K. Tasker, for Mr. I. Smith; 15 self-contained houses, Lilburn-street, Chirton, by Mr. A. K. Tasker, for Mr. I. Smith.—The Public Library Committee has resolved to erect a new library with a reference department, and a separate children's library and reading room. — Plans prepared by the housing architect for 12 blocks, each containing four maisonnettes, have been provisionally approved. Plans passed: Six houses, Blanchland-terrace, Messrs. Brannen Bros.; two houses, Hunt Hill estate, Messrs. Ball Bros.; 15 houses, Lilburn-street, Mr. A. K. Tasker; 13 houses, Lilburn-street, Mr. I. Smith; police station, Albert Edward Dock, Tyne Improvement Commissioners.

WAKEFIELD.—Plans passed by City Council: Two houses, Many Gates-lane, for Messrs. G. S. Hepworth & A. Siswick (Messrs. Bell & Kay, architects); house and shop, Alverthorpe-road, for Mr. A. Blackburn; house, Bromley Mount, for Mr. J. A. Benton.

WATFORD.—An extensive development scheme is to be carried out at the Oxhey estate, where it is proposed to build about 100 houses. The architects and surveyors to the estate are Messrs. Fayers & Fayers of Watford.

WILLESDEN.—A large site at Park Royal, Willesden, has been selected for the erection of the extensive Eurpean depot of the H. J. Heinz Co., the American canning firm. A considerable area has been acquired, and buildings are to be erected for both manufacturing and storage purposes. The first section of the plans show two blocks—one of two stories, and one of one story—with a floor area of about 140,000 and 70,000 ft. respectively. Elaborate machinery will be installed in the two-story building, of which a certain amount will be shipped from the United States. Steam and electricity will be used for power purposes. The buildings will be of brick with reinforced concrete floors. Both light roofs will be used, covered with patent glazing and asbestos tiles. The contractor is Mr. G. H. Burgess, of 45, Berners-street, London, W.1. The steel work will be supplied by Messrs. Archibald D. Dawnay & Sons, Ltd., of Battersea. The architects and consulting engineers are Messrs. Hal Williams & Co., of Factory House, 79, High Holborn, London, W.C.

WOLVERTON.—Plans passed by T.C.:—House, Littlehampton-road, for G. T. Short, by G. T. Short; five houses, Heene-road, for T. R. Dewell, by T. R. Dewell; house, Pembury-road, for F. J. Goodman, by J. E. Lund; two houses, Boundary-road, for A. Clare, by A. Clare; two shops and store, North-street, for C. Tomsett, by C. Tomsett; house, Mill-road, for E. M. Todd, by C. H. Huskinson; house, St. George's-road, for A. Jay, by H. V. Steer; house, Goring-road, for H. Thomas, by H. Sleeman & Co.; house, Forest-road, for D. Peacock, by H. Osborn; five houses, Grand-avenue, for S. W. Phillips & Co., by S. W. Phillips & Co.; six houses, Marine-parade, for D. S. Barclay; 56 houses St. Elmo-road, for H. P. Brazier, by E. J. Love; house, St. Thomas's-road, for J. A. Walker, by Smith, Bartlett & Co.; house, Mill-road, for G. Harwood, by J. E. Lund; house, Wallace-avenue, for H. Tier, by J. E. Lund; two houses, Grand-avenue, for J. Chadwick, by B. J. Blaker; house, Manor-road, for E. G. Goodall, by E. G. Goodall; house, Boundary-road, for H. P. Trounce, by Smith, Bartlett & Co.; house, Wallace-avenue, for Mrs. McLeod Roberson, by Smith, Bartlett & Co.; house, Wallace-avenue, for E. D. Cranmer, by J. E. Lund.



PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—E

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.
Flettons, at King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	2 8 3
Best Stourbridge Fire brick:—	
2½ in.	8 11 0
GLAZED BRICKS—	
Best White Ivory, and Salt Glazed Stretchers	23 0 0
Headers	22 10 0
Quoins. Bull-nose and 4½ in. Flats	29 10 0
Best Blue Pressed Staffs.	9 5 0
Do. Bullnose	9 15 0
Blue Wire Cuts	7 5 0
3 in.	10 3 0
D'ble Str'tch'rs	31 10 0
D'ble Headers	28 10 0
One Side and two Ends	32 10 0
Two Sides and one End	33 10 0
Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.
2 in. per yd. super	2 1
2½ in. "	2 6
3 in. per yd. super	2 11
4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	13 9	" "
Thames Sand	14 6	" "
Best Washed Sand	14 6	" "
½ in. Shingle for Ferro-Concrete	12 9	" "
¾ in.	14 0	" "
⅝ in. Broken Brick	11 6	" "
Tan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement (Waterproof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine "	5 12 0
Sirapite, Coarse	3 9 0
" Finish "	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube — s. 2, d. 9½

Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube — 2 11½

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube — 4 4

Do. do. delivered on road wagons at above stations, per ft. cube — 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1¾ in. to 2 in. ditto, ditto "	1 4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks Per Ft. Cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5 1½
6 in. rubbed two sides ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto. " ditto "	2 1½
2 in. self-faced random flags Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2½ × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	22 0	3 × 4	24 0

PLANED BOARDS.

1 × 11 £31 0 | 1 × 9 £30 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
¾	16/6
⅞	20/-
1	25/-

BATTENS

Inches	s. d. per 100 ft
¾ × 2	2 6

SAWN LATHS.

Per bundle	0 2 6
Dry Wainscot Oak, per ft. super, as inch	0 2 0 to 0 2 6
¾ in. do.	0 1 6 to 0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9 to 0 2 6
Cuba Mahogany	0 3 0 to 0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0 to —
American Whitewood planks, per ft. cube	0 12 0 to 0 14 0
Best Scotch Glue, per cwt.	4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 6 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in.	13 10 0
⅜ in.	14 10 0	⅝ in. to 2¼ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up.	Fittings. ⅜"to¾" inclusive.	Flanges ¾"&up.	Flanges ⅜"to¾" inclusive.
Black Gas	50 %	50 %	47½ %	60 %	57½ %
Blue Water	45 %	45 %	42½ %	55 %	52½ %
Red Steam	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas	35 %	40 %	37½ %	50 %	47½ %
" Water	28½ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.		£
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..	13
Hoop iron, basis price	16 10 0	..	17
" Galvanised	31 0 0	..	32
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	14 10 0	..	15
" " " 24 g.	15 10 0	..	16
" " " 26 g.	17 10 0	..	18
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 0 0	..	22
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..	23
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..	26
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..	21
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..	22
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..	24
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..	24
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..	26
Best Soft Steel Sheets, 26 g.	26 0 0	..	27
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22

METAL WINDOWS—Standard sizes suitable for plete houses, including all fittings, painting coats, and delivery to job, average price abou to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£
LEAD—Sheet, English, 4 lb. and up	50
Pipe in coils	50
Soil Pipe	53
Compo pipe	56

NOTE—Country delivery, 30s. per ton extra; lots 3 cwt., 2s. per cwt. extra and over 3cwt. and un cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. e

Old lead, ex London area, at Mills per ton	37	0 0 ..
Do., ex country, carriage forward per ton	38	0 0 ..

COPPER.

	s.
Seamless Copper tubes (basis) per lb.	1
Strong sheet "	2
Thin "	2
Copper nails "	2
Copper wire "	2

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS IRON.

¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/- 510/- per

NEW RIVER PATTERN SCREW DOWN STOP COCKS UNIONS.

¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/- 588/- per

NEW RIVER PATTERN SCREW DOWN MAIN FERRU

¾ in.	1 in.
59/6	60/- 116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	4 in
7/6	10/-	14/-	23/-	30/- 42/- per doz

DOUBLE NUT BOILER SCREWS

¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/- 63/- per doz

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES. S.

¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/- 228/- per

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEA SCREW.

1¼ in.	1½ in.	2 in.	3 in.
33/-	41/-	56/-	101/- per
35/-	45/-	66/-	126/-

8 lbs. P. traps
8 lbs. S. traps

TIN—English Ingots, 2/6 per lb. SOLDER—Plum 1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes per gallon	
" " " in barrels "	
" " " in drums "	
Boiled " " in barrels "	
" " " in drums "	
Turpentine in barrels	
" in drums (10 gall.)	
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	59

GENUINE WHITE LEAD PAINT—

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered

Red Lead, Dry (packages extra) per ton	52
Best Linseed Oil Putty per cwt	0
Filocol per cwt	0
Size, XD Quality tin	0

[*Continued on next page.*]

The information given on this page has been spe compiled for THE BUILDER and is copyright. Our a this list is to give, as far as possible, the *average* of materials, not necessarily the highest or lowest. Qu and quantity obviously affect prices—a fact which s be remembered by those who make use of this inform

S CURRENT OF MATERIALS (contd.)

GLASS.

H SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
urths ..	3½d.	32 oz. fourths	8½d.
irds	4½d.	32 „ thirds	10½d.
urths ..	5d.	Obscured Sheet. 15 oz.	4d
irds	6½d.	„ „ 21 „	5½d.
urths ..	6d.	Fluted 15oz. 6½d., 21 oz.	9½d.
irds	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

ce according to size and substance for squares m stock.

H ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
l plate	4½d.
n rolled	5½d.
n rolled	6½d.
ed Rolled, Baltic, Oceanic, Arctic, Stipte, and small and large Flemish white..	6½d.
itto, tinted	9d.
l Sheet	6d.
Rolled Cathedral	5½d.
do.	7½d.

st Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
nish	Outside	0 14 0
o	ditto	0 16 0
al	ditto	0 18 0
al	ditto	1 0 0
al Carriage	ditto	1 4 0
to	ditto	1 12 0
rnish	Inside	0 18 0
e Paper	ditto	0 18 0
al Cabinet	ditto	1 2 6
al Flatting	ditto	1 0 6
ring Oak	ditto	0 18 0
d Drying Oak	ditto	0 19 0
al Varnish	ditto	1 0 0
to	ditto	1 2 0
to	ditto	1 12 0
n Gold Size		0 10 0
k Japan		0 10 6
Mahogany Stain (water)		0 12 0
Black		0 7 6
ack		0 14 6
(patent)		1 5 0
nd Brush Polish		0 17 0
yers in Terebine		0 9 0
ack Enamel		0 7 0

South Esk Bridge.

ose Bridge Joint Committee recently to make application to the Ministry of rt for a grant of 65 per cent. for a bridge ected over the River South Esk, accordhe plan submitted on August 23, and g for a 24 ft. roadway, at an approxist of £88,000.

THE SCOTTISH BUILDER

SCOTTISH ECCLESIOLOGICAL SOCIETY

A MEETING of the Edinburgh District of the Scottish Ecclesiological Society was recently held in St. Cuthbert's Hall, Edinburgh. Mr. Thomas Ross, LL.D., presided.

Professor Charles Gourlay, B.Sc., F.R.I.B.A., of the Royal Technical College, Glasgow, delivered a lecture on Glasgow Cathedral. In the course of his remarks the lecturer said that the essential parts of most cathedrals were generally placed on practically one floor level, and these might be divided into two sections—respectively east and west of the "crossing." The eastern section in Glasgow Cathedral was unique in that it consisted of two stories, which in all old documents were referred to as lower and upper churches, but these terms did not convey the essential unity of the eastern arm of the Cathedral. As its site was one which sloped steeply downwards to a river towards the east, this led to the development of the design as executed, which was a work of genius on the part of the original designer, who produced in this portion the outstanding glory of the Cathedral. The placing of the high altar on the upper level gave the rightful prominence to this floor, while the placing of the Lady Chapel and the Chapel of St. Kentigern on the lower floor made it the necessary complement of the upper. The lecturer then showed the important influence of processions in the design of a mediæval cathedral plan by describing the ceremonial of the Sunday procession, and then proceeded to deal with the historical growth of the Cathedral. The first church on the site was that erected by St. Kentigern, and it probably occupied the south-west compartment of the present Lower Church. In 1115 David I of Scotland appointed his Chancellor, John Achains, to the bishopric, and John began the first Cathedral, which was consecrated in 1136. Its style would be Romanesque, but of its plan they had no knowledge.

The rough diagonal tooling, upwards to the left, to be seen on the surface of the stone wall near the Jocelin wall-shaft made it probable that a fragment of this Cathedral might yet remain. The 1136 Cathedral was burned down in 1176, and Bishop Jocelin rebuilt it, but only the wall-shaft named after him now remained. These fragments of early cathedrals being left in situ by later builders suggested that they marked a sacred spot, and the oldest sacred spot known to have existed within the building was the original grave of St. Kentigern, who was recorded to have been buried at the right-hand side of the altar in his church. The veneration paid to the resting-places of saints by pilgrims in the thirteenth century often led to the removal of their relics from inconvenient positions and their enshrinement in saints' chapels, and this appeared to have occurred in Glasgow Cathedral. A study of the base courses still existing showed that the Cathedral begun by Bishop Malvoisin about the year 1200 included the north and south walls of the present nave and transepts, while Bishop Walter built the wall and vault of the Lower Church and part of the north and south walls of the nave, with their responds. The next great building Bishop was Bondington, who built the eastern arm of the Cathedral, and continued the building of the parts already begun. Bishop Wishart redesigned the nave, but retained the old setting-out, which led to his executing the most beautiful combination of triforium and clerestory of this period now existing. Bishop Lauder built the tower, also part of the chapter-house, which was continued by Bishop Turnbull and completed by Bishop Cameron, who built the spire. Blacader's "aisle" was built by Archbishop Blacader between 1484 and 1508 to provide additional altars, but its upper story was never erected.

At the conclusion of the lecture Sir James Balfour Paul moved a cordial vote of thanks to Professor Gourlay.

NEW BUILDINGS IN SCOTLAND

Kilmarnock.—BUILDINGS.—The Dean of Guild Court has passed plans: Buildings in Lawson-street, in connection with spinning mill, for Douglas Reyburn & Co., at a probable cost of £150; buildings in Market-lane, in connection with extension to restaurant premises, for David T. Lauder & Son, at a probable cost of £900; bungalow in Knockinlaw-road, for G. Gilmour, at a probable cost of £725.

Dunoon.—COTTAGES.—The Dean of Guild Court has passed plans: Cottage at Kilbride-avenue, for R. Malloch; cottage, Alexander-street, for D. Campbell; cottages, Nelson-street and Alexander-street, for A. T. & J. T. Colquhoun.

Falkirk.—WAREHOUSE.—The Dean of Guild Court passed plans: Callendar Iron Co., Ltd., warehouse and fitting shop, at a probable cost of £1,250; bungalow, Major's-place, Falkirk, for J. Kean.

Glasgow War Memorial.

A war memorial to Glasgow Territorial R.A.M.C. units was recently unveiled by General Sir William Leishman, K.C.B., in the Cathedral. It is from a design by Mr. G. M. Brand, architect, Glasgow.

Clyde Bridge Banned.

The Glasgow Corporation recently decided to approve of the Provisional Orders promoted by the Corporation, with the exception of that part referring to the construction of the new bridge. A motion that this should be abandoned was carried by 38 votes to 19. The view was expressed that if this bridge were erected, and with the completion of the new bridge at Oswald-street, there would be four cross-river bridges within a short distance. The suggestion was made, however, that a bridge further down the river, possibly in the vicinity of the Finnieston district, would be more serviceable.

ILDING TRADE WAGES IN SCOTLAND.*

ollowing are the present rates of wages in the building trade in the principal towns of . Every endeavour is made to ensure accuracy, but we cannot be responsible for errors y occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plas-terers' Labourers.
.....	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½	
.....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
sa	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
.....	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
.....	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
le	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
ge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
on	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
.....	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
ine	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
h	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
.....	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
iam	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
s	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
.....	1/6	1/6	1/6	1/6-1/6½	1/6	1/6	1/6	1/2	
rgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
.....	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2	
ck	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
.....	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
ll	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
.....	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
re (Eastern	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
.....	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

*Information given in this table is copyright. The rates of wages in the various towns in England and given on page 952

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0	
Do. joists	" "	5	6	
Do. roofs, floors and partitions	" "	6	0	
Do. trusses	" "	8	6	

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½″	1¾″	2″
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		1″	1½
Deal wrot moulded and rebated	per foot cube		
Plain deal jamb linings framed	per ft. sup.	1/7	1
Deal shelves and bearers	"	1/4	1
Add if cross tongued	"	2d.	2

STAIRCASES.

	1″	1¼″	1½″	2
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	-
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2

Housings for steps and risers		ea
Deal balusters, 1 in. × 1½ in.	per ft. run.	
Mahogany handrail; average 3 in. × 3 in.	"	"
Add if ramped	"	"
Add if wreathed	"	"

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges	
Casement stays	1/2	letting in to floor	
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.

Rolled steel joists	per
Plain compound girders	"
Do. stanchions	"
In roof work	

RAIN-WATER GOODS.

		3″	4″	6
Half-round plain rebated joints	ft. run	1/11	2/4½	3
Ogee Do. Do.	"	2/4½	3/1	3
Rain-water pipes with ears	"	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	"	1/11	2/4½	3
Do. nozzles for inlets	"	2/2	2/7	3

PLUMBER.

Milled lead and laying in flashings and gutters						per cw
Do. Do. in flats						"
Extra labour and solder in coated cesspools						each
Welt joint						per ft r
Soldered seam						"
Copper nailing						"

		½″	¾″	1″	1½″	2
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/
Do. service	"	1/8	2/2	2/7	3/10	
Do. soil	"					
Bends in lead pipe	each					3/
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/
Red lead joints	"	11d.	1/-	1/3	1/11	2/
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/
Lead traps and cleaning screws	"				14/7	19/
Bib cocks and joints	"	6/4	9/7	15/4	41/-	
Stop cocks and joints	"	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard s	
Do. Do. Sirapite	"	
Do. Do. Keen's	"	
Add sawn lathing	"	
Add metal lathing	"	
Portland cement screed	"	
Do. plain face	"	
Mouldings in plaster	per 1 girth	
One-and-a-half granolithic pavings	per yard s	

GLAZIER.

21 oz. sheet plain	per foot s
26 oz Do	"
Obscured sheet	"
⅛ in. rolled plate	"
¼ in. rough rolled or cast plate	"
¼ in. wired cast plate	"

PAINTER.

Preparing and distempering, 2 coats	per yard	
Knotting and priming	"	
Plain painting 1 coat	"	
Do 2 coats	"	
Do. 3 coats	"	
Do. 4 coats	"	
Graining	"	
Varnishing twice	"	
Sizing	"	
Flatting	"	
Enamel	"	
Wax polishing	per foot sq	
French polishing	"	
Preparing for and hanging paper	per piece 2	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment co percentage of 1½ should be added for Employers Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The wa

Information given on this page is copyright.

PATENTS

APPLICATIONS PUBLISHED *

298.—C. W. Watson: Method of, and ne for, coiling wire reinforcements for te pipes.
228.—E. Pollard & Co., Ltd., and E. I: Antifriction supports for sliding doors w-cases.
230.—W. F. Muir: Combined drain- and apron for sinks.
313.—S. S. Rigers and Board & Co., Ltd.: covers.
317.—W. Lissaman: Castors.
319.—F. B. Dehn (Boston Machine Co.): Cementing machine.
340.—F. Wheatley, Junr.: Partitioned

355.—T. M. Harvard and Leyland & ngham Rubber Co., Ltd.: Pad or buffer e legs of chairs, tables, or other articles niture.
392.—B. H. Wood and H. L. Matthews: nding tables.
393.—E. Hangartner and J. Schlatter: ing blocks.
410.—J. T. Whittome: Casement win-

227.—C. W. Watson: Machines for fugally moulding concrete or like struc- including pipes.
602.—Vigilant Sprinklers, Ltd., and B. C. itchcock: Fire protection systems for ngs and the like.
615: F. Bodson: Windows.
668.—W. McCaughan: Construction of for buildings or other structures.
687.—W. Orlovsky: Composition for surfaces, walls, and the like, and method nufacturing the same.
459.—P. De Angelis: Heat insulating ial.
742.—V. Wikkula: Porous cement.
899.—A. Pope, E. Vaughan and A. Pope: ator for hot-water systems for heating ings.
923.—R. Caccia: Method of manufactur- me-sand concrete, and bricks and pipes.
497.—E. Douzal: Process of manufacture ificial marble.
001.—G. A. Wall and E. Babidge: Wall ets, particularly adaptable for use with lding and staging.
035.—C. Betz: Wall-board seam and ning strip.
051.—W. H. Pheysey: Field and other en gates.
059.—J. Bell & Co. Proprietary, Ltd., . D. Innes and M. S. Stanley: Construction inforced-concrete floors.
077.—J. Cable: Casement windows or s.
079.—H. G. O. Forain: Injection device oncrete plastering.
108.—W. Evans: Devices forming a com- d stay and fastener for windows.
109.—J. F. Goddard: Expansion joints ncrete and like structures.
116.—O. Bruster: Domestic hot-water rs.
120.—A. Daniel: Construction of ded floors.
138.—T. H. Hodgkinson and F. N. Hep- h: Boxes.
139.—W. K. Lusty: Boxes.
149.—J. Fowler & Co. (Leeds), Ltd., and Iobson: Elevators.
159.—R. Bonham: Combination of two ber's turnpins and plumb-bob.
169.—F. J. Orton: Casement stays.
261.—E. J. Elgood: Wall and like ctures.
269.—F. W. Foxon: Outdoor seats.
282.—A. Wilkins: Walls for buildings, blocks therefor.
018.—Fortis Reinforced Concrete Safe Ltd., and A. E. Hudd: Electromagnetic hanisms.

All these applications are now in the stage in h opposition to the grant of Patents upon them be made.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*

BARLBY.—For erection of a central school, for the East Riding C.C. E.C.:—
*J. H. Carr & Son, Selby.

BELFAST.—For erection of two elementary schools, for the E.C.:—
*J. Copeland & Sons, Ltd.—(Euston-street).
*H. & J. Martin—(Templemore-avenue).

BIRKENHEAD.—For erection of a garage and additions at the infectious diseases hospital, for the T.C.:—
*F. Thomas & Son £1,649

BIRKENHEAD.—For erection and completion of the stores at Craven-street station, for the T.C.:—
*J. Davies £2,548

BIRMINGHAM.—Erection of premises for branch bank, at Spring Hill, for T.C.:—
*W. Sapcote & Sons..... £1,389

BIRMINGHAM.—Construction of bank at Erdington for T.C.:—
*J. T. Harris, Ltd. £7,580

BOLTON.—For the erection of a machinery, boiler and pump house, for the T.C.:—
*J. Byrom, Ltd.

BRISTOL.—Erection of wall and railings at Greenbank Cemetery, for T.C.:—
*E. Walters & Son..... £3,224 10

BRISTOL.—Erection of three houses at Fishponds-road, for T.C.:—
*Bissicks & Fletcher..... per house £440

CHELMSFORD.—For erection of 12 houses, for the T.C.:—
Messrs. Arnold £5,350
Messrs. Marven 4,895
Messrs. Clayden..... 4,770
*F. H. Stewart 4,760

CHELTENHAM.—Erection of 15 pairs of non-parlour houses, for T.C.:—
*W. Drew..... per house £440

CHESTERFIELD.—Construction of underground conveniences in New-square, for T.C.:—
*Robson & Co. £5,197

DARLASTON.—For erection of 20 houses at Rough Hay, for the U.D.C.:—
*A. C. S. Teece £8,704

DONCASTER.—For extensions to the Yorkshire Penny Bank's premises in High-street, for the Yorkshire Penny Bank, Ltd.:—
*J. T. Wright & Son, Leeds.

EDGWARE.—For erection of branch of Westminster Bank, Ltd. Messrs. Hall-Jones & Dewhirst, architects:—
Hammond & Barr, Ltd. £6,877
General Building Co. 6,856
L. H. & R. Roberts 6,790
W. Shurmur & Sons, Ltd..... 6,721
G. Godson & Son, Ltd..... 6,659
*H. Neal, Ltd..... 6,475

ILFORD.—For extensions at new Masonic Temple, Ilford. Mr. W. J. Lewis, A.R.I.B.A., architect, of Ilford. Quantities prepared by architect. Two schemes were submitted:—

F. G. Minter, Putney	£17,825	0	0
	11,166	0	0
Luton, Stratford	16,489	0	0
	9,782	0	0
Downsing & Davis, Romford	16,600	0	0
	10,550	0	0
Hunt, Hoddeston	17,046	0	0
	9,310	0	0
Hammond & Miles	16,046	8	10
	9,908	4	9
Shurmur, Ltd., Clapton ..	17,100	0	0
	10,513	0	0
Harbrow, Bermondsey	16,363	0	0
	9,997	0	0

LEEDS.—For erection of engine and pump house, for the T.C.:—
*W. Thompson & Son £1,287

LEEDS.—For extension to the Meanwood-road baths:—
Wood Bros. (Leeds), Ltd. £4,175 8 4

LEEDS.—For erection of 300 houses, for the T.C.:—
‡D. Laing & Sons, Ltd., Carlisle.

LEEDS.—Structural alterations to buildings adjoining Municipal Buildings, for an extension of the gallery, for T.C.:—
*J. T. Wright & Son..... £4,444

LIVERPOOL.—For alterations, decoration and furnishing the new electricity showrooms in Whitechapel, for the T.C.:—
*Ashby, Tabb, Ltd. £5,760

LIVERPOOL.—For erection of four sample houses for the T.C.:—
‡W. Griffiths & Sons and Cromwell Ltd.—
per house £400

LIVERPOOL.—For alterations and additions to premises in Primrose-hill, for the T.C.:—
‡Tippin Bros. £6,958

LIVERPOOL.—For the reinstatement of buildings damaged by fire at Calderstones estate, for the T.C.:—
‡Turner & Moss, Garston £622 15

LONDON.—For external work to dwellings in Regency-street, for the Westminster City Council:—
John Mowlem & Co., Ltd. £492 0 0
Burton Bros. 475 0 0
R. M. Pearson 333 0 0
Sims & Russell 305 0 0
Townsends (Builders), Ltd. 289 16 6
*E. D. Hook, Ltd. 273 0 0

LONDON.—Construction of 24 flats, Lower North-street, for Poplar B.C.:—
*Geo. Simms £15,850

LONDON.—Making fit for habitation houses in Barbel-street, for Southwark T.C.:—
J. Tully £1,034 0 0
T. J. Gabb..... 883 15 0
William Clark & Co. 618 0 0
‡E. C. Sames & Co. 558 16 6

LOWESTOFT.—For erection of four houses on the Beccles-road site, for the C.B.:—
*Leighton & Son.

MANCHESTER.—For sub-contractors in connection with the contract for alterations at the Osborne-street Baths, for the T.C.:—
**Plasterer and painter*—Horrocks & Hogg.
**Plumber*—A. Longworth & Son.

MANCHESTER.—For Alma Park Municipal School Domestic and Handicraft Centres, for the E.C.:—
*Tinker & Young, Ltd.

MANCHESTER.—For alterations and conveniences in Platt Fields, Manchester:—
*Critchlow & Barton, Ltd.

MERTHYR TYDFIL.—For supply of steelwork required for the Taff Viaduct:—
*Sir William Arrol & Co., Ltd., Swansea £10,000

NEWBIGGIN.—For erection of 66 houses, for the U.D.C. Mr. R. Appleby, surveyor, Council Offices, Newbiggin-by-Sea:—
James F. Dickman, Newbiggin-by-Sea £25,887 4

NEWCASTLE.—For the erection of a bridge across the Tyne, for the T.C.:—
*Dorman Long & Co. £571,225

NEWCASTLE.—For erection of four bridges on the new Newcastle-Tynemouth coast road, for the T.C.:—
*R. McAlpine & Sons £23,871

NORTHAMPTON.—For a pair of houses, special concrete construction, for the T.C.:—
*C. J. Fox, Northampton £960

NORTHAMPTON.—For erection of 56 houses, for the T.C.:—
*The Yorkshire Hennibique Contracting Co., Ltd. £27,576

NORTHWOOD.—For erection of 36 houses, for the Ruislip-Northwood U.D.C.:—
‡Mr. McNamara ..... £480 per house.

NORTHWOOD.—For the erection of the War Memorial Hospital. Mr. Leslie T. Moore, F.R.I.B.A., architect:—
E. Spark, Northwood £11,275 17
Hill Bros., Northwood 10,893 0
Walter Lawrence & Son, Ltd. 10,225 0
C. Miskin & Son, Ltd., St. Albans 9,954 0
Sabey & Son, Islington 9,798 0
Dove Bros., Islington 9,761 0
W. J. Page, Northwood 9,778 0
A. E. Prouting, Ruislip 9,695 0
J. W. Falkner & Sons, S.E.1 .... 9,694 0
Geo. Wiggs & Son, Watford 9,682 0
*H. Neal, Ltd., Northwood 9,608 0

OLDHAM.—For various works for the new Higher Standard Centre at Ward-street, for the T.C. Mr. F. Thorpe is the architect:—
Excavating, Drainage, Brickwork and Concrete work—Whitworth Whittaker & Co.
Masonry—S. & J. Whitehead.
Joinery—Thomas Bros.
Plastering—Edward Pearce.
Slating—R. C. Fletcher.
Painting—J. Steventon.
Plumbing and Glazing—John Airey.

OLDHAM.—For painting the interior of the Market Hall, &c., for the T.C.:—
*Geo. Whitehead & Son (Decorators), Ltd.

OLDHAM.—For wood block flooring, for the T.C.:—
*E. B. Burgess & Co., Liverpool.

ORSETT.—For two new wards at the hospital, for the R.D.C.:—
*G. W. Cooke..... £627

OSSETT.—Completion of housing contract, for T.C. —
*— Greenwood..... £1,305 10

PONTEFRACT.—For reconstruction of the Coronation W.M. Club, at South Bailey Gate, for Messrs. J. Smiths, Ltd.:—
**Mason and bricklayers' Work*—Brown & Lodge.
**Joiners' Work*—J. Pease.

PONTEFRACT.—For erection of a bungalow at Carleton, near Pontefract, for Messrs. Garside & Pennington, architects:—
*Brown & Lodge.

PYRFORD.—Erection of police cottage, for the Surrey Standing Joint Committee :—
*C. & S. Allwork, Woking £828

QUORN.—For erection of a destructor shed, for the U.D.C. :—
J. Coltman & Co. £146 17 9

RAWMARSH.—For the erection of 25 houses, for the U.D.C. :—
*A. J. Pugh £11,225

SHEFFIELD.—Erection of transformer stations at Hangingwater-lane and Totley Rise, for the T.C. :—
*Wellerman Bros., Ltd. :
Hangingwater-lane £948 11
Totley Rise £2,097 15

SOUTH SHIELDS.—Erection of brick walls, for car shed extension, for the T.C. :—
*Gustavus, Bailey & Co. £2,685 16 6

STAINFORTH.—For erection of a Wesleyan Church hall, for the South Yorkshire Coalfield Commission. Messrs. Gelder & Kitchen, architects, Hull :—
*Johnson & Moore, Doncaster £8,175

STOKE-ON-TRENT.—Erection of six parlour houses, at Fenton, for the T.C. :—
*Challinor & Hughes £3,750

STOURBRIDGE.—For the construction of a 7in. sewer, together with manholes and lampholes, at Lye, for the U.D.C. :—
*Geo. Macdonald, Hunt & Co., Ltd., Harborne.

TILBURY.—For erection of 43 houses, for the U.D.C. :—
*Triangular Construction Co. £19,565

TILBURY.—For erection of 42 houses, for the U.D.C. :—
Brown Bros. (Grays), Ltd. £19,110

TILBURY.—For erection of 38 houses, for the U.D.C. :—
W. E. Walsham, Ltd. £17,290

TORQUAY.—Improvements to mortuary at St. Mary Church, for the T.C. :—
*A. E. Brock £170

TYNEMOUTH.—For a sub-station for the T.C. :—
*J. & W. Lowry £743 16

WAKEFIELD.—Alterations to Town Hall lavatories, for the T.C. :—
*Joseph Woodhead £479 6 6

WALLASEY.—For extensions to the Oldershaw school, for the T.C. :—
*J. A. Milestone & Son, Ltd. £8,350

WALLASEY.—For pointing and repairs at the Infectious Diseases Hospital, for the T.C. :—
*H. Dodd —..... £184

WARWICKSHIRE.—Erection of houses at County Mental Hospital, for the clerk and store-keeper, for the C.C. :—
*T. Hyam & Son £2,240

WHITEHAVEN.—Works to the harbour dam, for the T.C. :—
*Border Engineering Contractors, Ltd. £1,480

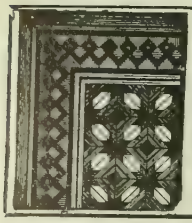
WOLVERHAMPTON.—For the erection of a new factory at Bushbury, for Messrs. Courtaulds, Ltd., estimated to cost £1,500,000 :—
**Steelwork*—Redpath Brown & Co., Ltd., Manchester.

WORKINGTON.—New park gates and stone piers for the Parks Committee :—
‡W. Hayward & Son.

WORTHING.—For erection of a chapel and superintendent's cottage and lodge, at Durrington Cemetery, for the T.C. :—
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Concreting Ditches.

The Finance Committee of the London County Council recommend that sanction be given to the borrowing by Woolwich Borough Council of an amount not exceeding £37,000 for the purpose of concreting ditches stead Marsh. In their report the C mention that the Borough Council h that, although the concreting of th was brought forward as a suitable the provision of additional employme been projected mainly on public health


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JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

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APPRECIATIONS AND CRITICISMS

WE welcome Professor Reilly's book* in a year which will be notable for the increased interest taken in architecture by the general public, and for the number of books which have been written on the subject to appeal to the layman. This is a book ining twenty-four critical essays, several of which have dy appeared in various papers. That they stand the test ok form is a tribute to the author's skill as a writer, and e grateful to him for his decision to publish these essays in anent form.

hat critics should have their standards and that artists d know their craft are two of the last points which anyone l think of disputing. These things are common ground, n architectural matters it is not generally recognised that ublic, in seeking for guidance in the appreciation of living tecture, places a difficult and delicate task upon the critic. fact that architecture has the grain of vice in it—that it ens to be useful—has secured for it a certain amount of nity from criticism. As an architectural critic, Professor stands in the front rank, and it is when he is frankly ng with architecture that we like him best in this book. tecture as an expression of civilisation is one thing, but n of civilisation developed to suit architecture is another. scusses a number of architectural problems: he criticises anks and our railway stations, our suburban houses and eligious buildings, our offices and our streets in a manner is thoroughly interesting. His essay on Liverpool dral is handled delightfully, and on the subject of Regent- he displays an ease and mastery of his subject in language ar and untechnical that the layman cannot fail to appre- both the problem and the evenly-balanced criticism.

e is a fearless critic of men and manners, and we enjoy his ous criticisms and applaud his palpable hits, particularly we feel that we are immune. This is a human foible, but te this sparkling criticism, and we would like more of it. a healthy corrective, even if we are not convinced that nplete philosophy of architectural criticism has yet been d out. "No one," he says, "writes to the papers to hat a vulgar and pretentious building the new War Office Perhaps not, although no doubt it would be safe enough t it; but we cannot help wondering how much the average ect and his client have a right to expect in the way of ited censure and criticism, while attending to the everyday ess (to them) of solving a practical problem. Admittedly, n of vulgarity lies between the two of them: we do not o excuse them, but we question the legality of the attitude assumes freedom to attack without penalty. No one avil at what is said in this book about railway and bank ors and public authorities: they have a public duty to m, and must be prepared to accept criticism.

king a line through the various essays, it is difficult to r whether the architect or the public is most to blame for esent low standard of architecture throughout the country. sense this difficulty lies at the root of the whole problem hitectural taste, and failing any very definite conclusions ust assume that the criticisms in the book before us apply the cap fits. In Italy, for instance, we see a real cular form of architectural expression which we are to ie is the work of folk who do it instinctively. On the hand, "the be-columned and be-swagged, the over- d and under-mannered structures we know so well," must be the work of architects. If we admit that the life which architects interpret into brick and stone is a "sordid materialistic life," either the architect is part and parcel of it, or we expect him to rise above it and give us something better in the same way that "the distinguishing note of modern American architecture is scholarship." A sense of civic values can be taught but it is by no means certain that we ought to accept the architect's conception of social values, which presumably he will distinguish for us by a comprehensive but subtle range of accessories and symbols. The science of political economy makes no ethical distinctions between the banker and the money-lender, or between the merchant prince of Venice and the retailer of "soft goods" in Oxford-street. If architects "use up our finest symbols" on certain buildings, the fault lies with the architect not with our social state. Architecture must lengthen its stride.

Comparing our architecture with that of modern America, Professor Reilly makes a point that no one can say of the mass of undigested nationalities which at present makes up the great United States, that, like the Greeks of old, they are a race of artists. Yet, as he says, "their advance in the oldest and noblest of the arts has not only been relatively greater than ours, but their absolute achievement has been immeasurably greater, too." We fancy that here we are likely to find the answer to many critics of architecture who lay the whole blame upon that elusive factor—public taste. The general reader will, therefore, take heart of grace when he has read this book. He is accustomed to periodical scourgings for his appalling taste in architecture, and although he does not escape severe criticism from the author, he will feel that justice is being dealt out, and that the blame is not entirely at his door. We do not think the golden age of architecture is produced by clients with sufficient taste to demand it from their architects; on the contrary, we think that the author's philosophy holds out the real hope for the future. "After all," he says, "it is not the opportunities either of site or money which make great architecture, but the men who design it."

It is rather an abrupt change to jump from a discussion upon the qualities of fine architecture to a discussion upon the relationship between the architect and the builder. The essay on the Anti-Social Contract is a soundly reasoned contribution upon a subject which not only deals with human relationships, but affects the practical application of architecture in the social state. This essay has a distinct bearing on the comment in a subsequent essay on Bath, to the effect that there is something to be said for the combination in one person of architect, builder and owner, as shown by the examples of the brothers Adam, and Wood and his son at Bath. Professor Reilly puts his finger on the weakest link in the long chain between the architect, and his completed building. "Why should the builder be on one side, and the architect on the other? Why should they not be colleagues from first to last, each helping the other with his experience?" We heartily endorse the sentiment underlying these inquiries, feeling certain that the more this breach is narrowed the greater will be the gain for architecture and the general public. A practical solution which abolishes the system of cut-throat tendering is suggested in the essay, and undoubtedly there is much to commend it. But surely there is another very obvious side to what should be a social contract. It is this: The builder is necessary to the architect but is the architect considered necessary either to the builder or by the builder? We are not attempting to excuse the existence of contracts which produce unsatisfactory buildings; on the contrary, we are explaining why the great majority of the buildings in the country are mere buildings devoid of architectural grace.

There are limits to a book review, and we cannot deal with many other interesting questions raised in this book. Our readers will find excellent entertainment in the author's criticisms and philosophy, and many will find that living architecture may hold a fresh interest for them.

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*"Some Architectural Problems of To-day." By C. H. Reilly, , M.A., F.R.I.B.A. The University Press of Liverpool, Ltd.; r & Stoughton, Ltd. Price 6s.

NOTES.

The New President of the R.A.

Of the accomplishments of the new President of the Royal Academy, Mr. Frank Dicksee, or of his fitness for his distinguished post, there can be no question. If his election appears to suggest that we are again unde the influence of the long-established tradition that art is mainly concerned with picture-making, we may at least rest assured that the new President, with his long experience and ability, is not unsympathetic to the present desire for reform, progress and more catholicity of vision. It might be well if, before many years elapse, we find a sculptor and yet another architect occupying the presidential chair if the best results of a real Academy of Arts are to be attained. At any rate, all that is best in the traditions of the Academy are at present in worthy hands.

American Institute Gold Medal.

Sir Edwin L. Lutyens, R.A., Vice-President of the Royal Institute of British Architects, has just been informed that he has been awarded the Gold Medal of the American Institute of Architects, and he has been invited to attend the Architectural Convention in New York in April, 1925, to receive the medal in person. This is the first occasion for seventeen years that the Gold Medal of the American Institute has been awarded to a British architect, the last occasion being in 1907, when it was awarded to Sir Aston Webb.

The Architectural Association.

Mr. H. S. Goodhart Rendel, F.R.I.B.A., the President, assisted by the Hon. Mrs. Wilbraham Cooper, received the members and guests at the A.A. headquarters at Bedford-square on Thursday last week. Despite the fog the attendance was large. A capital musical programme was provided and in addition an exhibition of members' holiday sketches was on view, also a series of photographs taken during the A.A. excursion to Spain. A pleasant evening was spent, which brought many old friends together once more, and dancing was an enjoyable part of the programme.

Non-Party Housing.

The housing of the poorer population is likely to remain a subject of almost predominant importance for some time, and every time a serious discussion on the subject arises we feel an increasing sense of the desirability that it should not be made a mere butt in party politics. The words of reasonable courtesy and consideration which passed in Parliament on Tuesday between Mr. Chamberlain and Mr. Wheatley really afford some glimmerings of hope for this wider and more generous outlook.

Steel Houses.

The chief interest in the discussion on the Government's housing policy in the House of Commons on Tuesday was the statement by the Minister of Health on the arrangements made for the production of a certain number of demonstration or experimental steel houses to be supplied to local authorities. A sum of money has been set aside from which a grant will be made to any local authority that is taking these particular experimental houses, the local authority not to let them to begin with, but to erect them in some spot where they can be readily visited and inspected by the public. This is, no doubt, a wise step to take, and it will enable local authorities to test public opinion before any drastic steps are taken in mass production. According to Mr. Chamberlain (the Minister of Health), "A considerable number of types will probably be submitted to public approval, but ultimately they will perhaps get down to two or three. If this experiment is successful, it will have several advantages. The production of this type can be multiplied indefinitely; the materials are sort for the production of whi capacity of this country is far in of the present demand; it is than the type of house of which w knowledge at present; and give a large amount of employn just that section of the community is most in need of it." It would from this that efforts will be m popularise this type of productio if they are successful the result n be to our liking, but it will pr supplemental supply of houses, is, of course, our first need.

Gilbert's Fountain.

The removal of thi tain from its site in dilly-circus is requi order to carry on t underground extension schemes progress which need the site purpose. We understand tha present intention is to remove temporarily and that it can be r a year later. It seems that this is an tunity for providing a better site. not able to make the great claims fountain which some have felt, should be given a situation more ing with its character, which is mor to garden surroundings than Pic circus. Leicester-square suggests a more suitable spot, where it replace the extremely negligible speare statue at present occupy centre.

Old and New.

The old stone bridg the River Frome at ham, Dorset, has inadequate for the t these days. In the Georgian bridge was regarded as so valuab a tablet then placed on the brid remaining to this day, states that person wilfully injuring any part County Bridge will be guilty of and upon conviction liable to be ported for life." Preparations fo seding the old bridge by one s adapted to the needs of the motor the lorry and the touring car understand, going forward as can in the photograph on page 965.

Waterloo Bridge.

The temporary alongside the W Bridge is expected completed about nex and until then no attempt will b to do anything with experiment the reconstruction of the old bridg can hardly doubt that the reque the London County Council for the of the Institution of Civil Enginee the practicability of restoring W Bridge in its original form will be me Institution affirmative, but there opposition to such action from th place modern convenience and c ment before everything else. Thi to say that modern development w best served by an entirely new b by a new position for it, but or



An old Shop-Front, Haymarket



An Old Shop-Front, Cornhill.

may be many who think so. Surely e can doubt, in view of all the con- tions advanced on the subject of ridges, that it is of the utmost tance for the whole subject to be seriously considered with proper ght for the future and in relation to eat importance of our bridge designs future amenity of London. Water- nd London Bridges have some e architectural values, and there is reason to demand an equally satis- y treatment for any new ones that rojected. A devout hope was ssed at the meeting of the Council 10th instant that the City Corpora- nd the County Council might come ne reasonable agreement on this question.

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cal eums.

There are many who will echo the wish of Captain Shore in his letter in our last issue that exhibits of local ological interest should be found in ighbourhood to which they apply. In numerous instances the exhibition locally would be of far greater interest and value than in the great store of the British Museum.

Old Bridges.

The problem of old bridges and the requirements of mechanical transport presents a very serious problem. Transport having outgrown the accommodation provided, they are no longer adequate to modern industrial conditions. It is perhaps a case of bowing to the inevitable, but their destruction cannot be regarded with indifference, and the trouble is that public opinion is so little organised that the motor interests have it all their own way. And yet there are other interests no less important and to which we think commerce ought to bow, though interests of much difficulty to vindicate. The beauty and historical associations of the countryside are worthy of attention, and their attraction to visitors is also of commercial value, and it appears to us that in many instances we are only sacrificing one interest to another when we disfigure and alter the ancient character of the countryside. The old bridge at Grasmere, so long associated with this quiet spot, hard by the ancient church, has to be widened to fit it to the increased traffic needs. So we alter the features that attract the tourist, and mutilate that which it is their object in coming to see, and for which reason the old bridge is to be mutilated! The old bridge at Rotherham is another case. This ancient bridge has a chantry on it, and it is in danger, as are others too numerous to mention. This growing menace to the historical and archæological interests of the country concerns us all.

British Institute of Industrial Art.

The exhibition now opened at the Whitworth Institute Galleries, Manchester, will, we hope, promote the interest in good craftsmanship and bring before the manufacturer of the Midlands standards of design and treatment which may influence his own production. It is difficult to avoid a certain sameness and want of freshness in these exhibitions, and the work shown tends to confine itself within familiar examples of a few good craftsmen's work and a large contribution of very average attainment. We could wish it were possible to strengthen the exhibition with work drawn from newer sources, though we appreciate the reluctance of the fine craftsman to see the advantage of such participation, and we miss some significant names. We can, however, see the evidence of some improvement if we look for it, and to this the Institute is contributing by the better examples it is bringing before the manufacturer. One bit of work really done properly, with due consideration of the restraints of fitness and becoming ornament, and shown in the ordinary ways of publicity, will do more than much precept and exhibition display, and it is a question whether the results of such fostering repay the expenses.



The Old Stone Bridge Across the River Frome at Wareham, Dorset.
[Preparations for building a modern iron structure are seen on the left.]

GENERAL NEWS

Christmas Holidays.

In consequence of the Christmas Holidays we shall be going to press next Monday. All communications to the Editor must reach the office first post Monday morning.

Professional Announcements.

Mr. R. H. Willson, Lic.R.I.B.A., has opened an office at 22A, Victoria-square, Aberdare Telephone : Aberdare 252. The Aberaman office will be open for appointments as usual.

Mr. A. Robert Bowles, M.S.A., has removed to 143A, Sandgate-road, Folkestone.

Obituary.

The death has occurred at Cleobarrow, Cockton Hill, of Mr. Fred H. Livesay, aged 55. a well-known Bishop Auckland architect.

The death occurred at his residence in Edin burgh recently, at the age of 80, of Mr. William D. M'Kay, R.S.A., LL.D., secretary of the Royal Scottish Academy since 1907.

Architect's Estate.

Mr. Frank Harold Collyer, of Birkland-avenue, Mapperley, Notts. architect (net personalty, £8,160), £12,413.

The Royal Infirmary.

Plans were recently passed at Edinburgh Dean of Guild Court in connection with the Radiological Department to be erected at the Royal Infirmary, Edinburgh. According to estimation, the building will cost £40,000. The building will be of reinforced concrete, and have two floors, with a large basement. A system of artificial ventilation, by mechanical extraction, throughout the building will be employed.

Rotherham Chantry Bridge.

Chantry Bridge, at Rotherham, was mentioned recently at a meeting of Rotherham Town Council. With regard to the objections of the Archæological Society, the Council were desirous of saving the old portion of the bridge, and retaining the old chapel. The new construction was to be of concrete, with an 80 ft. clear span. It would be 60 ft. wide, with a 36 ft. carriage way. The cost would amount to £90,000.

Dundeee Concrete Houses.

At a meeting of Dundee Town Council recently it was agreed to erect 200 concrete houses of the pier and panel system invented by Messrs. H. Boot & Son, Ltd. The Council resolved that direct labour should be employed, but only so far as the concrete part of the construction was concerned, the joiner work being left in the hands of private enterprise. Lord Provost High pointed out that the Caird Hall was built of concrete, and there was no crack or mark in it. Mr. W. H. Buist said that there were 5,473 unemployed men on the register of the Labour Exchange of Dundee. That was one of the reasons for going on with this scheme and allowing the City Engineer to have charge of the direct labour.

Poplar Flats.

Messrs. William Simms, Stepney, E.1, are the contractors for a block of 24 flats to be erected for the Poplar Council.

Department of Overseas Trade.

His Majesty's Senior Trade Commissioner in Canada reports that a company in Montreal is proceeding with the construction of an apartment house (block of flats) which it is considered will be the largest building of this kind in Canada, and that in consequence there is likely to be a demand for materials for interior decoration, roofing, &c. United Kingdom firms desirous of obtaining further particulars should apply to the Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

His Majesty's Trade Commissioner at Vancouver, B.C., reports that a local departmental store firm has decided entirely to rebuild their store premises in that city, and that the architects concerned are about to call for tenders for the supply of lighting, heating installation and refrigerating plant. United Kingdom firms can obtain further particulars on application to the Department of Overseas Trade, quoting reference AX. 1552.

Building Apprentices.

Mr. H. Matthews, president of the National Federation of Building Trade Employers, in a speech at Lancaster recently, said employers in the building trade were agreed that there was room for 35,000 apprentices, so that there would be one apprentice to every three operatives.

Benwell Colliery Baths.

The Benwell Colliery pit-head baths were recently opened. These baths are the third group of their type in the county, similar ones having been erected at Newbiggin and Ellerton. There are 32 baths at Benwell, for the accommodation of 400 men, and they are housed in a building erected near to the winding shaft of the Charlotte Pit and close to Condercum-road. The building was designed by Messrs. Cackett & Burns Dick, FF.R.I.B.A., Newcastle, and built by Messrs. J. & W. Lowry. The heating, hot water and bath arrangements were executed by Mr. R. W. Cairns, Newcastle.

CORRESPONDENCE

Plumbers and Housing.

SIR,—The ramification of Building Industry Committees is notorious, but my executive regret that this difficulty should have led to the paragraph in your Notes of December 5, entitled "Plumbers and Housing."

The Institute of Plumbers is a member both of the Building Industry Committee set up by the Minister of Health, and of the National Apprenticeship Council for the Plumbing Industry. The former body is distinctly concerned with housing policy and augmented apprenticeship, and has our entire support.

The postponement of a meeting of the latter body, which is concerned with normal apprenticeship, is a domestic matter, and has no immediate bearing upon housing policy, and is conditioned by the internal reorganisation of the Master Plumbers' organisation, which we hope will lead not to a lessened, but an increased interest and attention to apprenticeship matters. My executive trust you will publish this correction and suggest that inquiries from the undersigned would have avoided the misapprehensions your paragraph must have caused.

H. BLACKMAN,
Secretary.

[*** We gladly publish this letter. Many of the circumstances that led to the postponement of this conference were known, but as they were "domestic," were not published. But even if the unexpected change of plan had no "immediate" bearing on housing policy, it certainly had an immediate repercussion upon those who are advising the Government on this question, and an effect possibly wider than was realised by the Institute of Plumbers at the time.—ED.]

Housing Finance.

SIR,—A solution of the housing problem might be found if the Government set aside £1,000,000 as a guarantee to the banks against a total 10 per cent. loss; this would release £10,000,000 to builders for housing. £10,000,000 would employ, back up, and create 10,000 small building firms, employing, say, only 10 men each—100,000 men.

If each firm builds only 10 houses in each twelve months, that represents 100,000 homes—a gain to the country and a risk to none. The writer has employed 2,000 hands.

Pulborough. W.

COMPETITION NE

Christian Science Hall, Southport

The assessors, Messrs. J. E. Sanders A.R.I.B.A., have made the following a this competition :—(1) £75, Mr. W. Sinclair, F.R.I.B.A., 8, Buckinghar Strand, London; (2) £50, Messrs. Thomas & Button, 14, Acresfield, (3) £30, Mr. Herbert Longman, F.R.I. Hoghton-street, Southport. The design on view at the Trinity Wesleyan Sch Talbot-street, Southport, from 2 o'c 4.30 on Monday, December 15, to December 19, and Saturday, December 9.30 to 12 o'clock.

Concrete Cottages.

The following awards have been mad competition :—(1) 30 guineas : Mr. Sharp, F.R.I.B.A., Westminster Cham Victoria-street, Westminster, S.W.1. Guineas : Messrs. E. R. Hudson A.R.I.B.A., 69, Warwick-square, West S.W.1.

The Constantine Technical Colleg

Architects are invited to submit de this competition. Mr. Percy F.R.I.B.A., has been appointed assess conditions can be obtained from the S on the payment of £1 1s., not later than ber 27. Sending in day, May 15, 192 our last issue.)

Leeds Library.

Designs are invited from architects Riding only for a library to be erecte Compton-road estate. Mr. Percy S. W ton, F.R.I.B.A., is the assessor; premi £20, and £15. Conditions, on the pay £1 1s., from the Town Clerk, Leeds Se day February 16, 1925.

New Offices, Nairobi.

Designs are invited for new railwa to be erected in Nairobi, Kenya Colon miums of £200 and £100 are offered resp Conditions can be obtained, not lat February, on the payment of one guin the Crown Agents for the Colonies, M The assessor is Mr. William Dunn, F. Sending-in day at the offices of the Nairobi, February 28, 1925. (See our November 7.)

Heating and Ventilating.

The Council of the Institution of and Ventilating Engineers offer the prizes to assistants for original pa subjects connected with heating and ve during 1925 : Lumby Premium, £1 Sirocco Premium, £10 10s. ; Grenville I £5 5s. The winning of an award carrie a medal of the Institution. Full partic be obtained from the Institution, or seen at this office.

Other Competitions.

Other competitions still open include lowing (the dates given are, first the se date, and second the issue of *The Bu* which full particulars were given) :— Hall (May 1). Manchester Art Galle 28; Aug. 22). Jugo-Slav Landscape (Nov. 7). Argentine Institute for t (Dec. 31, 1925; Nov. 28). Valletta (June 30, 1925; Dec. 5).

New Bridge for Rotherham.

The Rotherham County Borough recently decided to build a new bridge River Don at Rotherham at a cost of half of which will be borne by the of Transport. The present fifteenth bridge has been scheduled as an monument.



Milliner's Shop, New York.
Mr. K. M. Murchison, Architect.



"Carpenter Building," Washington.
Mr. George Ray, Architect.



Shop in Washington.
Mr. George Ray, Architect.



Shop in Washington.
Mr. George Ray, Architect.

Some American Shop Fronts.

A MEETING of the Royal Institute of British Architects was held at 9, Conduit-street, W.1, on Monday last, Mr. J. A. Gotch, President, presiding.

Obituary.

The HON. SECRETARY (Mr. A. Keen) announced the death of Mr. John Slater, Associate 1879, Fellow 1881, Vice-President 1900–1904; Mr. A. W. Sheppard, Associate 1894, Fellow 1924, Hon. Auditor 1907 to 1909, 1915 to 1917, and 1921 to 1923, and a Member of the Science Standing Committee for Session 1923–1924; Mr. H. W. Lockton, Licentiate 1911.

It was decided that a message of sympathy and condolence be conveyed to the relatives.

SHOP FRONTS AND THEIR TREATMENT.

In the course of a lecture on this subject, Mr. A. J. Davis said the subject he was dealing with was one of considerable interest both to shop owners and their architects. The commercial and æsthetic developments which had taken place during recent years in the treatment of the shop-front clearly showed that after a period of neglect this problem was at last receiving the attention it deserved, and that the merchant was no longer content to leave the decorative treatment of his window to the tender mercies of the contractor and fitter. The modern shop-front was essentially a problem requiring artistic consideration. It was one which appeared frequently in most architects' practices, and its many aspects presented opportunities where skill and taste could be displayed to the advantage of the client, and to the embellishment of the street in which his premises were situated. It had become more and more recognised that an appropriate shop-front was in itself a commercial asset of no small value, in the same way as the beauty of a picture was enhanced when presented in a well-designed frame.

After describing the shops of ancient times, the lecturer said very limited progress was to be recorded in the thirteenth and fourteenth centuries, but advance might be noted in the early part of the fifteenth century, when they found that shops had their fronts so made that the lower half of the boarding which secured the opening could be let down and supported on legs, forming a platform about 3 ft. high on which goods were exposed for sale. The upper part, being hinged at the top, could be lifted up to give protection from rain and sun. A few instances remained of shops of the fifteenth century, the most perfect being that at Butcher-row, Shrewsbury. Each business was distinguished by a hanging street sign, a few of which were still in common use; two well-known examples being the barber's pole and basin, and the pawnbroker's three balls, the latter being derived from the shield of the Medici family, whose principal business was money-changing.

The shop-fronts of the nineteenth century were lighter and more refined than the sturdy and perhaps more architectural examples of the seventeenth and eighteenth centuries. Semi-circular fanlights decorated with radiating and curved glazing bars were commonly seen. Cornices and pilasters were very much alike in the manner of their use, the enrichments being plentifully varied. Most of the fronts of this period were well proportioned, due recognition having been given to the limited uses of material, the latter being usually wood. A classic influence upon the nature of the moulding and details was quite pronounced. Thin pilasters, fluted or panelled, and usually without capitals, were frequently introduced. The stall boards were rather high, panelled in wood, and often additionally protected by some excellent wrought iron or lead work. Bead butt or bead flush doors were greatly in favour, and sliding shutters used in preference to the flap arrangement of previous centuries. Among many old fronts that were interesting, perhaps none were more suggestive of refinement, and of that perfection of form and detail which were all essentials of a precise architectural effectiveness, than the shop-front of Messrs. Fribourg & Treyer in the north end of the Haymarket. The successful simplicity of the doors and fanlights and the details of the frieze and cornice were delightful. It was originally designed for the business of a tobacco merchant, and was still used as such; its date was about 1770. Another interesting shop-front was that of Birch's in Cornhill, one of the oldest existing fronts in the City, and built probably during the reign of George I. The ornament was of considerable merit, and the whole treatment reminded one of the picturesque London of a former age. Another simple Georgian front was that of Boxford, Suffolk, probably of mid-eighteenth century date. Its slender proportions were rather reminiscent of American Colonial work. A motif of that period particularly admired was the shallow curved bay window. It occurred often, and always to good effect.

In the early nineteenth century they saw examples illustrating a further step in the development of shop-front design—the architect adopting a treatment incorporating some classic details in the manner of Sir John Soane. The shop in Artillery-lane was an example showing a clever and original adaptation of classic form and details. The architectural treatment of the two doorways was distinctive.

As to plate glass, the shop owner counted the inches with as much eagerness as a farmer did his acres of land and thought they were productive in much the same manner. His rent was regulated to a very large extent by the length of his frontage, and he naturally thought it was to his advantage to utilise every possible inch of it for display of his goods. He therefore voted every pier which supported the upper part of the building an obstruction and a nuisance; every pillar must be as thin as possible and be put as far as it could out of sight, and the whole superstructure, as far as appearances go, must hang unsupported in mid-air. They believed the main reason why they had so few art shop-fronts was to be found in the m contrarieties which had to be reconciled them. The shopkeeper required the ga chasm and his plate glass. He was fi convinced that the open space served his pose best, and when he yielded a little on point he insisted on vulgar gilt letterings as much gaudy ornament as possible attract customers. Thus their street ar tecture progressed far too slowly, and w they did not find a dull uniformity they frequently afflicted with a medley of in gruous and inartistic conceptions worthy of a nation of shopkeepers. The precise p in fact, wherein the salesman needed ed tion was that good architecture forme feature of attractiveness in itself. A front composed of nothing but plate glass like a picture without a frame, and the art displayed by the tradesman without the cessories of appropriate building decorat lost half their power of attracting custon The passion for enormous sheets of plate g had done more perhaps to prevent the crea of good designs than anything else. utmost the architect could attempt was introduction of sash bars in brass, mahog or some coloured material, and these he called upon to keep as thin as possible in o that the valuable glass sheets might dis their full dimensions. These instructi while embarrassing to the designer, seeme them entirely unnecessary and useless i multitude of businesses.

It might generally be stated that la open spaces of window created an effec cheapness upon the passer-by, which was always the impression which the partic business wished to convey. The sm window, well-proportioned and prop framed, had an air of exclusiveness very ne sary to the firm that wished to please a s *clientèle*. The perfume shop of Me " Atkinson " in Bond-street provided a not example of what the architect could do in respect. Liberty's new building in Ar place was another illustration on a la scale that a much greater appeal was mad not exposing everything the shop contai but rather hinting at the contents by a nun of separate and uncrowded window comp tions, was a psychological fact that no would deny. On the other hand, the shop the sale of numerous articles of a cheap na designed to attract the pennies of the ca pedestrian was a problem requiring a different solution. It was here that the p glass front had its merits.

Architecturally there were several princi which might be applied to counteract the e of undue weight upon the plate-glass s front. An excellent solution was afforded setting back the window from the gen



Messrs. Morny's Shop-Front in Regent-street.
MESSRS. MEWES & DAVIS, FF.R.I.B.A., Architects.

sage. While admitting the loss of four or feet of valuable site, the advantages to business were obvious; the public were y invited to come within the line of the ing itself; they were in a position where had leisure to examine the display with- ear of jostling by passing crowds. Messrs. & Sons' store in Tottenham Court-road one of the few places in which this plan been adopted. The use of the deep, flat trave or frame as a surround enhanced nously the value of the window as a place ain to expose fine goods. A frame had dvantage of cutting off discordant sur- lings, and immediately gave the window er that opportunity to compose his wares was so necessary to accentuate their and add to their effectiveness. The nctive simplicity of Liberty's shop-front e Boulevards des Italiens, Paris, was ner interpretation of the same principle. e plain surfaces of veined marble relieved a coat of arms, the company's name and lad ornament in bronze, formed an ad- rle frame for the rich silks displayed n. The architecture did not clash with ares exhibited, and the flat surface treat- permitted a very shallow recessing of the , so that the best possible light was ntted.

hen it was desired to treat a shop-front single unit the full effectiveness would tained only when the design was kept enough to be embraced by the angle ion at one time. This applied, of course, ntages of small dimensions. The use of r, not only in the exterior surround of indow but also as a background for the , was one that should make an increas- ppeal to the designer. With regard to ial lighting, the general tendency was ds a softly-toned light of sufficient quan- either evenly distributed or concentrated ticles of outstanding interest. Whatever was required outside the shop should be ated as to be in keeping with the design. ior lighting was falling into disfavour, he powerful arc lamps of twenty years ad practically disappeared. All that was necessary was that the name of the keeper should be sufficiently apparent, and s now becoming the custom to place an nated hanging sign within the window In fact, the shop-front, in addition to a show window, was becoming one of the s of modern salesmanship, and was itself ften used as a means of publicity. The ng practice of illuminating the display hours after the premises were closed stuted an advertisement of fundamental tance. The appearance of the goods yed was greatly enhanced by cleverly con- and well-placed artificial illumination, many customers were no doubt attracted s means. Particularly was this the case ard to shops which specialised in feminine odities, and in this connection it might ntioned that light and colour had the rresistible fascination for women as the had for the moth.

ther modern innovation was the use of ighting which created unusual contrasts ht and shade. In the interests of pub- this was a very effective method of ily introducing the building itself to the notice. An example of this could be n Mr. Curtis Green's Wolseley Build- n Piccadilly, and at "Selfridge's," ol-street. While on the subject of pub- it was perhaps worth while to mention mewhat objectionable scintillating signs were at the moment enjoying a tre- us popularity, and had even been d for the fascia of shop-fronts. Per- the least offensive of modern electric was the "Neon tube," the colour and ction of which would no doubt be modi- time. Mercury vapour tubes were nally to be seen, but they gave a effect to the complexion, and women ere aware of this generally contrived to he shops which used them. The use of e lettering had recently been acknow- as a commercial necessity, and as such ue of expert advice was recognised. The



A Shop Front in the Rue de la Paix. Paris.

well-known incised gilt letters were gradually being replaced by characters of careful design and proportion, properly spaced and harmonising with the general decorative treatment.

With regard to the construction of shop-fronts, it might be remarked that bent windows were no longer the fashion. Not only were they expensive, but they produced distorted reflections which were very objectionable, especially where concave glass was used. Much thought had been given to the question of avoiding condensation upon the inside of the shop window. Theoretically the problem was quite easy of solution, for it is only necessary to keep the temperature equal on both sides of the glass. To do this, however, the external air must be allowed to circulate freely, and the difficulty of admitting it evenly, at the same time excluding dust, was one that was not easily overcome. The most effective method yet evolved was to provide a film of hot air on the inside surface of the glass by means of a coil of heating pipes concealed in the window board extending across the whole front and to a depth of about 12 in. This system had the effect of drying the air locally and was very efficient in preventing condensation. The level of shop floors should be made about the same as that of the pavement, thus making it easy for prospective customers to enter the merchants' places of business. This might seem to be but a detail, yet it was important, for the buying public, to quite an extent, followed the line of least resistance, so that all steps or obstacles which might deter people from entering should be omitted. The heights of window-floors should be made to conform to the kind of goods displayed. Furniture should be shown at nearly pavement level, while rings and articles of jewellery should be presented in about the position a person would naturally wear them. In fact, it might be adopted as a maxim that merchandise, to be displayed to the best advantage, must be shown as nearly as possible in the position in which it is intended to be used. It was gratifying to note that this interesting branch of civic architecture was receiving the consideration it deserved; and that those engaged in merchandise were alive to the importance of a problem so long neglected. In conclusion, he would quote Mr. Marshal Field, an American authority on the subject, who said that "Goods well displayed are half sold."

Discussion.

CAPTAIN IVOR STEWART-LIBERTY, in moving a vote of thanks to Mr. Davis, said the shop window question was an extremely difficult one, As an explanation of his own attitude towards Renaissance building, he remembered the time when famous business premises in London had a personality of their own: to-day it was sometimes difficult to know in which particular shop one was in. It might help those who were rebuilding in the future to remember that temporary shop windows were extremely valuable, even if they had to be reached across "A Bridge of Sighs." The secret was that they had a real frame, and the back of the window was close to the glass. With regard to the addition of colour to the frame shopkeepers had to be extremely careful. The materials they showed were constantly changing; they had to play for safety and go in for dark colours.

MR. A. S. GAYE, in seconding the vote of thanks, said Mr. Davis had chosen one of the most difficult problems modern architects had to face. When an architect had to design a shop front it was, perhaps, difficult for him to reconcile his duty to his art and his duty to his client. The average shopkeeper did not care how his window looked so long as it attracted attention. It would be better if shopkeepers took the advice of their architects instead of following their own ideas.

MR. P. J. WALDRAM said he made a plea for the lighting engineer and the architect to co-operate at the earliest possible stage of the design. The proportion of a shop front meant everything to an engineer, and if he were given one already proportioned efficient lighting became almost impossible. In many of the shops in Bond-street it was impossible in summer time to see anything owing to the reflections; both from the spectator and the other side of the road. It could be overcome by a shallow shop front, which would also make it easier for the lighting engineer.

PROFESSOR A. E. RICHARDSON said they had heard a great deal about the small shop fronts of an intimate character: he would take them to the rebuilding of New Oxford-street which would take place shortly. It seemed to him that following the question and the idea of zoning there should be an opportunity to zone the drapery interest. This street could be rebuilt on big lines. What would they say to having three ranges of shops; one on the level with the pavement; another on the first floor; and the third at the top of the building. The idea was not extravagant; it had been carried out in idea in the sixteenth century at Florence. Various establishments might be designed as separate buildings, on the Paris model, and connected with flying bridges across the streets. It would only apply to certain streets, which would be zoned. Some of their members had prepared designs for this street. They must enter upon schemes of an imaginative and comprehensive character.

MR. E. S. HALL, speaking of hanging signs, said they had been most attractive in the past, and they still might lend interest and colour to their streets.

Messrs. A. Braden, G. H. Jenkins, John Murray, H. V. Lanchester, and A. H. Moberley also took part in the discussion.

Mr. A. T. Davies briefly responded to the vote of thanks.

THE ROYAL ACADEMY STUDENTS' WORK

SIR ASTON WEBB was to have distributed the prizes to the students of the Royal Academy School at Burlington House, on December 10, but owing to his unavoidable absence his place was taken by Sir Frank Short, R.A., who read a brief communication from the President.

In the course of his letter Sir Aston said it was easy, of course, to criticise and find fault, especially when students' work was under review, but he had been round the galleries with a painter member of the Academy who was a keen critic, and also very sympathetic with students' work; and they thought they found a general tendency throughout to work on certain lines, leaving the later Italian and Reynolds' schools for the early Italian. They found much beauty of form and construction and finish in the life drawings and paintings, and a greatly improved idea of composition as shown in their studies for the decoration of an apsidal dome, with the same tendency towards early Italian design strongly marked.

It was no doubt a great thing to have tradition to work upon, to which, however, they must add a certain adventurous spirit of their own; for perfect reproduction only, even of a Michelangelo, would not avail. It was sympathy and imagination that made the artist—sympathy with tradition, and imagination in their own personality as artists. Let them cultivate both, and they might leave behind them something worth doing—and after all, doing was the principal thing. It was for the older ones to see visions of what might have been, and for the younger men and women to dream dreams of what might be and what would be if they made up their minds it should be. Perhaps they would say they did not care for dreams. Very well; but if so, let them not despise those who did. Both were required in the world—the dreamer and the practical man. Sometimes, but very rarely, they were both found in one man, and then we had produced the rarest of all products, a genius like Joshua Reynolds or Christopher Wren. Let them determine to hold high the standard of their art so that they could stand before the world unashamed.

Prize List.

Design in Monochrome for a Figure Picture (Penelope and the Suitors)—Armitage Prizes 1st (£30) and Silver medal, not awarded; 2nd Prize (£10) and Bronze Medal, Alan Blyth.

Landscape Painting (A Farm)—Creswick Prize (25) and Silver Medal, Eve Cynthia Ruth Garnett.

Design for the Decoration of a Portion of a Public Building (a Figure-Subject from the Bible for the Decoration of the vault of a semi-circular Apse at the east end of a Church)—Landseer Prizes, 1st (£30) and Silver Medal, Alan Blyth; 2nd (£10) and Bronze Medal, Olive Grace Bourne.

Set of Four Drawings of a Figure from the Life: 1st Prize (£10) and Silver Medal, Frank Edward Slater; 2nd Prize (£5) and Bronze Medal, Woltera Mary Barclay-Smith; Best Finished Drawing of a Head in any Set—Prize (£5), Woltera Mary Barclay-Smith.

Two Paintings of a Figure from the Life—1st Prize (£10) and Silver Medal, Daryll Sullivan; 2nd Prize, Bronze Medal, Jessie Mary Margaret Hodge.

Cartoon of a Draped Figure (Grief: A Crouching Figure)—Landseer Prize (£2 Silver Medal, Edward Dennis Earle.

Portrait Study of a Lady in Evening showing Arms and Hands—Arthur Hacke (£30) and Silver Medal, Margaret Hill Scla

Drawing from the Antique—Prize (£ Silver Medal, Marjorie Gossling.

Model of a Design of a Subject con with Architecture (A Memorial Tomb Arched Recess)— Edward Stott Prizes, 1s and Silver Medal, Frank Pentland Chan 2nd (£20) and Bronze Medal, Hubert I MacGeogh Gilbert.

Two Models of a Bust from the Life—1s (£5) and Silver Medal, Alice Bertha T 2nd Prize, Bronze Medal, Una Rawnsley.

Model for a Medal or Coin (A Seal Industrial City)—Prize (£10) and Silver Eva Dorothy Allan.

Set of Three Models of a Figure fro Life—Landseer Prizes, 1st (£30) and Medal, Eva Dorothy Allan; 2nd (£20 Bronze Medal, Lilian Everilda Birch.

Design in Architecture (A Municipa School and Picture Gallery)—Travelling St ship (England) (£60) tenable for one James Francis Mason.

Perspective Drawing in Outline (open Students) (The Courtyard of Burlington from the north-west corner)—Prize (£5 Silver Medal, Ronald Owen Vinc.

Set of Architectural Drawings (The Gate of York House, Buckingham-str 1st Prize (£10) and Silver Medal, Edwin H Horsley Williams; 2nd Prize, Bronze Herbert James Hall.

An Architectural Design (First Term St only)—1st Prize (£10) and Silver Medal, V John Brookhouse Prize; 2nd Prize (£ Bronze Medal, Edwin Herbert Horsley Wi (ineligible through having received the prize before).

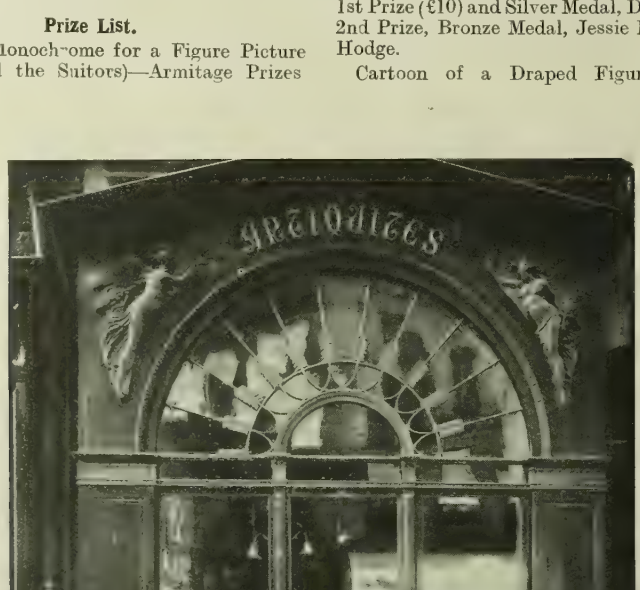
An Architectural Design—Landseer (£20) and Silver Medal, Hubert Edwin Fu

Landseer Scholarships in Painting Sculpture, of £40 a year each, tenable f years, have been awarded in Painti Mabel Bowden and Doris M. Stacey Sculpture to Lilian E. Birch and Una Raw

There was no competition for the pri A Pencil Study of a Landscape Foregroun An Original Composition in Ornament (arc only). The prizes for Composition in and Painting of a Head from the Life, Lif were not awarded.



A Bond Street Shop Front.



Shop-front in Rue St. Honoré, Paris.

Flintshire Viaduct Scheme.

The Flintshire viaduct scheme, to £120,000, across the River Dee, from Flints Cheshire, at Queen's Ferry, has been sanct

THE BRIDGES OF LONDON

(December 12, Major Harry Barnes, .K.B.A., lectured before The London Society i ais subject. Sir Lynden Macassey, K.C., esided. In the course of his remarks Major ar s said London had 105 bridges, and of ie no fewer than 53, a majority, were not e water courses.

Aer giving details of the various bridges, e ecturer dealt with what he called the ste of the Bridges, and said it was a triple ie there was the battle of position, the tt of type, and the battle of style. The st nd the last furnished the hottest engage- en, but the second was not without some ur and fury. The battle of position began t seaward end of their river stretch. South to Tower Bridge they were out of the gi of bridges and into that of tunnels. ie two London County Council tunnels, ot rhithe and Blackwall, carried little more ar per cent. of the vehicular traffic across e ver, yet they were responsible for 50 per nt of the capital cost of cross river com- unations. There were, however, those who alnged the whole position of the advocates ore bridges. London, they ejaculated, is city and not a corridor. There was ne in the argument that appealed. He was f by-passes; he would like cities and wi not on main roads but pendants to them, kil of vermiform appendixes with no cor- ulit for the mere passer-by. For what vatage was there in bringing traffic through a wnor city if it could as conveniently go un it? As a general proposition he was epted to agree that bridges should not be ilto induce traffic but to relieve congestion. heter that disposed of the proposals to ildnew bridges or widen old ones between ndn Bridge and Westminster was another att and they might pass on to examine m

The were four of them known commonly as Pal's, the Temple, Waterloo and Charing oss Those who did not want St. Paul's idg found in the last argument for it the omist argument against it. Make the ssa through the City easier, they said, and y ould make it more difficult. If their ffic blocks now were whips they would ron as scorpions, and congestion such as erwas would be the result. St. Paul's idg moreover, raised a question unique on bridges, that of the stability of St. ul's Cathedral. They said threatened men ed ng, and it might be as true of churches. Id listened to conversations between inet engineers and architects that made n dubt if he should ever again see Wren's me ise over Ludgate Hill. It was difficult belive, however, that the City Fathers could caless of the fate of the greatest of the y clrches, and in face of the First Report of Eyal Fine Arts Commissioners, it was hai not too much to expect that before oceeing further with St. Paul's Bridge they uldake such steps as would genuinely allay e aprehensions that the report had aroused. ha been suggested that were St. Paul's de great high level bridge it would facilitate e aess of people both from north and south, the heart of the City.

He ould say with a sense of the greatest ponbility that the stability of St. Paul's theral was causing the greatest anxiety ong all those charged with the care of it, d if ney really wanted to save this supremely ion monument from disaster immediate ps t the public expense must be taken to ert .

Afte St. Paul's Bridge came the Temple dge It, too, had its sponsors who said St. ul's Bridge was not wanted, and Charing oss Bridge was too remote to be a rival. e Tmple Bridge would leave the Strand newere about Arundel-street about 400 yards ow Waterloo Bridge, linking up with the sterend of the Aldwych.

Wit regard to Waterloo Bridge, the present cockpit of engineers at variance, to pin or not to pin, that was the question—whether it was better to pile and grout or take arms against a sea of critics to end it. He was a little inclined to paraphrase the hapless Dane and say, "The Bridge is out of plumb, Oh! wretched spite that ever we were born to set it right." There were those whose devotion for the past was so great that they would treat every building a century old with the same reverent care that was bestowed on a Stilton cheese—scoop it out as much as they liked, but Oh! preserve the rind. They admonished them that they might take up the roadway and refill the core, underset the foundations, renew and replace as they liked where it was not seen, but if they removed a stone or laid a finger on anyone of the three dimensions, like Shylock, their lives should pay for it. To maintain a bridge, 42 ft. wide, in the very centre of London's Strand, loaded to 66 per cent. of its capacity, with its neighbour 105 ft. wide, only carrying 27 per cent. of the volume of traffic it could take! He confessed it made him think of Morley's dictum, that what came from the heart should go round by the head.

With regard to Charing Cross Bridge, what was the scheme? To cross the Thames on the line of the South-Western Bridge by a double decker bridge, electric trains on the lower level with a wide roadway above, along which would flow the traffic from north to south that now sought a congested outlet over Westminster Bridge. The roadway was to cross the Strand by a bridge finding its level somewhere by Nurse Cavell's Statue. So doing it would avoid creating another traffic block in the Strand, an essential part of any bridge scheme on the northern side of the Thames. It was not so clear where one got down to the level on the southern side, and he though something might be done to make this part of the scheme clear. Here they were against a bridge difficulty, particularly in the Thames valley, where they had one bank so much higher than the other. He did not know of any other points in the stretch of river with which they were concerning themselves where bridges were suggested, and if he must declare himself on these four, one that drew away from all the others in fulfilling the purpose for which a bridge across the Thames should be undertaken so as to make it the choice of choices, it was Charing Cross.

The battle was not over, however; when they had fixed on their position, there remained two issues at least to be contested. The first was this: What was to be their type of bridge? Was it to be a High Level or a Low Level bridge? Was their approach on the northern side to start from the embankment or from the Strand, or beyond that from Holborn itself or some near point to it?

How little they were guided in these things by reason, how much by convenience!

With regard to material the lecturer said he supposed bridges could be made of any material from bamboo to coke breeze, but he did not propose to invite them to consider so wide a range. He would narrow the issue to stone, steel and concrete. This was not to ignore the possibility and even beauty of brick as a bridge material. Brick was an admirable material, and if used with understanding was capable of producing most architectural effects, but it was not in the range of practical politics for a bridge on this river front. They were tied to a trinity of stone, steel and concrete, and the greatest of these was stone, which was unfortunate, for as far as he could see stone bridges which were really stone bridges were out of the question. Waterloo bridge was more than a hundred years old and London Bridge was within a lustre of its century (undoubtedly the two best designs on the river). London Bridge covering 782 ft. in five spans, Waterloo covering 1,240 ft. in nine spans. They were of stone with arches, and bridges could have no fairer chance than to be compounded of such elements.

When they talked of the bridges of London in the area to which they had confined themselves they were not talking of bridging one stream; they had not only the River Thames to cross, but at least two traffic rivers on each side of it, and it was that fact which drove him to the conclusion that if they were thinking of bridges and not of tunnels, the time had come when there was only one type of bridge that would meet the necessities of the case, the high-level type, that of all the positions in which it was possible there was no position to compare with that occupied by the present Charing Cross Bridge, and finally, that if they were to be equal to the occasion and it had been well said there was no other equality worth the name—they should not shrink from the task of setting in its place there a bridge that in a century's time would for those of that day be a proof that bridge building did not cease with Rennie, and that the capacity to satisfy through great monuments the needs and aspirations of a great city was not exhausted when the London County Council took the fate of London in its hands.

In proposing a vote of thanks to Major Barnes, Mr. W. R. Davidge said he was against two-decker bridges, and personally would regret to see two systems combined in a double-decker bridge; it would spoil the sweep of the river and not improve the bridge as a bridge. However, they must have means of crossing the river by railway, and railway communications must be taken into consideration. He was all in favour of a by-pass London.

At the conclusion of the proceedings Sir Lynden Macassey in expressing his appreciation of Major Barnes' paper, said a bridge at Charing Cross was really necessary, but the question of bridges was entirely one of finance. He would suggest that the whole question should not be a charge on the City, but on the whole of the London area: the question went to the root of the welfare of the whole Metropolis.



A Bond Street Perfumery Shop-front.
MR. C. F. A. VOYSEY, Architect.

ARCHITECTURAL ASSOCIATION OF IRELAND

MR. L. F. GIRON, M.R.I.A.I., recently gave his inaugural address as President for the session 1924-5, before the Architectural Association of Ireland. In the course of his remarks, the President said they were assembled in their new home for the first time, and their entry into those premises marked the opening of a new chapter in the history of the Association.

The President then dealt with the subject of "Nationality in Architecture," and said that architecture had been very aptly described as the printing press of all the ages which gave a history of the state of society in which it was erected. The truth of this definition at once became apparent upon looking back over the past. The works of the Greek, Roman, Romanesque, Gothic and Renaissance periods in architecture became so many chapters in the world's history, each unfolding its story of relentless power, of conquest, of defeat, or piety, and so forth, and giving an invaluable guide to the life and habits of the people. They noticed that each of these chapters was clearly marked by a change in the style of architecture. This change was not abrupt, but was of gradual growth, and up to the time of the Renaissance was the natural outcome of advance in the knowledge of construction.

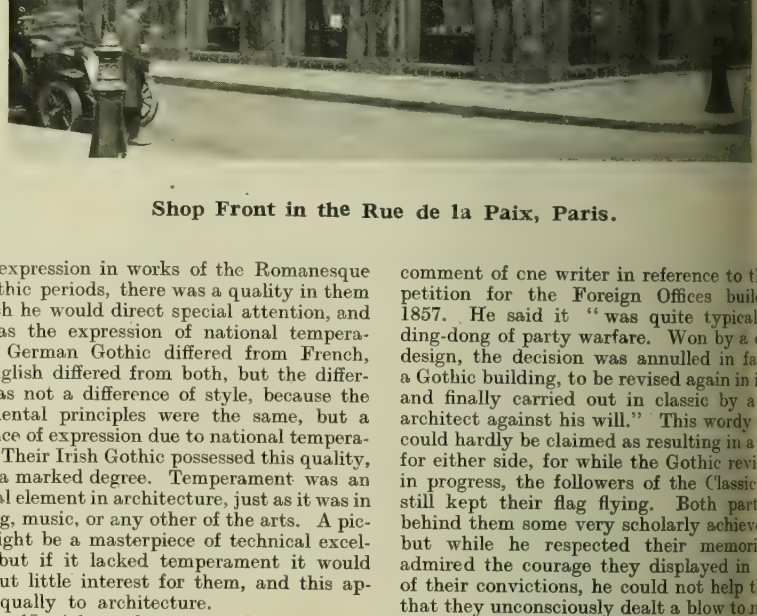
The Greeks adhered rigidly to the trabeated system and evolved and perfected what they now knew as the orders. The Romans received their early lessons in building from the Etruscans, but made little progress in architecture until they came in contact with Greece. After the conquest of Greece, they adopted the use of the orders, but they changed their character somewhat, and also the manner of employment. They also developed the construction of the vault and the dome, and inaugurated the use of concrete.

What they called the Romanesque style was the result of an awakening after a period of slumber. Early examples showed signs of having been inspired by Roman work, but after a time a distinctive character became apparent, varying in each of the countries in which the style was practised.

Constructive necessity and inventive genius led to the development of the Gothic style which substituted the laws of elasticity and equilibrium for those of inert stability, and in this style they had the arcuated system brought to perfection.

They now came to the first break in the orderly evolution of style out of structural necessity. The fashion for studying ancient Greek and Latin authors, the existence of classical remains, which were a fruitful and attractive source of inspiration, and the inherited classical tradition, all contributed to the Renaissance movement in Italy, which was really a return to ancient forms in architecture. Italy was, at this time, the centre of European culture, and as a consequence the movement spread rapidly throughout the Continent. This period was of peculiar interest, because the architect never enjoyed his rightful position as an individual artist until the time of the Renaissance. The age of collective art had passed, and in the works of this period they found the individual expression of the artist. While they could not trace individual expression in works of the Romanesque and Gothic periods, there was a quality in them to which he would direct special attention, and that was the expression of national temperament. German Gothic differed from French, and English differed from both, but the difference was not a difference of style, because the fundamental principles were the same, but a difference of expression due to national temperament. Their Irish Gothic possessed this quality, too, in a marked degree. Temperament was an essential element in architecture, just as it was in painting, music, or any other of the arts. A picture might be a masterpiece of technical excellence, but if it lacked temperament it would have but little interest for them, and this applied equally to architecture.

Since the eighteenth century they appeared to have lost much of their power of national expression, and this he thought was probably due to the various revivals of the nineteenth century, which broke down development on traditional lines. The publication of Stuart and Revett's "Antiquities of Athens," P Adam's "Spalato," Inwood's "Erechth and other works, brought about in Engla increased interest in classic work, but a same time a lot of slavish copying; while in the nineteenth century, the publicati works on Gothic, by Batty Langley, Rick Brandon, and others, created a new in in Gothic work. About the 'fifties of th century, the battle of the styles was fiercely, Ruskin, Parker, Sharpe, and defending Gothic against Cockrell, Dona and his following, and the effect upon the of public buildings might be gauged



Shop Front in the Rue de la Paix, Paris.

comment of one writer in reference to the petition for the Foreign Offices buildi 1857. He said it "was quite typical d ding-dong of party warfare. Won by a cla design, the decision was annulled in favo a Gothic building, to be revised again in its and finally carried out in classic by a G architect against his will." This wordy wa could hardly be claimed as resulting in a vi for either side, for while the Gothic reviva in progress, the followers of the Classic S still kept their flag flying. Both partie behind them some very scholarly achieven but while he respected their memories admired the courage they displayed in de of their convictions, he could not help thi that they unconsciously dealt a blow to nat architecture by modelling designs on foreign w

Now the question was how were the restore this character which was wantin much of their modern work? Well, he bel that it could only be done by the establish of a central live school of thought wh their embryo architects would be traine think as Irishmen all the time, and where would be taught to develop their art on t tional lines and to study and learn the p application and use of the native materials which their country abounded. Why was F so far ahead in the matter of national arch ture? It was simply because for the pas hundred years her sons had enjoyed the ad tages of a State school, whose curriculum framed on sound principles calculated to the student with that wealth of knowledge culture which was necessary to the full ex sion of national ideals and aspirations in tecture.

See the wonderful progress in America, v architectural education was introduced on the middle of the last century. In England a number of schools were now established sound footing, and were tending to produ more stable line of thought in matters a tectural.

Much had been said and written in r years on the subject of establishing a C Culture in Ireland, and efforts were now made towards that end. As culture four highest expression in the arts, they r express the hope that architecture—the M of the Arts—would not be overlooked ir scheme which might be formulated.



Shop Front, Ludgate Hill, E.C. MESSRS. DEANE & BRADDELL, Architects.

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ILLUSTRATIONS

"Devonshire Court," Mayfair.

is block of buildings is to be erected on a on of the Devonshire House Estate, and occupy an area of approximately 44,000 . From the block plan, it will be noted that buildings occupy a position with a long age facing south on the extension of ton-street, and a similarly long frontage to eley-street—which is to be widened and form a much-needed street improvement. ite also adjoins Lansdowne House Gardens. e scheme is for a block of buildings, com-ng a series of shops facing Berkeley-street Stratton-street, with flats above, and, as ed, there will be large open courts behind main frontages, whilst down a few steps the street level, and accessible from all lats and from entrances in Berkeley-street Stratton-street, there will be a building ying a space of approximately 140 ft. × , to be used as a restaurant.

e perspective is from the drawing made by T. Hansford White, A.R.I.B.A., of the tect's preliminary study for the building. ny special problems are involved in this ne, and it is proposed to employ electricity ghting and heating, &c., and to produce with every convenience for easy working; ugh each flat will be self-contained, access e provided to the restaurant on the lower nd floor.

e building will be erected by Messrs. ster, Ltd., London, W. 12, who are at nt engaged in excavating on the site, and will carry out the work from the designs . W. Henry White, F.R.I.B.A., of Caven-place, London, W. 1.

Byron House.

ron House is situated at Nos. 7-9, St. s's-street, S.W.1, in the heart of "Club-" It has a frontage of 61 ft. to St. James's-, and extends from that street to Crown-, where there are two entrances. There ight stories, with a total of 38,000 super-ft. of floor space. The Renaissance eleva-to St. James's-street is in Portland stone. esisting materials are used throughout; are of oak or other hardwood blocks; eating is by low-pressure hot water. The actors are Messrs. Edcaster, Ltd., of erd's Bush, W. 17.

W. Henry White, F.R.I.B.A., is the ect. The perspective drawing is by Mr. ansford White, A.R.I.B.A.

n Entrance, P. & O. Banking Corporation, St. Mary Axe, E.C.

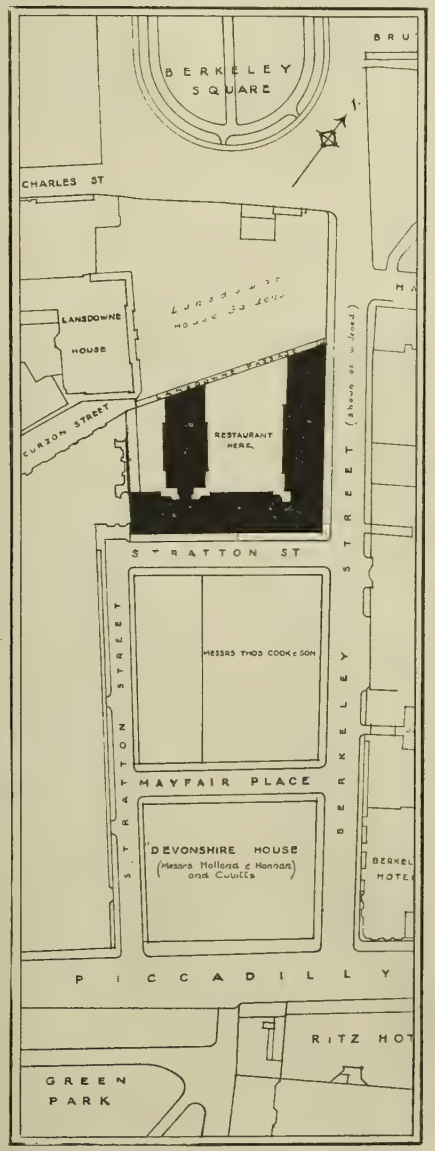
s drawing shows the main entrance to the ffices of the P. & O. Banking Corporation, corner of Leadenhall-street and St. Mary-axe. The materials used are granite to the plinth, with Portland stone above. The general contractors for the work are Messrs. Trollope & Colls, Ltd., and the following sub-contractors were also employed: Heating, Jas. Gray, Ltd.; windows, W. Richardson & Co.; electric light, Electrical Installations, Ltd.; marble work, Burke & Co., and Bellman, Ivey & Carter; granite work, Messrs. Brookes; asphalte, Faldo & Co.; plaster decoration, G. Jackson & Co.; bronze entrance doors, Birmingham Guild, Ltd.; hollow block floors, H. W. Cullum & Co.; lifts, Waygood-Otis, Ltd. The stone enrichments were modelled and carved by Mr. P. G. Bentham, of Stamford Bridge Studios. Plumbing and sanitary work is by Matthew Hall & Co.

The whole of the work has been designed and carried out under the supervision of Mr. Stanley Hamp, F.R.I.B.A. (Collcutt & Hamp); and the perspective drawing is by Mr. Kenneth Anns.

Newcastle High School.

The war memorial at Newcastle High School, Staffs, is now finished; the work has consisted of a panelled dado, gallery, and organ at one end of the hall, a dais at the other end, and special furniture. The whole of the work is executed in wainscot oak left clean from the tool. The contractors for the work were Messrs. Foster & Dicksee, Ltd., of London and Rugby; the carver was Mr. Antony Smith, of Leicester; and the necessary alterations to the heating were carried out by Messrs. Haden, of Smethwick. The organ was built by Messrs. Hill & Son. Norman & Beard, of London and Norwich.

The architect is Mr. W. T. Loveday, A.R.I.B.A., of Rugby



"Devonshire Court," Berkeley-st., W.
MR. W. HENRY WHITE, F.R.I.B.A., Architect.

New Premises, Portland-place.

The contract for this house was signed over twelve months ago, but there has been unusual delay, and the house is only about half up. Advantage was taken of the ground being excavated to place the dining-room on the lower ground floor, with kitchen near it. The drawing-room is thus on the ground floor level, and the principal bedrooms on the first floor—a new thing for a town residence. The upper floors are planned to special instructions. A garage is built at the back and the space between is to have a garden, approached through French windows from the dining-room, outside which is a small stone terrace. The front elevation is faced with Portland stone. The site is leased from the Howard de Walden estate. The architect is Mr. G. H. Wenyon, F.S.Arc.

Horton Priory.

The old Cluniac Priory has been slightly altered and considerably added to by Mr. George Hornblower, F.R.I.B.A., and forms the residence illustrated in this issue. The work of adaptation was fully described in our issue for March 23, 1923, when other illustrations and plans were given.

R.A. Schools Students' Work.

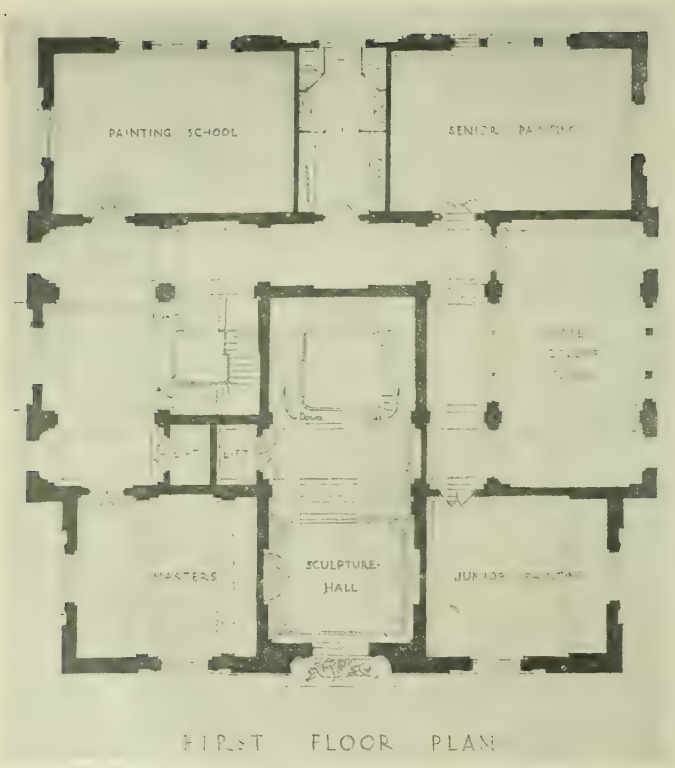
A list of prize-winners at the Royal Academy Schools is given on page 970. This week we illustrate a design for "A Municipal Art School and Picture Gallery, by Mr. J. F. Mason, awarded the R.A. Schools' Travelling Studentship (£60). The conditions required a simple and dignified building on an island site, 80 ft. square, in which to exhibit the municipal art treasures, with a picture gallery on the top floor, reached by lift and the main staircase, and an art school with a stated accommodation of classrooms, &c., to be entered from the side street.

The National Gallery.

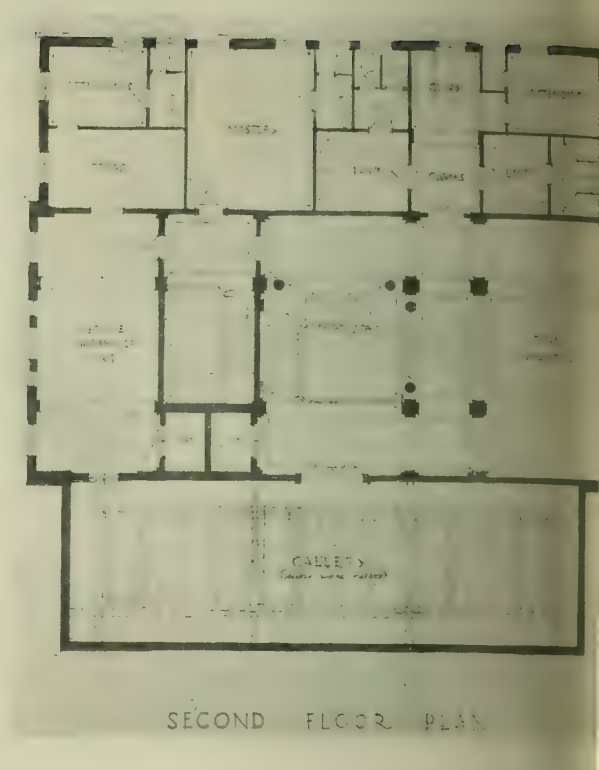
The portrait of Vincenzo Morosini, by Tintoretto, has now been hung in Room VII at Trafalgar-square, among the other examples of the sixteenth-century Venetian School. It will be remembered that this portrait was presented to the Gallery by the National Art Collections Fund in commemoration of its coming of age, and of the National Gallery Centenary. The pictures of the French School in Room XI have been rearranged; the latest addition being a spirited portrait of a young French gentleman, by Louis Tocqué, purchased from Mr. G. S. Sedgwick, out of the Temple West Fund. In the vestibule is placed a characteristic seapiece by Charles Brooking (1723–59), the first considerable English painter of marine subjects. The picture has been presented to the Gallery by Miss Tupper.

Middlesex Hospital.

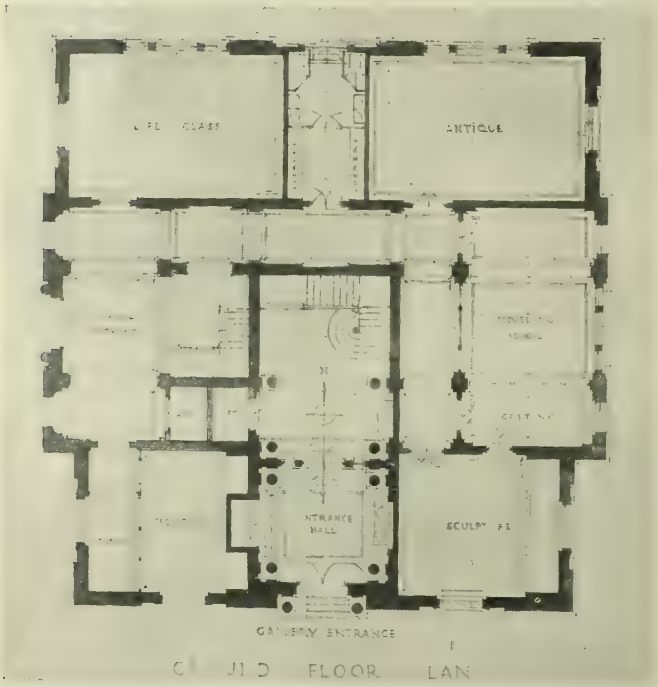
At a recent meeting of the Court of Governors of Middlesex Hospital, held in the Board Room of the Hospital, an important letter was read from Prince Arthur of Connaught. His Royal Highness, after describing the serious state of the old hospital buildings and the temporary measures taken to strengthen them, stated that he accepted the view of the experts that rebuilding was necessary, and the decision to rebuild the old hospital buildings at an estimated cost of £500,000 was approved by the Court. The letter further stated that the President of the Royal Institute of British Architects was called in consultation, whose reasoned opinion pointed, without qualification, to a complete rebuilding scheme, and, after submitting his report to the King's Fund, the Board decided to seek sanction to the adoption of that policy.



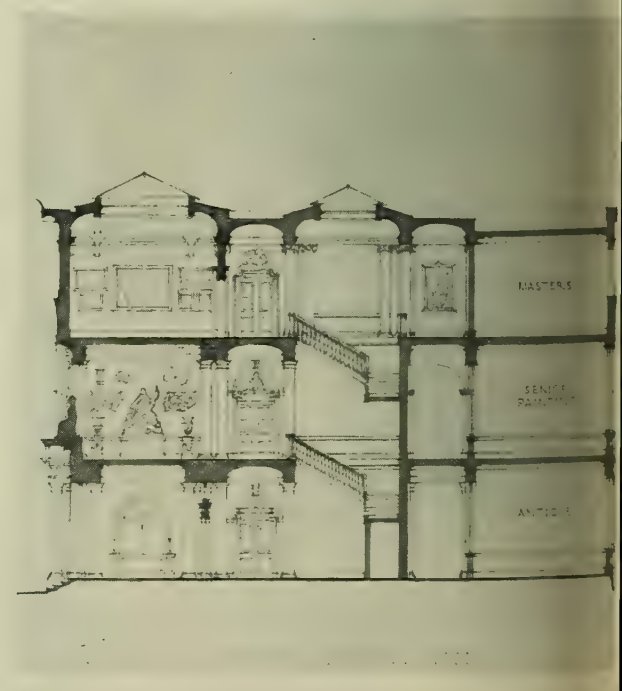
FIRST FLOOR PLAN



SECOND FLOOR PLAN



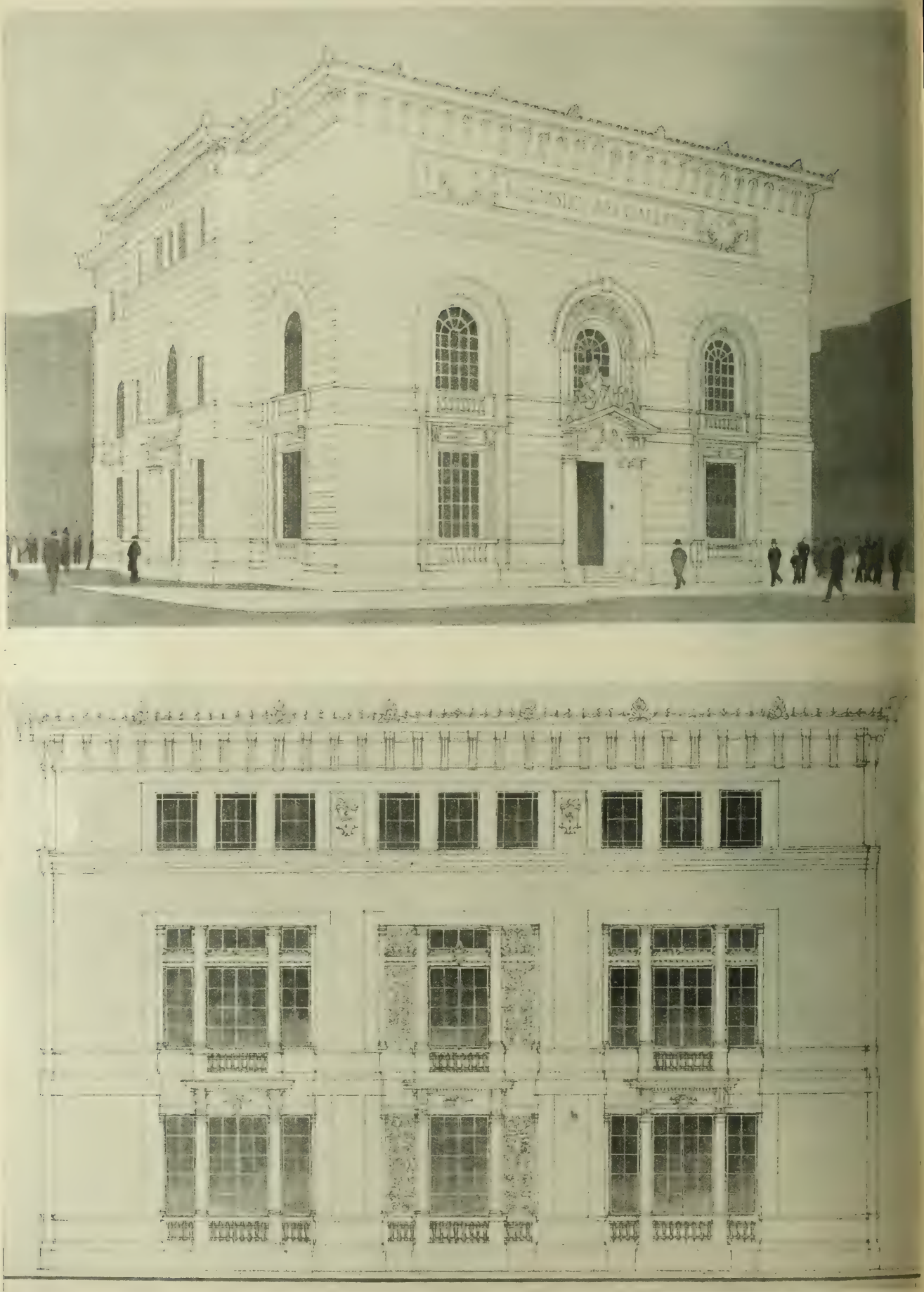
GROUND FLOOR PLAN



R.A. Schools' Students' Work.

Design for a Municipal Art School and Picture Gallery.

By Mr. J. F. MASON (Awarded R.A. Schools' Travelling Studentship.



R.A. Schools' Students' Work.

NORTH ELEVATION.

Design for a Municipal Art School and Picture Gallery.

By Mr. J. F. Mason (Awarded R.A. Schools' Travelling Studentship.



"BYRON HOUSE," ST. JAMES'S STREET.

MR. W. HENRY WHITE, F.R.I.B.A., & MR. T. HANSFORD WHITE, A.R.I.B.A., ARCHITECTS.



P. & O. BANKING CORPORATION LD., ENTRANCE TO OFFICES, LEADENHALL ST.

MESSRS. COLLCUTT & HAMP, FF.R.I.B.A., ARCHITECTS.



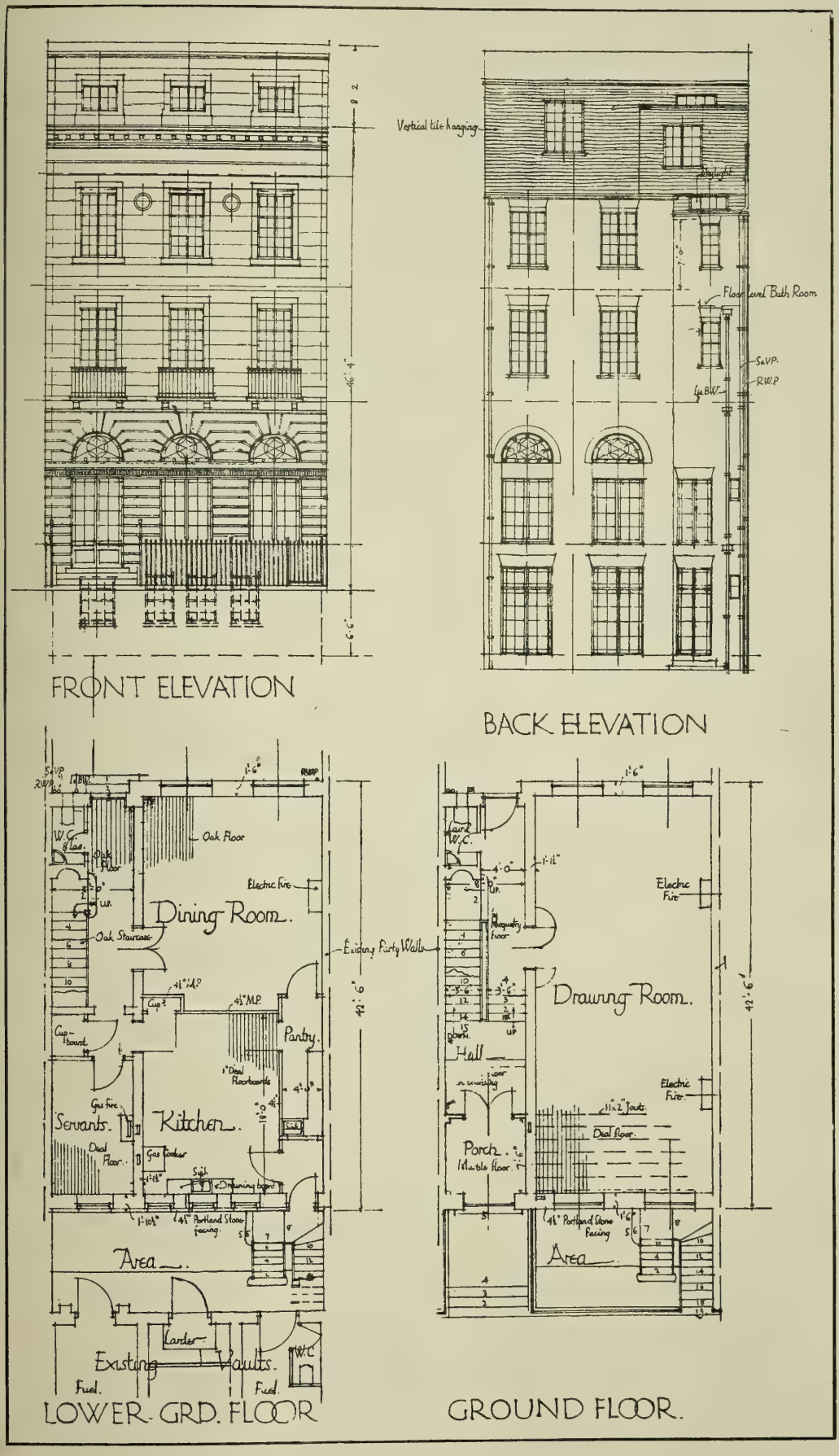
"DEVONSHIRE COURT." MAYFAIR, W.



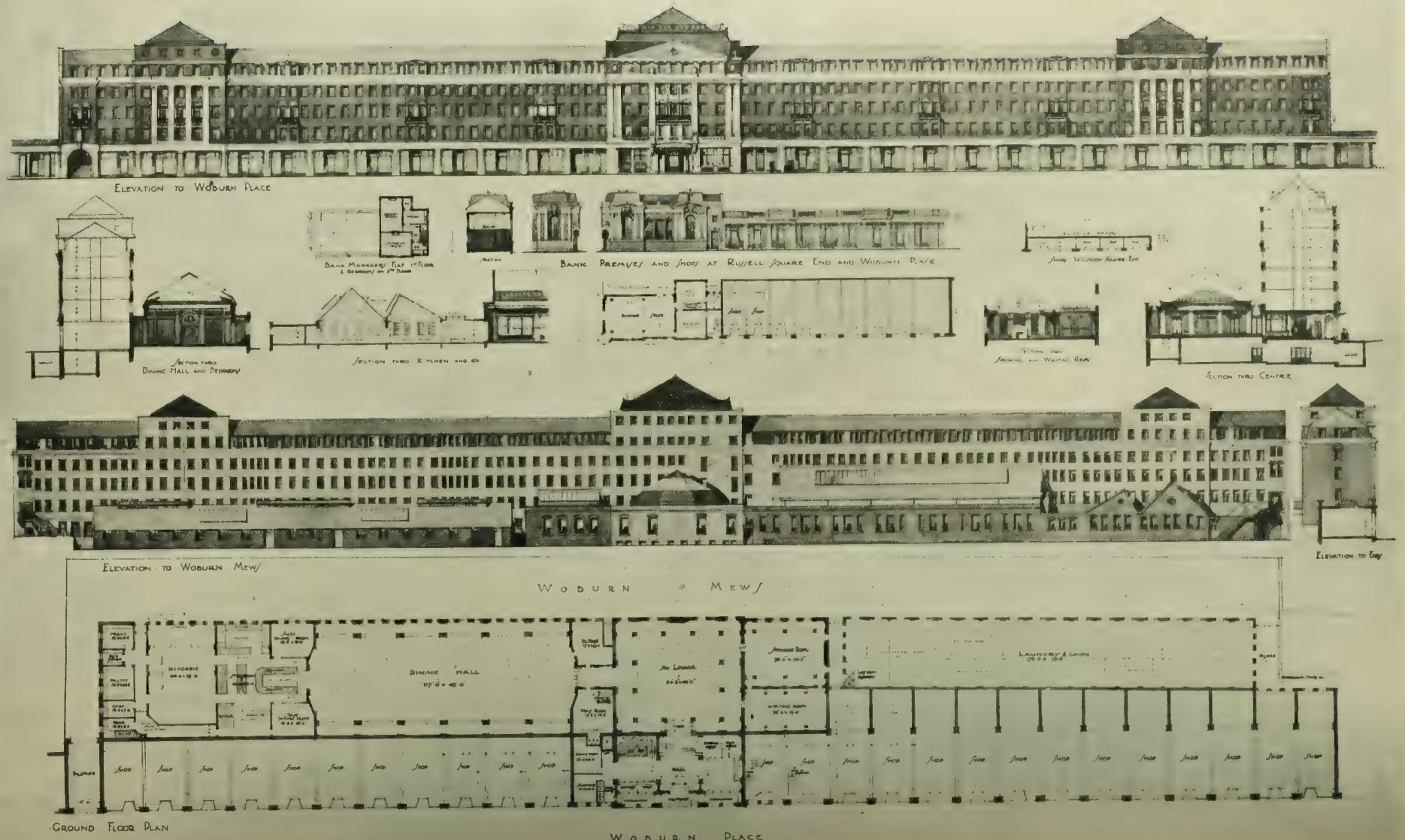
W. Henry White, F.R.I.B.A., Architect.



New Premises, Portland-place. Mr. [illegible] H. Worthington, F.S.A., Architect.

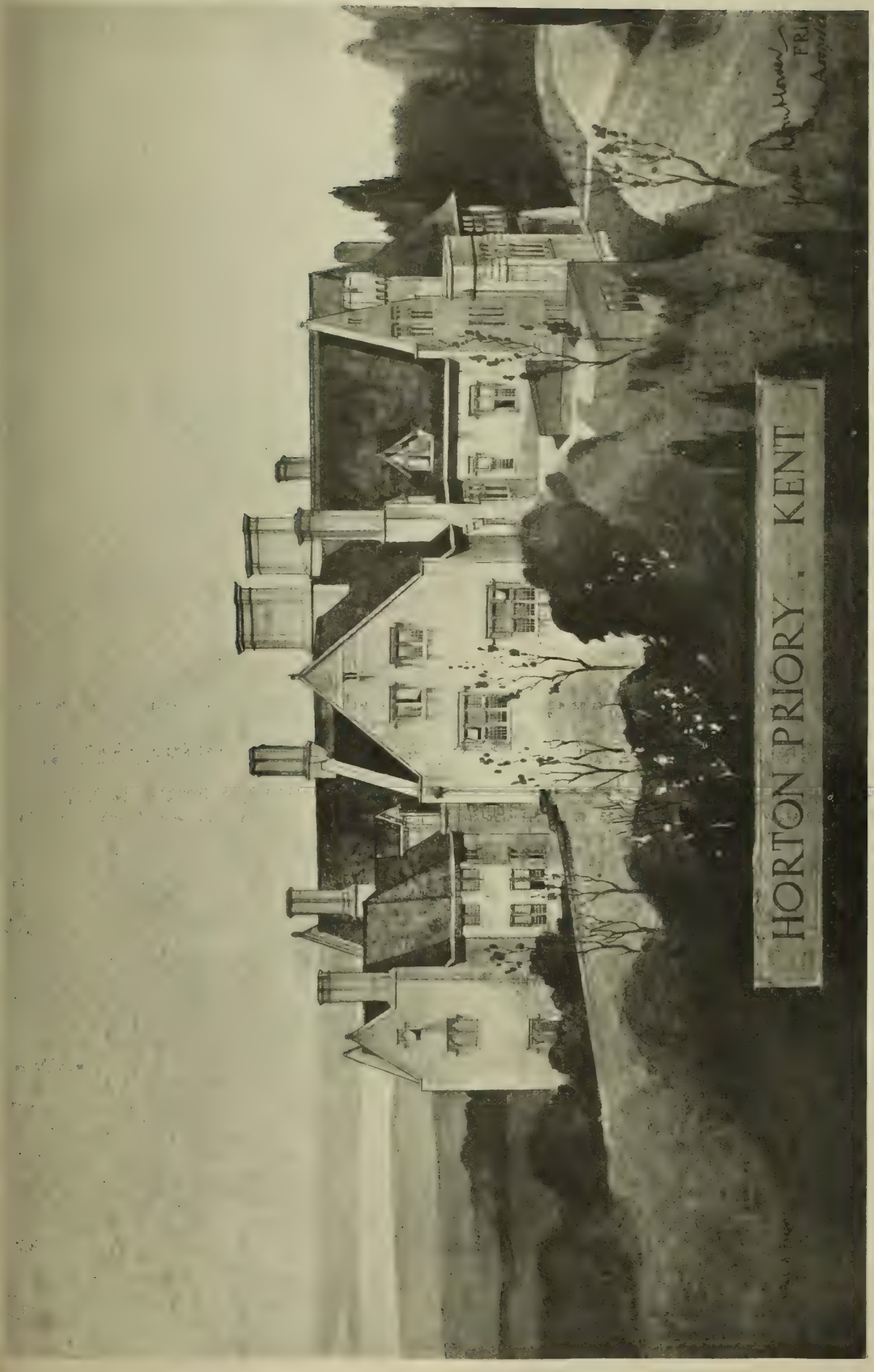


New Premises, Portland-place. MR. G. H. WENYON, F.S.Arc., Architect.



Competition for Proposed "Royal" Hotel, London. Design placed Second: By Mr. C. Peck.

[The design placed first in this competition, by Mr. C. A. Rowbotham, was given in our last issue.]



MR. GEORGE HORNBLOWER, F.R.I.B.A., Architect.





Newcastle-under-Lyme High School War Memorial Hall. MR. W. T. LOVEDAY, A.R.I.B.A., Architect. (*See p.* 973.)

BRIDGE DESIGN

n his tenth Town Planning lecture at mingham University on this subject, Mr. liam Haywood, F.R.I.B.A., said the general racter of bridge design should be suited to environment. In the presence of great ural effects, as in the bridged intervals of a d through mountains, it should be bold, ple, and subordinate. Across vast cuttings, h cliffs of great size, an appropriate design ght be found—as at Clifton—in the magnifi- t stride of a cambered roadway of slight ckness between pyramidal abutments of ne.

or the Clifton problem—so far as situation concerned—might be treated as the Romans dged the valley of the Gard; with an amazing aphony of arches, in which the governing pose, the carrying of a stone-built channel at great height, was logically and superbly ieved. In this design there was harmony of e with the rugged valley; an effect of vast ngth applied to trifling labour; and there a better scale factor than was possible with suspension principle; yet the spirituelle nner of Clifton was at least equal in its eal to the terrestrial grandeur of the Pont du d.

reat estuaries, with relatively low land sses, provided conditions favourable to phasis in bridge design. The Firth of Forth such an estuary; and the Forth Bridge was, most respects, a successful design for the ation. The monotony of the landscape was best opposed, and the situation invited ominant design.

n undulating country, a road bridge and the nging rise of its approaches might rank in ortance with the lesser land swells. Easy ps and low parapets rising suavely over a crown were the most necessary elements of oper treatment for this situation. The type ridge with which they were most familiar that which linked two sections of a town ss a river. It was usually built with as few s as possible, and its arch-lines were either tical or segmental. Ammanati's Pontadella ita at Florence, *circa* 1566, a most beautiful ge of this character, was one of the first in ch the new elliptical form was used. The cutwaters and curves of the arches and pets were happily related to their architec- l environment. This type and its deriva- s were to-day the normal for moderately e rivers. Many of the Parisian bridges were is character, and the Pont Alexandre, with ingle span of steel, was a development of the e idea.

The more intimately bridges were associated with buildings, and especially with buildings of collegiate or civic importance, the more properly might they make use of details common to buildings. Balustrades, for example, seldom looked well except in the vicinity of appropriate buildings, or the architectural gardening which often formed part of their *entourage*. The delightful bridge at Clare College, Cambridge, built 1638 was a case in point.

Colour was also an important factor in bridge design; and particularly in the design of modern composite structures. All the older or pre-steel bridges were uniform in colour because built throughout of the same material; but where several materials were employed, a comprehensive effect was more difficult, and was often thoughtlessly ignored. In Southwark Bridge, for instance, the granite piers were of a whitish grey, and the metal arch-spans nearly black. The new Southwark Bridge had the same apparent lack of cohesion; and as steelwork must always be subject to periodical painting for its preservation, and this detail was usually outside the designer's control once a contract was completed, bridges of this type were liable to lose unity of effect by the injudicious use of inappropriate colour values. It was one of the strongest claims for the superiority in æsthetic quality of ferro-concrete over steel in bridge building that it was not subject to this disability.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

We take the following notes from the Minutes of the Council meeting, held on December 1:—

Registration of Probationers:—On the recommendation of the Board of Architectural Education the Council decided to accept the Senior Certificate Examination of the Ministry of Education, Northern Ireland, in support of applications for registration as Probationer R.I.B.A., provided the certificate covers the required subjects.

Godwin Bursary and Wimperis Bequest:—On the recommendation of the Board of Architectural Education, the Council approved the Memoirs and Sketches submitted by Mr. W. T. Benslyn, A.R.I.B.A., Godwin Bursar, 1923.

Illegal Use of the R.I.B.A. affix:—The Council were informed of two cases in which the R.I.B.A. affix had been illegally employed by non-members of the R.I.B.A., and it was decided to take strong action in the matter.

Reinstatement:—Major L. M. Wells-Bladen was reinstated as a Licentiate of the R.I.B.A.

EXHIBITION NOTES

PATERSON'S GALLERY.

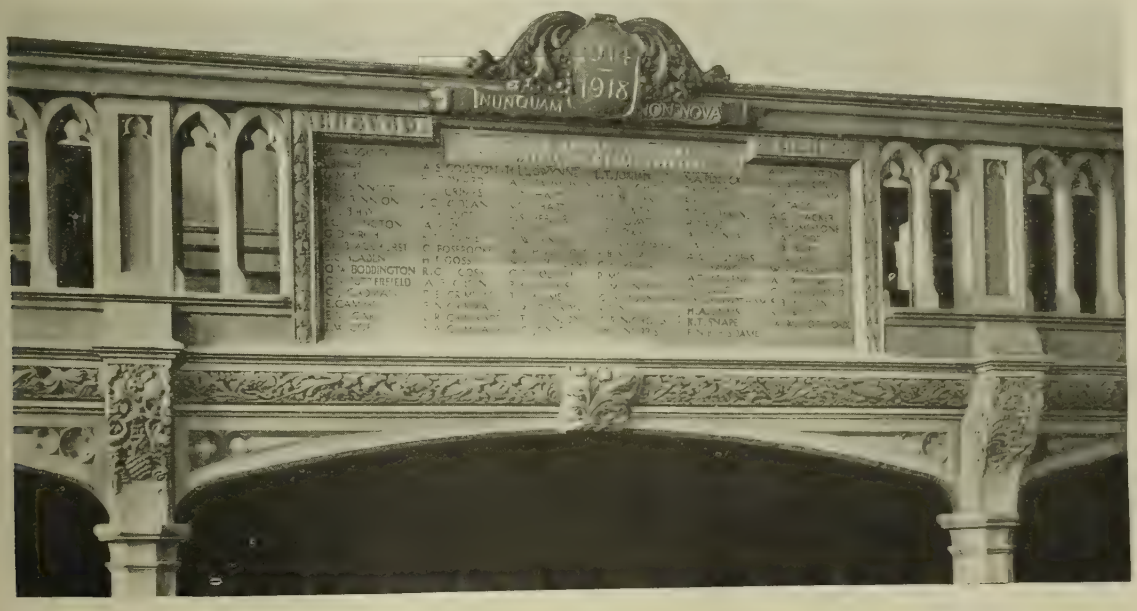
We have been so accustomed to interesting and attractive exhibitions at Mr. Paterson's gallery in Bond-street that we should hardly have expected to find there an exhibition like the present one of the Seven and Five. Words fail to exactly explain all one feels in the presence of most of these drawings. Perhaps one ought to regard with humorous concern the attitude of mind towards art and life which incites people to make such drawings, but if there were a likelihood that the public would be captivated by their particular charm we might feel more of concern than of humour. Certain drawings by J. R. R. McCulloch, G. R. Woolway and Alan J. Durst make one wonder how they got into the company of the rest, for these drawings and the few examples of sculpture are products of a different vision. The admirable conventional figure of the Madonna and Child, by Allan Hurst, a charming head by A. J. Oakley, and a finely-sculptured head by E. S. Frith are good enough things even for Mr. Paterson's gallery.

COLNAGHI'S GALLERY.

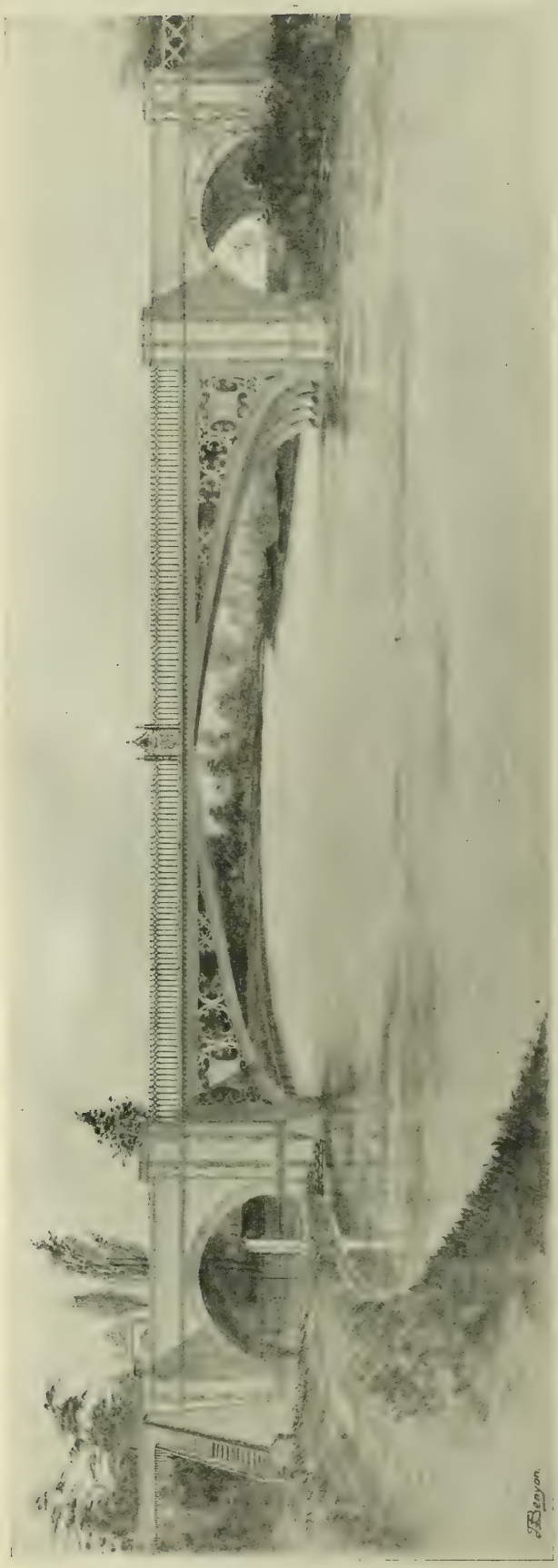
The drawings and etchings by G. L. Brockhurst, at Messrs. Colnaghi's, show sound and capable draughtmanship, reaching in some cases to a fine expression of line and tone. Perhaps if fewer subjects had been shown together, we might have escaped something of a feeling of tightness and over-elaboration which the sound knowledge and painstaking qualities of the artist have brought into rather strong expression; in some examples, however, especially in the pencil drawings, the results are certainly not lacking in distinction.

Building Trade Census.

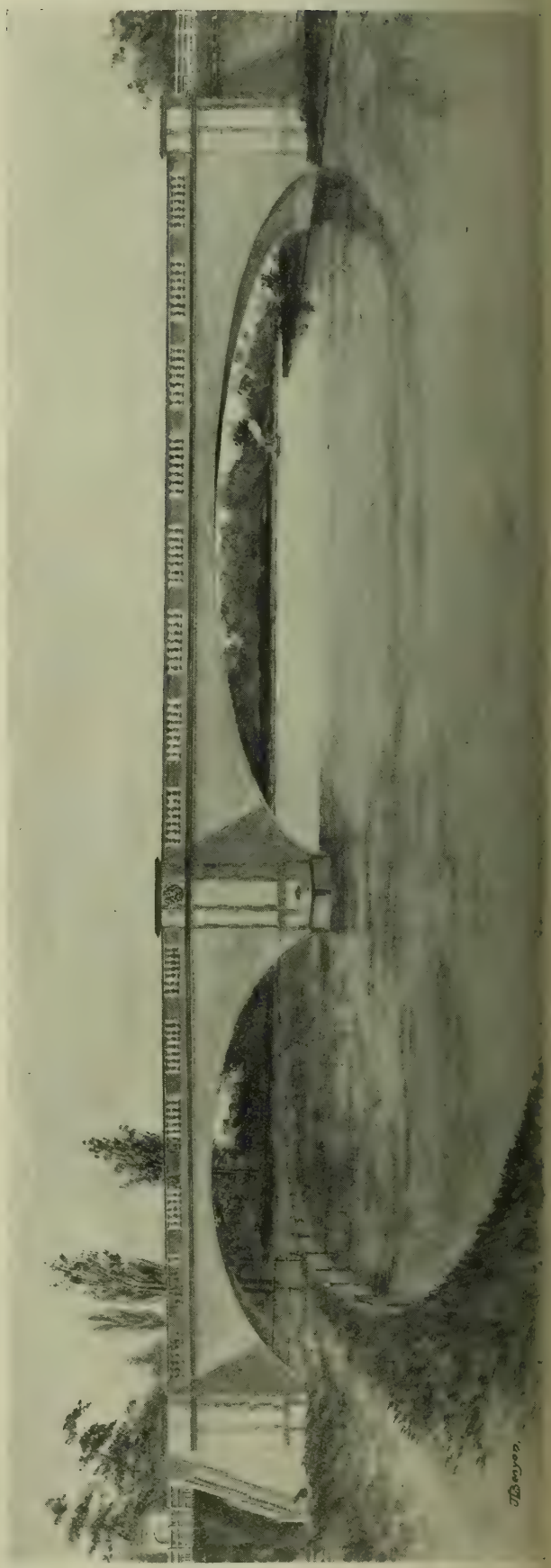
A volume on occupations, in connection with the census of England and Wales in 1921, was published recently by the Stationery Office. Under the heading of builders, bricklayers, stone and slate workers, and contractors, there were 503,535 males and 1,743 females, the latter including 262 employers and managers, 76 glaziers, 127 tilelayers, mosaic workers, and composition floor-layers, 84 stone cutters and dressers, and 69 slate workers and slate masons. Painters and decorators (not pottery) totalled 104,811 males and 2,863 females.



Newcastle-under-Lyme High School War Memorial. Mr. W. T. Loveday, A.R.I.B.A., Architect. (*See p.* 973.)



THE PRESENT BRIDGE.



DESIGN OF THE NEW (JUBILEE) BRIDGE.

BOOK REVIEW

andbook of Housing. By B. S. Townroe, B.A. (London: Methuen & Co., Ltd.) Price 6s.

its kind. this is one of the most readable cations we have come across. The author ot together an enormous amount of infor- on which he has sorted out and grouped eight main sections, giving a carefully ned and comprehensive survey of the ipal aspects of the question. The book des in a handy and compact form the main es of the information needed by housing ittees, local authorities, architects, and ers. Interest in the book is considerably ased by the contributions from former ters of Health, and various authorities experts on the subjects of housing and rials. Sir Charles Ruthen, the Director- ral of Housing, contributes a useful survey e problem, and it is interesting to see that w realises that the housing failures, which ied so hard to excuse in various ways years ago, were solely the result of attempt- o ignore the laws of political economy. d, throughout the whole book, we note most of the contributors have come to see an abnormal demand for houses coupled a shortage in labour means higher prices. is connection it is interesting in the light perience to read Sir Alfred Mond's plan mpaign whilst he was Minister of Health. was a continual and rapidly rising curve sts and a reduction in output, until the esslike procedure of stopping the demand time was adopted. The result was exactly id been anticipated and prices fell con- ably. Sir Alfred Mond issues the warning inflation of prices must be prevented, wise the costs of building will rise to such tent as will inevitably wreck any scheme did before. Regarding housing in the e and its connection with subsidies we are two opinions diametrically opposed. ddison thinks that assistance from national will be required in some form, whatever od is adopted, while Sir William Joynson considers that housing difficulties will e permanent, that we cannot alter the of political economy, and that sooner or housing will find its economic level. With atter opinion most of the authorities seem in agreement, and consider that it is the tive which should be aimed at in housing. ur supply has been the vital factor in the ng situation, and the subject is fully dealt in this book. Discussions upon labour naterial lead naturally to discussions upon opments in construction and new materials, the object of trying to find some method of ng the housing and labour shortages at and the same time. Mr. H. O. Weller des two excellent chapters on new ials and concrete houses, followed by a er on new methods of construction ap- d by the Ministry of Health. In the er on the practical aspect of the housing em the author discusses the question of port and housing along with the doctrine elve houses to the acre. We are entirely eement with him, even if he is afraid that elief may be regarded as heresy by the ng reformers. There is a good deal of in the following extracts which convince at the author has a broad grasp of his ct :—" In this, as in other questions of n, it is possible that those housing reformers most pride themselves on their humani- n idealism are actually the most short- ed," and " With national customs changing dly, new methods of construction being t for, and the economic basis of modern lation shifting, too settled a policy in ng is folly." A summary of the Housing 1924, is included for the benefit of those wish to take advantage of the financial ance offered by the Government. We ently recommend this excellent and comprehensive book, and considering that it is published at a very reasonable price, it ought to be widely read.

NEW REINFORCED CONCRETE BRIDGE OVER THE THAMES

The work of demolishing the Albert Bridge over the Thames, near Datchet, and constructing a new one in its place, has now commenced. The new bridge will be constructed in reinforced concrete. The design, prepared by the County Surveyors of Berks and Bucks, was approved by His Majesty the King, and the bridge when completed will bear the Royal Arms. The illustrations on p. 980 show (1) the existing Albert Bridge, and (2) the proposed new structure.

The present bridge, in Gothic style, was designed by Prince Albert and was erected in 1852, and is not now capable of taking present-day traffic. The cast-iron arch-ribs are cracked in various places, due to contraction in casting, temperature, or vibration stresses, and the bridge has dropped at the arch crown.

Eventually it was resolved to construct a bridge capable of taking all classes of modern traffic. A ferro-concrete bridge was decided upon, but there were difficulties to be met, chiefly with the Thames Conservancy, as to the width of waterway at this important point on the river. However, at a later date, the width of waterway was agreed, and the new bridge will consist of two unequal span arches, the arch on the Berks side being 75 ft., and the arch on the Bucks side 110 ft., with a centre cut-water pier 15 ft. wide.

The arches will be of slab construction on which will be carried, by means of columns, the deck beams and decking. The balustrading and cornice will be of Bath stone, supported by reinforced concrete curtain walls which are so arranged as to be independent of the arch slab and decking. The towers and wing walls will be faced with squared rubble and stone dressings from the old bridge; seats will be arranged in the towers at footpath level as at present. This will be the third reinforced concrete bridge to be erected over the Thames. The engineers are Lt.-Colonel J. F. Hawkins, M.Inst.C.E., and the late Major R. J. Thomas, M.Inst.C.E.

The bridge will be constructed on the system of the Trussed Concrete Steel Company and will be built by Messrs. A. Jackaman & Son, of Slough (Bucks), under the superintendence of Lt.-Colonel J. F. Hawkins, County Surveyor of Berkshire; and Mr. E. Winfield, County Surveyor of Bucks.

ROSS SMITH MEMORIAL COMPETITION

The design illustrated on this page, by Mr. A. B. Hitch, A.R.B.S., has been selected in the competition for a statue to the late Sir Ross Smith. The idea of the design is to illustrate the great distance covered by Sir Ross Smith and his companions in their flight from England to Australia. The statue, in bronze, is mounted on a portion of a globe, which also finishes off the top of the pedestal. On two sides of the pedestal are figures representing "Flight" and "Intrepidity," the former a female figure in the act of soaring, holding an aeroplane, and the latter a male figure holding the earth and a palm of victory in the right-hand—denoting victory over distance. The bronze frieze is flush with the pedestal, and illustrates, on four sides, important countries passed by the airmen *en route*, namely, England, India, East Indies and Burmah, and Australia. The badge of the Royal Air Force is freely treated below. The whole of the sculpture and ornament would be of bronze, the pedestal in marble, the platform and base of granite.



Ross Smith Memorial Competition:
Accepted Design: By Mr. A. B. Hitch, A.R.B.S.

REGIONAL ARCHITECTURE

WE give below a synopsis of a lecture given recently by Professor A. E. Richardson on "Regional Architecture in the West of England," at St. Bride's Institute.

Professor Richardson said architecture to-day was of general interest, and its study was encouraged outside professional circles; thus it was that many new facets of the subject were continually being discovered, and the material seemed inexhaustible. From Norman times to the Reformation, building in this country was developed on structural lines influenced mainly by material considerations. They were pleased for convenience to call this development mediæval. No matter which period of mediæval work was taken for analysis, the general characteristics of the buildings were similar. But when they enquired more closely into the detail of the individual buildings of those times, they found the important factors of material and *locale* coming into play, effecting in turn subtle distinctions which, for convenience of grouping, could be termed regional.

After the Reformation, various new influences crept in from the Continent, which were destined to change the entire character of English buildings. Certain forms of ornamental decoration, mostly derived from Italy, France, Spain, the Netherlands, and Germany, were accepted as authoritative in this country. Then followed a period of compromise between the established system of building and the imported forms, until in the second half of the seventeenth century Sir Christopher Wren assisted the vernacular to a more definite level. From the early eighteenth to the middle of the last century the impetus given to building by the Wren school was in principle if not in detail more or less maintained. The modern movement in architecture about which so much had been said began in the 'seventies of the last century.

It should be borne in mind that the use of local materials, such as stone, granite, timber, cob walling, tiles, slate, or thatch, as well as brickwork, was in certain districts continued from mediæval times through the seventeenth century, and well into the eighteenth. It was equally true that in some districts the old methods of construction had been continued almost to their own day. At the close of the seventeenth century, the building examples of Holland were in the ascendant; hence the Dutch type of window and other architectural features associated with domestic building. This influence, strong as it was, did not long survive, for English artists fired by the story of the classic ruins of Italy and Greece, gradually made themselves acquainted at first hand with the remains of antiquity. Each decade witnessed some slight change in the design of buildings. These changes, however, did not alter the fundamental principles as followed all over the country. On such reasoning, as well as from concrete evidence, it could be demonstrated that regional characteristics persisted in every part of the country from the time of Elizabeth until the invention of railways brought about a disastrous facility of transport, for example, making it possible to use Welsh slates in a tile district, as well as encouraging the red rash of villadom without regard to local amenities. The critic whose mind was undeveloped might view English architecture of the past as evidencing the same form and the same detail in every part of England, but architects knew better. The correct view resulted from ability to perceive the local distinctions which the buildings showed.

The chief factors which they had to consider were those of local material and traditional methods of craftsmanship. In the West of England, particularly, from the earliest times, material had been the dominant factor. Arising from necessity, a system of proportion was evolved, almost a subconscious effort on the part of the builders, which outlived the importation of ideas from abroad, as well as from other countries. Such truths lead them to look more closely into the types of buildings which were a feature of the eighteenth and nineteenth centuries in Devon and Cornwall. They were faced with the simplicity of the designs, the low pitch of the roofs, the broad surface of the walls, the curious placing of chimney stacks, the shaping of the cappings, the homely interiors, and the odd doorways. In such features were to be seen the true regional characteristics. After the Napoleonic wars, when the country entered upon its industrial era, mass production succeeded to individual workmanship, and one by one the time-honoured crafts were suppressed. It was a fact, however, and one evidenced by the style of west-country work, that the proportions, in so far as country buildings were concerned, responded more directly to local tradition than similar buildings nearer London. The work, therefore, of this late period remained regional in the Dorian sense, but its details gradually became more akin to the general type.

At this present introduction of patent materials, such as asbestos slating, machine-made tiles, stamped steel houses, and reinforced concrete blocks as well as bricks without texture or surface quality, might have economic advantages which were temporary, but such materials should have no place in the picture of the country side. It should be the first aim of architects who were called upon to build in country districts, to ascertain the nature of local materials, and while aware of the uses of patents they should be careful to restrict them to internal construction.

For three centuries, building in the West Country in its more specialised branches had benefited by the works of London architects. These men, however, had first to master local conditions and to make use of the natural resources of the district in which their buildings were projected. On this showing, it was erroneous to speak of such examples as being exotic. The whole history of the later Renaissance in England was a long story of change and development, and the minor branches of this development were of as much consequence as the main issue. None would deny that the homely farms and cottages of Devon and Cornwall had distinction. The stone-built chapels and the meeting houses of the early nineteenth century showed something more than mere buildings. The introduction of classic ornament from time to time was interesting, but in reality it did not affect the structural qualities which, so far as the smaller buildings were concerned, remained constant.

In Exeter, Plymouth, Bodmin, Truro, and Penzance, there were individual buildings and terrace groupings which reflected the way London. There were stuccoed convent which might have been inspired by Nash well as mild copies of the architecture of Reg Park. The grey West with its climatic ditions demanded stucco as a protection ag the weather. Cornish granite was notori porous, slate shingling was expensive. In use of stucco was to be seen the wisdo Foulston, whose chief care was to pr his buildings with a weather coat. What desired in these anarchial times was not a r to any particular type of traditional build on the contrary, it was reasonable evolu New conditions had to be met; the buil laws had changed the proportion of cott To-day they were faced with problems demanded direct statement. There were, ever, certain unwritten laws which shoul observed, and no better standard existe a guide than the simple buildings of the pa

ROMANCE IN STONE

IN a recent lecture at the Central Scho Arts and Crafts on this subject, Sir Ban Fletcher, F.R.I.B.A., described the e ordinary development of Gothic architect as seen in the cathedrals of France. showed how the sombre and solid Romane gave way to the light and graceful Go and how this energetic and restless sty architecture gave expression to the Fr character. By balancing stone upon sto pier, vault and buttress they dispensed solid walls, and filled their places with giga traceried windows of blazing stained glass

During the Gothic period France cov herself with cathedrals, and the zeal w prompted their erection changed the fac their country, much as industrial life covered England with railways and facto Lantern views of Chartres, Laon, and o beautiful cathedrals showed that the ass tion of architecture and sculpture was bro to a perfection that has never been surpas The lecturer described French characteris such as the chevet, or rounded east end cluster of chapels, which, except at W minster, did not occur in England.

Art Treasures Destroyed.

A disastrous fire recently occurred at Trinity House. Art treasures and much v able furniture, including many Chippen chairs, were destroyed. Hull Trinity H was established in 1369. The damage is mated at many thousands of pounds.



A Shopfront near Mortimer Street.

Messrs. W. A. PITE, SON & FAIRWEATHER, Architects.

TOWN-PLANNING INSTITUTE

MR. W. T. LANCASHIRE (President) took the air at a meeting of the Institute, held at 92, Victoria-street, S.W., on December 12, when A. F. Marsden, City Surveyor of Bradford, gave an address on "City of Bradford Town-planning Schemes."

Mr. Marsden illustrated his address with a large number of lantern slides, which included maps of planned areas, diagrams showing densities of population, photographs of the road works carried out by the city authorities to find work for the unemployed, photographs of the houses erected by the Corporation, and views of houses of historic interest being preserved under the town-planning schemes. In the course of his remarks he said that Bradford was the centre of the worsted and woollen industries, and the bulk of the people are engaged in some form of work connected with these industries. The results of the industrial movements were seen in a very marked degree in the city, especially in the lack of any plan of development, overcrowding, and absence of beauty either in design or surroundings of industrial premises and the housing of the working classes. The object seemed to be to put as many houses as possible on a given area with little regard to any amenities or air space, whilst, at the time of their building, the houses were surrounded by agricultural land.

The lines which had been followed in preparing the town-planning maps and schemes, however, had been to allocate areas for:—(1) housing purposes; (2) shopping and business premises; (3) open spaces; (4) industrial areas.

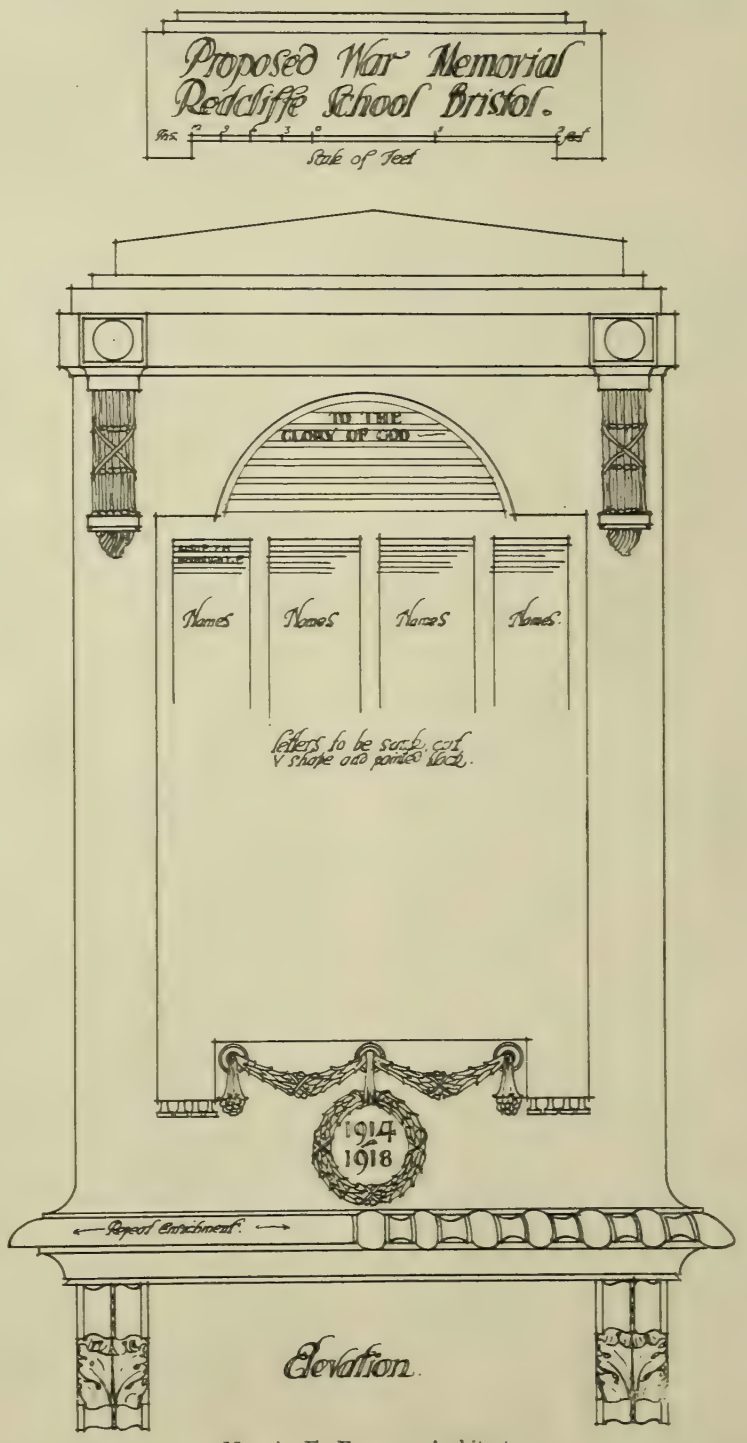
As to housing, the schemes were being varied in accordance with the varying suitability for greater or lesser densities.

The areas for shopping and business purposes were being allocated at junctions of roads, but the Council were not preventing shops being erected in suitable positions on housing estates, and they were consenting to the alteration of existing houses on main roads into shops, as necessity demanded. By these methods they hoped to keep the amenity of all residential districts, whilst at the same time providing reasonable shopping facilities for the residents of these districts. The hard and fast allocation long before an area was developed added very greatly to the problem of providing reasonable facilities for residential areas. The shopping centre problem was a very real one, especially in a city like Bradford, where by far the larger proportion of the houses were occupied by the artisan and working classes.

Bradford possessed ten principal parks and a large number of recreation grounds and playing areas within the city, and, in addition, Roberts Park, Shipley Glen, and Baildon Moor, lying immediately to its northerly boundary. One idea which was being prospected in Bradford was to provide playing areas of some description so that the children would be able to reach such an area without more than ten minutes' walk from their residences. Bradford had just had an order made by the Ministry of Health for one of the largest, if not the largest, sanitary area clearance schemes which the Ministry had ever dealt with, and the new layout of the estate was being treated on town-planning lines, although it was not within the area of any of the schemes.

In settling industrial areas, regard had been given to the question of transport of the workers, especially as the population under the new densities for housing would be covering very much larger areas. The scheme had been to provide for the improvement and widening of all the existing main arterial roads. In addition, new lines of roads were being laid down in all the areas, so as to ensure that main lines of communication should exist when the various parts of the cities came to be developed and built up in future years. The main arterial roads were being designed for 100 ft. in width over all, including tramway tracks, and the secondary roads 80 ft. and 60 ft. in width, the width being varied to meet as far as could be seen the probable traffic. The Bradford schemes were providing in all cases for building lines on all the arterial roads and other secondary roads branching therefrom varying from 20 to 35 ft. according to circumstances. Much encouragement had been received for these building lines by the way in which builders and owners of property had adopted them because they were beginning to realise the many advantages which accrued to their property where it was used or developed for housing purposes or for shops or business premises.

On account of the varying levels and irregular configuration of the city it was impossible to preserve very many long straight roads in the city, and detours have to be made in many of them in order to overcome engineering difficulties and to keep the cost of the roads within reasonable bounds. An inner ring road had been designed, a large proportion of which was already constructed, although not to the full width intended, and a scheme was now in hand which would complete one of the more important intervening sections. An outer ring road had also been laid down, but most of this outer ring road was outside the city boundary. The



MR. A. F. FRENCH, Architect.

[This memorial has been erected in the Lower Hall of Redcliffe Endowed Boys' School, Bristol, to the memory of the 198 Old Boys who were killed in the war. The memorial is of Caen stone, with raised panel for inscription with the names sunk and V-cut, painted black. The architect for the work is Mr. Alec. F. French, of Weston-super-Mare, and the whole was executed by Messrs. Humphrys & Oakes, of 109, Lawrence Hill, Bristol.]

outer ring road had been laid out so as to fit in with the outer ring road of the city of Leeds, the two roads together forming a figure eight, one portion being common to both cities.

The usual practice in Bradford was when an owner wished to develop an estate he applied to the Corporation for particulars as to any restrictions or lines of new roads which would have to be observed, so that he could make these the basis of his development. As a rule he was supplied with a small sketch map showing upon what lines it was possible to develop his estate, which he could either adopt, amend, or substitute by another design. Any lay-out which was approved had to provide for the new roads and widenings. In the lay-out of these estates advantage was generally taken by the owner of the relaxation of building regulations to the extent of making much narrower streets with a minimum distance between buildings of 75 ft.; then he was asked to dedicate free of cost any land which might be necessary for the widening of existing highways, besides providing the land for all the new arterial roads required by the town-planning scheme. If he were not prepared to meet the Corporation in this way, the Corporation claimed to exercise their option as to whether or not they would permit the relaxation of building regulations. The owners recognised the advantage to them, and met the Corporation's wishes, but in some cases the Corporation agreed to pay the extra cost of making any road through the estate of a greater width than 60 ft., as this was the width which might be required by the present building regulations in the city of Bradford for main through streets, but, in any case, they could require a street to be made not less than 42 ft. wide. Under this arrangement the Corporation had had dedicated to them 100,000 sq. yards free of cost.

Bradford was of such recent growth, comparatively speaking, that in the areas covered by the town-planning schemes there was not a large number of ancient monuments or buildings which required particular preservation because of their antiquity. There were a few, however, such as Bolling Hall (owned by the Bradford Corporation), Horton Hall, and Royds Hall, none of which would be disturbed by any of the town-planning schemes. In nearly every case the owner of these old buildings was as anxious as the Corporation to preserve the amenities of them, and there was no immediate fear that they would be surrounded by buildings or the adjoining lands used in such a way as to mar their own characteristics.

In all the town-planning schemes great care had been taken as far as possible to work in conjunction with all the adjoining districts. Happy negotiations and discussions had taken place with representatives of most of the districts adjoining the city, who had followed the example of Bradford and taken up the question of town planning in an enthusiastic manner. Under such circumstances it would readily be seen that Bradford and its neighbours were working together, so that when the whole district became town planned and developed it would be a satisfactory whole rather than in so many separate and distinct plans. Such negotiations and mutual arrangements had been come to with the following:—County boroughs: Halifax and Leeds; and urban districts: Bingley, Baildon, Clayton and Shipley.

Possibly some of the success and favourable attitude of the owners of the estates was due to the fact that Bradford had always believed in the greatest publicity of town planning, and to further it they had permitted the author to attend public meetings in various parts of the city and allowed a very large amount of work to be done in the way of preparation of plans and other information to show the advantages of development on town-planning lines. In this connection an advertisement issued by the Corporation in the local press appeared at least every three months drawing the attention of the public to the fact of town planning, and advising them to make application to the author before purchasing any lands in the city, and this advertisement had proved of great benefit both to vendors and purchasers. As a matter of fact, no less than 4,528 inquiries had been made besides innumerable interviews on the subject. From these facts, it would be seen that a spirit of co-operation was gradually being developed between the owners, purchasers, and the Corporation, which was leading to very happy results, and the opposition which was at first experienced was quickly disappearing.

An interesting discussion followed in which Messrs. L. G. Pepler, Col. C. H. Bressey, (Minister of Transport) F. G. Elgood, Raymond Unwin, E. R. Abbott, Allen, and the President took part.

Col. Bressey suggested that as the Traffic Advisory Board was to control an area of about fifteen miles all round from Charing Cross, it would be a suitable thing if the Regional Committee for London dealt with the same area.

Mr. E. R. Abbott raised the question of what ought to be considered suitable buildings for placing on arterial roads, and suggested that it would lend itself to an evening's discussion.

Mr. Allen asked if the fact of Bradford having nine schemes of about 2,000 acres each meant that as the result of practice it had been shown this was a suitable area to deal with.

Mr. Marsden said the reason for having nine schemes was with the object of getting something done quickly.

LAW REPORT

Action by Architects.

AN arbitrator's award in the form of a special case, in which the parties concerned were Mr. Thomas Peter Clarkson and Mr. Herbert Austen Hall, both architects, came before Mr. Justice Roche in the King's Bench Division on December 3, the matter being in relation to a professional dispute.

Mr. Barton, counsel for Mr. Hall, said that his client and Mr. Clarkson, as well as another gentleman who was Mr. Clarkson's brother, were employed by Messrs. Peter Robinson & Co. in connection with a new building scheme for their Oxford-street premises. The scheme was in two parts, one being for the eastern block and the other for the western block. There was an agreement of November 4, 1914, providing for the employment by Messrs. Robinson of the three architects in relation to the eastern block.

Following that agreement, the architects entered into an agreement on November 5 among themselves in the matter. In 1916 the work on the eastern block was stopped and, as a consequence, Messrs. Robinson paid the architects certain sums. The architects had acted in the meantime in connection with the western block of buildings. Mr. Clarkson was a director of Messrs. Robinson & Co. After some time the Company decided to proceed with the eastern block, and Mr. Hall discovered that, although there was an agreement which specially provided that the architects should work together in connection with any future business obtained for them from Messrs. Robinson, Mr. Clarkson had been appointed sole architect for the eastern block, which was work in which the architects had previously acted. Mr. Hall's case was that the partnership agreement between the architects still subsisted, and that subsequent work on the eastern block should have been obtained for the partnership. The matter went to arbitration before the President of the Institute of British Architects, before whom an objection was made on behalf of Mr. Clarkson that the architects' agreement, being merely supplemental to the first building agreement of November 4, 1914, had come to an end, and that, therefore, there could be no submission to arbitration.

The arbitrator heard the evidence, without prejudice to the preliminary objection, and made an award, the effect of which was, if his Lordsl was of the opinion that there was a subsisti submission to arbitration, his client (Mr. H was to recover one hundred guineas, and co of the reference and award.

Counsel went on to say that the work on t eastern block was stopped in 1916 owing increased costs, and the architects were p 2½ per cent. on the estimated cost of t building.. When it was decided at a la date to proceed with the eastern block, Mess Robinson resolved it was not necessary employ an outside architect. and that t work would be more economically and efficien dealt with in the Company's own offices. Clarkson was appointed architect. In claim before the arbitrator, Mr. Hall alle (1) that the partnership agreement of Nove ber 5, 1914, still subsisted; (2) that the cond of Mr. Clarkson in agreeing with Mess Robinson, Ltd., to be sole architect for completion of the eastern block was a brea of his duty to his partners under the partnersl agreement of November 5, 1914, and that t alleged breach had prevented the partnersl from earning certain fees; and that Clarkson was liable for such loss. Mr. Clarks objected that the agreement of November had been determined, the original service of t architects having been paid for and subseque services dispensed with, and that that agr ment having terminated, the agreement November 5 was of necessity also terminated.

Mr. Barton said he supported the arbitrato award, and argued that the agreement question never came to an end.

Mr. Barrington Ward, K.C., for Mr. Clarks contended that the agreement had ended.

In his judgment, Mr. Justice Roche said was contended by Mr. Hall that the partn ship agreement of November 5 still existe It was not really a partnership agreement, b an agreement providing for joint action architects in certain specified matters. Hall also alleged that Mr. Clarkson's condu was a breach of the partnership agreement. his (his Lordship's) opinion the complai against Mr. Clarkson was not well founde The agreement of November 5 was supplement to that of November 4, which related to t employment of the three architects by Mess Robinson on the eastern block. The agreeme of November 5 provided for the distribution duties and rights and benefits among t architects under the principal scheme. It al contemplated that there might be other matte in respect of which Messrs. Robinson mig choose to employ them, and if so employed other matters the architects would act up the terms of the November 5 agreement. F the eastern block nothing had been done 1916 except tenders were invited, but contracts entered, and the matter was th not taken up again until 1923, when M Clarkson alone was appointed as architec The arbitrator had found Mr. Clarkson w wrong in the matter, but he (his Lordshi thought there was no contract on the part Mr. Clarkson which was broken, and a breac which could give rise to Mr. Hall's claim f damages. He (his Lordship) had no doul that the agreement of November 4 had be put an end to, tenders for the building apparent having been declined by Messrs. Robinson, ar in those circumstances it could not be argue successfully that the agreement of November gave any right in connection with the easter block to either of the parties. When th November 4 agreement terminated, there wa no obligation upon Mr. Clarkson to do anythin to secure or attempt to secure for Mr. Hall an himself a further agreement. So far from being the right and duty of Mr. Clarkson t invite the giving of work to Mr. Hall an himself, having regard to the relations of M Clarkson to Messrs. Robinson, there was a goo deal to be said for the contention that his dut was the other way. He (his Lordship) decide that the arbitrator had no power to make th award on a claim that Mr. Clarkson had com mitted a breach of agreement as alleged. Tha disposed of the matter.

RCHITECTS' & BUILDERS' INQUIRY BUREAU

. are glad to give questions and answers, but cannot . responsibility for contributed replies, especially to matters.

. we appeal to our correspondents to submit their . on paper of a size easily filed, and written as . as possible, or better still, in typescript.—ED.

Recovery of Fees.

R.—As an old established architect, I invite of your readers who have had experience he following points of law, or have seen decisions, to give me and your readers the fit of them :—

any years ago the enquirer was appointed itect for a Nonconformist church and schools, ared working drawings and specification the whole scheme, plans of which were ed by local authorities, the school portion being proceeded with owing to lack of funds. was paid commission only on the portion ally carried out at the time. It was thought the church would be proceeded with at arly date, but time went on, and it is only to be proceeded with. The present trustees e of whom are new men) think they are to appoint another architect for the church out first settling with him ; no account was ered at the time ; it was thought by him the appointment of architect constituted a ract, the Statute of Limitations not applying

is now stated on behalf of the trustees that debt or contract should have been renewed odically to make it enforceable. Another case ere an architect won a competition and after- s was appointed architect, and prepared ing drawings and specification, and got plans d by the council ; the work was deferred ow- o the war, and only a very small amount paid count at the time. The question will arise is latter case, another architect having been inted, whether the first architect can claim ice of fees, and, if so, whether he is entitled se his charges on the pre-war estimated cost on the present estimated cost of the build- and whether he should claim as "balance es," or for damages for breach of contract, oth ?

"LAW."

Flooring Battens.

R,—I should be greatly obliged if any of readers would inform me whether ordinary flooring battens laid in mastic on cement rete make a good lasting floor, and of a good, cheap mastic is composed ? Should the cost be cheaper than boards on joists, the necessary sleeper walls, air space and extra excavation ?

L. WILLOUGHBY THOMAS.

Thickness of Lead.

LY TO "YOUNG ARCHITECT," DECEMBER 5.]

R,—Referring to "Young Architect's" y asking for information dealing with the ness of sheet lead, and the best way of suring same, I trust the following infor- on will be of some use to him :—

). Sheet lead	.068 in. thick	($\frac{68}{1000}$ of 1 in.)
. „	.085 „	($\frac{85}{1000}$ „)
. „	.101 „	($\frac{101}{1000}$ „)

micrometer, as used in an engineer's shop, would be a good instrument to use measuring the thickness of the lead, as it is stable to a great degree of accuracy, and rds in thousandths of an inch.

"KENT."

Communion Railings.

R.—Can any of your readers inform us re it is possible to obtain old church com- ion railings and balusters, in oak—Jacobean r Carolean preferred ?

lso old stone statuettes (or modern) repre- ing SS. Peter and Paul.

"CHURCH RESTORATION."

Hot Plates.

[REPLY TO "BAFFLED," DECEMBER 5.]

SIR,—If "Baffled" will be so good as to pay a visit to any well-stocked showroom of a gas undertaking and ask to see an elevated gas range (that is to say, a range with the oven raised on a stand about 2 ft. high, and with a hot plate fixed on the stand to the right of the oven), he will find that immediately above the oven there is an enclosed chamber from 12 to 15 in. high specially designed for warming plates or keeping food warm. This chamber utilises any waste heat which comes through the top of the oven ; and when the oven is not in use the chamber can be heated up by some small gas jets provided inside the chamber. This appliance should meet "Baffled's" needs exactly, if he is referring to difficulties experienced in his home. Should he desire to warm large quantities of plates, he can have a gas-heated hot closet capable of warming up at one time 100, 200, 500 or any greater number of plates

"B. C. G."

Decay in Stone.

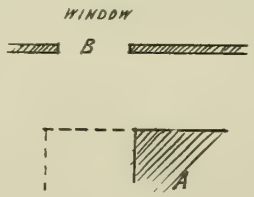
[REPLY TO "CONSTANT READER," DECEMBER 5].

SIR,—For the preservation of stone I think there is no remedy that is applicable to every stone, Each stone must be dealt with according to its component parts, and if my 40 years' experience and observation are of any use to "Constant Reader" I should be pleased to give him my help if he sends me a sample of the stone he wants to preserve.

FRANK MORTIMER.

Building Lights.

SIR,—Is a building considered to interfere with the right of light to another building unless it is actually opposite that building ?



That is, would the building "A" be considered as interfering with light to the window "B," or would it be considered as interfering only if it were continued as shown by dotted line ?

S. T. C.

Stonework Wash.

SIR,—We should be glad if any of your readers could give us any information on the following point :—

A customer of ours is building a church of Darley Dale stone in a dirty industrial town. Can you recommend a wash of any description to use on the interior stonework of the building which will keep it clean and can be easily removed when the roof is on ?

"H. S. E."

Dry Rot.

SIR,—The manufacturers of certain timber preservatives claim that it is possible to cure dry rot by the application of their special solutions. If any reader has experienced a cure, some details of the process adopted would be very much appreciated.

"FUNGI."

Brands of Timber.

SIR,—I require a few samples of the various sorts of timber for the purpose of distinguishing between them. Will any of your readers kindly inform me where I can get these ?

E. J. WRIGHT.

Protection of Oak.

SIR,—I have been advised recently that it is useless to treat English oak by the process of creosoting under pressure owing to its density which, it is alleged, does not permit of the creosote penetrating into its pores. I noticed in these columns a few weeks ago a very interesting letter dealing with the effect upon pitch pine piling in harbour work, where it was stated that the above treatment was found to be a great protection although only penetrating a bare $\frac{1}{8}$ in. I should be very interested if the same or any other correspondent who has had similar experience would advise me whether the same benefits can be obtained when English oak for ordinary outdoor work is treated by creosoting under pressure.

"ARCHITECT."

Ham Hill Stone.

SIR,—Can any of your readers kindly inform me where can be seen any buildings built in Ham Hill stone, which, I believe, comes from a Somerset quarry ?

"MASON."

Factor of Safety.

SIR,—At a time when the high cost of building has become a matter of paramount importance, it has occurred to me that much unnecessary expense is daily thrown away in the design of structural steelwork by the use of so high a factor of safety of 4. Surely this is carrying caution to excess now that steel is tested to such a fine point, and the quality is so dependable, or is there some reason of which I am unaware that makes this universal practice accepted ?

"ECONOMIST."

Cheap Roof Trusses.

[REPLY TO "PROGRESS," DECEMBER 12.]

SIR,—Your correspondent should consider the design of a laminated truss, built up of light material. Such a truss for a span of 20 ft. might well take the form of two 4 in. by 2 in. rafters, stiffened by two 5 in. by $1\frac{1}{2}$ in. collars, with a single king post of the same scantling, and with two ties of the same scantling from the feet of the rafters up to the foot of the king post. The truss should be further strengthened by short angle ties across from rafter to rafter immediately under the ridge, and across the angles between the rafters and the collar, so as to grip the purlins which will rest on the collar close by the rafters. Such a truss can follow the line of the common rafters and rest on the same plate, and there is a minimum of framing and material. The members passing between other pairs are simply spiked through and a strong job is assured without bolting.

"CARPENTER."

Cement Flashings.

[REPLY TO "SAXPENCE," DECEMBER 12.]

SIR,—The real objection to cement flashings is not a matter of the quality of cement so much as the rigidity of the parts of the building between which the flashings are made. Generally they occur between a rigid wall or chimney stack and a non-rigid timber roof. The flashings are made and the roof settles and draws away with it the, perhaps, perfectly watertight flashing, and the damage is done. With a lead flashing and soakers this movement of parts is permitted without the opening up of a weather gap, and such vital points of a building should not be the subject of a false economy.

"PENNY WISE."

Lime Wash.

SIR,—Is it necessary, to make a successful lime wash, to add a certain quantity of glue or boiled oil ? I have used both of those in lime wash. But in the present case the walls are partly covered with climbers, roses, &c., and I am of the opinion that to add either glue or oil to the lime would probably kill those plants.

"READER."

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

DURING the debate on the motion for the presentation of an address by the House of Commons in reply to the King's Speech, many references were made to the housing problem.

Mr. Ramsay MacDonald, the leader of the Opposition, urged that in any new forms of construction which might be adopted, the countryside should not be covered with unseemly dwellings, which were an insult to the eye of the passer-by as well as an inconvenience to those who dwelt in them. We had had far too many engineers and far too few architects in the building of our houses.

Mr. Baldwin, the Prime Minister, expressed his sympathy with Mr. MacDonald's plea, but pointed out that the first necessity at a time like this was to try and get houses. If houses, even of a more temporary nature, would help to ease the situation in the slums, this was a time when the health and well-being of the people must take precedence even of æsthetics.

Major Wheler, a Unionist member, suggested a greater development of the brick-fields of the country in order to get the increased number of bricks required. He also hoped that the Government would devise a scheme for the employment of more labour for house building.

Mr. Morgan Jones, the Labour member for Caerphilly, alleged that the Chamberlain Act had been a failure, not a single house having been built under it in a mining valley in his constitutency.

Lieut.-Col. Fremantle, Unionist, and a former chairman of the L.C.C. Housing Committee, believed that the purchase of middle-class houses through building societies would lead to a very material solution of the housing problem. The essential thing in the new housing programme was the question of distribution. Town-planning schemes had lagged behind since 1909, and new legislation was required to enable town-planning to be completed to apply it to already built-up areas. So far as London itself was concerned, one could see a vista of the old London gradually coming to an end and its housing replaced. That replacement should be done on proper lines. The authorities should have power to take over sufficiently large areas and to reconstruct them, not simply to improve streets where they were, but to make a change on a much larger scale. The traffic problem would also have to be considered in this connection.

Sir Leslie Scott, a former Unionist Solicitor-General, held that the solution of the housing problem in the docks district of Liverpool lay in the provision of tenement buildings. With regard to small dwelling-houses, we should not get the mass of houses required unless we got the private builder back in larger numbers.

Use of Concrete Blocks.

Mr. Hardie asked the Minister of Health whether he would prohibit the use of all wet concrete blocks for house building and sanction the dry method ?

Mr. N. Chamberlain said he had no information which would justify the prohibition of the use of concrete blocks made by the wet process, although the dry method of manufacture was that almost invariably adopted for housing work

Grants for Cheaper Type of House.

Colonel Applin asked the Minister whether, in view of the present nature of the housing question, he would consider making a grant for immediate erection of types of ferro-concrete and other cheap houses to enable local authorities to see sample houses in being, with full particulars as to price, labour and time required for their construction.

Mr. N. Chamberlain said he would give very careful consideration to the suggestion.

Rating of Empty Houses.

Mr. Gillett asked the Minister whether, in view of the urgent need for more accommodation and the fact that many houses were standing empty waiting to be sold, he would consider the desirability of introducing a measure next Session for the part rating of empty houses ?

Mr. N. Chamberlain said he doubted whether the remedy proposed was a practical one, and he could not undertake to introduce legislation for the purpose suggested.

Output of Bricks.

Sir Kingsley Wood, Parliamentary Secretary to the Ministry of Health, informed Mr. H. Williams that there were no reliable figures available for the pre-war production of bricks, but it was estimated that the average production for the three years prior to the war was 2,805 millions per annum. It had been estimated that the production capacity of brickworks at the present time was about 5,000 millions, and the actual output this year would probably approach this figure.

Government's Housing Policy.

Mr. N. Chamberlain, the new Minister of Health, gave a general survey of the housing position and dealt in detail with the Government's policy in reply to an amendment to the Address of thanks for the King's Speech in the House of Commons on Tuesday. The amendment, was moved by Mr. Wheatley, the late Minister of Health, in the following terms: —"But humbly regret that your Majesty's advisers are committed to a policy of leaving the solution of the housing problem mainly to private enterprise and the operation of occupying ownership, thus ignoring the importance of carrying out a long-term scheme of building houses to be let at rents within the means of the working-classes, and failing to take every advantage for increasing employment in the building and auxiliary industries."

Mr. Chamberlain, in his speech, explained first of all that he should not for one moment think of interfering with the discretion of a local authority which desired to employ direct labour, provided that authority could show that it was the most economical way of carrying out their contract. The present position of housing was that under the 1923 Act the number of houses approved up to date in the case of local authorities was 53,535, and in the case of private enterprise 116,858. In other words, private enterprise had done rather more than twice as much as the local authorities under that Act. To get a true picture of what was going on to-day in the solving of the housing problem they must not take merely the number of houses which were being built under one particular Act; they must consider the total number of houses which were being built in the country. For the twelve months ended September 30 last there were built no fewer than 110,000 houses. These were actually completed. Of these 14,500 odd were built by local authorities, and 95,362, or 86 per cent., were built by private enterprise. The maximum number of houses ever built in one year in this country was 129,000. It was a remarkable fact that to-day, already, in spite of the extraordinary limitations of labour and material, that they should have got within 19,000 of that figure. Out of these 110,000, upwards of 90,000 were of a rateable value of under £26 a year. On October 1 there were actually under construction another 92,000 houses, of which 71,000 were being built by private enterprise. He therefore drew the conclusion that not only was private enterprise now supplying the greater number of houses constructed in the country, but he expected that the rate of building during the next twelve months would be very considerably in excess of that estimated last year and even of the maximum number which he had quoted. The Act of 1923 had provided a reservoir of houses of a standard of accommodation very much in advance of what the working man was getting to-day, and these houses would eventually come within his means under the Small Dwellings Acquisition Act, 1899. As amended by the 1923 Act, 10,168 houses had been purchased by their occupiers through advances made to them.

Although he did not consider that the Wheatley Act would add one single house to the number that would have been provided if the Act had never been passed, it was not his intention to discourage local authorities nor to the difficulties in their way. He would give the Act a fair trial. It must stand or fall by its performances. But he could not promise that if it turned out to have failed it would remain in its present condition. He considered Mr. Wheatley's scheme to organise for the augmentation of labour and materials and for better distribution was a statesmanlike piece of work. He would support and increase that work by every means possible, for the whole key and crux of the housing problem was in the supply of labour and material.

He did not contemplate the introduction of legislation dealing specially with the manufacture of materials. The Government would keep a watchful eye on all costs in connection with the building of houses, and if they found reason to suppose that the public were being exploited, whether by manufacturers, by labour, by tractors, or anybody else, they would take their own measures to put a stop to such exploitation. The most they could hope for was an increase by 36,000 in the number of houses erected annually instead of the 50,000 contemplated by the Wheatley Act. It was necessary, therefore, to see if there was not some way of supplementing the present method of house building by some new materials or new methods of construction. If at the same time by using these new methods they could do something to diminish the great army of unemployed they would be doing a real service to the State. Mr. Chamberlain referred to his recent visit to Glasgow to see the work of Lord Weir and others in the building of new types of houses. He came back full of hopeful of the future. The idea of steel houses might seem strange to many people, but it was a misnomer so to describe those erected by Lord Weir. He was not going to try to force steel houses on anybody who did not want them, but he was anxious that working people should have an opportunity of judging for themselves. He had, therefore, made an arrangement with Lord Weir under which he had undertaken to set aside a part of his factory for the production of a certain number of these houses for demonstration or experimental purposes, to be supplied to local authorities. In order that this might be done quickly and local authorities might be ready to take these experimental houses, he had, with the concurrence of the Chancellor of the Exchequer, set aside a sum of money from which he would give a grant to any local authority that took taking these experimental houses. In return he asked the local authorities not to let them, at the outset, at any rate, but to erect them on some spot where they could be readily visited and inspected by the public. He hoped by this method very speedily to get erected in different parts of the country a number of these so-called steel houses in positions where people could view them and judge whether or not they were suitable for their accommodation. The houses were not unpleasing to the eye from outside and they were thoroughly comfortable and home-like inside, and he believed they would meet with very widespread favour. The cost must to some extent depend on the quantity ordered. He hoped it might be substantially lower than that of an ordinary house. He thought there would be a considerable number of houses submitted for approval, comprising new methods and new materials, and ultimately they would get down to two or three types. If the experiment proved successful, it would bring them substantially nearer the time when they could deal with the slums. They must relieve overcrowding before on a large scale, they could deal with the slums.

After a debate lasting several hours, the amendment was rejected by a large majority.

Radley College.

H.R.H. the Prince of Wales recently opened the new library at Radley College, which has recently been reconstructed and renovated by Messrs. G. H. Carter, Ltd., of Holloway, N. Messrs. Knapp Fisher, Powell & Russell, of Westminster, were the architects.

THE BUILDING TRADE

LONDON MASTER BUILDERS' ASSOCIATION

ANNUAL DINNER

Hotel Cecil, on Thursday last week, RY T. HOLLOWAY (President) presided nnual dinner of the London Master and Allied Industries' Association. the 350 members and guests present ssrs. H. J. S. Abrams, A. H. Adamson, H. D. Anderson, R. S. Ayling, A., Herbert Baker, A.R.A., J. H. Bradford, E. J. Brown (Director of ciation), Lord Burnham, Messrs. G. M. n Carter, W. E. Collier, A. B. H. Colls, Culver, T. S. Darbyshire, A.R.I.B.A., J. Davis, F.R.I.B.A., J. D. Daymond, exter, H. Dicksee, A.R.I.B.A., J. E. F.S.I., H. A. Fairhead, W. G. Faldo, alkner, L. R. Ford (President, District r's Association), G. Topham Forrest rchitect of the L.C.C.), F. Lindus Forge, Forsdike, W. A. Forsyth, F.R.I.B.A., Gascoyne (President, Associated Master rs), F. J. Gayer, C. Lovett Gill, .A., Herbert Gleed, W. Curtis Green, B. P. Greenwood, F. L. Griggs, W. H. F.R.I.B.A., F. Harbrow, C. G. Hare, d A. Haskins, H. H. and R. Holloway, an, G. W. Humphreys (Chief Engineer, F. D. Huntingdon, S. Gordon Jeeves, D. Palmer Jones, W. Kaula, Sir Walter e, Messrs. W. A. Leaning, F.S.I., H. hant, F. W. Loasby, H. M. Lorden, ay, F. A. and F. G. Minter, G. Perry V. G. Newton, A.R.I.B.A., Sir Cecil e, Mr. F. Peaker, Sir F. Rice, E. J. , A. Roberts, A. and S. E. Roome, ddenham (Secretary of the Association), in Savill (President, Surveyors' Insti- Messrs. J. M. Theobald, F.S.I., F. W. J. Tozer (President, London Foremen's Association), A. F. A. ne, C. C. and F. Trollope, F. W. Troup, .A., A. F. Vigor, E. H. Wall (Assistant y of the Association), F. J. and L. S. Septimus Warwick, F.R.I.B.A.

oposing the toast of "The Architects Sveyors," MR. A. H. ADAMSON said the industry had been passing through a cficult stage, and what with heavy taxa- erce competition, shortage of skilled and difficulty of obtaining material, the e found their hands fairly full. Yet it l human touch and the spirit of kindly ction which made everything worth , nd they were pleased at those annual gs to have the opportunity of getting h with the architects and surveyors. had noticed with interest the recent nation of the Society of Architects and Real Institute of British Architects. They rulated the architects on that step, and he words of the president of the Society tects, expressed in his recent presidential that the fusion might strengthen the n in its relations with the public, and to speak with a united voice. Builders eful that with this amalgamation fresh minds, architects would do everything power to support the serious effort was being made so that builders, too, peak with a united voice. The builders ed by the National Federation of g Trade Employers to negotiate with ratives carried a heavy responsibility, only were they occupied with the rs' interest, but they were safeguarding rests of the architects and the surveyors, identally protecting the operatives from anny of a turbulent minority. The trike showed that the builders had the upport of the architects. The change ernment had given confidence, and confidence no industry could flourish. should remember the words in the Speech at the opening of Parliament, g for mutual confidence between masters and men, and he thought builders and operatives had already got near to that ideal, and the settlement of the recent strike was proof of that. If there could be a greater number of conferences between the architects, surveyors, and builders, all contributing from their individual experience towards the settlement of the many problems facing the industry, it would prove to be of the greatest good to the industry, and help in the settlement of many vital questions. If, for instance, the fierce burden of competition could be lessened it would be of great benefit to the industry, for he was sure no one wished a body of men to give so much of their time for nothing, as the builders were forced to do under present conditions. A conference of architects, surveyors and builders could also be of help to the Government in the housing difficulty, and thus lift a millstone from the neck of the industry. There was much talk of alternative materials for housing, but could not they get together and improve the output of materials in this country and stop the tremendous import of materials from abroad? Another thing which he thought would result in a great deal of good to the industry would be for young architects to spend some time in a builders' office and on building works, and for young builders to spend some time in architects' offices, and they had already gone some way in the matter of getting architects and builders to know one another's difficulties better by founding a Chair of Building at Cambridge University.

MR. W. G. NEWTON, in responding, said the architect and builder were once one, but now, owing to the specialisation of modern life, they had become separated and performed separate functions; the chief difference between them was that the architects' establishments and incomes were small while the builders' establishments and incomes were large. The work produced by the average builder in this country was of a very high standard, for the English workmen took a lot of beating. It was very necessary there should be a breaking down of suspicion between the masters and the workmen, and a strengthening of mutual confidence. A great deal depended upon the way the men were spoken of. Speak well of the men and they would respond. The more they could do to encourage the craftsman to take an interest in his work, to show him that his share in the task was recognised, the more likely they were, in the speaker's opinion, to settle the labour difficulty. As an instance of what could be done in that direction he mentioned that on a building being erected for him by their chairman, the building committee had asked that the names of the workmen should be inscribed on that building. He thought that was the right spirit, although it could not, of course, be done in every case.

MR. J. M. THEOBALD, F.S.I., responding for the surveyors, made a humorous speech, in which many professional terms were introduced in outlining the "history" of a quantity surveyor, in the course of which he said: Once upon a time there was a young Quantity Surveyor, whose Christian name was William—naturally enough he was called "Bill"—who led the usual monotonous life, with "Variations," of course. He came of "good, hard, sound, well-burnt stock," and though handicapped by a "plain face," a "bull nose" and a "rough squint," his "frame" was "free from sap, shakes, large, loose or dead knots, waney edges and all other defects," and he was as "Keene" as cement. He committed many sins of "addition and omission" (which he endeavoured to cover up before they had been inspected and approved by the architect), and he was not above being "squared"; but for this his father, who had spared the "rod" and spoilt the "reinforcement," was largely to blame. "Anaglypta," however, upon whom his affections were "centred," (centering measured separately), was not blind to his many faults. . . . She pointed out to him that he was "oversailing" the mark and that six months' (tread-) "milled lead and labour" would surely be his, although she realised he was so weak that "no solution" was possible—not even "Dr. Angus Smith's." Of this she was so "shore" that she "struck and removed him as being no longer required," as he found to his "prime cost." This completely "floored" him and the "asphalte flat." That night as he wended his steps "fair on top and front edge" and "lay on his natural bed," which "rubbed hard on all his exposed surfaces," he felt he had indeed "floated grounds" for complaint. A bad attack of "flu," which, in spite of being "parged and cored," "caused distinct signs of shrinkage to appear within three months," warned him that his die was "cast (including mold)." He therefore "gave notice to the local authority," but his "submission was held not to be one within the meaning of the Arbitration Act of 1889," so he was "executed and carried out in accordance with the R.I.B.A. Conditions of Contract." A "trench was dug, not exceeding 5 ft. deep," as per the standard Method of Measurement, into which he was "filled in and well rammed," and having thus paid the "penalty" and made "provision" of quite respectable dimensions for a quantity surveyor—to which, of course, the legatees had to "add for profit, carriage and fixing,"—his character was held to have been "twice whitened."

In proposing the toast of "The London Master Builders' Association," VISCOUNT BURNHAM said hardly a day passed but what a new building material was put forward as a solution of all the building difficulties by someone unconnected with the industry; it seemed to be thought that those who understood the art of building most completely were those who had never learned or practised it. It had to be remembered, however, that building materials suitable for one country were not necessarily appropriate to another country with different climatic and other conditions. He used to think that the architects and builders of this country used materials and built in the style most suited to the character of the country, but that seemed to be wrong, and it appeared that if building was to be carried out according to the best principles it would be necessary to revive the office of the Minister of Munitions. It was sometimes thought that architects and builders to-day were never able to equal the standards of ancient days, but lately—especially after seeing such work as that of Mr. Herbert Baker, A.R.A., in South Africa—he had come to the conclusion that that was a myth. It would be impossible to find craftsmen of greater skill or reliability than the men who, selected from the staffs of London builders, had gone out to Delhi to give their lead to the native workmen who were building there the new capital of India. In the L.M.B.A. they had the organised strength and the organised efficiency of their calling, and also the organised patriotism of their calling. In his address from the Throne the King had called attention to the necessity of properly housing the people and clearing slum areas in order to promote social contentment and alleviate human misery, and with the return to confidence brought about by the change of Government came added responsibilities. If the years immediately before them passed without an effort to make it impossible for the present housing scandal to continue, then indeed they would have a heavy reckoning to pay. The housing inadequacy was at the root of social discontents, and unless they dealt with the problem satisfactorily, the prospect before them was not a very bright or hopeful one. Instead of this period of confidence being a time for them to rest, it was their duty to get busy and make certain that in a few years all that

they now deplored in the overcrowding of cities, in lack of cleanliness and comfort in the villages, would be a thing of the past. As master builders they more than anyone else could help to attain that consummation, and he was confident such an appeal would not be made in vain.

The PRESIDENT, in reply, said the year now closing had been the most eventful one in the history of the Association. At its outset they had the shadow of a dispute hanging over them, and at Liverpool there was an attempt to undermine the national agreement. Then there came a demand for 2d. an hour increase in wages throughout the country, and the situation was rendered more difficult by the serious shortage of labour in certain skilled trades. The federated employers felt bound to resist the demand, although the London employers had no reasonable objection to an advance in wages in their own area, but the Association was not prepared to see the grievances which undoubtedly existed in London made use of to force up wages all over the country, in many parts of which no advance was justified. The employers made the most strenuous efforts at conciliation, and went to great lengths to avert the trouble. A national strike in the building industry of this country was without precedent, but it had one merit—it was short and sharp, and when work was resumed it was on terms which were practically the same as those offered when the negotiations were continued. Liverpool had been brought into line, and the London employers had been given the opportunity of increasing the wages of their own men without prejudicing the national position. They were proud to know that in all these difficulties and in all their activities they had emerged with a great measure of success and with much increased prestige. Their success had been earned by the whole-hearted loyalty of the members of the Association, and particularly of the members of the Council and Committee. They must now look to the future, and it was more necessary than ever before that they should have a strong, united employers' organisation to control the industry and to legislate for its future peace and well-being. The greatest difficulty to-day was undoubtedly in the shortage of their skilled trades. Unless the employers were federated they would be bidding against each other, there would be an all-round increase of wages, and the result in the end would be ruin and chaos in the industry, and the trade unions would be in absolute control. In the interests of the nation that could never be allowed. They must have an immediate increase in the number of skilled men, and that could only be obtained by increased, intensive apprenticeship, and for the time being a rigid adherence to the standard rate of wages. They were going to ask every employer, in and out of the Association, to give a signed undertaking that he would pay neither more nor less to his workmen than the standard rate. He was not one of those who believed that the bare standard, the flat rate of pay to all workmen, was the ultimate aim of their policy. He believed in paying a man what he was worth. He believed the time would come, though it might not yet be near, when the highly skilled man in the industry and the man who was prepared to give a better output than his fellows would have a higher reward. Unless they could bring that about they would never get men to give of their best. Nevertheless, they were convinced that, for the time being at any rate, and until other things had been put right, the bare standard of the agreed rates must be adhered to. If firms failed to carry out their undertaking then they would have to bring against them the full strength of their organisation. Architects, surveyors, and builders should have no difficulty whatever in deciding where their support should lie in this matter. They desired to lift their industry to a much higher level than it occupied at present. It was not part of their policy to fix prices or to limit fair competition. There was nothing whatever in their objects, either written or unwritten, which would lend colour to the suggestion that they were forming a ring.

The toast of the guests was proposed by MR. FRED THORNE, and acknowledged in a few words by MR. E. J. RIMMER.

THE HEALTH MINISTER AND HOUSING

BY B. S. TOWNROE.

MR. NEVILLE CHAMBERLAIN during the past fortnight has made several interesting speeches, mainly to political gatherings in London, on housing problems, but his pronouncements have been somewhat lacking in illumination. He has spoken, as might indeed have been expected, with a certain complacency on the results of the 1923 Act, and has announced the record number of houses, probably in all over 120,000, that will have been built since January by the end of this month. He has also said a good deal in the abstract about steel houses, and declares that he has been "very favourably" impressed after seeing for himself the Weir house in Glasgow.

Mr. Chamberlain has an exceptional opportunity. For this reason it is possibly permissible to write somewhat frankly of his immediate tasks. All thinking people wish him well in his new post. He has been favoured with an exceptionally good press because, so it has been freely stated by inspired political correspondents, he refused to become Chancellor of the Exchequer, as he wanted to make his mark in housing. Ever since the Election all men, even his political opponents, have spoken well of him. Here lies the danger, and it is because of this that all those who are keenly interested in the provision of houses and the clearance of slums must hope that Mr. Chamberlain in the near future will devote himself a little more clearly to some of the difficult conundrums in front of him.

He has, I believe, expressed admiration for the Weir "steel" house, but Lord Weir in a letter to me, dated November 10th, just over a month ago, spoke of his method as being in an initial stage of development, and expressed his anxiety that it should not go out as "a half-baked scheme." The report of the Committee, of which Sir Ernest Moir is chairman, on the Weir house, issued last month, was a masterpiece of official ambiguity, saying as little as possible for or against. But those who have studied the report carefully know that serious objection will be taken to the Weir house unless the measures proposed to keep it warm and to resist high temperature are successful; and are aware that the scantlings have to be increased and the internal linings strengthened; that from the architects' point of view the monotony of the types is a disadvantage; that certainly "the life of the houses will be shorter and the maintenance charges will be greater than in either a brick or concrete structure"; and that no exact figures are available on the essential question of cost. In short, reading between the lines of the Committee's report, it is obvious that the signatories do not expect the Weir house to revolutionise the building industry.

It is, of course, well-known in the trade that the upgrading of builders' labourers is a right course, and that the trade unions have in the past raised many difficulties. It is equally well-known that in recent months there has been a very steady and satisfactory recruitment of the ranks of skilled craftsmen by men who have had plenty of experience as labourers on building work. But there is a fear that the speeches of politicians may check the healthy movement within the industry itself.

It is stated that the Wheatley Act is breaking down of its own weight. There are many who have an objection to Mr. Wheatley as a politician, especially in view of his recent calls for class warfare, but who recognise that his Act of 1924, despite imperfections, has many good points. Local authorities are, in many cases, being forced by the facts to change over from the Chamberlain Act to the Wheatley Act. A subsidy of £9 for forty years as against £6 for twenty years, in spite of limitations of rent, has an appeal that cannot be resisted. Many architects who would certainly advise a private client, whether he be a man wanting a house for his own occupation or a builder, to proceed under the Chamberlain Act, are finding that the situation is quite different when the deal with local authorities.

On this point a clear statement i needed. Local authorities who are sidering housing schemes for next y definite statement as to whether intention of the Government to facili under the Wheatley Act, or whether it is to remain in force on the Statute to be killed in effect by administrativ

Again, the nation will expect a early next year with regard to slum Sir Leslie Scott, in a notable speech Parliament on December 9, suggested time has come to give advances for ment of insanitary property up to 75 of the annual loss incurred by a local and possibly also to make a capit bution at the outset.

It is too early yet for any consider to be announced with regard to the of town planning to areas already Obviously the 1919 Act that applies co as far as areas are to be built over in are concerned, needs expansion. that Mr. Neville Chamberlain is th sympathetic on this point, and there a hopes of a move forward in town plan year.

These various points of view are n in any spirit of hostility, and certain opposition to the Government's declar of helping the private builder and of ing house ownership. But there is the present time that some of the rea the situation may be overlooked. The press especially cannot ignore the i feeling that exists, especially among and builders, that politicians, irrespectiv party complexion, are too apt to ove practical questions involved. Wild mistic statements about "steel" exaggerated claims as to "dilution hits at rival housing schemes, do n help the nation forward. Mr. Cha to-day should realise that he has an ex opportunity, because he now posse confidence of probably nine-tenths of t and that it will be a disaster if he fails good his present confidence.

[The above article was written be discussion in the House of Commons day.—ED.]

BUILDING IN LEE

A REPORT of the building activity during the past year has recently been i the City Engineer (Mr. W. T. Lancashi comparative table of the number o erected is as follows:—

	Dec. 1923 to Nov. 1924.
Detached houses	105
Semi-detached houses ..	299
Terrace houses	350
Total houses	754

The miscellaneous buildings erected the past year numbered 1,037, as c with 963 the previous year; plans de numbered 2,255, as against 2,221, and mated value of buildings shown on the a plans was £1,505,084, as compare £1,587,656.

Under the Housing Act, 1923, the Cor has approved applications for the ere 975 houses, provisional certificates ha issued for 543 houses, and there are to completed. In addition 200 houses a erected for sale by the Leeds Corpor Middleton under the 1923 Act. The tion now propose to obtain tenders erection of 500 houses at Crossgates, Me and Middleton. Under the Leeds schemes 1,563 A type houses have be pleted, 1,288 B type completed, 41 completed, and 337 C type completed, a 3,229. A further 100 houses are completion.

LONDON ASSOCIATION OF MASTER DECORATORS

THE CRACE PAPERS.

IE presentation of prizes to successful lon competitors in the recent competitions nised by The National Painters' and rators' Joint Education Committee at castle-on-Tyne, took place recently at ters' Hall, Little Trinity-lane, E.C. Prior ie distribution Mr. A. V. Sugden (Chairman xecutive of Wall-paper Manufacturers, Ltd.), in a condensed form "The Crace Papers." Sugden said the papers themselves were in the nature of classics and were full atters of great literary as well as of anti- ian interest. John Gregory Crace, was in 1809, and came of an old family of rators and paper-stainers (for in the early the two arts were generally combined), and family was one of extreme personal longevity. 826 John Gregory Crace joined the firm and tly afterwards they established themselves Wigmore-street. John Gregory Crace elled abroad and became a recognised iority on decorative art. It did not seem able that paperstaining was actually carried by the Craces from about 1800 onwards, but had an excellent range of private designs h passed into the hands of Cowtan & Sons 99, when the latter house acquired the Crace ness.

ie two papers, which the lecturer then in an abbreviated form, were delivered February 4 and 18, 1839, to the Royal itute of British Architects. After reading papers Mr. Sugden made the following ments :—

RIGINS.—Whilst it was entirely correct that e of the earliest efforts, as also those of later ods, had been aimed at the imitations of the stries, velvets, oak wainscoting and leather gings of earlier ages, it was also on record the earliest known specimen of wall-paper this country—the so-called "Cambridge ment" of 1509—was printed by an early rpress printer, Hugo Goss, of Beverley and k, in the ordinary black printer's ink of the od. It would seem that in this country at rate the letterpress printers manufactured -papers even earlier than the paperstainers er, who invented the flock and also the domino rs. His theory was that these letterpress ers when time or inclination permitted did only make papers for walls, but closet and g papers and papers for the interior of ks and chests. It was even possible that e of their ornamental scrolls and similar work, normally in book plates, surrounding of lamations, &c., were actually suitable and for those purposes.

LOCK PAPERS.—Apropos of the invention of k, claimed by Francois of Rouen, prior to its oduction by Jerome Lanyer, modern research the credit of the discovery to Holland and n fully half a century earlier than Francois. what it was worth he advanced the theory Jerome Lanyer (or Lanier) might have been uguenot refugee who had fled from Rouen might have been a workman under Francois nally. His name Lanyer may have been an ish version of the French "lainier," or er, viz., Jerome the Flocker. The French hs for Francois were difficult of credence (1) use in the French description of flocking, ed by Crace, no blocks were used, the artist ting his design in fixitive directly on to the rial used (this would suggest the blocks ing the dates 1620 were really domino ks), and (2) because the facts and dates ed about him must be wrong, as a father was a fully-grown individual in 1620 could ly have a son who died in 1748! It was rkable that the flock ran for a very con- able period before it occurred to its prac- ners to utilise their designs and blocks for ur printing.

OMINO PAPERS.—These originated in Italy with the marbled paper of a type and process of manufacture so well known in connection with ledger linings. The art proceeded to France, and in that country at least the printers, with their little domino blocks, were the direct forerunners of paperstaining proper. Domino papers did not appear to have ever been manufactured in England, but there was a considerable affinity between these and the chest lining papers.

JACKSON OF BATTERSEA.—The references quoted from this essay (by Crace) showed him to be critical not only of all rival productions, including Chinese, but also of his own earlier distemper printed papers. His use of oil colours marked a great departure from general practice and his blends were quite clever. He used four colours—grey-green, yellow, blue and red—and claimed "ten positive tints." Specimens of his work might be seen in the Print Room at the British Museum and also at South Kensington. He was evidently a father of modern advertising.

THE CHINESE PAPERS.—These may be divided into three groups—(1) the original hand-painted Chinese, imported by London traders, which consisted of scenic subjects, each length different and designed to grow up the wall from base to ceiling; (2) the English imitations, which were nearly all in small panel form, like pictures, usually printed in outline from an engraved or etched plate with the colours put in by hand; and (3) the French imitations which were more ambitious and also more grotesque in subject, such as mandarins skipping on trees, &c. It was probable that Jackson's contempt was aimed at the two latter classes. Some very good specimens of the English Chinese were contained in the Joicey collections at the London Museum. There were also one or two at South Kensington.

THE ECKHARDTS AND SHERRINGHAM.—It was regrettable that so little of these eulogised paper-stainers was known and that their work had also passed into oblivion. Nathaniel Hinchliffe, forerunner to Scott Cuthbertson, took over the Whitelands works at Chelsea previously in the occupation of the Eckhardts, whilst the first William Woollams was apprenticed to Sherringham.

THE PASSING OF SUPREMACY TO THE FRENCH.—It seemed extremely probable that this was due in part to the coming of machinery which not only monopolised the attention of those who were experimenting with it, but disturbed the normal initiative of those who did not understand and possibly over-estimated its effect on hand-work. It must be admitted, however, that the imitation of other and costlier materials had always been most prejudicial to the development of design, and it would seem the French were rightly seeking originality and a form of expression in design which really suited the material upon which they were working.

STENCILLING.—This process, which appeared to have fallen into disuse about Crace's time was revived some forty years later by the firm of Messrs. Hayward & Son, and had been a very important branch ever since.

CRACE'S CONCLUDING WORDS AS TO A HIGHER STANDARD OF DESIGN AND TASTE.—"It appears presumption in one so humble as myself to address thus the Institute of British Architects, but yet with them in a certain degree must rest the remedy. It is in your power to introduce in your designs the Sister Art of Painting; by encouraging that, the evils of which I complain would soon disappear, working schools, the only effective ones, would thus be formed, and besides adorning our buildings, you would be the means of more widely diffusing and perfecting an art, which I think all will agree is of such vital consequence to the grand cause of our greatness as a nation—our manufactures."

Whether it be to his inspiration or not, it was clear that after these words an immense change came over the scene, commencing a very few years from the date of the Crace papers. To mention the factors in sequence and very briefly, he would quote the following events :—

(1) The Gothic Revival pioneered by Owen Jones and Pugin.

(2) Metford Warner's determined efforts to bring wall-paper up to the level of the arts. This effort was an almost unique achievement in its length of performance as in the success which crowned it. A feature was the seeking out of the artist by the manufacturer instead of depending on the block-cutter for his designs.

(3) The coming of William Morris and the pre-Raphaelites, Walter Crane, Lewis Day, C. F. A. Voysey, and others.

In conclusion the lecturer showed a number of papers of the Crace period, some being actually designs of the firm and possibly printed at one time under the personal supervision or to the order of the author of the papers.

After a cordial vote of thanks had been passed to Mr Sugden, the prizes and certificates were awarded to the successful competitors.

BUILDING TRADE APPRENTICES

IN view of the recent visit to the Minister of Health of a deputation from the National House Building Committee on the question of augmenting the supply of labour in the building industry, it may be of interest to recall the methods of popularising the trade with the young men and boys of Ipswich in 1922. There it was felt desirable and necessary for the apprentices to make full use of the evening classes at the technical school and the school of art, and it was discovered that for some reason, whilst other courses of instruction were well attended, that on building construction was not. With a view to altering this state of affairs, two "socials," at an appreciable interval apart, were held. The interval of the evening's entertainment was made use of for short speeches urging the opportunities of the training afforded. At the second social a similar procedure was adopted, and, in addition, a letter setting out the scheme of training was handed to each boy, asking him to consider the matter for another week. A satisfactory result ensued, and the building trade instruction at the evening classes was an assured success.

The same plan, it is felt, might well be adopted very generally; but at the same time it leaves something still to be done. "The boys," writes a correspondent, "must have practical training as well as theoretical; and herein is the opportunity for the employers. The old-time objection that one employer does not care to train apprentices who leave him upon completion of the term to go, perhaps, to a competitor may be overcome by means of grouping all apprentices together under experienced instructors; but these groups should not be kept continuously under the same employer, it being rather the care of the local Association of Master Builders to find work for the groups. The cost being thus borne by the local association, the share falling upon the individual employer would be slight. Nevertheless, whatever system be decided upon—and that reported in *The Builder* of December 5 would seem to be as satisfactory as any—it will be essential that the course must be intensified. The need is urgent; the shortage is now, and training lasting from three to five years, whilst being better than nothing, will not supply that need. Given proper care in instruction and application on the part of the student, and also advanced continuation classes for as long as may be desired afterwards, there is no great difficulty in the way of making a craftsman sufficiently capable to undertake any of the operations required in erecting a cheap house such as will be necessary in six months."

NEW BUILDINGS IN LONDON

Charles-street.—A large block of flats is in course of erection at No. 12, Charles-street, the former town house of Lord Savile. The site extends from Charles-street to a private road in the rear, and the building will consist of seven stories, containing two large suites on each floor, with lounge hall, two reception rooms and from three to six bedrooms, in addition to ample kitchen offices, grouped round a central court-yard. The construction will be fire-resisting throughout, and the Georgian elevation will be in Crowborough bricks with stucco cornices and enrichments in keeping with the general architectural character of the street. The building is being erected for the London and Northern Estates Co., Ltd., from designs by Mr. Paul Hoffmann, architect, Capel House, E.C.2. The general contractors are Messrs. W. H. Lorden & Son, Ltd., of Upper Tooting; the steel engineers, Messrs. Young & Co.; lifts by The Express Lift Co.; heating and hot-water installation by Messrs. Russell.

New Oxford-street.—The large five-story corner block of premises known as No. 78, New Oxford-street, W.1, is to be considerably altered and renovated and opened as office accommodation. Shops will be fitted in the ground floor, whilst the remaining floors will be sub-divided as required. A lift will be installed. The work has been entrusted to Messrs. Whitby's, Ltd., Eagle-street, London, W.C.1. The architects are Messrs. Nicholas & Dixon-Spain, of 19, Hanover-square, London, W.1.

Old Broad-street.—Alterations and improvements are to be made to the premises in Old Broad-street, E.C., of the Midland Bank, Ltd. Plans have been prepared by Messrs. Whinney, Son, & Austen Hall, of 8, Old Jewry, Cheapside, E.C.2. The contractors are Messrs. Hall, Beddall & Co., Ltd., of Waterloo Bridge, S.E.1.

Cheapside.—A new branch shop is to be opened by Messrs. Horne Bros., Ltd., of 90, Oxford-street, W.1, at premises in Cheapside, E.C. The new shop front, &c., will be carried out by Messrs. E. Pollard & Co., Ltd., of St. John's-square, London, E.C.1.

Walworth-road.—It is proposed to considerably alter and improve the King's Head Hotel, in Walworth-road, Newington, S.E., owned by Messrs. Watney, Combe, Reid & Co., Ltd., of the Stag Brewery, S.W.1. A new front, probably in terra-cotta, will be built and the heating and lighting systems improved. The architect is Mr. Malcolm T. Saunders.

Edgware.—A new branch bank is to be built at the corner of Edgwarebury and Hall-lane by the Westminster Bank, Ltd., of Lothbury, E.C. The new building will be of three floors, of which the ground floor will be used for the bank and the upper stories for residential purposes. The building will be faced with best Crowborough bricks, with quoins and stringers of red pressed brick. The elevation to first story will be of Portland stone with metal windows. Central heating and electric lighting will be installed. The contractor is Mr. Harry Neal, of Northwood, Middlesex. The architects are Messrs. Hall-Jones & Dewhirst, of Parliament Mansions, Victoria-street, London, S.W.1., and Ealing, W.

Regent-street.—Building will start shortly on the site of Nos. 83–89, Regent-street, W.1, where the old buildings are to be replaced under the scheme of the Office of Woods and Forests. A building lease for 80 years has been granted and plans for a new block of office and shop property have been designed by Messrs. Trehearne & Norman, of Windsor House, Kingsway, London, W.C.2. The new building will be of six stories, with basements, and will have the top floor in a Mansard roof. The elevation will be similar to the adjoining buildings, and will be of Portland stone enriched with bronze ornamental work. The shop fronts will also be of metal work, and the remaining casements will be of the steel type. The roof will be covered with green Cumberland slates, and finished on the top with concrete and asphalte. Lifts will be installed to serve all floors, and central heating, electric lighting, bells, and burglar alarms, ventilating plant, vacuum cleaners, &c., will form part of the equipment of the building. Marble will be used both for the window linings and skirting, and for the entrance lobbies floors and walls. The contractors are Messrs. W. F. Blay, Ltd., of Dowgate-hill, Cannon-street, London, E.C.4, and Spital-street, Dartford, Kent.

Jeffrey-road.—Alterations and additions are to be made to the "Clarence Hotel," at Jeffrey-road, S.W.4. The work will cost several thousand pounds, and will principally consist of new kitchen and lavatories, a re-arrangement of the interior fittings and the provision of a new front to the building, probably of terra-cotta. The plans have been prepared by Mr. Foster, chief surveyor to the Nine Elms Brewery, S.W.8.

Edgware-road.—The premises at No. 229, Edgware-road, W., are to be demolished and a new business emporium erected for occupation by Messrs. Montague Burton, Ltd. This firm are to build premises of four stories. The building will be erected on a steel-framework, and will have a frontage to the street clothed in Portland stone. The floors will all be of concrete, surfaced with wood blocks. The roof will be slated. Heating and hot-water supplies installations and electric lighting will be installed The architect is Mr. Harry Wilson, of Victoria Park-avenue, Kirkstall, Leeds.

St. Helen's-place.—Another site in St. Helen's-place is to be covered with an office building, similar to the new building on the site opposite. The new block will be of six stories in height with a basement. The street elevation will be carried out in Portland stone, and the rear wall will be backed with white glazed brick. A steel frame will support the building, the floors being of concrete. The window casements will be of steel, a lift will be installed, whilst the interior equipment will also include heating and electric lighting, ventilating plant, vacuum cleaning apparatus, telephones, bells, &c. The entrance and lobby will be paved and walled in marble. The contractors will be Messrs. Dove Bros., Ltd., of Cloudesley-place, Islington, London, N.1. The architect is Mr. Henry A. Saul, F.R.I.B.A., of 10, Gray's Inn-square, London, W.C.

Wood-street.—Work has just started on a new block of residential flats to designs of Mr. Matthew J. Dawson, F.R.I.B.A., of 9, New-square, Lincoln's Inn, London, W.C. A block of six stories is to be erected containing three flats on each floor. The building will be steel-framed, with side walls of brick and a front elevation of facing bricks and Portland stone dressings. The floors will all be of concrete, reinforced with steel bars. The roof will be flat and asphalted. The builders are Messrs. Ford & Walton, Ltd., of 254, High-road, London, N.W.6., whose tender amounted to £36,890. The steelwork will be supplied by Messrs. Redpath, Brown & Co., Ltd., of 3, Lawrence Pountney Hill, E.C.3. The site has an area of 5,450 ft. with a frontage to Wood-street of 40 ft.

Deptford.—Tenders will be invited at an early date for the erection of public baths and wash-houses in Evelyn-road, North Deptford, for the Deptford Borough Council. The plans show two swimming baths 66 ft. long and 22 ft. wide. in concrete, around which will be 38 dressing boxes. There will also be four suites of slipper baths, and vapour baths, cooling rooms, shampooing room and two shower baths. There will also be a public laundry, boiler house, stores and residential quarters for a caretaker. The total cost of the scheme is estimated at £72,000. The architects are Messrs. A. W. S. & K. M. B. Cross, of 45–46, New Bond-street, London, W.1. The quantity surveyors are Messrs. Rualt & Young, of 17, Southampton-street, London, W.C.1.

Langham-place.—A new block of offices—to be called Summit House—is to be erected on the site of Nos. 1 and 2, Langham-place, W.1, at the corner of Langham-place and Mortimer-street. The ground floor will provide space for a bank on the corner, with shops on each street front. Above will be five upper floors divided off for letting purposes into suit single offices, reached by a lift from the floor. Electric light will be installed, current will also be supplied for power pu A central heating hot-water supply on t pressure system will also be included floors will be of concrete supported by grillage, which in turn will be suppor girders and stanchions. The elevations streets will be of Portland stone. Wooc flooring will be laid on the ground flo entrance hall. The walls will be of p plaster, plainly distempered. The roof covered with slates. The site has a fr to Mortimer-street of 28 ft. and to Lar place of 45 ft. The ground floor area is whilst there will be a basement, light pavement lights, of 2,000 ft. The archi Mr. Delissa Joseph, F.R.I.B.A., of 2, Basi avenue, London, E.C.2. The builders are Edcaster, Ltd., of Goldhawk-road, Shep Bush, W.

Regent-street.—Messrs. A. Edmonds Ltd., are the contractors for shopfitting at the new premises at 149–151, Regent-

BUILDING MATERIAL DEPUTATION

THE Minister of Health, the Right Neville Chamberlain, accompanied b Parliamentary Secretary and officials Department, received a deputation fro manufacturers and suppliers of bu materials.

Mr. H. J. C. Johnston, on behalf deputation, said that the Minister coul on the hearty co-operation of the ma turers in the Government's housing sc They had given their word that they not increase prices of building materi housing schemes unless increases wer dered necessary owing to increased co production; the record of the past few m had shown that the materials manufac and suppliers were keeping their word. manufacturers objected to being single for control by Act of Parliament, as ha intended by Mr. Wheatley, and had st expressed themselves as opposed in pr to the Building Materials (Charges Supply) Bill. The manufacturers refer the fact that although there may be a sh of bricks in some areas, there were, other hand, several districts in which th duction exceeded the demand, and strongly urged that some means shou devised whereby these surplus stocks co economically transferred to the needy

The Minister, replying to the depu said that he accepted their promise of co tion, and he was sure they all realise what would pay them best would be tinuous demand for their commodities. could best be secured by maintaining pr the lowest possible level. He welcomed promise to set up a committee wh thought would have many useful functi perform with regard to the distributio the most advantageous use of av materials, so that a shortage in one could be supplied out of an excess in a district. He promised to send the ma turers a draft of the precise terms of ref for their committee so that its functions be settled quite definitely.

Concrete House Subsidy.

The Ministry of Health recently decid important point in connection with co houses and the subsidy. The Chertsey District Council wrote to the Ministry ask concrete houses would be eligible for the su and if the £75 subsidy was to be calculated £600 cost limit for houses available f subsidy. At a recent meeting of the Cou was reported that the Ministry had decide concrete houses erected at a cost of £62 brick at £675, were available for the su which is included in these amounts.

CATION IN THE DING INDUSTRY,

LIVERPOOL CORRESPONDENT.]

tional development of vital interest ing industry is taking very definite verpool. On January 5 next a new of day classes for apprentices in the dustry will be established in the nical School, and additional accom- ill shortly be available in the Lord morial Workshops, Fontenoy-street, chased by the Education Committee ustees.

me is the outcome of several confer- under the chairmanship of Mr. J. Allen, M.P., between members of the nd Allied Trades Employers' Asso- Operatives' Societies, and representa- Technical Education Sub-Committee Education Committee. It is under- an Advisory Committee consisting of f these several bodies will form a part of the machinery responsible for on of the scheme, and for the success artment.

ous approval has been secured for the nich provides, in the first instance, for nce at a two years' course, of appren- ed in the various trades comprising ng Industry. Apprentices will be ithout loss of wages, on one full day in order that they may attend the ses arranged for their sole benefit at of Building. In addition to attend- g the day, the apprentices will be to attend on one evening each week, trated lectures dealing historically tlines of building construction, types nd machine tools, and the uses and of materials will be delivered by ing special knowledge of the industry sential needs of both apprentices and

g on the two years spent in the day e youths will continue for a further t more advanced evening classes, and complete, during the apprenticeship omprehensive course of study extend- least four years.

such as this, supported as it is by all with the future prosperity of the ndustry, should exercise a profound cial influence, not only on the appren- oblem, but also on the whole of the ndustry in the locality of Liverpool. ts no longer any doubt regarding the of the old-fashioned indentured ship system. So ineffective has it t only a very small proportion of the on employed in the skilled building e served, compulsorily, an apprentice- l. The Industry has been in recent ansformed by the employment of new onal materials and methods, and of hinery, that the old-style apprentice- ods have ceased automatically to

fresh from school on entry to the ndustry is no longer employed as an to a master, but he has become to a t an independent worker in a vast economically important but relatively pations. The large machine-driven s gradually displaced the small shop, was usual for the apprentice to be d educated for the career of an all- aftsman. The conditions which possible for the master or his journey- e to the apprentice personal attention ng in the usages of his craft have thus surely disappeared. That personal necessary for the cultivation of really craftsmen is, by force of circumstances, king in the modern workshop.

of those responsible for this Liverpool Building is not merely to provide facilities for apprentices to acquire a of the technique of building con- forms and methods, but also to m to take a wide view of their craft.

ACTION BY CONTRACTORS

THIS case came before Mr. Justice Roche in the King's Bench Division on December 5, upon a special case stated by the arbitrator in a dispute between the plaintiffs—Messrs. Wm. Muirhead, Macdonald, Wilson & Co., Ltd.—and the Corporation of the City of London in regard to a housing scheme at Ilford, which was, it was alleged, to cost about £2,000,000. The scheme was abandoned when only 220 houses had been erected.

Sir John Simon, K.C., Mr. A. A. Hudson, K.C., Mr. W. W. Szlumper, and Mr. L. Mead appeared for the contractors; and Mr. Alexander Neilson, K.C., and Mr. E. H. Tindal Atkinson represented the Corporation.

Sir John Simon stated there were two contracts—a building or housing contract dated July 1, 1920, and a road and sewers contract dated August 6, 1920. The Corporation's scheme was for the erection of not more than 2,000 houses. The payment clause was of a very intricate nature, and one which the Ministry of Health must more or less have patented. Its object was to secure that the contractors would get a defined remuneration per house. If the contractors brought out a house at less than the standard price their profit was increased, and if a house cost more than the standard price the contractor's profit was reduced. In any event, there was a guaranteed profit of £30 per house to the contractors. He (Counsel) contended there was an implied term that the Corporation would not so behave as to make the houses cost more than the standard price, which would penalise the contractors. When the scheme was abandoned, only 220 houses had been erected and the foundations of 414 houses laid. There was a big bill to foot, and the question was: What was the size of the bill? The Corporation had power to give notice to suspend or put an end to further work, and in that event the contractors were to be paid for what they had done. The Corporation relied on a provision that they were at liberty to say "stop," and they also said they were only liable to pay a sum per house. The houses had cost more than the contract price, and the contractors' profit had been reduced to the minimum. By the breaking of the contract by the Corporation the contractors had sustained a great loss, because they had provided heavy plant and had given orders for bricks. A portion of the site had been taken out of the contractors' hands and let to a farmer. It was said by the contractors that the Corporation, by what they had done, had greatly increased the cost per house, and that they were not entitled now to say their liability was limited to the terms of the contract, which, if literally interpreted, would give but a minimum profit per house to the contractors.

The arbitrator had found entirely in favour of the contractors, and the question now was how the facts had to be applied and whether the contractors were to be paid the price per house under the contract or a larger sum as damages.

Mr. Neilson, for the Corporation, said the Ministry of Health was responsible for all the steps the Corporation had taken. There was to be a penny rate on the City, and any sum required above that for the scheme was to be found by the Ministry of Health. Because of the urgent public necessity for economy, steps had to be taken to stop the building of the houses. The number of houses to be erected, he (counsel) submitted, was entirely in the control of the Corporation, who could go to the contractors, after one or two houses were built, and say they would not want any more. The cost of materials and plant, except certain specific portions, had to be paid for by the Corporation.

Mr. Justice Roche, in giving judgment, said that when prices were mounting in an alarming way the Corporation ordered the contractors to "go slow," and they did everything they could to prevent progress of the work. He thought they should make up the loss resulting from that circumstance to the contractor. It was a necessary implication of a contract of that kind that one of the parties to it should not so act as to prevent the other earning a reasonable profit. He accordingly held that the contractors were entitled to £40,766 in respect of the housing contract and £9,175 in respect of the roads and sewers contract, and he entered judgment accordingly for the contractors for those sums with costs.

DARLINGTON MASTER BUILDERS' ASSOCIATION

THE annual dinner of the Darlington and District Master Builders' and Allied Trades Association was recently held at the King's Head Hotel, Darlington. Mr. C. J. Todd (President) occupied the chair, and those present included Mr. G. C. Carr, President of the Newcastle Association; Mr. H. Bell, senior Vice-President, Northern Counties Federation of Building Trades' Employers; Mr. W. H. Hope, Secretary of the Northern Counties Federation; Alderman T. E. B. Bates, Chairman of the Darlington Corporation Housing Committee; Mr. J. W. Guthrie, junior Vice-President of the Darlington Association; Mr. W. Stairmand, Past President, Northern Counties Federation, and member of the National Conciliation Board.

Proposing the toast, "The Building Industry," the Chairman said he had been associated with the trade for 29 years. Some people urged that dilution was the solution of the housing problem, but in his opinion the foundation of the security of their trade in the future was to be achieved by making their own workmen by training apprentices. He had always favoured such a course of action, and he found that other employers were always glad to get hold of his apprentices.

Responding, Mr. Carr agreed that they would never be able to build the houses required until such times as they got more men. He mentioned that a scheme had been inaugurated in Newcastle under which they could take apprentices to bricklaying and plastering from 18 to 22 years of age, and they could become fairly skilled in two to three years.

Mr. Bell said that if they were to build houses at a reasonable figure several factors must be more favourable than they were at present. The first was labour, which had gone back 50 per cent. in output. If they could get it into the minds of the workmen that they were not only helping the employer, but doing a good turn to themselves and to the nation by increasing output they would go far towards solving the problem. Replying to the toast, "Success to the town and trade of Darlington," Mr. Minors, Borough Surveyor, paid a compliment to the way in which the builders of the town had risen to the occasion. He said that during the past twelve months 235 houses had been certified for occupation, or about 40 to 50 more than the average before the war.

Concrete Mile Posts.

Concrete mile posts and whistles are very generally used on railways on account of their low initial cost and the negligible cost of maintenance. A further development in this direction is now being made by the use of white cement for the manufacture of these posts, which considerably adds to their visibility. On one important American railway, the New York Central Railroad, all mile posts and whistle posts are now made with white cement. The posts are made in wooden moulds, the "W" on the whistle posts being formed by nailing strips of wood inside the forms; they are then painted black. The concrete consists of 1 part "Atlas White" cement, 2 parts white sand, and 4 parts white gravel passing a ¾ in. mesh. Both types of post are reinforced with ½ in. round rods.

NOTTINGHAM BUILDING TRADES' EMPLOYERS

THE annual dinner of the Nottingham and District Association of Building Trades Employers was recently held at the Victoria Station Hotel, Nottingham under the presidency of Mr. P. Bow.

Mr. W. Bosworth, in proposing the civic toast, said Nottingham was a city of splendid enterprise. He referred to housing, the new Town Hall, Wollaton Hall, the Municipal orchestra, the widening of Trent Bridge, and the electricity station. Nottingham, he said, could not be much behind in its endeavours on behalf of the citizens. It seemed a pity that some of the unemployed could not be usefully employed in the erection of houses. Their federation was not to blame for the shortage of labour in the building trade. As a matter of fact, they had been opposed in this matter to a very high degree.

In responding, the Mayor mentioned that the 1,500 houses erected by the Corporation cost about £1,000 each. The Council now projected the provision of another 700 at a cost which would work out at £500 per house. People required houses at a rent they could pay, and unless they were able to build cheaper dwellings they would not benefit the community at large. He suggested that, say, 50,000 men in the army should be trained in building trades so that when they came out of the service they could take their place in the building world. It would be a good investment for the nation, and they would do no harm whatever to the present bricklayers, plasterers, &c. What they wanted were more skilled men, and he thought it was due to the country to provide them.

The Sheriff (Councillor R. A. Young), who also acknowledged the toast, observed that he inclined to the view that they were suffering somewhat from the sins of their forefathers, who took too parochial and narrow a view. To-day the Corporation was trying to look ahead and take a broader and wider view, considering not merely the present, but the future.

Submitting "The Guests," Mr. N. Hopewell remarked that the building industry ranked second in the town. Though their trade was the target for many jests, they had not been accused of being a town of jerry-builders.

Mr. W. J. Board, who replied, said the city had never progressed as much, was never spending so much money, and never had bigger schemes in hand than to-day.

Mr. G. A. Hewitt, president of the Midland Federation of Building Trades Employers, and Mr. E. H. Heazell, president of the Nottingham and Derby Architectural Society, also responded.

NEW BUILDINGS

Sittingbourne.—Erection of 176 houses, first instalment of a total scheme of 750 houses, at Kemsley Garden Village, for Messrs. Edward Lloyd, Ltd., paper manufacturers. Architects, Messrs. Thomas Adams & Longstreth Thompson, FF.S.I., MM.T.P.I., 121, Victoria-street, Westminster, S.W.1. Builders, Messrs. E. Bishop & Sons, Albany-street, Sittingbourne.

Oxford.—Messrs. F. W. Woolworth & Co., Ltd., of Victory House, Kingsway, London, expect to commence operations in January for the conversion of the "Roebuck" Hotel, an old coaching hostelry, which was acquired by them some time ago, into a branch stores. The interior will be entirely gutted and rebuilt, and show-rooms and a restaurant erected. The interior fittings and equipment will all be carried out in hardwoods, and the shop fronts will be of brass and art metal work. The work will be executed by the company's own building staff, under the direction of their staff architect, Mr. W. Priddle.

New Y.W.C.A. Club.

A scheme to erect, at a cost of £200,000, a Y.W.C.A. club building in the centre of London for the use of 800,000 girls has been proposed.

RATES OF WAGES IN THE BUILDING TR

Every endeavour is made to ensure accuracy, but we cannot be responsible for erro

	Masons.	Bricklayers.	C'p'ters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	La
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/5½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London (12 m. radius)	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 999.)

THE RENT ACT

Transfer of "Burden or Liability."

unusual point was raised under the Rent
in the recent case, Hornsby *v.* Maynard
Weekly Notes, November 29). The plaintiff
the owner of a house at Ealing which,
August 3, 1914, was let by her at a rent
16s. per annum, she paying rates, this
becoming the standard rent. In 1917, the
iff had let this house to the defendant
term of three years, at a rent of £36 a year,
was a term of this agreement that the
dant should pay the rates and also give
plaintiff the use of the drawing room
bedroom on the same floor for her own
ation. On the termination of this agree-
in August, 1920, the defendant had
ned on as a statutory tenant. On Septem-
, 1920, the plaintiff had served on the
dant a notice to increase the rent to £46 16s.
the defendant had paid the increased rent
to the end of 1922, but he then ceased to
rent on the ground that the notice was
id and that he had paid rent in excess of
for which he was liable. In November,
, the plaintiff commenced the present
n in the county court for recovery of
ession of the house and £33 rent, being the
for eleven months at £36 per annum.
defendant denied that the sum claimed was
g and counterclaimed for excess rent paid
m, and at the trial it was contended on his
f that the transfer to him of the payment
es and the license he had to give to the
iff to use two of the rooms in the house,
burdens or liabilities previously borne by
andlord transferred to him within section 2,
ection (3) of the Act of 1920, and amounted
ber to an alteration in rent which exceeded
standard rent by more than the amount
itted, and that as the clause in the agree-
was an exception from the demise and only
of the house was thus let to the defendant,
ent should be apportioned, and that on
grounds the defendant was entitled to
urn of rent overpaid.
e county court judge assessed the transfer
e rates at £10 16s., so that if this was treated
nt, it only brought the rent up to, but not
nd, the standard rent, and he held the
se to use the two rooms could not be
ed as either rent or an exception from the
se, but, in case of an appeal, he fixed the
of this license at £10 16s. He found for
plaintiff for £33, the rent claimed, but for
lefendant on the counterclaim for £24 6s.
overpaid under the invalid notice of
ase, thus giving judgment for the plaintiff
the balance.
e defendant appealed on the ground of the
se, which he alleged should be treated
r as rent, or an exception from the demise,
a Divisional Court dismissed the appeal,
ding that the provision in the agreement was
an exception from the demise, and the agree-
t was a demise of the whole house; the
iff had only a personal right to use the
rooms in question for her own convenience,
the defendant was not entitled to an appor-
nent as though only a part of the house
let to him. The provision as to the two
as was not a transfer of a burden or liability
iously borne by the plaintiff within section 2,
ection (3), nor could it be said that the rent
thereby been increased within the meaning
ction 1; in that section and throughout the
the term "rent" meant rent payable
oney and money alone, and this was borne
by decided cases.
the present brief report, the cases are not
n, but no doubt they are Westminster and
ral Properties and Investment Co. (*The
der*, August 15, 1919), Isaacs *v.* Tittlebaum
Builder, March 26, 1920), and Mackworth *v.*
ard (*The Builder*, April 15, 1921), all of
h cases turned upon the question whether
or rates and taxes should be computed in
ence to standard rent, Glossop *v.* Ashley
Builder, April 15, 1921), where a "tie"
public house was excluded, and Brakspear
arton (1924, 2 K.B. 88), where a discount on tied prices had been withdrawn on the granting of a new lease of an inn, and this was held not to constitute a burden or liability imposed upon the tenant under section 2, subsection (3).

We have dealt with the only point reported in this case which was before the Divisional Court and the subject of appeal, but, as it may be noticed that in the court below judgment had been given on the counterclaim for rent paid in excess down to the end of 1922, it may be useful to our readers if we remind them of one or two points in connection with increases of rent and the time limits imposed. If the notice of increase is unaccompanied with or does not contain a notice to quit, that is no longer a defect, as by section 1 of the Rent Restrictions (Notices of Increase) Act, 1923, a notice to increase rent operates as a notice to quit, and that section is retrospective in its effect (Landrigan *v.* Simons, 1924, 1 K.B. 509, *The Builder*, October 3, 1924; Aston *v.* Smith, 1924, 2 K.B. 143, *The Builder*, August 22, 1924), but by the proviso to that section neither party can recover from the other sums paid before December 1, 1922 (see Landrigan *v.* Simons). If a notice to increase rent is deficient and the error or omission is due to a *bona fide* mistake on the part of the landlord, the county court, under section 6 of the Rent Act, 1923, has power to amend it, but by section 8 of that Act a time limit is introduced as regards notices so amended. By subsection (1), no increase of rent payable in respect of an amended order is recoverable in respect of any rental period which ended more than six months before the date of the order to amend, and by subsection (2) any sums paid by a tenant which is made recoverable by a tenant by section 14 of the principal Act, are only recoverable within six months of the date of payment, or, in the case of a payment made before the passing of the Act of 1923, at any time within six months of the passing of the Act (June 7, 1923). It is to be noticed that this section is, by subsection (3), not to affect the operation of the Notices Act. This section was considered in Williams *v.* Britannic Merthyr Steam Coal Co., Ltd. (1924, 2 K.B. 334, *The Builder*, October 31), but as we explained in our note to that case, we found the decision difficult to follow as the court held that the time limit in subsection (1) applied to the landlord (who had deducted increased rent from the wages of an employee under amended notices of increase), rendering sums so deducted more than six months before the order of amendment "irrecoverable" by the landlord, and therefore "recoverable" by the tenant under section 14 of the principal Act, but that subsection (2) of section 8 of the Act of 1923 had no application to the circumstances of this case.

In the case under consideration it may be assumed the notice of increase had been defective, not merely for want of notice to quit, but in other respects, and that no amendment had been made. The path of the landlord under the Rent Acts is, indeed, a thorny one, and in connection with claims made for the return of rent paid for many years without demur, some time limit appears very necessary. In Brakspears' case, the judge who tried the case commented on the aid the Rent Acts gave to persons who desire to act discreditably.

The Rent Acts Standard Rent.

WE may note another recent decision under the Rent Acts as to apportionment of rent where part of the premises are let off, and the calculation of the standard rent, in the case Westcott *v.* Bowes (*The Times*, December 3). The defendant was the landlord of a house which on August 3, 1914, was leased at a rent of £85 a year, the tenant then paying the rates. At some date after August 3, 1914, the house was let by the landlord in separate floors, the landlord then paying the rates, and in October, 1918, under these conditions the plaintiff had become tenant of the first floor. In 1923 the plaintiff applied in these proceedings for an apportionment of rent, and he also claimed to be entitled to recover rent overpaid.

The County Court judge had apportioned the standard rent of the first floor at £2 10s., and this figure was not contested on the Appeal, but in order to ascertain what, if any, rent had been overpaid, he had to determine what was the "net rent," as the increases allowed in section 2 subsection (1) pars. (*c*) and (*d*) are calculated on the net rent, and he had held that the landlord's proportion, of the rates was 18s. 6d., and deducting this from the £2 10s., the net rent would be £1 12s.

By section 12 subsection (1) par. (*c*) the expression "net rent" is defined as meaning, "Where the landlord at the time by reference to which the standard rent is calculated paid the rates chargeable on, or which but for the provisions of any Act would be chargeable on the occupier, the standard rent less the amount of such rates in any other case the standard rent." The Divisional Court held that at the time referred to in this paragraph as the rates were paid by the then tenant and not by the landlord the standard rent and the net rent were not different, but one and the same thing, and the assessment of the County Court judge was wrong, the standard rent and the net rent being £2 10s.

COMPULSORY ACQUISITION OF LAND

A SPECIAL lecture on the subject of the "Compulsory Acquisition of Land" was given recently at the College of Estate Management, by Mr. E. W. Eason, F.S.I., F.A.I.

The lecturer opened his subject with a brief outline of the various examples of compulsory acquisition, such as that which took place in England under William the Conqueror, down to the commencement of the nineteenth century. At this time the rise of the railways and industrial undertakings necessitated some compendious forms of Acts which would prevent the Statute Book from becoming too bulky. The result of the Committee of Mr. Gladstone, in 1844, was the passing through Parliament of three general Acts known as the "Companies Clauses Act," "Land Clauses Act," and the "Railway Clauses Act."

Modern views with respect to compensation caused a revulsion of feeling from the legislation favourable to the landowner, and after the War it was felt that the Land Clauses Act was out of date, and that some more modern method of dealing with compulsory acquisition of land should be provided. The important Committee, presided over by Sir Leslie Scott, in 1917, resulted in the Acquisition of Land Act of 1919, which provided the general principles of compensation where Government Departments or local or public authorities desired to acquire land.

The lecturer then considered another class of Acts of Parliament dealing with the improvement of the housing of the people as a whole, and after considering the terms of the Housing of the Working Classes Act of 1890, proceeded to deal with an entirely new form of compensation embodied in certain sections of the Housing and Town Planning Act of 1919, whereby in place of the various interests in property being valued a certain portion of the property was valued under certain principles, and this sum of money was then allocated to the various interests.

Obituary.

The death occurred recently of Mr. Thomas Cartwright Pegg, builder and joiner, of Derby-road, Ashbourne, at the age of 81.

The death has occurred at Spring Bank, Kirkoswald, of Mr. Anthony Watson, aged 84 years, who had for many years been associated in the management of the firm of Messrs. Watson & Son, builders and contractors.

The death has occurred of Mr. Thos. Walton, aged 77, builder and contractor, of Villa Real-road, Consett.

Builder's Estate.

Mr. Cephas Gradwell, of 85, Clarendon-road, Chorlton-upon-Medlock, Manchester, builder and contractor, £57,885.

CONTRACTS, COMPETITIONS, &c.

Forsome contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

DECEMBER 22.—**Aberdeen.**—COTTAGE.—For joiner, slater and plaster works, for the erection of a workman's cottage at Rocks of Balmedie Quarry, Belhelvie, for the D.C. The District Clerk, 7, Bon-Accord-square.

DECEMBER 22.—**Brighton.**—HOUSES.—Erection of 11 houses in Hereford-street, Brighton, for the County Borough Council of Brighton. Borough Surveyor, Town Hall, Brighton. Deposit £1.

DECEMBER 22.—**Bucklow.**—BUILDING.—For a veranda at the Institution Hospital, Knutsford, for the B.G. Mr. G. Leigh, Clerk to the Guardians, Union Offices, Knutsford. Deposit 10s. 6d.

DECEMBER 22 — **Edinburgh.** — EXTENSION. — For brick, &c., carpenter, joiner and glazier, plaster and harling, plumber at Tynecastle school, for the E.C. Mr. J. Stewart, S.S.C., Executive Officer, Education Offices.

DECEMBER 22.—**Failsworth.**—CONVERSION.—For the work and all materials required in the conversion of 27 privies to water-closets, for the U.D.C. Mr. H. C. Broome, Clerk to the Council, Town Hall.

DECEMBER 22. — **France and Belgium.** — HEADSTONES.—Tenders for a total supply of 20,000 headstones, packed and delivered (f.o.r.), to be divided into a number of contracts, none of which shall be for less than 100 headstones, for the Imperial War Graves Department. The Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, London, W.1, and marked "Headstone Contract, 5079 W."

DECEMBER 22.—**Manchester.**—BOILER HOUSE.—For erection of a boiler house, timber store, &c., at the Hyde-road car depot, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 22.—**Rowley Regis.**—HOUSES.—For erection of 16 houses at Hill-road, Tividale, &c., for the U.D.C. Mr. D. Wright, Clerk to the Council.

DECEMBER 22.—**Shoeburyness.**—CONVENIENCE.—For the enlargement of the existing public conveniences upon the Common at Shoeburyness, and the construction of a public convenience and refreshment room on Whitakers-parade, Rampart-street, Shoeburyness, for the U.D.C. Mr. F. Gregson, Clerk, 46, Alexandra-street, Southend-on-Sea.

DECEMBER 23.—**Almondbury.**—BUNGALOW.—For various works required in the erection of bungalow, Dog Kennel Bank. Mr. J. Ainley, architect and surveyor, 55, New-street.

DECEMBER 23.—**Cork.**—BUILDING.—For building of new premises at 13-17, Patrick-street, for Messrs. Roches Stores, Ltd. Secretary, Roches Stores, Ltd., Patrick-street, Cork.

DECEMBER 23.—**Guildford.**—HOUSES.—For erection of three pairs of non-parlour houses on the Peaslake site, in the parish of Shere, for the Guildford R.D.C. Mr. John Anstee, Council Architect, Council Offices, Commercial-road, Guildford. Deposit £2 2s.

DECEMBER 23.—**Huddersfield.**—HALL.—For the various works required in the erection of the Memorial Hall and Institute at Rashcliffe. Messrs. Abbey & Hanson, architects, 11, Cloth Hall-street.

DECEMBER 23.—**London.**—SLATING.—For re-slating the roofs of the nurses' home and the out-relief offices and dispensary, Fulham Palace-road, for the B.G. Mr. E. J. Mott, Clerk to the Guardians, Guardians Offices, 129, Fulham Palace-road, W.6.

DECEMBER 22. — **Tenby.** — HOUSE. — Erection of house, for Dr. E. W. Knowling. Mr. E. Glover Thomas, architect.

✱DECEMBER 23.—**London, S.W. 2.**—SCREENING.—Erection of corrugated asbestos screening in the yard at Stockwell Stables, Stockwell Green, S.W. 9, for the Metropolitan Borough Council of Lambeth. Mr. Osmond Cattlin, Borough Engineer, Town Hall, Brixton-hill, S.W. 2.

DECEMBER 23.—**Southampton.** — COTTAGES. — For erection of two pairs of cottages on a site at the corner of Dickens-lane and the main road 2 miles from Basingstoke, for the C.B. Mr. A. L. Roberts, County Architect, The Castle, Winchester. Deposit £1 1s.

✱DECEMBER 23.—**Staffordshire.**—HOUSES.—Erection of three pairs of non-parlour type and two pairs of parlour type houses, to be erected on the Woodshutte housing site. Mr. F. C. Crimes, Architect and Surveyor to the Council, Kidsgrove, Staffs. Deposit £2 2s.

DECEMBER 24.—**Huddersfield.**—HOUSE.—For erection of a detached residence in Thornhill-road. Messrs. J. Berry & Sons, 3, Market-place, Huddersfield.

DECEMBER 29.—**Dublin.**—REPAIRS.—For repairs and alterations to the office of the Irish Land Commission, 14, Upper Merrion-street, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 29.—**Kiveton Park.**—HOUSES.—For erection of 28 houses, for the R.D.C. Mr. A. Lawrence Lewis, Clerk to the Kiveton Park R.D.C., Council Offices, Kiveton Park, near Sheffield.

DECEMBER 29.—**Leeds.**—HOUSES.—For trades in connection with the erection in brick or other forms of construction of 150 houses on the Crossgates Estate, 250 on the Middleton Estate, and 100 on the Meanwood Estate, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings. Deposit £1 1s.

DECEMBER 29.—**Middlesbrough (near).**—BUILDING.—For erection of a pumping station, &c., in Normanby-road, South Bank, for the Tees Valley Water Board. Mr. T. S. Calvert, Clerk to the Board, Water Board Offices, Middlesbrough. Deposit £2.

DECEMBER 29.—**Monmouthshire.**—REPAIRS, &C.—For carrying out, for the County Small Holdings Committee, general structural repairs to farm buildings at Pant Farm, Llwyncelyn. Mr. A. Every-Clayton, County Land Agent, 2, Gold-tops, Newport (Mon.).

DECEMBER 29.—**Wallsend.**—CONVERSION.—For conversion of cell privies into water closets, for the C.B. Mr. W. V. Mulcaster, Town Clerk, 28, Sandhill, Newcastle-on-Tyne.

DECEMBER 29.—**Worthing.**—SHELTER.—For erection of a glazed shelter in the Denton-gardens, for the C.B. Mr. J. Kennedy Allerton, Town Clerk, Municipal Offices. Deposit £1 1s.

DECEMBER 30.—**Burslem, Staffs.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Burslem, Staffs, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.)

✱DECEMBER 30. — **London, W.5.** — REBUILDING WALL.—Rebuilding forecourt wall of Christ Church, Uxbridge-road, for the Town Council of Ealing. Mr. W. R. Wicks, M.Inst.C.E., F.S.I., Borough Engineer, Town Hall, Ealing, W.5. Deposit £1 1s.

DECEMBER 31.—**Blyth and Cuckney.**—DISPOSAL WORKS.—For construction of sewerage and sewage disposal for the parishes of Hodsock and Carlton, for the R.D.C. Mr. A. H. Styring, Clerk, 6, North Church-street, Sheffield. Deposit £5.

DECEMBER 31. — **Dartford.**—WEIGHBRIDGE FOUNDATIONS, &C.—Forming weighbridge foundations and visitors' waiting rooms at the Southern Hospital, Dartford, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 31.—**Derby.**—HOUSES.—For erection of 123 houses, for the C.B. Mr. C. A. Clews, Borough Surveyor, Surveyor's Office, Babington-lane. Deposit £1 1s.

DECEMBER 31.—**Dublin.**—ADDITIONS.—For additions and alterations at St. Patrick's Convent, Pelletstown, Cabra, for the B.G. Commissioners, Dublin Union, 1, James's-street. Deposit £3 3s.

DECEMBER 31.—**Kent.**—CLEANING AND PAINTING.—Cleaning and painting works at White Oak, Swanley Junction, Kent, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

✱DECEMBER 31.—**London, S.W. 17.**—WOOD FLOORING.—Supplying and laying alternatively pitch pine or oak block flooring at Tooting Bec Hospital extensions, Church-lane, Tooting, S.W. 17, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C. 4. Deposit £1.

JANUARY 1, 1925.—**Birmingham.**—PAINTING.—For exterior painting, &c., at the children's homes, Erdington, for the B.G. Mr. James Curtis, Clerk to the Guardians, Union Offices, Edmund-street.

JANUARY 1. — **Lincoln.** — ADDITIONS. — For additions to the C.C. Offices, Newland House, Lincoln, for the Lindsey C.C. Mr. Eric W. Scorer, Clerk of the County Council, County Council Offices, Mint-street. Deposit £2 2s.

JANUARY 1.—**Skegness.**—ADDITIONS.—For additions to the Council school, for the Lindsey C.C. Messrs. Scorer & Gamble, architects, Bank-street Chambers, Lincoln. Deposit £1 1s.

JANUARY 2.—**Bolton.**—EMPLOYMENT EXCHANGE.—For adaptation of the old Post Office, Bolton, to form an Employment Exchange, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.)

JANUARY 2.—**Hebden Bridge.**—TRADES.—For several trades required in the erection of 12 non-parlour type houses, and the supply of about 378 yds. of 3 in. cast-iron water pipes, for the U.D.C. Mr. S. Ogden, Clerk of the Council, Council Offices.

JANUARY 2.— **Plymouth.** — HOUSES.—Erection of 800 houses (whole or part) at North Prospect (Sections 2 and 3), for the County Borough Council of Plymouth. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth. Deposit £5 5s.

JANUARY 2.—**Sligo.**—ADDITIONS.—For enlarging Moylough National School, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Baile Atha Cliath, Dublin. Deposit £1.

JANUARY 2.—**Wexford.**—RESTORATION.—For restoration of Clonevan ex-R.I.C. Barrack, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Baile Atha Cliath, Dublin. Deposit £1.

JANUARY 3.—**Argoed.**—SCHOOL.—For erection of a new infants' school. Mr. C. Dauncey, Secretary, County Hall, Newport. Deposit £1 1s.

JANUARY 3.—**Harrow-on-the-Hill.**—HOUSES.—For erection of 18 parlour-type houses on the Council's housing estate, for the U.D.C. Mr. J. P. Bennetts, Engineer and Surveyor, Council Offices. Deposit £1.

JANUARY 3.—**Rotherham.**—HOUSES.—For erection of 50 houses on the Dalton housing site, for the R.D.C. Mr. J. Totty, architect, Moorgate-street. Deposit £2 2s.

JANUARY 3.—**Sheffield.**—TRANSFORMER S... For erection of transformer sub-stations ... street, Abbey-lane, Beauchief, and Bla... Park, for the T.C. Mr. S. E. Fedden, Gene... and Engineer, Commercial-street.

JANUARY 3.—**Swallowfield, Berks.**—Sc... the erection of a new Council school for 1... at Farley Hill, for the Berkshire E.C. M... Anderson, Education Secretary, Shire Hall... Deposit £1 1s.

JANUARY 5.—**Aylesbury.**—COW HOUSE. ... tion of a new cow house, fodder store, &... Bucks Agriculture Committee. Mr. G. ... County Land Agent, 21, Walton-street.

JANUARY 5.—**Goldthorpe.**—HOUSES, &c.—... erection of 74 dwelling houses, toget... road and surface water drainage works, ... borough-lane, or in sections (1) 30 hou... houses, (3) roads and surface water drain... for the Bolton-upon-Dearne U.D.C. M... H. Adams, M.S.A., Council Offices, Bol... Dearne. Deposit £1 1s.

✱JANUARY 5.—**Hornsey.**—PUBLIC CONV... —Erection of a public convenience, compri... above ground and extension of undergro... venience at the Broadway, Muswell Hill, fo... Council of the Borough of Hornsey. Mr. ... grove, Borough Engineer and Surveyor, T... Highgate, N.6.

✱JANUARY 5.—**London, E.**—CUSTOMS ... Erection of a Customs Waterguard Office... George V Dock, Pierhead, London, E., for t... missioners of His Majesty's Office of Works, ... Branch, H.M.O.W., King Charles-street, ... S.W.1. Deposit £1 1s. (cheques payable to ... missioners of H.M. Works, &c.).

JANUARY 5. — **Nottingham.** — WALL. — ... boundary wall, entrance gates and office... widening of Lenton-road, also retaining wall... Dry Moat, for the T.C. Mr. W. J. Board, Tow... Deposit £2.

✱JANUARY 5.—**Southend-on-Sea, Essex.**—H... Erection and completion of a groundsman... and works incidental thereto, at the Jones ... Ground, Southend, for the Corporation of Sout... Sea. Mr. Robert H. Dyer, Borough Engineer, ... Buildings, Southend-on-Sea. Deposit £2.

✱JANUARY 6.—**Liverpool.**—REDECORATIO... ternal redecorations, &c., at the Head Pos... Liverpool, for the Commissioners of His Majest... of Works. Contracts Branch, H.M.O.W., King ... street, London, S.W.1. Deposit £1 1s. (cheq... able to the Commissioners of H.M. Works, &c...

JANUARY 6.—**Maldon.**—HOUSES.—For ... workmen's dwellings in pairs, as follows: T... Knights, 8 houses; Hazeleigh, 6 houses; ... 8 houses, for the R.D.C. Mr. Wm. Almond, ... 6, Market-hill.

JANUARY 7.—**Cardiff.**—CONVENIENCE.—F... tion of a public convenience and extensions o... at Beulah Cross-roads, Rhiwbina, for the ... Mr. M. Warren, Clerk to the Council, Park ...

✱JANUARY 7.—**Llandudno.**—ALTERATIONS.—... tions to the Post Office, Llandudno, for the ... sioners of His Majesty's Office of Works, ... Branch, H.M.O.W., King Charles-street, ... S.W.1. Deposit £1 1s. (cheques payable to t... missioners of H.M. Works, &c.).

✱JANUARY 8.—**Yorkshire.**—POST OFFICE.—... tions to the Post Office, Brighouse, Yorks. ... Commissioners of His Majesty's Office of ... Contracts Branch, H.M.O.W., King Charles ... London, S.W.1. Deposit £1 1s. (cheques pay... the Commissioners, of H.M. Works, &c.).

✱JANUARY 9.—**Bucks.**—POST OFFICE AN... PHONE EXCHANGE.—Erection of a Post Offi... Telephone Exchange at Beaconsfield, Bucks... Commissioners of His Majesty's Office of ... Contracts Branch, H.M.O.W., King Charles ... London, S.W.1. Deposit £1 1s. (cheques pay... the Commissioners of H.M. Works, &c.).

✱JANUARY 9.—**Darlington.**—ELEMENTARY ... —Erection of an elementary school on a site at... Bates-avenue and Stooperdale-avenue, ... Darlington, for the Darlington Corporation... H. G. Steavenson, Town Clerk, Houndgate, Darl... Deposit £2 2s.

JANUARY 10.—**Congleton.**—SCHOOL.—Erect... an elementary school (based on firm prices... scholars, at New-street, Congleton, for the Corp... of Congleton. Mr. J. H. Walters, architect, ... street, Congleton. Deposit £2.

JANUARY 12. — **Birmingham.** — ADDITIONS, ... building alterations and additions at Dudl... Hospital, for the B.G. Mr. J. Curtis Clerk ... Guardians, Union Offices, Edmund-street. ... £10 10s.

✱JANUARY 12.—**Bognor.**—COTTAGES.—Erec... 24 cottages on the housing site off Sheepwash-l... the Bognor Urban District Council. The Su... High-street, Bognor. Deposit £2 2s.

JANUARY 13.—**Glasgow.**—SANATORIUM.—Fo... tion of Mearnskirk Sanatorium, Mearns, Renfr... including plaster work, glazier work, tile wo... terrazzo work, for the T.C. Mr. J. Lindsay, Tow... City Chambers. Deposit £5 5s. each.

JANUARY 14.—**London.**—BUILDING.—For ... building at the Institution, Plumstead High ... for the Woolwich B.G. Mr. A. Holder, Clerk ... Guardians, 99, Rectory-place.

JANUARY 14. — **Stafford.** — OPERATING THE... Tenders for new operating theatre and con... small alterations at the existing Infirmary, ... Board of Management of the Staffordshire ... Infirmary, Stafford. Secretary at the In... Deposit £2.

JANUARY 15.—**Langley.**—POLICE STATIO... erection of a police station and six reside... Langley, near Oldbury, for the Worcestersh... Mr. A. Vernon Rowe, County Architect, 38, Fo... street, Worcester.

19.—**Birmingham.**—ALTERATIONS.—For nd additions at the Selly Oak Hospital, new nurses' dining room, new kitchen, rooms, &c., for the B.G. Mr. J. Curtis, Guardians, Union Offices, Edmund-street. 10s.

Y 22.—**London.**—ROOFING WORK.—Re- fing, skylights and gutters and repainting, locomotive and carriage works, Oswestry, t Western Railway. Mr. A. E. Bolter, Paddington Station, London, endorsed Roofing, &c.," Oswestry.

—**Becontree.**—PAINTING.—For plastering, zing, in about 1,000 houses on the estate, Messrs. C. J. Wills & Sons, Ltd., Mayfield- ell Heath, Essex.

—**Dublin.**—PREMISES.—For new printing alee, for Messrs. J. Quinnell & Sons, Ltd. uinnell & Sons, Ltd., The Market, Tralee.

—**Manchester.**—DEMOLITION.—For demo- ilding situate in Poland-street, Oldham- Calico Printers' Association, Ltd., St. ldings, Oxford-street.

2.—**Solihull.**—HOUSES.—For erection of Malthouse-lane, Knowle, and four houses -lane, Balsall, for the R.D.C. Mr. C. H. to the Council, Council Offices.

2.—**Swallownest.**—ADDITIONS.—For erec- ohtheria block and additions to the admini- k, for the South Rotherham and Kiveton t Hospital. Mr. A. H. Styring, Clerk to ttee, 6, North Church-street, Sheffield. 2s.

ITURE, MATERIALS, etc.

R 22.—**Middleton.**—MATERIALS.—For gra- roken granite, granite chippings, limestone rushed slag, stone kerbs, flags, ballast and rete tubes, portland cement, stoneware neering bricks and common bricks, and re- ncrete tubes, for the C.B. Mr. J. P. Walms- lerk, Town Hall.

R 22.— **Rotherham.** — MATERIALS. — For r construction of a footpath, for the R.D.C. Rawstron, Engineer and Surveyor, Council ove-road, Moorgate. Deposit, £1 1s.

R 29. — **Rawtenstall.** — MATERIALS. — For equired in the sewering and paving, &c., -street and Back Holme-bank, for the C.B. lley, Town Clerk, Town Hall. Deposit £1.

R 29.—**Reading.**—SAND.—For supply of l material, gravel and sand, for the Berk- Surveyor's Department, Shire Hall, The

ER 30.—**Bexley.**—PIPES.—For supply of naterials, best glazed stoneware socketed best Portland cement, for the U.D.C. Mr. aynes, Clerk to the Council, Council Offices.

ER 31. — **London, S.W.17.** — PORTLAND Supply and delivery of about 175 tons ement of English manufacture, at Tooting al extensions, Church-lane, Tooting, S.W.17, etropolitan Asylums Board. Office of the toria Embankment, E.C.4.

r 1, 1925.—**Dorchester.**—MATERIALS.—For granite, basalt, limestone, and other surface aterial, for the Dorset C.C. Mr. W. T. ounty Surveyor, County Offices.

r 3.—**East Suffolk C.C.**—MATERIALS.—For granite, gravel, &c. W. Jervis, County Sur- inty Hall, Ipswich.

r 5.—**Exeter.**—FURNITURE.—For supply of iture, for the Devon E.C. Secretary, The

E.—**Bebington and Bromborough.**—PIPES.— of 15 in., 12 in., and 9 in. stoneware pipes, U.D.C. The Surveyor, Council Offices,

EERING, IRON AND STEEL.

ER 20.—**Dewsbury.**—TANKS.—For construc- rcolating filters, humus tanks and other nt works in connection with the construction disposal works at Mitchell Laithes, for the H. Booth, Town Clerk, Town Hall. De-

ER 20.—**Egypt.**—RESERVOIR.—For construc- eel reservoir, for the Ministry of the Interior. nt of Overseas Trade, 35, Old Queen-street,

ER 20.—**Southampton.**—STORES.—For erec- steel-framed electrical stores building on a dation to the Western Esplanade, for the R. R. Linthorne, Town Clerk. Deposit

ER 20.—**Wilmslow.**—ADDITIONS.—For con- of screen chamber, suction wells, settling rcolating filters and humus tanks, sundry pipeline and sundry auxiliary works, at the Sewage Farm, for the U.D.C. Mr. H. Cliffe, he Council, Clerk's Office. Deposit £5.

ER 22.—**Manchester.**—SHEDS.—For con- and completion of two five-story transit ension of the grain subway, and all ancillary Manchester Docks, for the Ship Canal Co. Eyre, Secretary, 41, Spring-gardens. De-

ER 22. — **Rhondda.** — STEELWORK. — For truction and delivery to Treherbert .W.R.) of about 160 tons of bridge steel- and supply of bricks, stoneware pipes, pavings, annels and pitchings, Portland cement and lime, paints, oils, &c., for the U.D.C. Mr. E. ngineer and Surveyor, Council Offices, Pentre,

DECEMBER 23.—**Merthyr Tydfil.**—STEEL.—For supply of about 5,000 tons of steel socket and spigot pipes of diameters ranging from 37 in. to 17 in., together with certain cast-iron pipes, valves and specials, all of British material and manufacture, for the Taf Fechan Water Supply Board. Mr. J. Colenso Jones, Clerk to the Board, Board's Offices, 101, High-street. Deposit £5.

DECEMBER 24.—**Marazion.**—For a new exit and fire escape at St. Thomas' Hall, for the Town Trustees. Architect, 11, Morrab-road, Penzance.

DECEMBER 31.—**Hamilton.**—BRIDGE.—**Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw.** Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

JANUARY 3.—**Kingston-by-Sea.**—REPAIRS.—Construction and repairs to the middle pier, for the New Shoreham Harbour Commission. Mr. C. Baguley, Clerk to the Trustees, Harbour Offices, Southwick, Brighton.

JANUARY 5. — **Eastbourne.** — FLAPS. — For removal of existing tidal flaps, &c., in the valve chamber, Langney Point and the supply and fixing of new tidal and sluice valves, for the C.B. Mr. L. Roseveare, Borough Engineer, Town Hall. Deposit £1 1s.

JANUARY 9.—**Long Eaton.**—RECONSTRUCTION.—For a bridge reconstruction in ferro-concrete and approaches, for the U.D.C. Mr. H. Raven, Engineer, The Hall Long Eaton.

ROAD, SANITARY, AND WATER WORKS.

DECEMBER 20.—**Ilford.**—PAVING.—For levelling, paving, metalling, channelling, and making good The Crescent, Ilford, for the U.D.C. Mr. Adam Partington, Clerk of the Council, Town Hall.

DECEMBER 20.—**Rugby.**—ROADS.—For construction, sewering, levelling, &c., of certain roads, proposed to be made in connection with the housing scheme, Eastlands Estate, Clifton-road, for the U.D.C. Mr. J. H. Sharp, Engineer and Surveyor, Surveyor's Office, Benn Buildings. Deposit £1 1s.

DECEMBER 20.—**Stafford.**—SEWER.—For construction of two concrete storm water culverts, and the raising and metalling of the approach road to the sewage farm, for the C.B. Mr. H. H. Battle, Town Clerk, Borough Hall. Deposit £1 1s.

DECEMBER 22.—**Barnsley.**—MAIN.—For laying of a 4 in. cast-iron water main in Carlton-lane, Carlton, for the R.D.C. Mr. Wm. Robinson, Clerk to the Council, 17, Regent-street.

DECEMBER 22.—**Birmingham.**—PAVING.—For reconstruction of slag foundation, Cleveland-street; reconstruction of carriageway, Brougham-street, Augustus-road, and Westbourne-road; constructing concrete foundation to carriageway, Newhall-street; and reconstruction of new road, for the T.C. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2 each.

DECEMBER 22.—**Birmingham.**—RECONSTRUCTION.—For reconstruction of Wiggin-street, Rotton-park, and construction of an extension to Tyburn-road, for the T.C. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2 each.

DECEMBER 22.—**Exeter.**—ROAD.—For construction of a new road from Streatham Hall entrance, New North-road, to the Home Farm in Hoopern-lane, and widening of Hoopern-lane and the construction of a portion of new road from the Home Farm to Pennsylvania, for the City and County Council. Mr. T. Moulding, City Engineer and Surveyor, Exeter.

DECEMBER 22.—**Manchester.**—PAVING.—For reconstruction of carriage-way with concrete pavement in Moston-lane, Moston, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 22.—**Rochford.**—SEWERAGE.—For surface water drainage, construction of culvert, and road strengthening works, for the R.D.C. Mr. W. Harding Roberts, Clerk, 40, Clarence-street, Southend-on-Sea. Deposit £1 1s.

DECEMBER 22.—**Tilbury.**—PAVING.—For works in connection with the reconstruction in artificial stone paving and re-bedding and levelling of kerbs to footways on both sides of Dock and Montreal and part of St. Chad's-roads, for the U.D.C. Mr. A. W. Buckner, Clerk of the Council, Council Offices, Civic-square. Deposit £2.

DECEMBER 23.—**Dover.**—DRAINAGE.—For drainage scheme, comprising about 400 lin. yds. of 12 in., 2,000 lin. yds. of 9 in., and 700 lin. yds. of 6 in. stoneware pipe, together with all manholes, house connections &c., for the Corporation. Mr. Wm. Boulton Smith Borough Engineer, Borough Engineer's Office, Maison Dieu House. Deposit £2 2s.

DECEMBER 24.—**Staffordshire.**—WIDENING.—For widening of a portion of the old Chester main-road, from the Beggars' Bush at Sutton Coldfield to Little Aston Cross-roads, for the C.C. Mr. J. Moncur. County Surveyor, County Buildings, Stafford.

DECEMBER 27.—**Bridlington.**—SEWER.—For the construction of a new reinforced concrete roadway, kerbing, a 9 in. stoneware pipe sewer and accompanying manholes, gullies, &c., on the west side of Forty Foot-road, for the C.B. Mr. G. Melvin, Town Clerk. Deposit £2 2s.

DECEMBER 29.—**Dublin.**—ROAD.—For laying of a reinforced concrete roadway, for the Corporation. Mr. J. J. Murphy, Town Clerk. Deposit £1 1s.

DECEMBER 29.—**Prestatyn.**—SEWERS.—For construction of about 2,720 yds. of stoneware pipe sewers, 9 in. diameter and under, with manholes, ventilators, one ejector chamber, and cast-iron air and delivery mains, in the Towyn area, for the U.D.C. Mr. J. Lloyd Hughes, Clerk to the Council, Council Offices, Prestatyn, N. Wales. Deposit £5 5s.

DECEMBER 30.—**Devon.**—ROAD.—For work required in the reconstruction and widening of the Whipton–Pinhoe section of the Exeter–Taunton road, for the C.C. Mr. B. S. Miller, Clerk of the Council, The Castle, Exeter. Deposit £10 10s.

DECEMBER 31.—**Cowbridge.**—MAINS.—For a covered service reservoir in mass concrete, and 18,900 lin. yds. of various cast-iron mains, for the Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s.

DECEMBER 31.—**Totnes.**—ROADS.—For making up Jubilee-road, for the C.B. Mr. Geo. E. Windeatt, Town Clerk, Town Clerk's Office. Deposit £2 2s.

JANUARY 3.—**Harrow-on-the-Hill.**—STREET.—For carrying out a public street improvement in station (main) road, for the U.D.C. Mr. J. P. Bennetts, Engineer and Surveyor, Council Offices. Deposit £3.

JANUARY 5.— **Margate.**— PIPES.— For supplying pipes, excavating for and constructing about 999 yds. of 48 in. by 32 in. egg-shaped intercepting sewer, for the C.B. Mr. E. Brooke, Town Clerk, Town Clerk's Office.

JANUARY 12.—**Caerphilly (near).**—SEWER CONNECTION.—Constructing a sewer connection at Gwaunabara, near Caerphilly, of approximately 280 lin. yds. of 18 in. and 24 in. stoneware and cast-iron sewer, with manholes, for the Caerphilly U.D.C. Mr. T. H. Richards, Surveyor, Council Offices, Caerphilly. Deposit £2 2s.

JANUARY 16.—**London Colney.**—DRAINAGE.—For main drainage of London Colney, consisting of sewers, manholes, outfall works, ejector chambers, engine house, &c., for the St. Albans R.D.C. Mr. E. F. W. Hieatt, Clerk to the R.D.C., Union Offices. Deposit £3 3s.

NO DATE.—**Fairwater.**—SEWERS.—For laying of sewers, for Mr. T. G. Cartwright. Messrs. H. Budgen & Co., 95, St. Mary-street, Cardiff. Deposit £2 2s.

Competitions.

(*See Competition News, page* 966.)

Auction Sales, Tenders, etc.

DECEMBER 22.—**London, S.W.**—Mr. Richard J. Steel has received instructions from Messrs. Demolition & Excavation (Greenham), Ltd., to sell upon the premises, Rosebank Wharf, Fulham, S.W., in 500 lots of sound building materials of various kinds. Auctioneer, 2, Plough-terrace, South Ealing, W.5.

DECEMBER 22.—**Shepherd's Bush.**—Messrs. Charles R. Davis & Co. will sell, by order of the Liquidator, *re* The Standard Timber Trading Co., Ltd. (in voluntary liquidation), stock of timber, plant and office furniture, at the timber yard, at Wood-lane. Auctioneers, 285, Borough High-street, S.E.

DECEMBER 30.—**Barnet, Herts.**—Messrs. Charles R. Davis & Co. will sell, by order of the Receiver for the Debenture Holder, *re* McCormick & Sons, Ltd., woodworking machinery, motive power, builders' and contractors' plant, timber, &c., at the yard and mill, Bath-place, High-street, at 11 o'clock. Auctioneers, 285, Borough High-street, S.E.

JANUARY 14, 1925.—**London, E.**—Messrs. J. T. Skelding & Co., without reserve, owing to expiration of lease, at the Building Material Depot, Tredegar-square, Mile End-road, E., timber and building materials, including 200 tons of old oak beams and scantlings, R.S. joists, steam pipe and fittings, slates, scaffolding, trailer, vans, timber and corrugated iron sheets, &c. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

✱JANUARY 14 AND 15.—**Bedfordshire.**—Messrs. Perry & Phillips will sell (unless previously sold by private treaty), at "Cranfield Court," Bedfordshire, the whole of the interior and exterior fixtures and fittings previous to demolition. Auctioneers, High-street, Bridgnorth.

✱JANUARY 15.—**London, E.C.**—Messrs. Ernest Owers, Ltd., will sell (unless previously sold privately), at the Mart, 155, Queen Victoria-street, E.C., by order of executors of late G. Warman, Theydon Bois, Essex, about 8 acres of valuable freehold land. Auctioneers, 155, Queen Victoria-street, E.C.

Public Appointments.

DECEMBER 22.—**Barrow-in-Furness.**—Temporary Architectural Assistant, with experience in the design of public elementary schools, required in the Borough Engineer's Department, for the County Borough of Barrow-in-Furness. Borough Engineer, Town Hall, Barrow-in-Furness, endorsed "Temporary Assistant."

DECEMBER 22. — **Ramsgate.** — Town - Planning Assistant required in the Borough Engineer's Department by the Borough Council of Ramsgate, for town-planning scheme. Borough Engineer, Town Hall, Ramsgate.

DECEMBER 27.—**Enfield.**—Clerk of Works required by the U.D.C. Mr. H. R. Crabb, Surveyor, Public Offices, Enfield, Middlesex.

✱DECEMBER 31.—**Middlesex.**—Town-Planning Assistant in the Engineer and Surveyor's Department, by the Heston and Isleworth Urban District Council. Mr. H. J. Baker, Clerk to the Council, Council House, Hounslow.

JANUARY 1, 1925.—**Cambridge.**—Assistant to the Master required by the Board of Architectural Studies at the University of Cambridge, School of Architecture. The Secretary of the Board of Architectural Studies, Mr. Edward Bullough, Gonville and Caius College, Cambridge.

✱NO DATE. — **Gold Coast.** — DRAUGHTSMAN. — Draughtsman required by the Government of the Gold Coast, for the Public Works Department, for two tours of 12 to 18 months' service, with possible extension. Crown Agents for the Colonies, 4, Millbank, London, S.W. 1, quoting clearly at head of application, "M/13089."

✱NO DATE.—**Hunstanton.**—Ganger Foreman for concrete sea wall and piling work. Engineer and Surveyor, Town Hall, Hunstanton.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board of Education.

ABERCARN.—The Llanover Estate scheme for the erection of 600 houses at Abercarn has been approved by the U.D.C. and the M.H.

ABERDEEN.—The T.C. authorised the Director of Housing to invite tenders for the development of the second instalment of the Cattofield housing scheme, for the erection of 48 tenement houses; and also two blocks of flatted houses.

ABERYSTWYTH.—Plans passed by the T.C.: House, Iorweth-avenue, for Mr. A. E. Lloyd.

ACCRINGTON.—Messrs. F. W. Woolworth & Co., Ltd., have acquired a site in Blackburn-road for the erection of up-to-date stores.

AMMANFORD.—The U.D.C. has approved a joint sewerage scheme, for £66,000.

ARBROATH.—A scheme for the erection of a sick children's ward at the Arbroath Infirmary is being considered.

ARDSLEY.—Plans passed: Two houses in Rein-road, West Ardsley, for Messrs. Harrison, Spenseley & Sons.

ASHTON-UNDER-LYNE.—Sanction of the M.H. has been obtained by the Corporation for the erection of 36 houses on land off Marlborough-street.

AUDENSHAW.—The U.D.C. passed plans: Two houses, Manchester-road, Mr. G. Hadfield.

AYLESBURY.—The T.C. approved plans: Abattoir, Bicester-road, for Mr. W. A. Seaton; house, Walton-road, Dr. Steele; house, Abbotts-road, Mr. E. Jenkins. — Work has just started on the rebuilding of the station of the London & North Eastern Railway Co. The work involves an expenditure of about £40,000. The buildings will be of brick with stone dressings and slated roofs. The roofs over the platforms will be supported on a light steel framework, glazed and slated. Plans have been prepared under the direction of Mr. C. J. Brown, C.B.E., chief engineer to the London & North Eastern Railway (G.C. & G.N. Section).—The Bucks C.C. has decided to build an elementary school for 120 infants at the Southcourt housing estate.

BANBURY.—The T.C. passed plans: House, Horton-view, for T. Blencowe; house at Easington, for W. T. Palmer.

BARKING.—The local residents of Barking, Essex, are considering upon erecting a cottage hospital for the district. A number of alternative schemes have been prepared by Messrs. C. J. Dawson, Son, & Allardyce, of Clock House Chambers, Barking.

BARNT GREEN.—The B.E. has agreed to the provision of a new Church of England school.

BARRY (GLAM.).—The Barry U.D.C. has passed plans: Shop and house, Paget-road, for Mr. W. Beynon; shop, 205, Holton-road, for Mr. R. Guy; house, Romilly-park, for Miss W. Osmond; house, High-street, for Mr. W. H. Collins; bungalow, Buttrill's-road, for H. S. Rendell & Sons; house, Cambridge-street, for Copp Bros.; house, Pontypridd-road, for Mr. D. W. Jenkins; seven houses, Gladstone-road, for Mr. J. T. Roach; two houses, Pontypridd-road, for Mr. W. Garwood.—The U.D.C. has referred to a commiteee a scheme for extending the district hospital, at an estimated cost of £3,750.

BATTLE.—The U.D.C. passed plans. Bungalow near the cross-roads, Polegate, for Mr. C. Wood, Mr. W. R. Hamblyn architect; bungalow in Rattle-lane, Westham, for Mr. D. Carter, Mr. A. Ford architect; bungalow near the cross-roads, Polegate, for Mr. E. Thurlow, Mr. W. R. Hamblyn architect.

BEESTON.—Plans were approved by the U.D.C. for 12 houses under the subsidy scheme.

BENFIELDSIDE.—Durham County Architect has prepared a scheme for remodelling the elementary school at a cost of £8,580.

BILSTON.—The U.D.C. passed plans: House, Wolverhampton-street, for J. Beddow; house, Wolverhampton-street, for B. Ganner.

BLACKBURN.—The R.D.C. are to apply for a further allotment under the subsidy Act for 20 houses.

BLACKPOOL.—A new parsonage is to be erected for the Vicar of Holy Trinity, South Shore, on the corner of Central-road. Mr. A. C. Moore, architect.

BLAYDON.—A new school clinic is to be provided by the Durham E.C.

BOURNEMOUTH.—The T.C. passed plans: House, Alyth-road, Dr. H. Simmons; house, Bloomfield-avenue, Way & Marshall; house, Coronation-avenue, H. Dean; house, Mavis-road, S. G. Ward; house, Albemarle-road, Jenkins & Sons, Ltd.; house, Egerton-road, G. Dolman; house, corner Wimborne and Maclaren-roads, Dr. S. Dearen-Walker; house, Stokewood-road, A. Barnes; house, Boscombe Overcliff-drive, Dr. Ferguson; house, Nama-road, W. H. Stride; house, Eldon-road, Rev. G. Preece; house, Danesbury-avenue, A. Stacey; house, The Avenue, H. Ellison, Son & Dale; house, Brackendale-road, H. G. Lambert; house, St. Luke's-road, A. Cooke; two houses, Danesbury-avenue, Hewitt & Lane; house, Browning-avenue, J. Newbury; house, Glenmoor-road, A. Bennion; bungalow, corner of Malvern and Beatty-roads, S. G. Ward; two houses, King George-avenue, H. P. D. Barnes; bungalow, Court-road, P. A. Troke; two houses, Curzon and St. Mary's-roads, Mrs. Powell; house and shop, Kimberley-road, J. B. Allison; house, Charminster-avenue, H. J. Roffey; house, Wentworth-avenue, A. Holly; house, Beaufort-road, J. B. Allison; house, Malmesbury Park-road, E. S. Roffey; five houses, Elmes-road, Jones & Sims; house, St. Luke's-road, J. White; house, Ophir-road, H. Ellison, Son & Dale; bungalow, Oswald-road, Cook; house, Cranleigh-road, F. E. Phrangley; house, Belle Vue-road, Bunning & Patrick; two houses, Elmes-road, F. Young; bungalow, Bloomfield-avenue, G. E. Cooke; house, Ken-road, C. H. Fisher; eight bungalows, Delhi-road, J. T. Rowley & Co.; six bungalows, Middleton-road, J. T. Rowley & Co.; house, King Edward-avenue, F. J. Whittle; house, Bloomfield-avenue, G. E. Cooke. — A shelter to cost £400 is to be erected on the East Overcliff-drive.—The Borough Engineer has been instructed to invite tenders for the erection of 42 houses.—The M.T., it was reported, has sanctioned the borrowing by the Council of £22,500 for the reconstruction of the head of Boscombe Pier and the provision of additional accommodation.—The Borough Engineer has been instructed to report with plans on the enlargement of the convenience at Boscombe, and also instructed to report on the extension of the convenience at Fisherman's Walk.

BRAMHALL.—The U.D.C. passed plans: House, Offerton-lane, for W. Bell; house, Chester-road, Bancroft & Pixton; house, Grange-road, F. Fallows & Co.; three houses, Offerton-road, Bancroft & Pixton; two houses, Douglas-road, Oldham & Hallworth; house, Hillbrook-road, C. A. Taylor; house, Ethel-road, G. P. Padfield.

BRIDGEND.—Plans passed by the U.D.C.: House on the Glanogwr estate, for Mr. Idris Davies, Bridgend.

BRIGHTON.—The Southdown Motor Services, Ltd., anticipate extensive building operations shortly. A large area of land near the Grand Parade has been acquired, and plans are prepared for the erection of a garage. Property, with vacant possession, has also been obtained in Park-street, where extensions are proposed. The architects are Messrs. Clayton & Black, of 10, Prince Albert-street, Brighton.

BURTON-ON-TRENT.—The E.C. submitted a scheme for the provision for a new high school for girls, on the site of "The Woodlands." The estimated cost will be £48,000.

CAKEMORE—Worcester C.C. has decided to provide an elementary school for 600 children on a site in Long-lane.

CAMBRIDGE.—The T.C. approved plans: House, Queen Edith's-way, for J. Mercer; shop and premises, Sidney-street, for J. Sainsbury, Ltd.; house, Latham-road, for Rev. C. A. Skinner; pair of semi-detached houses, Union-lane, for H. Richardson; house, Barton-road, for A. J. Ransom; house, Harvey Goodwin-avenue, for Miss K. Townsend.

CASTLEFORD.—Plans passed: Six houses in Smawthorne-lane, for Mr. L. J. Gallagher.

CHELMSFORD.—The R.D.C. reported that they had received letters from Runwell asking that steps be taken to formulate a town-planning scheme for that parish. — The T.C. passed plans: House, Maltese-road, for Davis & Gibbons; house, Galleywood-road, for Mr. H. R. Tapp; pair of houses, Finchley-avenue, for W. Fincham & Son.

CHEPSTOW.—The R.D.C. has passed plans for five new houses and two bungalows at Severn Tunnel Junction, presented by Mr. R. Richards.

CHESTERFIELD.—The R.D.C. has received approval from the M.H. for the erection of 200 houses at Staveley, 37 at Heath, 16 at Killamarsh, 18 at Tupton, and 32 at Grassmoor.

CHIPPENHAM.—The T.C. decided to embark on another building scheme and erect 20 more houses. These houses will cost £9,670.

CLONAKILTY.—The D.C. has asked for permission to borrow £3,000 for erecting 10 cottages.

CLOWNE.—The R.D.C. has placed contracts (subject to the approval of the M.H.) for the erection of 20 houses at Clowne, and 10 houses at Whitwell.

COCKERTON.—It is proposed to erect a Church school for about 160 children.

CROFTON.—Plans have been prepared by Massie & Holdsworth, architects, for the erection of a new mission hall, for the Nostell Colliery Co., Ltd. Tenders are about to be invited.

DARLINGTON.—The R.D.C. passed plans for 16 houses to be erected by Mr. T. E. Dugill, and a house at Blackwell for Mr. R. J. Mounsey.

DEWSBURY.—The T.C. passed plans: T. R. V. Parkin, house, Caledonian-road, Savile Town; A Day, house, Leeds-road: Mr. Hodson, house, Tanhouse-street, Ravensthorpe; W. Gledhill, lock-up shop, Huddersfield-road, Ravensthorpe.—A new bridge is to be erected over the Calder and Hebble Canal at Slaithwaite-road; estimated cost, £7,000.

DORCHESTER.—The T.C. has purchased two pieces of land in connection with the erection of houses on the Victoria Park housing site.

DUNDEE.—Plans and sections of proposed new buildings, &c., have been lodged at the office of the City Engineer: Dalkeith-road, semi-detached cottages for Alex. W. Horsburgh and Alex. Don, architect W. M. Wilson; Glamis-drive, cottage for Mrs. M. Annan, architect N. T. Stewart; Martin-street, houses for J. K. Anderson, plans by petitioner; Milner-street, house for H. Kinnes, architects, Gauldie & Hardie; Strathmartine-road, house for Mrs. J. W. Kennedy, architect N. T. Stewart.

DURHAM.—The County E.C. has prepared a school building scheme estimated to involve an outlay of £350,000.

EARBY.—The D.C. are to apply to the M.H. for sanction to borrow £2,000 for the subsidy of 20 houses.

EAST RAINTON.—Durham County E.C. has purchased a site for a new elementary school.

EDINBURGH.—The Dean of Guild Court has plans: Pavilion for the Radiological Department of the Royal Infirmary; J. Alexander, to erect [illegible] at Park-gardens, Liberton; J. Blyth, building at the corner of St. John's-road and Drum[illegible]; Corstorphine; M'Bain & Torrie, eight flatted houses at Baronscourt.

EVESHAM.—The M.T. has promised a grant of 65 per cent. of the cost (£40,600) of the construction of the new bridge, plans for which have been prepared.

FLAXTON.—The R.D.C. received a letter from the M.H. intimating that he was prepared to give sanction for the erection of a further 25 houses by private enterprise, subject to certain arrangements.

FOLESHILL.—Warwickshire E.C. has decided to build a school for about 250 children.

GLAMORGAN.—A scheme for the provision of new stations in the county, which will involve an estimated outlay of £123,000, is to be undertaken by the G.W.R. Stations are as follows: Ystrad Mynach, £15,000; Ogmore Vale, £5,000; Aberavon, £9,000; [illegible] £15,000; Mardy, £5,000; Pontardulais, £[illegible]; Penclawdd, £4,000; Penygraig, £7,000; £10,000; Aberamman, £4,500; Pontypridd, £[illegible].

GOLBORNE.—The congregation of the Wesleyan Chapel are raising £2,000 to provide funds for a new Sunday school.

GOSPORT.—The T.C. is to proceed with the scheme of "The Hard," and the lay-out of Kingsgate-park, at a cost of £3,000.—Plans passed: Two houses, San Diego-road, for Mr. E. Treacher; two houses, Cambridge estate, for Mr. R. Orsmond; house, Grove-road, for Mr. W. G. Roberts.

GRAVESEND.—The Baths Committee has approved of draft plans prepared by the B.S. for slipper baths. Plans passed: House, Singlewell-road, for Mr. Cutlack. — Plans passed by T.C.: Two houses, Old East-road, for Hopkins & Sons; house, road, near Sun-lane, for Messrs. Bridgland & [illegible].

GUILDFORD.—The Corporation is to purchase an acre site in Woodbridge-road for a new electric station. The scheme will cost nearly £90,000.

HASTINGS.—The T.C. passed plans: Bungalow, Red-lane, for Mr. A. Nash (Mr. H. D. Ward, architect); flats, Cornwallis-gardens, for Mr. Dent (Mr. H. D. Ward, architect); flats, "White Rock House," for Mrs. Grierson Lowe (Mr. P. H. Oxley, architect); house, The Green, for Mrs. C. F. Callow (Messrs. Lucas & Callow, architects); bungalow, Hughenden-road, for Mrs. J. H. Tingle (Mr. J. Hunt, architect).

HEBBURN.—The U.D.C. resolved to take immediate steps for the erection of 100 houses.

HEYWOOD.—The T.C. decided to erect a covered market on a site in Hind Hill-street, at a cost of £[illegible].

HODSOCK LANGOLD.—Notts E.C. has purchased a site for an elementary school.

HOVE.—Plans passed by the T.C.: Conversion of Wheatland, eight pairs semi-detached houses, Hangleton-road; A. W. Presland & Co., three pairs semi-detached houses, Hogarth-road; T. Squires, three houses, Glendor-road; Miss H. Chapman, bungalow, Nevilas; C. Marchant, two pairs semi-detached houses, Wilbury-crescent; A. Chadwell, three proposed houses, Hove-street; O. Scott, detached house, New-avenue; Smith & Mullinger, pair semi-detached houses, Wish-road; L. Hess, detached house, Princes-[illegible].

HULL.—The T.C. approved a scheme to erect a new pier and pontoon at an estimated cost of £2[illegible].

ILFORD.—Plans passed by U.D.C.: W. Bull, five houses, Hatch-lane; Haines & Warwick, bungalow, "Wayside," Tomswood Hill; A. Smith, four houses, Green-lane; Sunnyside Development Syndicate, houses, Kingston-road; P. E. Brand, Ltd., three houses and dwellings, Gantshill-parade; F. Fortescue, houses and 34 garages; Geo. Baines & Son, proposed church, corner of Broomhill-road and Green-lane; P. E. Brand, Ltd., house and shop, Jerrold-avenue; E. A. Russell, shop and four houses, Ilford-lane; Hitchcock, 24 houses, Talbot-gardens; D. J. Bull, 17 houses, Cavenham-gardens.

ILKESTON.—The T.C. approved plans: Proposed bungalow, Catherine-avenue, Mr. J. Slater.

KEIGHLEY.—The T.C. propose to carry out a scheme for the erection of 100 additional houses on the Bracken-hill estate in the next year.

KERESLEY.—Warwickshire E.C. is to erect a school for 300, with arrangements for enlargement by 100 places.

LAMPETER.—The T.C. has been authorised to expend £1,000 in providing public lavatory accommodation.

LANCASTER.—The T.C. passed plans: Two pairs of detached houses off Palatine-avenue, for Mr. Mashiter & Hirst; house off Palatine-avenue, for Mr. Lewis.

LANGLEY.—Plans have been prepared by the Worcester Standing Joint Committee for the erection of police buildings.

LEADGATE.—The U.D.C. decided to seek a loan of £13,500 for the purpose of carrying out sewerage disposal works at Crookhall and Billingside.

LEEDS.—Plans have been prepared for the complete reconstruction of the "Sir Robert Peel" Inn, Armley-bury-road, for the Armley Brewery Co., Ltd. Tenders are about to be invited by the architects, Messrs. Massie & Holdsworth, Wood-street, Wakefield.

LITTLEBORO'.—Plans have been approved for the erection of four houses at Timbercliffe, for Mr. Fothergill & Harvey, Ltd.

LIVERPOOL.—The Housing Committee decided to build a number of "sample" all-electric houses on the Walton Hall estate.—A site has been secured by Aigburth Vale Wesleyans for the purposes of carrying out an extension scheme, estimated to cost £[illegible]. The site is on the Aigburth Boulevard.

LONDON (BROCKLEY).—At a cost of £2,600 the congregation of St. Peter's has acquired for a vicarage a house in Breakspears-road.

LONDON (STREATHAM).—A permanent vicarage is to be built for St. Margaret's Church.

* See also our List of Contracts, Competitions, etc.

LOUTH.—The T.C. has provisionally accepted a tender for the erection of 11 workmen's houses at River Head; amount of tender, £3,795.

LOWESTOFT.—The Council is to buy the Normanston Hall estate for £4,650.

MAIDSTONE.—The bridge over the Medway is to be widened at a cost of £40,000.

MALDON.—The R.D.C.'s engineer has prepared plans of two types of bungalows of timber construction for the parishes of Tolleshunt Knights, eight dwellings; Latchingdon, eight; Steeple, six; Hazeleigh, six; Burleigh, eight.

MALLING.—The R.D.C. passed plans: Bungalow, Ash-road, Stansted, for Mrs. S. Edge; two cottages, The Bush Corner, East Peckham, for Mr. H. R. Gardener; bungalow, Ryarsh, for Preedy Bros.; cottage, Bush Corner, East Peckham, for Mr. H. R. Gardener.

MANCHESTER.—Messrs. Foden, Hemm & Williams, architects, have prepared plans for proposed extensions to Xaverian College, Victoria Park, estimated to cost £5,000.

MARGATE.—The T.C. approved plans: Four houses, Wellesley-road, Wiles Bros.; house, Old Green-road, H. Wakley; house, Westbrook-avenue, S.M. Construction Co., Ltd.; house, Wellis-gardens, J. H. Reed; house, Hartsdown-road, Wood & Co.; two houses, Leslie-avenue, Peall & Co.; seven houses, Brooke-avenue, Wood & Co.; house, Westbrook-avenue, A. Vanner; house, Millmead-road, F. H. Cole; house, Hartsdown-road, Billinghurst & Webb.—A bathing pavilion is to be erected on the sands at a cost of £28,480.

MELTON.—The R.D.C. plans for approval: Slaughter-house at the Gun Range, Asfordby, for Mr. R. Simms; house at Sealford, for Mr. Carter.

MERTHYR.—The plans for the proposed 46 houses at Hoelgerrig are to be submitted to the next Town Council meeting.

MILNROW.—The Council are making enquiries in New Hey and Firgrove districts for sites upon which to erect a further 50 houses.

MOLESEY.—A new lock-house is to be built as well as a new lock at Molesey, near Kingston-on-Thames.

MYNYDISLWYN.—The U.D.C. proposes to build 200 houses.

NEATH.—The R.D.C. is acquiring land for the erection of houses.

NELSON.—The Plans Sub-Committee recommended that the following be approved: Semi-detached bungalows at Lee Gate, for Wood & Fewster; bungalow, Halifax-road, for G. Mutch.

NEWBIGGIN (NORTHUMBERLAN).—The U.D.C. has received the approval of the M.H. for the erection of an additional 66 houses.

NEWPORT (MON).—The T.C. has finally decided to erect an abattoir on the Lisserry site, adjoining the G.W.R. at East Usk.

NORTHAMPTON.—The T.C. recommended that a plot of land on the Balfour-road site be purchased for £1,345 13s. 4d.—The Borough Engineer is to prepare a scheme and invite tenders for the erection of flats in continuation of those already constructed.—With regard to Harborough-road Hospital, the Public Health Committee reported they had asked the Borough Engineer to prepare plans and estimates for structural alterations, &c., in respect of an expenditure not exceeding £10,500, excluding the previous suggestion to build a receiving ward and a new ward, which together would cost £6,170. The committee also reported that the Borough Engineer would submit separate plans and details of the receiving ward, to cost £1,500, for consideration at a special meeting.

OLDBURY.—Final plans for new secondary school buildings have been submitted to the B.E. for approval.

PEMBROKESHIRE.—Plans passed by the Pembroke R.D.C.: Bungalow at Sardis, for Mr. T. Evans, Haverfordwest.—The County E.C. has instructed the preparation of plans for a new school for 400 children to be erected at Milford Haven.

PENYBONT.—The R.D.C. has received sanction to borrow £3,000 for the construction of sewerage works at Penyfai.

PONTARDAWE.—The U.D.C. is to invite tenders for the erection of houses, as follows: At Gwaun-Cae-Gurwen site, 24 houses; at Ystalyfera site, 10 houses; at Alltwen site, 8 houses; at Clydach, 4 houses.

POULTON.—Plans approved: Potts & Pimley, four houses and shops, Poulton-road, Carleton; J. E. Swaine, bungalow and two houses off Blackpool-road, Carleton; W. A. Gary, house, Blackpool-road, Carleton; L. Sanderson, pair of houses, Staining-road, Hardhorn; Lancashire E.C., new dining room, &c., Hardhorn Tees, Staining Institute; Dent & Waterhouse, pair of houses.—A site has been acquired near Vicarage-lane for the erection of a parish parochial hall for the parish church.

QUEBEC (DURHAM).—The local branch of the British Legion propose to erect a hall for the district.

QUEENSBURY.—The Queensbury and District E.C. have decided to ask the West Riding E.C. to expedite the arrangements for carrying out the necessary alterations to the Church School, now known as the Upper Council School, to be used for Central School purposes.

RADCLIFFE.—A scheme has been submitted by the surveyors to the D.C. for the provision of a tramway waiting room and public sanitary conveniences in Water-street. Sites for two schools have been obtained by arrangement from the Earl of Wilton.

RAMSEY.—The U.D.C. passed a plan for the erection of a house in the Blenheim-road by Mr. W. Avory.

REDCAR.—Sanction has been received from the M.H. by the T.C. to erect a further batch of 100 houses, and tenders are to be invited for the building of 60.

RICHMOND.—Plans have been prepared for the reconstruction of the Paradise Stores, off-licensed premises in Church-walk. A scheme has been designed by Mr. J. E. Jefferson, A.R.I.B.A.

ROCHFORD.—The R.D.C. has decided to apply for permission to erect 20 more houses.

ROTHERHAM.—The R.D.C. has given subsidy to the Rother Vale Collieries for a further 32 houses.—The Ministry has agreed to the proposal to erect a further 50 houses at Dalton, and a further 50 houses at Thurcroft. Application has been made to erect 24 houses at Laughton, and 16 houses at Hooton Robert.—An inquiry has been held by the M.H. into the R.D.C. application to borrow £8,088 for sewage and sewage disposal work.

RUGBY.—The B.E. has approved plans for a new secondary school, and tenders are to be invited by the C.C.—The R.D.C. passed plans: Four houses for Mr. Hollowell; four houses, Messrs. Winn.

ST. ANNES-ON-SEA.—A new mission church in connection with the parish church is to be erected in St. Leonards-road with accommodation for 350 persons.

SCHOOL AYCLIFFE.—Durham C.C. proposes the purchase of two farms of 343 acres as a site for an institution for mental defectives.

SEDGEFIELD.—A house is to be erected at the Durham County Asylum for the assistant medical officer, at a cost of £2,100.—The Board of Control has urged for the provision of an admission hospital.

SEIGLEY.—The U.D.C. expresses readiness to join with neighbouring authorities in schemes for reclaiming derelict lands in order to find work for the unemployed.—Stores and workshops are to be erected at the Beacon site, at a cost of £750.

SHIPLEY.—The U.D.C. has decided to erect 195 houses on the Saltaire housing estate, at an estimated cost of £114,813.—The estimated cost of the adaptation of "Far Royds" into a child welfare centre is £2,710; sanction has been received, and the work is to be commenced immediately.

SHREWSBURY.—The T.C. is to reconstruct the English Bridge at a cost of £80,000.

SOUTHPORT.—The private builders of Southport are to mutually erect 100 new houses under an arrangement with the Corporation, of which 50 are to be erected at Birkdale and the other 50 at Canning-road.

SPENBOROUGH.—The U.D.C. have applied to the M.H. for sanction to carry out a scheme for the erection of 220 houses at various places within the Council's boundary.

STARE.—Warwick C.C. has authorised the preparation of plans for a new bridge.

STOCKTON.—The M.H. has approved plans for the erection of a clinic at a cost of £3,150.

STOKE HEATH.—Warwickshire E.C. proposes to provide a school for 200 children.

STOURBRIDGE.—Two additional class-rooms and an extension of the science buildings are to be provided at the King Edward Grammar School.

STOURPORT.—The T.C. propose to erect 120 houses of the maisonette type on the Grange estate.—Terms have now been arranged between the Worcester C.C. and the Canal Co. for the rebuilding of the Gilgal and Mitton-street bridges.

SUNDERLAND.—The M.T. has sanctioned the construction of a new Wearmouth bridge, at an estimated cost of £300,000.—An inquiry has been held into the proposals for development in connection with the T.C.'s town-planning scheme.

SUTTON COLDFIELD.—The T.C. approved plans: House, Belwell-lane, for Miss K. Rogers; bungalow, Clarence-road, for Mrs. D. M. Stone; pair of houses, Clarence-road, for Mr. W. L. Stone; bungalow, Chester-road, for Mrs. Barton; house, Penns-lane, for Mr. L. A. Walter; pair of houses, Penns-lane, for Blackband Bros.; house, Stonehouse-road, for Mr. Fellows; house, Stonehouse-road, for Mr. Pryse; house, Worcester-lane, for Mrs. Keatley; eight houses, Walsall-road, for Mrs. Wilcox; bungalow, Whitehouse Common-road, for Misses M. and L. B. Stratford.

THORNTON.—Plans passed by the Council: Bungalow, Stanch-road, for Mr. P. Drummond; pair of bungalows in Lawsons-road, for Messrs. R. Lancaster & Sons; an extension of the Sunday school in Meadows-avenue, for the Rev. C. N. Sergeant.

TIR-Y-BERTH.—Plans have been submitted by the Glamorgan E.C. for a new school, and have been approved. The cost will be £16,000.

TONBRIDGE.—The M.H. has approved of the U.D.C. proposal to erect 40 houses in Shipbourne-road.

TRURO.—The City Surveyor has prepared a scheme for the erection of 89 houses on the Hendra site, at an estimated cost of £58,000.—The T.C. has decided to proceed with a scheme for bridging over the river at Lemon Bridge, at a cost of £5,000.—Plans passed: House, The Crescent, for Mr. Russell.

UCKFIELD.—The U.D.C. approved plans: Bungalow, Hempstead-road.—Plans approved by R.D.C.: Two bungalows in Rotherfield-lane, Mayfield, for Mr. E. J. Hodges: house in Station-road, Crowborough, for Messrs. Connor; house in Queen's-road, Crowborough, for Miss Holmes; house in Pilner-road, Crowborough, for Mrs. Campbell; house at Sweet Hawes, Crowborough, for Mr. Buckingham; bungalow in Harlequin-lane, Crowborough, for Mrs. Stuckey.

UXBRIDGE.—It is suggested that the Council should provide conveniences throughout the district.—Plans passed: Bungalow, Derby-road, for Mr. C. B. Payne.

WAKEFIELD.—Plans passed: Two houses in Thornes-road, for Messrs. J. W. Easter and B. Buckland; two houses in Cross-lane, for Messrs. Kilkenny Bros.; house in Thornes-lane, for Mr. H. Campbell; house, in Agbrigg-road, for Mrs. Raby.—The Corporation are to erect four houses at an estimated cost of £1,800.

WARWICK.—The T.C. is to erect another 32 houses.—Plans passed: House, Bridge End, for Mr. A. Tilt.

WELLFIELD.—Durham County E.C. has purchased a site for a new secondary school.

WELLINGBOROUGH.—The U.D.C.'s committee recommended the Council to apply for sanction to grant subsidies in respect of 40 further houses.—Plans were passed for five houses in The Drive, one in Broadway, and Gisburne-road, and six in Hatton Park-road.

WELWYN.—The R.D.C. has decided to apply to the Public Works Loan Board for a third advance of £15,000, under the mortgage for £40,700 in connection with Welwyn Garden City housing scheme No. 3, and sanction to an additional loan of £280 for cottages at London-road. Plans approved: House, Mardley Hill estate, for Mr. H. F. Crawhall.

WEST HARTLEPOOL.—Plans passed by the T.C.: Detached house, Park-road, for D. Edgar; bungalow, Stockton-road, Mrs. Marwood.—The M.H. has approved the Corporation giving subsidy to the erection of 32 houses.

WEST LANCASHIRE.—Plans approved by the R.D.C.: Bungalow, Moss-lane, Hesketh Bank; house, Aughton; bungalows, Maghull; bungalow, Aughton; pair of houses, Tarleton; pair of bungalows, Halsall; detached house, Halsall.

WEYBRIDGE.—The general committee of the Cottage Hospital have decided to go ahead with their proposed building operations. The cost is estimated at £25,000. Plans have been prepared by Messrs. A. W. Kenyon and S. G. Livock, of London.

WEYMOUTH.—The T.C. passed plans: S. Jackson & Sons, for Mr. K. Openshaw, pair of semi-detached houses, Southlands-road; A. Knell & Sons, pair of semi-detached houses, King's-road; J. F. Annan, house, Icen-road; A. Knell & Son, for T. Pritchard, Radipole, pair of semi-detached bungalows, Coronation-road; Mr. Masters, for Mr. R. James, bungalow at the corner of Icen-road and Dorchester-road.

WHITLEY.—The U.D.C. passed plans: Mr. W. Poole, two pairs of semi-detached houses on the Ruswarp Hall estate; Mr. W. G. Smithson, house, in Ruswarp-lane.

WHITWOOD.—A site has been acquired at the Four Lane Ends, Whitwood, 16 acres in extent, upon which it is proposed to erect the Mining and Technical Institute to serve the Castleford and Normanton district. Tenders are shortly to be invited.

WIGAN.—The T.C. is to erect a new pavilion in Mesnes Park.

WIGTON.—A water scheme to cost £20,500 has been decided on by the R.D.C.

WIMBLEDON.—The B.C. passed plans: H. Coombs & Son, two houses, Devas-road; R. J. Thomson, house, Belvedere-drive; Hill & Gurr, house, Merton Hall-road; R. J. Thomson, house, St. Mary's-road; F. M. Thompson & Sons, Ltd., house, The Drive; R. Sharp, house, Dora-road; Bleach & Dorey, Ltd., two houses, Queen's-road; H. Guest, two bungalows, Queensmere-road; W. H. Whitehead & Co., house, Conway-road; H. & G. Longhurst, house, Montana-road; E. W. Fisher, house, The Common.

WINDLESHAM.—The U.D.C. decided to build 30 houses.

WINSFORD.—Cheshire County Surveyor has prepared plans for the reconstruction of the county bridge, at a cost of £3,600.

WITHNELL.—Plans have been approved for the erection of a new warehouse at Fenniscowles, for the Star Paper Mill.

WOKING.—The U.D.C. approved plans of 11 houses, and a new church and hospital in connection with St. Peter's Harbour, at the junction of Lavender-road and Maybury Hill.

WOLVERHAMPTON.—The T.C. approved plans: J. Love, house, Bamford-road; G. Oliver, two houses, Lea-road; J. Patten, two houses, Richmond-road; A. M. Griffiths, eight houses, Newhampton-road and Park-road East; S. J. Matthews, house and shop, Cannock-road; G. H. Jevon, bungalow, Penn-road; Caddick, Son, & Yates, Ltd., two houses, Fowler-street; G. H. Guest, house, Park-avenue; G. Shale, house, Park-avenue; J. Patten, two houses, Richmond-road.

WOMBWELL.—The U.D.C. has adopted an improvement scheme for the Hemingfield-road; estimated cost of full scheme is £8,000.—The U.D.C. approved plans: A. Mattocks, two houses, King's-road; J. Mattocks, two houses, Kelvin-grove.—The U.D.C. propose to erect 60 additional houses.

WORCESTER.—The City Council propose to carry out a scheme for the erection of 122 houses at Goodrest, in addition to the 68 now in course of erection at Bromyard-road site.

WREXHAM.—The Electricity Committee of the T.C. propose to erect a sub-station at the Garden Village, at an estimated cost of £1,225.

WYKE.—The Bradford Corporation tramways committee propose to erect a new tramway shelter at the south-west corner of the Wyke Council School site.

YORK.—J. Terry & Sons, Ltd., of Clementhorpe, are to erect a new factory on a town-planned area. Plans have been prepared by the firm's architect's department.

FIRE.

LONDON.—A fire broke out recently in a block of warehouses and offices, known as Bentley House, Beat-street, near Regent-street. The damage is estimated at over £15,000.

Building Trades Employers.

Over 75 members attended the annual dinner at the Pit and Nelson Hotel, Ashton-under-Lyne, of the Ashton, Stalybridge, Hyde and District Allied Building Trades Employers' Association. The company included master builders, plumbers, painters, &c., and Mr. E. Warrington, President, occupied the chair.

Mr. Warrington expressed pleasure at such a large gathering of allied building trades employers. Such a function was a good augury of a joint association, which was necessary if the objects for which the representative association had been formed were to be attained.

Mr. Charles Marshall (Ashton), in proposing "The Allied Building Trades Employers," said if the employers were to retain their present position as employers they must be united.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Fletton, at King's Cross	2 13 3	Best Blue Pressed Staffs.	9 5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick:—			
2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	23 0 0	D'ble Str'tch'rs	31 10 0
Headers	22 10 0	D'ble Headers	28 10 0
Quoins. Bullnose and 4½ in. Flats	29 10 0	One Side and two Ends	32 10 0
		Two Sides and one End	33 10 0
		Splays and Squints	31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
2½ in. "	2 6	4 in. "	3 6

	s. d.	
Thames Ballast	10 6	per yard.
Pit Sand	9 "	"
Thames Sand	14 6	" "
Best Washed Sand	14 6	" "
½ in. Shingle for Ferro-Concrete	12 9	" "
¾ in.	14 0	" "
¾ in. Broken Brick	11 6	" "
Pan Breeze	7 6	" "

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 3 6
51/- alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement (Waterproof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube — s. 2 d. 9½

Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube — 2 11½

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube — 4 4

Do. do. delivered on road wagons at above stations, per ft. cube — 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. per ft. beyond 30 ft.

HOPTON-WOOD STONE.

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. Per ft. cube	7/-
Random blocks from 10 ft. and over "	17/-
Sawn two sides "	27/-
Sawn three or four sides "	32/-

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s.	d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per Ft. Super	5	6
6 in. rubbed two sides, ditto "	6	0
3 in. sawn two sides slabs (random sizes) "	2	3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1	6½
1½ in. to 2 in. ditto, ditto "	1	4

HARD YORK—

Delivered at any Goods Station London.

Scappled random blocks Per Ft. Cube	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per Ft. Super	5	1½
6 in. rubbed two sides ditto "	6	1½
4 in. sawn two sides slabs (random sizes) "	2	10
3 in. ditto. ditto "	2	1½
2 in. self-faced random flags Per Yard Super	9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4½	24 0
2½ × 7	22 0	3 × 4	24 0

PLANED BOARDS.

1 × 11	£31 0	1 × 9	£30 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
½	21/-	1¼	32/6
¾	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST).

Inches	per sq.
½	16/6
¾	20/-
1	25/-

BATTENS

Inches	s.	d.
¾ × 2	2	6 per 100 ft.

SAWN LATHS.

Per bundle				0	2 6
Dry Wainscot Oak, per ft. super, as inch	0	2 0	to	0	2 6
¾ in. do. do.	0	1 6	to	0	2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	1 9	to	0	2 6
	0	3 0	to	0	3 6
Cuba Mahogany	0	14 0	to		—
Teak (Rangoon, Moulmein or Java), per ft. cube					
American Whitewood planks, per ft. cube	0	12 0	to	0	14 0
	4	10 0	to		—
Best Scotch Glue, per cwt.	4	7 0	to	5	10 0
Liquid Glue, per cwt.					

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Per 1,000 f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand made	0 9 6
Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅜ in. to ½ in.	13 10 0
⅛ in.	14 10 0	⅝ in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ⅛" &up. ¼" to ½" inclusive.	Fittings. ⅛" &up. ¼" to ½" inclusive.	Flanges. ⅛" &up. ¼" to ½" inclusive.
Black Gas	50 %	50 %	47½ %	60 % .. 57½ %
Blue Water	45 %	45 %	42½ %	55 % .. 52½ %
Red Steam	40 %	40 %	37½ %	50 % .. 47½ %
Galv'd Gas	35 %	40 %	37½ %	50 % .. 47½ %
" Water	28½ %	35 %	32½ %	45 % .. 42½ %
" Steam	22½ %	30 %	27½ %	40 % .. 37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe. s. d.	Bends stock angles. s. d.	Branches stock angles. s. d.
3½ in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.	
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..
Hoop iron, basis price	16 10 0	..
Galvanised	31 0 0	..

Soft Steel Sheets, Black—

Ordinary sizes to 20 g.	14 10 0	..
" " " 24 g.	15 10 0	..
" " " 26 g.	17 10 0	..

Sheets Flat Best Soft Steel, C.R. & C.A. qu

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	21 0 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	22 10 0	..
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	24 10 0	..
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker	23 10 0	..
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..
Best Soft Steel Sheets, 26 g.	26 0 0	..
	20 10 0	..

Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)

METAL WINDOWS—Standard sizes suitable plete houses, including all fittings, pa coats, and delivery to job, average price to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£ s. d.	
LEAD—Sheet. English, 4 lb. and up		
Pipe in coils		
Soil Pipe		
Compo pipe		
NOTE—Country delivery, 30s. per ton extra; 3 cwt., 2s. per cwt. extra and over 3cwt. a cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s.		
Old lead, ex London area, at Mills per ton	39 10 0	..
Do., ex country, carriage forward per ton	40 10 0	..

COPPER.

Seamless Copper tubes (basis)	per
Strong sheet	
Thin "	
Copper nails	
Copper wire	

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2
29/-	45/-	76/-	153/-	246/-	510/

NEW RIVER PATTERN SCREW DOWN STOP UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/

NEW RIVER PATTERN SCREW DOWN MAIN

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per do

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/-

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/-

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per

NEW RIVER PATTERN CROYDON BALL VALV

½ in.	¾ in.	1 in.	1¼ in.	1½
35/-	56/-	98/-	162/-	228

DRAWN LEAD P. & S. TRAPS WITH BRASS SCREW.

	1¼ in.	1½ in.	2 in.	3
8 lbs. P. traps	33/-	41/-	56/-	101
8 lbs. S. traps	35/-	45/-	66/-	126

TIN—English Ingots, 2/6 per lb. SOLDER—1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon
" " " in barrels	"
" " " in drums	"
Boiled " in barrels	"
" " in drums	"
Turpentine in barrels	"
" in drums (10 gall.)	"
Genuine Ground English White Lead, per to (In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's, "Spedol" and other best brands (i 14 lb. tins) not less than 5 cwt. lots	per ton delivere
Red Lead, Dry (packages extra)	per to
Best Linseed Oil Putty	per cw
Filocol	per cw
Size. XD Quality	fk

[*Continued on next page.*]

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THE SCOTTISH BUILDER

FAMOUS SCOTTISH ARCHITECTS

In the last issue of the *Quarterly Illustrated* of The Incorporation of Architects in Scotland an account, by Mr. T. Harold Hughes, A.R.I.B.A., is given of the life of the famous Scottish architect, James Craig. Craig was born in the year 1740, and received his architectural education in London as a pupil of Sir Robert Taylor, an architect whose best-known work, perhaps, is Ely House, Dover-street.

Proposals for the extension of Edinburgh had been propounded by the end of the seventeenth century, for which James VII is credited. As Duke of York, it is stated that, on a visit to the city he pointed out to the magistrates the possibilities of city extensions to the north and south. John, the eleventh Earl of Mar, is another who is believed to have had schemes of which the New Town was the final outcome. It was not, however, until the year 1752 that the magistrates first seriously considered the project of extending the city. By this year (1752) powers had been obtained to "Enlarge and Beautify the City," but the Royalty did not extend to the area to the north. Other improvements were undertaken of which the most important was that of building the North Bridge. In 1763 the North Loch was drained and the first stone of this bridge (of which William Mylne was the architect) was laid on October 21. Following this the magistrates again attempted to extend their Royalty, and this time sanction was given to build to the north. A competition was inaugurated for plans for the new town, "Conform to which buildings might be erected in the most regular, handsome and commodious manner." Craig's opportunity came when he was but 27 years of age, and his design was adopted.

The site was a virgin one. Along the crest of the hill Craig ran his main street, George-street, terminating it at each end with a large square. At the west end was Charlotte-square, with a central plot of grass and obelisk, the centre of the west side—on the axis of the street—being marked as a site for a church. St. Andrew-square, at the east end, is similar, the church site on the eastern side balancing that to the west of Charlotte-square. A small point of difference is the placing of two statues in St. Andrew-square, both facing towards George-street. This fine street, with its two well-proportioned squares, formed the main axis of Craig's stately plan. Parallel to it, and on the southern slope, was Princes-street, the southern boundary of which was formed by gardens and a broad canal on the site of the old North Loch. Balancing Princes-street on the northern slope the line only of Queen-street is indicated, the further northern development of the "New Town" being subsequent to Craig's plan. The cross streets, St. David's, Hanover, Frederick, Castle and Charlotte-streets divided the area up into large blocks which were further divided up by minor streets and lanes. The whole plan was simple and dignified. There was nothing faltering or amateurish, and its simplicity and directness is all the more remarkable when we consider that Craig was hardly 27 years old when he prepared his scheme.

In addition to planning the New Town Craig was responsible for several buildings, of which the most important was the old Physicians' Hall, built on a site in George-street, opposite to St. Andrew's Church. The foundation stone was laid on November 27, 1775. The building covered an area of 83 ft. east to west, by 63 ft. deep, and was three stories in height.

In 1776 the foundation stone was laid for an Observatory on the Calton Hill, for which Craig was the architect. The building, altered and added to, still exists. It is circular in form, of about 25 ft. diameter, with a rectangular wing. It was probably intended that it should be harled with stone facings to the windows. Robert Adam appears to have been consulted in the matter, and he suggested that, owing to the nature of the site, the edifice should be constructed to have the appearance of a fortification! The three buttresses which now exist seem to have been added subsequent to the general building, probably as a result of Adam's suggestion, and whilst the lower windows are square the upper ones have pointed arches. All the money available was expended before the design was completed, and it had to be finished—not until 1792—in "an inferior style."

Whilst the Observatory was being built Craig erected a block of buildings on the west side of the south end of the North Bridge.

Craig died on June 23, 1795, a comparatively young man. He had lived to see his fine scheme for the New Town realised, but he also lived to see less enlightened City Fathers than those who chose his plan allow the normal eastern development of his design to suffer neglect. The New Town of Edinburgh, however, will always be one of the fine things that this country has produced, and Craig's niche in the Temple of Fame is assured.

NEW BUILDINGS IN SCOTLAND

Grangemouth.—HOUSES.—The T.C. has decided to proceed with a further housing scheme in the new town, to consist of 54–64 houses. The Burgh Engineer has received instructions to prepare plans.

Arbroath. — EXTENSIONS. — The Forfarshire E.C. has submitted plans to the Dean of Guild Court in connection with the extensions to the High School to be used as a mechanical engineering room. The estimate is £900.

Greenock.—BUNGALOW.—The Dean of Guild Court has passed plans for the erection of a bungalow at Carmichael-street, for R. Aitkenhead & Sons.

Loanhead.—HOUSES.—The T.C. reported that a scheme was under negotiation for 100 houses.

Dumbarton.—TENEMENTS.—The Dean of Guild Court has passed plans for the erection of four tenements at West Bridgend.

Dalkeith.—EXTENSIONS.—Approval has been granted for the proposed extensions at Dalkeith School, for the Midlothian E.C., at an estimated cost of £16,500.

CURRENT OF MATERIALS (cont...

GLASS.

SHEET GLASS IN CRATES OF STO... SIZES.

	Per Ft.		Per F...
ths ..	3½d.	32 oz. fourths	8½
s	4½d.	32 „ thirds	10½d
ths ..	5d.	Obscured Sheet. 15 oz.	4d
s	6½d.	„ „ 21 „	5½d
ths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½
s	7½d.	En'lled 15oz. 5½d., 21 oz	7½

according to size and substance for square stock.

ROLLED PLATE IN CRATES OF STOCK SIZES. Per Ft.

plate	4½ d.
rolled	5½d
rolled	5½d
Rolled, Baltic, Oceanic, Arctic, Stipple and small and large Flemish white..	6½d
tto. tinted	9d.
Sheet	6d.
Rolled Cathedral	5½d
do.	7½d

Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon £ s. d.
lish	Outside	0 14 0
o	ditto	0 16 0
al	ditto	0 18 0
al	ditto	1 0 0
al Carriage	ditto	1 4 0
tto	ditto	1 12 0
rnish	Inside	0 13 0
le Paper	ditto	0 18 0
al Cabinet	ditto	1 2 6
al Flatting	ditto	1 0 6
ying Oak	ditto	0 18 0
rd Drying Oak	ditto	0 19 0
al Varnish	ditto	1 0 0
tto	ditto	1 2 0
tto	ditto	1 12 0
an Gold Size		0 10 0
ck Japan		0 10 6
Mahogany Stain (water)		0 12 0
k Black		0 7 6
lack		0 14 6
(patent)		1 5 0
nd Brush Polish		0 17 0
Dryers in Terebine		0 9 0
Black Enamel		0 7 0

Scottish Contracts.

as officially stated at Glasgow recently essrs. Duncan, Stewart & Co., engineers, w, had secured a contract to build beet actories at Kidderminster and Spalding. actory will cost approximately half a pounds. Ninety per cent., it is stated, machinery is to be manufactured in

ILDING TRADE WAGES IN SCOTLAND.

following are the present rates of wages in the building trade in the principal towns d. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors ay occur :—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-layers Masons' Labourers	Plas-terers'
en	1/8	1/8½	1/8	1/8	1/8	1/8	1/8	1/0½	
	1/8	1/8	1/8	1/8	1/8	—	1/8½	1/3	
ria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
h	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
e	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3	
wrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1	
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
ige	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
rton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
es	1/8	—	1/6	1/6	1/6	1/6	1/6	1/3½	
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
mline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
rgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
	1/7½	1/7½	1/7	1/8	1/7	1/7	1/8½	1/2½	
lliam	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
els	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2	
y	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
k	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
on	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
urgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
ss	1/5	—	1/4½	1/4	1/5	1/5	1/4	1d. to 1/2	
nock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
dy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
ll	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0	
	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
well	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
	1/3	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
shire (Eastern ict)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/8½	1/3½	
	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

e information given in this table is copyright. The rates of wages in the various towns in England and are given on page 992.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6 ..	per yard cube	32	0
Add if in underpinning in short lengths	„ „	7	0
Add if in floors 6 in. thick	„ „	3	3
Add if in beams	„ „	3	9
Add if aggregate 1 : 2: 4	„ „	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	„	7	10	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	1	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	„ „	8	6
¾ inch on flats in two thicknesses	„ „	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	„ „	22	0
Bath stone and all labour fixed	„ „	10	6
Portland stone fixed	„ „	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	„	80	9
Do. 24 in. × 12 in. Do. Do.	„	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	„ „	5	6
Do. roofs, floors and partitions	„ „	6	0
Do. trusses	„ „	8	6

	¾″	1″	1¼″	2″
Deal rough close boarding .... per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers .. „		50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	„	1	6
Gutter boards and bearers	„	1	0

FLOORING.	¾″	1″	1¼″	1½″
Deal-edges shot .... per sq.		44/6	53/-	60/6
Do. tongued and grooved .... „		49/-	57/6	65/-
Do. matchings .... „	45/-	51/-		
Moulded skirting, including backings and grounds .... per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	„ „	3	9

DOORS.	1½″	1¾″	2″
Two-panel square framed .... per ft. sup.	2/1	2/4	2/6
Four-panel Do. .... „	2/5	2/8	2/11
Two-panel moulded both sides .... „	2/8	2/11	3/2
Four-panel Do. Do. .... „	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated .... per foot cube			
	1″	1½	
Plain deal jamb linings framed .... per ft. sup.	1/7	1/	
Deal shelves and bearers .... „	1/4	1/	
Add if cross tongued .... „	2d.	2d	

STAIRCASES.

	1″	1¼″	1½″	2″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/

Housings for steps and risers	eac
Deal balusters, 1 in. × 1¼ in.	per ft. run.
Mahogany handrail; average 3 in. × 3 in.	„ „
Add if ramped	„ „
Add if wreathed	„ „

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks	
Casement fasteners	1/5	Patent spring hinges letting in to floor making good	
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cw
Plain compound girders	„
Do. stanchions	„
In roof work	„

RAIN-WATER GOODS.

		3″	4″	5″
Half-round plain rebated joints ..	ft. run	1/11	2/4½	3/
Ogee Do. Do. ..	„	2/4½	3/1	3/
Rain-water pipes with ears	„	2/9	3/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	„	1/11	2/4½	3/
Do. nozzles for inlets	„	2/2	2/7	3/

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt
Do. Do. in flats	„
Extra labour and solder in coated cesspools	each
Welt joint	per ft. ru
Soldered seam	„ „
Copper nailing	„ „

	½″	¾″	1″	1½″	2″
Drawn lead waste per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service „	1/8	2/2	2/7	3/10	
Do. soil „					3/3
Bends in lead pipe each					
Soldered stop ends „	1/2	1/8	2/1	2/10	3/6
Red lead joints .... „	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints „	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws .... „				14/7	19/6
Bib cocks and joints .. „	6/4	9/7	15/4	41/-	
Stop cocks and joints „	15/4	17/2	25/8	64/-	

PLASTERER.

Render, float and set in lime and hair	per yard su	
Do. Do. Sirapite	„	„
Do. Do. Keen's	„	„
Add sawn lathing	„	„
Add metal lathing	„	„
Portland cement screed	„	„
Do. plain face	„	„
Mouldings in plaster	per 1 girth	
One-and-a-half granolithic pavings	per yard su	

GLAZIER.

21 oz. sheet plain	per foot su	
26 oz. Do.	„	„
Obscured sheet	„	„
⅛ in. rolled plate	„	„
¼ in. rough rolled or cast plate	„	„
¼ in. wired cast plate	„	„

PAINTER.

Preparing and distempering, 2 coats	per yard s	
Knotting and priming	„	„
Plain painting 1 coat	„	„
Do. 2 coats	„	„
Do. 3 coats	„	„
Do. 4 coats	„	„
Graining	„	„
Varnishing twice	„	„
Sizing	„	„
Flatting	„	„
Enamel	„	„
Wax polishing	per foot su	
French polishing	„	„
Preparing for and hanging paper	per piece 2	

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment cha percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whol

information given on this page is copyright.

RADE NEWS

ceived from Messrs. John Tann, f their latest catalogue of "Anchor afes, strong rooms, strong-room It is, they state, the most com- atalogue ever issued in the safe gives much interesting informa- modern security work of all ddition to giving full particulars arious manufactures, it provides ific treatise on safes and strong- ction. Results are also given of held to ascertain the resistance rious materials and forms of con- ainst the oxy-acetylene blowpipe ith other forms of attack. The hich the house of Tann has kept times and anticipated every house- vice is clearly evidenced by the though the electric drill, high ex- l the oxy-acetylene blowpipe have edly employed to open the John kers' safes and strong rooms, every has been successfully withstood, ingle exception. The catalogue is roduced, and for convenience is on af principle.

e name of "Associated Lead Manu- Ltd.," a fusion of certain of their s been arranged (effective January 1) ssrs. Cookson & Co., Ltd., of New- me, Locke, Lancaster & W. W. son & Sons, Ltd., of London, and & Co., Ltd., of Exeter, Bristol and The manufacturing interests of Co., Ltd., are to be taken over by mpany—"The Cookson Lead and Co., Ltd., and the manufacturing white lead and lead oxides carried on ootle Works by Messrs. Rowe Bros. d., by a new company to be called os. & Co. (Bootle), Ltd." The busi- ke, Lancaster & W. W. & R. Johnson d., will be carried on under the same eretofore, and together with the two nies referred to above will be grouped control of Associated Lead Manu- Ltd., and will continue to trade under management as heretofore. They works at London, Newcastle-on-Tyne e.

e received from Messrs. The Key g Co., Ltd. (4, Queen Victoria-street, me interesting particulars, together les, which they will be glad to supply, exible asbestos roofing. It is, they all-mineral roofing for permanent in the form of a roofing felt. The posed of 96 per cent. of pure asbestos vegetable fibre and impregnated with phaltes. It is made in Canada, and use there for twenty years, and also ited States where it was originally There are roofs in existence put up ears ago which have received no or dressing since they were put up. for this apparently indefinitely long ited to its mineral composition and of any perishable organic matter, the fact that asbestos fibres, being fine and non-capillary, are able to mpregnation for an indefinite period. ation of the three samples—smooth bestos, coloured slate surface, and nder slate lining felt, will, we are be more convincing than any com-

Marshall, Sons & Co., Ltd., Engineers, Ironworks, Gainsborough, Lincoln- m us that from January 1, 1925, e the sole British concessionnaires and rers of the world-famed "Cummer" ants. The whole of the machinery nstructed at Gainsborough, where a partment has been laid out and or its manufacture. Messrs. Marshall, ., Ltd., are also placing a new line on the market. Our readers are well with the high-grade products, such oad rollers, portable steam engines, gines and oil engines, which are made tannia Works, and excellent results ed in connection with the latest addi e firm's lengthy list of manufactures.

NEW CINEMAS

We understand that tenders are now being invited in connection with the erection of a new cinema in Townsend-lane, Liverpool. The plans are by Messrs. Pritchard & Lewis, AA.R.I.B.A., 11, Dale-street, Liverpool, the scheme being under the direction of a local syndicate.

We also understand that a contract has been signed with Messrs. Dryland & Preston, Ltd., Topping-street, Blackpool, for the erection of the new Rendezvous Cinema at Church-street, South Shore, Blackpool. Plans have been prepared by Mr. Richard Anderton, A.R.I.B.A., 6, Kenilworth-gardens, South Shore, Blackpool, and provide for a seating capacity of about 1,250. The main entrance is to be in glazed terra-cotta; the foyer walls will be decorated with tapestry panels with a coffered and dentilled ceiling, and flooring rubber Grecian tiling. The roof is to be of steel trusses with a vaulted fibrous ceiling suspended therefrom, and heating will be provided by a low-pressure hot-water system, and ventilation by exhaust trunks and extract fans. Seating will be by tip-up chairs throughout, and the balcony is to have upholstered bucket seats.

A new cinema and ballroom, we are informed, are to be erected on the site of the Old Miners' Hall, Durham. The architects are Messrs. S. J. Stephenson, 20, Saville-row, Newcastle-on-Tyne, and the plans have been approved. The cinema is to have all modern fittings and is to accommodate 800, while the dance hall is to accommodate 150.

The construction of the new Pavilion at Bournemouth by the local Corporation has commenced. This work is estimated to cost £180,000.

The Hayes, Middlesex, local authorities have had submitted to them plans for a new cinema at Hayes, to seat 750 people.

A new cinema in place of that recently destroyed by fire, is to be erected at Roscrea, Ireland; also a new picture theatre, to be named the Central Hall, to seat 500, at Strand-street, Clonakilty.

A concert hall and roof gardens to accommodate 1,500 persons is among the proposals of the Bath Corporation.

The West Pier Co. are about to reconstruct parts of the Brighton Pier.

We are informed that the Variety Theatre Consolidated, Ltd., 25, Charing Cross-road, W.C.2, have under consideration the improvement of the South London Palace, London, S.E.1. Plans for extensive alterations have been made by Mr. Cecil Masey, 19, Devereux-court, Strand, W.C.2, and include the reconstruction of the stage and auditorium, &c. Tenders are now invited.

That the contract in connection with the erection of a new cinema—"The Playhouse"—at Bury St. Edmunds has now been placed with Messrs. Pollard & Skerritt, 88, St. Helen's-street, Ipswich. Operations are to be commenced immediately. No sub-contracts have yet been settled.

L.C.C. Housing Schemes.

The Housing Committee recently submitted proposals for development to the London County Council. An expenditure of £81,479 is involved for the erection of 160 tenements on East-hill estate, Wandsworth. Tenders have been invited for the erection of 422 houses on the remainder of the Roehampton estate. A number of these houses, not exceeding 39, will come under the Act of 1923, and the Council were asked to approve a separate estimate for them amounting to £26,286. On the White Hart-lane estate, Tottenham, for Lordship-lane frontage, it is proposed to erect 70 three-story dwellings at an expenditure of £90,490.

Greenock Housing Scheme.

A large area has been acquired in the south-west part of the town, and plans have been prepared for the construction of 700 houses, and it is also intended to increase the number of dwellings to be built under the slum clearance grant to 1,000.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

ASHINGTON.—For roofing over platforms and alterations to station buildings, for the L.N.E. Railway. Mr. Stephen Wilkinson, architect N.E. Area, Irving House, Westgate-road, Newcastle-on-Tyne:—
*J. R. Rutherford & Son, Newcastle-on-Tyne

BARNES.—Erection of houses, for U.D.C.:—
‡Cory & Cory—
15 houses in Bicester-road each £538 0 0
‡Pecover
11 houses n Lower Richmond-road ..... „ 543 7 6

BEESTON.—For erection of 22 houses, for the U.D.C.:—
*G. T. Rice.

BOURNEMOUTH.—For erection of office, shelters and bungalows on the Undercliff-drive, for the T.C.:—
*J. McWilliam & Son..... £4,440

BOURNEMOUTH.—For fencing at Woodland-avenue, for the T.C.:—
*J. Caslake £1,007 10 6

BRADFORD.—For erection of a new north shed at Joseph Dawson's Cashmere Works. Messrs. Chippindale & Edmondson, architects, Bradford:—
*F. Robinson & Sons, Thornton.

BRADFORD.—For erection of a new joiners' shop at Joseph Dawson's Cashmere Works, Laisterdyke. Messrs. Chippindale & Edmondson, architects, Bradford:—
*J. Moulson & Sons, Ltd.

BRENTFORD.—For erection of the first portion of an orphanage. Mr. Wallace J. Gregory, architect and surveyor, 7, Carteret-street, Queen Anne's-gate, S.W. 1; quantities by the architect:—
Green & Abbot, Ltd. £12,596
A. Roberts & Co., Ltd. 12,471
Joseph Dorey & Co., Ltd. 12,270
H. Roffey & Sons 12,269
*William Lacey 11,275

CHESTERFIELD.—Erection of new sewage disposal works at New Whittingham, for T.C.:—
*Wm. Moss & Sons, Loughborough.. £64,040

EBBW JUNCTION.—For erection of a steel girder bridge:—
*Sir W. Arrol & Co. (Swansea), Ltd.

ELSENHAM.—For erection of a house, for the Essex Joint Standing Committee:—
*Smith & Robinson..... £492 10

GLASGOW.—Second section of new buildings on Stockwell-street Improvement Scheme, for T.C.:—
Reinforced concrete floors—
‡Melville Dundas & Whitson £6,954 7 0
Steel windows—
‡F. Braby & Co., Ltd. 1,135 9 7
Tile work—
‡Barclay Mackay & Co., Ltd. .. 1,258 8 7

GLASGOW.—Construction of convenience at Edmiston-drive, for T.C.:—
Constructional work—
‡Wilson Bros. £906 18 9½

GLASGOW.—Steel piling at coal store of Dalmarnock Power Station, for the T.C.:—
‡Sir Wm. Arrol & Co., Ltd. £7,010

GLASGOW.—Extensions at Belvedere hospital, for T.C.:—
Mason Work—
‡Brown, Fraser & Co. £37,622 4 0
Joiner Work—
‡Matthew Dunbar 25,494 0 0
Slater Work—
‡William Graydon 5,267 12 7
Plumber Work—
‡Hugh Twaddle & Son 17,700 0 0
Plaster Work—
‡H. S. Bathgate 6,471 3 2

GLASGOW.—Alterations and extensions at Newlands depot, for T.C.:—
Digger, Mason and Brick Works—
‡Walter S. Bennie £3,774 14 6
Carpenter, Joiner, and Glazier Works—
‡Hugh M'Taggart & Sons .. 1,840 0 0
Steel Work—
‡Fleming Bros. 258 4 10
Slater Work and Rough Casting—
‡Alex. Robertson 235 11 3
Plumber Work—
‡John Paterson & Co., Ltd.... 351 0 0

HARTSHORN AND SEALS.—For the proposed Woodville and Overseal water supply, for the R.D.C.:—
E. Jeavons, Tipton £23,085
G. Stor & Co., Newport (Mon) 20,329
H. Ashley, Mansfield 20,732
W. G. Harrison & Son, Leicester 20,429
*J. Hodsons, Ltd., Nottingham 20,240

HAWORTH.—For extensions to the sewage works for the Haworth U.D.C.:—
*W. & S. Bradley, Bingley.

HULL.—For re-covering market roof, Corporation Field, for the T.C.:—
*Monk Bridge Construction Co., Ltd. .. £1,270

KENDAL.—For erection of a fence wall, for the T.C. :—

*J. Hine & Son..... £105 14

LINCOLN.—For erection of 39 houses in Monks-road, for the T.C. :—

*S. & R. Horton & Sons, Ltd.

LONDON.—For extension to the hospital, for the Lewisham B.G. :—

†A. Monk, London £131,380

MERTHYR.—For erection of 126 houses at Treharris, for the T.C. :—

Foundation Co., Ltd., London	£88,800
Eclypse Builders, Ltd., Porthcawl ..	78,331
Wm. Blackburn, Treharris	70,938
Lloyd & Davies, Port Talbot	63,228
Bonding Block Construction Co., Ltd.	62,646
Evan James, Ystrad Mynach.....	62,370
*H. Smith, Cross Keys—	
Brick	57,708
Concrete	53,940

Tender of Mr. Thackeray, Borough Architect, estimated, £70,794.

NEWCASTLE.—For erection of a block of business premises in Pudding Clare, for Messrs. H. Wilson and the Victoria Manufacturing Co. Mr. M. K. Glass, architect :—

*J. Lunn & Son.

OSSETT.—For the plasterers' work required in connection with the 44 houses, for the Corporation :—

*J. M. Greenwood, Batley £1,035 10 4

ROTHERHAM.—For erection of 24 houses, for the R.D.C. :—

*A. J. Pugh.

ROWLEY REGIS.—For erection of 12 houses at Black Heath, for the U.D.C. :—

*Housing, Ltd. £6,599

STALYBRIDGE.—Painting and decorating the library, for T.C. :—

*R. Hitchen & Sons.

STEVENAGE.—For the erection of 32 houses in Haycroft-road, for the U.D.C. Mr. Reg. A. Gandy, Engineer and Surveyor :—

W. Seymour & Sons, Hitchin ..	£25,488	18	2
W. O. Porter, Ware	22,454	10	0
John Ray, Letchworth	20,800	0	0
W. Austin & Sons, Stevenage..	19,825	0	0
G. F. Armitage, Letchworth ..	19,354	0	0
H. Lacey & Sons, Luton	19,075	0	0
M. & F. O. Foster & Co., Ltd., Hitchin	18,087	0	0
F. J. Bailey & Co., Ltd., Ashwell	17,914	0	0
*R. H. Field, Stevenage	15,094	15	6

STOURBRIDGE.—Erection of special subjects centre and caretaker's house, for Worcester County E.C. :—

*Meredith & Hingley, of Cradley.. £2,685 13

SWANSEA.—Llansamlet sewerage scheme, for T.C. :—

*Abraham Graham & Sons..... £70,156

SWANSEA.—Erection of 41 houses at the Fforestfach site, for T.C. :—

John Morgan, Neath	£24,259	8	5
*J. & F. Weaver, Swansea	21,314	7	6

TILBURY.—For erection of three houses, for Essex Joint Standing Committee :—

*G. J. Hawkes & Son, Chelmsford.... £2,057

TONBRIDGE.—For erection of houses on the Cage Green housing estate, for the U.D.C. :—

	Parlour Type per pair.	Non-parlour Type per block of four.
Allcorn & Sons, Tonbridge	£1,400 19 ..	£2,350 5
Strange & Sons, Ltd., Tunbridge Wells	1,380 0 ..	2,437 0
L. A. Standen & Son, Tonbridge	1,325 0 ..	2,100 0
G. B. Punnett, Tonbridge	1,241 0 ..	1,981 0
*Lewis Thorpe, Southborough	1,132 0 ..	1,909 0

WILLENHALL.—For erection of 58 houses on the Wolverhampton-road site, for the U.D.C. :—

*A. M. Griffiths, Wednesfield—
Parlour type ..... each £436 10
Non-parlour type ..... ,, 377 10

Building Apprentices.

At a recent meeting of the Swansea Committee, Mr. T. J. Rees (Director tion) said a scheme had been institu Education Committee in co-operatio building trade employers and apprent which apprentices could receive instruction at the Technical College of of Art during two half days a wee employers' time, and two evenings i time. A course extending over four years of a building operative's app had been arranged, and about 60 were now taking the first year co committee agreed to the proposal to College at a cost of £31,000.

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THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VII.—No. 4273. DECEMBER 26, 1914.

ARBITRATION IN BUILDING DISPUTES

N the carrying out of a building contract, it is to the best interest of all concerned—the employer, the architect or surveyor, and the contractor—that the work undertaken should be allowed to progress to satisfactory completion, with the utmost expedition compatible with skilful workmanship; and that, in an atmosphere of ual confidence, consideration and help. To this end it is of mount importance that building contracts should be drawn with the utmost care and foresight, and with absolute erity of purpose—not forgetting that where works of nitude are involved, or in any case where complications to be expected, the assistance of an experienced lawyer is spensable in the framing of the clauses going to make up h contracts. These clauses should be expressed in terms ch are as lucid, concise and unambiguous as possible; such aseology being employed as is the customary language of trade; and even this carefully checked so as to be in mony with any special usage or terminology of the particular rict in which the work is to be carried out. The conditions out should be comprehensive, explicit and final in purpose, couched in terms calculated to prevent misunderstanding disappointment between, and to, all parties.

However, though the work of drawing up the contract may ndertaken conscientiously and skilfully, absolute perfection complete foresight is an ideal humanly impossible of attain- t in any but the most simple of documents. This element ncertainty is peculiarly present where a building or engi- ring contract is entered into; because, for example, Nature, he course of excavations, may disclose to the contractor o has been guided by a geological survey map and its rions, uncharted variations of strata which materially ct the cost of digging; then there are fluctuations of market es, and the possibility of strikes—these and other unforeseen elopments or contingencies must always be bogies to the tractor when the conditions are put before him; and, for reason, every building or engineering contract should, and st of them do, contain an arbitration clause, providing for iew and settlement of any dispute which may arise during gress by submission to a mutually elected referee—the itrator. The ultimate benefit of such a clause is that, ost invariably, it makes resort to litigation unnecessary—ess, of course, some actually criminal charge is made against ier party of a nature which can only be dealt with by the rts. The method of arbitration is welcomed, as a rule, by h disputants, as the proceedings are conducted in private, the procedure itself is less formal, and usually less costly.

If there is no arbitration clause in a contract, the obvious iedy of the aggrieved party would be resort to the courts; very often, even at a later juncture when a dispute has ually arisen, submission to arbitration suggests itself to h parties as a preferable means of settling their differences; l then an arbitrator, mutually elected, must be invited to udicate between them. Indeed, the present time has been ed "the age of arbitration." And on every hand, in com- rcial and other circles, this method is gaining growing ularity over that of discussion in open court. Arbitration tself probably the more ancient method. Plato, in "The ws," written about 350 B.C., says: "In the first place, re shall be elected judges in the courts who shall be chosen the plaintiff and defendant in common. These shall be led 'arbiters' rather than 'judges.'" In Blake's case 06) 6 Rep. 43*b*, it was stated "generally in all actions where nages only are to be recovered arbitrament is a good plan." cial courts of arbitration have been of late years set up to l with disputes in individual trades or occupations, expert ness being given by members of the particular trades con- ned, and decisions being, generally, more acceptable than se given in the ordinary courts.

Decision and award by an arbitrator is particularly satis- tory and conclusive when the dispute involves, or turns on, tters of technical phraseology or detail, which can essentially ly be thoroughly understood and impartially reviewed by persons who have acquired, by practical experience, a personal knowledge of the customs and terminology of the trade or community within the sphere of which the dispute has arisen. Such persons are more likely to be guided by solid facts, and their decisions untrammelled by sentimental considerations which might affect the verdict of a jury. In fact, to a person called upon to act for the first time in his experience, the whole duty of an arbitrator may appear to be discharged by the exercise of technical knowledge, common sense and impartial judgment, with an absolutely unbiassed mind. But if his qualifications as an arbitrator end there, he will find himself confronted, at the incidence of the first complication, with the demands of rules of law relating to evidence and equity, contract law, and stamp laws; and he will have, in such circumstances, the greatest difficulty to sustain his dignity and prestige, or indeed to give an award acceptable to both parties. Lacking sufficient knowledge of these laws, and sufficient acquaintance of the established rules governing their application, he is likely to make the mistake of following crude and arbitrary principles of his own, and thereby to come into conflict with experienced expert witnesses, not so ill equipped as himself, if such witnesses be present.

It is common knowledge that, in the past, many arbitrations in building disputes have been conducted with no greater seriousness than that of "hearing both sides and halving the difference"; but, as in all other activities, the greater keenness of modern times demands an increasing degree of exactness in the sifting of evidence and in the nature or magnitude of the award. It is not unusual that the validity of an award is disputable, not because its ultimate justice is questionable, but because the procedure at the inquiry can be criticised as having been irregular.

It has been stated above, and probably will be vigorously disputed by some, that an arbitration, as a means of settlement, is less costly than an ordinary action in the courts. It must be admitted that there are on record cases where the costs of arbitration have totalled an amount out of all proportion to the matters submitted for decision, or to the benefit received by the successful disputant; and, in all probability, beyond those which would have been incurred in the ordinary courts. But it is seriously contended that, where this has happened, it is traceable invariably to the lack of knowledge on the part of the arbitrator of the essentials of legal procedure and the rules of evidence, and his consequent "amateurishness" resulting in much confusion and waste of time at the inquiry; especially in permitting lengthy and detailed discussion on technicalities on which his opinion may be final and valuable, but which have no direct legal bearing on the decision and award, or should not have if these be impartially given. Without question, therefore, arbitration, in skilful hands, is by far the less costly venture.

It should always be borne in mind that an arbitration is a *trial*, and should be conducted as such. Its institution is not to permit laxity, but to give greater freedom to expert and particular evidence *without* interfering with the course of legal justice and precedent. Frequently, when cases demanding such special treatment are taken into court, the court or judge will decide that they shall be sent to arbitration. This is a possibility which should always be kept in view by litigants. Technical cases are frequently ordered to be heard by an official referee.

The subject of arbitration being then one of general and vital importance, we have concluded that our readers will find of practical use and interest a series of articles which we propose to introduce in our New Year's issue. The subject will therein be treated in a popular but practical manner, mainly for the benefit of those, outside the legal profession, who are interested in building enterprises, great and small. Common types of dispute will be discussed, and the operation of the Law of Arbitration explained; sufficient reference to leading cases being given for the assistance of those tempted, by interest or necessity, to a more minute study of the subject.

NOTES.

The late Mr. Waterhouse.

THE tragic death of Mr. Paul Waterhouse will have been heard with deep regret by the whole profession and many others in the associated arts and crafts, while to his personal friends—and he had more than most men—his sudden and unexpected death will be an irreparable loss. As the son of Alfred Waterhouse, R.A., his outstanding qualities were well known before his presidency of the R.I.B.A., but during the somewhat turbulent period of his years of office, his tactful leadership, his logical and witty speeches, and above all his impartiality, shrewdness, and the subtle charm of his personality, gave him a position in professional regard which few presidents have attained in the past. As an after-dinner speaker he had a reputation which extended far beyond the ranks of the profession, and those who heard him could not fail to be charmed by his easy and graceful delivery and the wit and brilliance which his speeches invariably displayed. No profession can afford to lose men of culture, and to the architectural profession the death of Paul Waterhouse, at the somewhat early age of 63, is a distinct loss.

Bricklayer Apprentices.

A PROPOSAL which we believe is on foot to train five hundred young apprentices to the bricklaying trade is likely to include important consequences on the future of the industry. The subject has become loaded with a good many debatable, if not obsolete, considerations. The craft of bricklaying we do not suppose to be one more difficult to acquire than that of the potter or other similar undertaking entered on after a training not made to cover so many preliminary years. Practise in bricklaying will give no doubt a speed and finish not otherwise to be acquired, but we ought not to be afraid, at a time when there is such need of bricklayers, to get apprentices through the necessary training required as quickly as possible, and on to the job. There has been a tendency to exaggerate the mystery of industrial training of this kind, and the amount of time required to equip the apprentice for his work. The war, however, revealed to us how under the compulsion of circumstances men did successful work with less than the ordinary training, and sometimes with none at all. We have observed in country districts, where there is greater freedom of approach, building work done by the handy man not less practical and durable beca conforming to the theoretic stan approach which resists initiative is there not also a good deal o jealousy in these objections, a de mainly to sustain efficiency, but the number employed in the tra we are to get our building done w extricate ourselves from the old wont, and venture a little more, shall be not a little surprised i apprentices now to be trained do r a very good account of themselve in a very few months, they are pu actual bricklaying. At a time of we need to show ourselves a little able as to the food we eat—so work there is required the freshe new experience such as initiative, ment and new approach.

Past and Present.

A TIME that is deve seeking its pleasure preservation of the jealous of the destruction of any b with marks of by-gone character s upon it, is not a productive one, may too resolutely set our eyes o looking backwards. Youth, w sense of expansion and power, forward; old age turns back up past. May it not also be so with n



R.A. Schools' Students' Work.

Memorial Tomb in an Arched Recess. Design by MR. F. P. CHAMBERS, B.A.

[Awarded Edward Stott Prize (£50) and Silver Medal for a Model of a Design Subject combined with Architecture.]



L ... SCREEN, MIDDLETON CHURCH, LANCS.

eriod of great productive activity is ore-occupied to pore too curiously over shattered fragments of antiquity. the other hand, the preservation of historic past makes a proper and iring claim upon us. The difficulty ld seem to be to find the mean veen the two extremes—the over- fulness to preserve, and recklessness eplacement. Perhaps this is not in f easy to find. But if we felt surer ur own work and purpose, our sense proportion might be better served; were it more certain that when the had to be replaced by the new the k would be approached in a spirit ecure that it would be as good—or n better—we should be less full of siness and doubt, and the S.P.A.B. e at rest. Distrust of our own time its needs entails doubts of its direction nce we may make almost a fetish reserving what in the inexorable order hings should die.

District Surveyors' Fees.

BUILDERS generally seem unaware of the present values of District Surveyors' fees. It should be embered that the Act of 1921 increased fees by 25 per cent. and empowered London County Council to increase n by a further equal amount. The C. exercised that power to the full, making a total increase of 50 per . Recently, however, in October, reduced the fees by 12½ per cent., hat the original amounts now stand eased by 37½ per cent. It would sim- calculations for everyone concerned he present fees were increased or ced by 2½ per cent.

Report Concrete.

THE forthcoming Report of Sir Ernest Moir's Committee on new methods of house construction, promised last day by Sir Kingsley Wood, is being ited in building quarters with considerable interest. At least three drafts are already in existence and deal with various methods of utilising concrete in building working-class houses. Real progress forward has been made, since Dr. Addison agreed in 1919 that demonstration concrete houses should be erected at Acton, in our knowledge of the properties of concrete, and in various devices for making use of it economically. But we hear that almost as much difficulty is being found in deciding on the exact words of this Government Report on concrete as occurred in the drafting of the report on steel houses after the visit paid by members of the Committee on October 4 last to the Cathcart Foundry in Glasgow. Many of the same objections felt by the operatives to standardisation and the mass production of steel houses apply equally to concrete. On the other hand, the technical engineers and scientists who have been studying closely the concrete houses that have been erected during the past five years, consider that the development in this direction is full of hope for the future.



CHAIR AND PANELLING IN CHANCEL OF HOPE CHURCH, DERBYSHIRE.

"Tess" and the Dorchester Players.

THE extent to which the dramatic world is indebted to the pioneer efforts of certain producers, frequently provincial, can hardly be exaggerated. It was therefore a notable mark of appreciation when Mr. Thomas Hardy entrusted the dramatisation of "Tess" to the Dorchester Players. The building world still claims Mr. Hardy as a member of the architectural calling, and, in congratulating him on his masterpiece likes to feel that it is also congratulating itself on a member's work, in another corner of the same art field.

The A.A. Play.

THE Architectural Association have provided many delightful and clever entertainments in the past, and as their effort last year was as good as anything they had ever accomplished, it was, perhaps, too much to hope they would be equally successful this year. That the members of the Lyric Club who took part in it worked hard to do so was evident to those who saw the production last week of "Guffaws," a revue in eleven scenes, at the Royal Institute of British Architects, which provided many opportunities for good jokes and professional hits, though there were too many scenes, and one or two of them we might have been spared with advantage. Scene III was one of the best, in which "the Mistress Art" presented to her offspring Commodity, Firmness and Delight her new baby, in the form of a cake of concrete—"a colleague for a little, but a successor for good." The scenery and costumes and the acting in this scene—as indeed in most—were excellent, and showed what architectural students can do in the cultivation of the dramatic arts when they give time to their study. Those who took part in the production worked hard, especially Miss Enid Caldicott, Mr. F. Halliburton Smith and Mr. J. B. Jeffcott.



PANEL IN SCREEN, MOBBERLEY CHURCH, CHESHIRE.



[PULPIT, WARMINGTON CHURCH, NORTHANTS.

GENERAL NEWS

Professional Announcement.

Messrs. E. J. Burr, Son & Nunn, chartered surveyors, have removed to 18, Grosvenor-gardens, Westminster, S.W.1. Telephone: Victoria 9237.

New Masonic Hall.

The Right Hon. Lord Ravensworth, Provincial Grand Master of the Province of Durham, recently opened the new Masonic Hall and Temple at Castle Eden. Of modern design, the building, which is 79 ft. by 53 ft., is carried out in sand-faced bricks. The front elevation has panels in white concrete, and stone dressing, and is adorned with the masonic device. The Temple is 50 ft. by 25 ft. The walls are panelled and the seating is in oak and upholstered. Mr. J. W. English, M.S.A., of Wingate, was the architect, and Mr. W. E. M. Twedde, of West Hartlepool, the contractor.

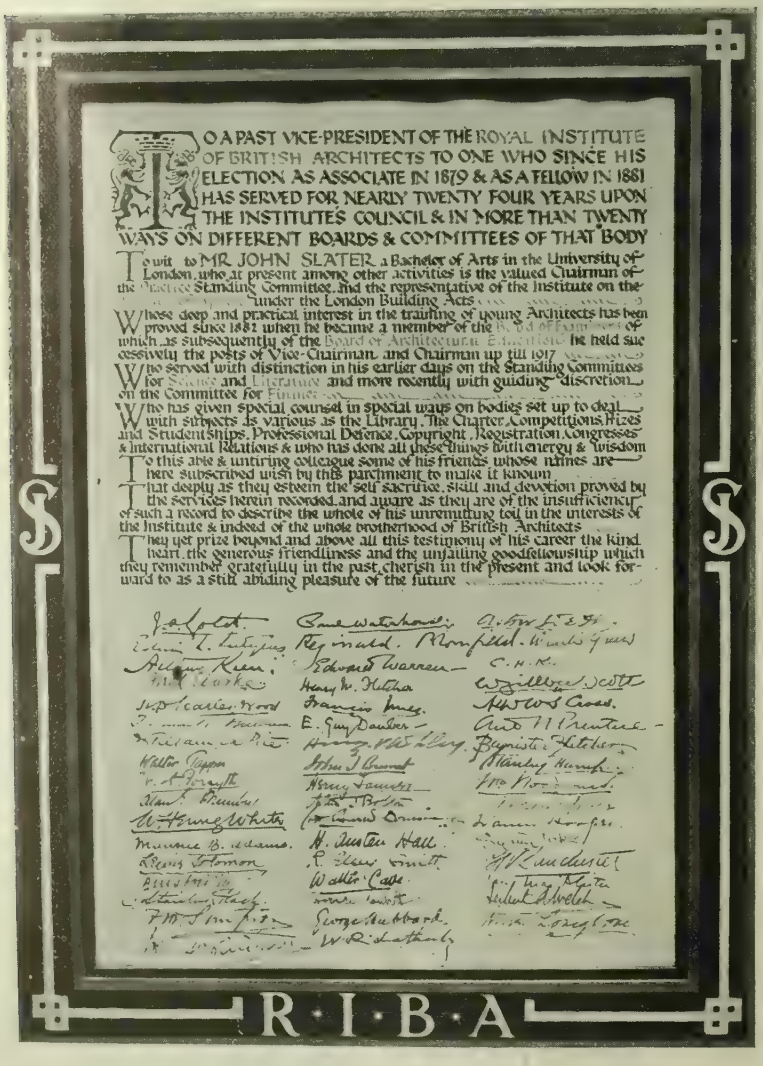
The Weir Houses.

Mr. R. Coppock, secretary of the National Federation of Building Trade Operatives, in a recent interview in the Press, with regard to the Glasgow Corporation's decision on the Weir steel houses, said: "The attitude of the building trade operatives of this country is that wherever any firm are erecting houses which require building trade operations, building trade practices as to hours, wages, and general conditions should obtain." "This is a national decision," he commented, "and one that will be carried out on all alternative methods of house construction."

The action of the Glasgow Corporation, Mr. Coppock said, was in accordance with the Standing Orders of the Council, *i.e.*, the Fair Contract Clause. The Weir house was not an innovation in the industry, and he considered it to be untrue to allege that it was a steel one. In fact, it was a timber house with a steel outer covering, and such houses had been built in this country for years, although instead of steel corrugated iron had hitherto been employed. There was no new technique in the application of labour for the Weir house, and standardisation did not necessarily mean that craftsmanship was eliminated. There was no effort on the part of the building trade operatives to prevent the erection of any alternative type of house, but they demanded that the conditions agreed in the industry between employers and operatives should be given effect to on all alternative methods of building, following building trade practices. Mr. Coppock further declared that in October last Messrs. Weir were informed of the actual position which would result "if they attempted to pursue a practice of employing labour contrary to the conditions existing in the building industry."

Puvis de Chavannes.

In celebration of the centenary of Puvis de Chavannes a bust of the painter was recently erected in the little square separating the Sorbonne from the Cluny Museum. The monument is the work of M. Jules Dubois and below the bust a sculptured symbolical figure representing Painting is shown before the Master. Rodin's bust of Puvis de Chavannes was also placed in the Pantheon in front of the artist's famous wall painting of "The Life of Ste. Genevieve, Patron Saint of Paris."



Presentation to the late John Slater, F.R.I.B.A.

COMPETITION NE

Parish Hall, Staffs.

The assessor, Mr. W. H. Bidlake, F.R.I.B.A., has placed first the desi Messrs. Webb & Gray, MM.S.A., Dudley, competition.

Geneva Conference Hall.

The League of Nations will shortly competition for the selection of a plan construction of a Conference Hall at on the ground presented to the League City and Canton of Geneva. The comp will be open to all architects who are Na or State members of the League. An national jury, consisting of architects Great Britain, France, Italy, Belgium, A and Switzerland, will examine the plan mitted and decide their order of mer sum of £4,000 will be placed at the d of the jury for division among the arc submitting the best plans.

Industrial Designs.

In order to encourage the study of desi industrial purposes, the Royal Society decided to hold annual competitions. second competition will take place in Jun It will be open to two classes—(*a*) All subjects (with certain specified limitatio age in the sections of architectural dec and furniture), and (*b*) students in Schools of Art. Entries can only be r from individual designers, not from firms subjects of competition will be the same f classes of candidates, but in considering th the Judges will bear in mind to which cl competitors belong.

The competition will be divided und following heads:—(1) Architectural Dec (2) Textiles, (3) Furniture, (4) Book Prod (5) Pottery and Glass, (6) Miscellaneous particulars can be obtained from the Society for the Encouragement of Arts, factures and Commerce, John-street, A London, W.C.2, or can be seen at this o

The Constantine Technical College

Architects are invited to submit in this competition. Mr. Percy T F.R.I.B.A., has been appointed assess conditions can be obtained from the Se on the payment of £1 1s., not later than ber 27. Sending-in day, May 15, 1925 our issue for December 19, 1924.)

Leeds Library.

Designs are invited from architects i Riding only for a library to be erected Compton-road estate. Mr. Percy S. We ton, F.R.I.B.A., is the assessor; premiu £20, and £15. Conditions, on the payr £1 1s., from the Town Clerk, Leeds. Sen day, February 16, 1925. (See our is December, 19, 1924.)

New Offices, Nairobi.

Designs are invited for new railway to be erected in Nairobi, Kenya Colony miums of £200 and £100 are offered respe Conditions can be obtained, not late February, on the payment of one guine the Crown Agents for the Colonies, M The assessor is Mr. William Dunn, F.R Sending-in day at the offices of the Nairobi, February 28, 1925. (See our is November 7.)

Other Competitions.

Other competitions still open include lowing (the dates given are, first the sen date, and second the issue of *The Bu* which full particulars were given):— Hall (May 1). Manchester Art Gallery 28; Aug. 22). Jugo-Slav Landscape (D Nov. 7). Argentine Institute for the (Dec. 31, 1925; Nov. 28). Valletta (June 30, 1925; Dec. 5).

THE LATE PAUL WATERHOUSE

BY PROFESSOR BERESFORD PITE.

may be said, quite without doubt, that no
ber of the profession will be more univers-
and sincerely regretted than Paul Water-
se. The shock of his sudden removal last
ay scarcely enables one to realise either the
to architecture or to friendship which has
created by his unusual qualities and value ;
ities of a subtle charm of personality and of
ure, which, together with a standard of
ght and practice, made contact with him an
iring pleasure.

part from their artistic quality the person-
es of architects who attain success and
ership have special interest to their brethren.
l Waterhouse had a distinction of character
would have assured him success in other
s than those of the professional architect.
had an attractive sagacity, width of interest
racy humour, evident alike in conversation
in literary composition, and was entirely
poilt in spirit either by business cares or
cess. To his professional friends he was
ays the happy man without enemies or rivals,
l it was clear that the joyous and free
it had resources in home-life and in
llectual and spiritual friendships that
e strong and constant.

Ie found pleasure in describing his pro-
ion as ancestral, and was highly sensi-
of discriminating appreciation for
work of his distinguished father ; in
se days this critical justice is somewhat
r than, without much doubt, it will be-
e in the future. To those whom he felt
erstood the architectural qualities of
ancestor he naturally responded.
ugh the two architects, father and son,
e, as is not unusual, contrasts, physic-
and architecturally, both manifested
erited qualities of power and character
ch have made their family remarkable.
should be taken into account that the
ier was President of the Institute of
hitects, and his brothers respectively
he Institute of Accountants and of
Incorporated Law Society, and it is
significant that the mother was sister
Hodgkin, the historian. That such
estry is continuing to bear witness to
f can well be believed.

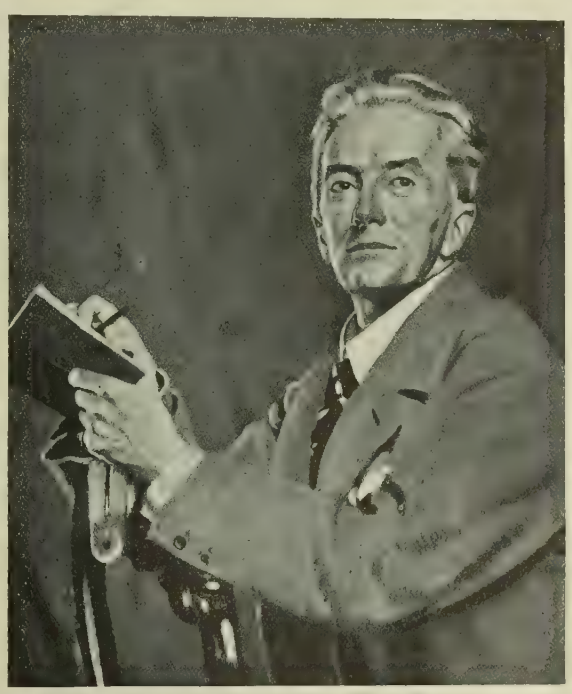
aul Waterhouse was at first unduly
lest in his expectation of holding the
t practice which he inherited, but it
not long before he justified his name
is clients. In his designs for buildings
ontact with or in addition to his
er's, he apparently felt the defer-
al wisdom of taking his own line, and
ded a comparison that would be im-
s; but the son can be observed as the
ectful though independent follower.
is tastes and gifts were dedicated to
rofession and they necessarily ensured
osition among his brethren. In a peculiar way
as fitted for the Presidency of the Institute ;
might say designed to ornament the chair.
obably no one else at the period could have
t so successfully with its urgent difficulties.
artiality, shrewdness and the saving grace of
our were displayed in conducting discussions
tended to acrimoniousness in these very
blous times. But this success is a minor
negative part of the record. His formal
resses and the many speeches that he made
he allied societies as President were always
inal and pungent, philosophical in tone,
resting in matter, and the evident work of an
mplished essayist. The more private and
onal, equally with the public, responsibilities
he head of an important profession were
lled without mistake, and it would not be
to say that he was a perfect head for an
itectural society.

hat the public leadership of the profession
undertaken and fulfilled with conspicuous
cess by a man of Waterhouse's gifts has
ved directly not only of great advantage to the Institute, but indirectly to everyone who professes and calls himself an architect.

It is little more than a year ago that his friends showed their appreciation of his services to the Institute at a special gathering, when an address and a replica of his portrait were offered to him, and it is but a few hours ago that on the morning of his sudden death they all received a delightfully characteristic note of thanks for the accomplishment of this gift—a gift which must now have its constant use.

Waterhouse's zeal and thoroughness were especially shown in matters connected with the improvement of London. He read a remarkable paper to the Institute upon the Traffic Commission Report of 1905, submitting plans that had involved much study and labour. Later on he gave similar help to the London Society's proposals for improving the south side of the river, and found time out of his busy life to undertake one of the suburban district maps.

When Chairman of the Institute Board of Architectural Education he was ungrudging in attendance and in acting as external examiner. The conduct of the business was constantly eased by the chairman's offer to write an explanatory letter, which must have been as pleasant to the patient as it was convenient.



The Late Paul Waterhouse, PP.R.I.B.A.
[From the painting by Sir William Orpen, at the Royal Institute of British Architects.]

"Wisdom strengthens the wise more than ten men that are in the city," is a text to which Waterhouse's goad-like words often gave point. His loss will continue to be felt in the controversies which still beset the profession which he loved, and in which his many friends look back to his example with pride and affection.

In 1891 Mr. Waterhouse was taken into partnership by his father, and after the retirement of the latter in 1901 continued and completed some of his father's works. He had helped his father in the designing of St. Margaret's School, Bushey, and Rhyl Hospital, and he completed University College Hospital, which his father had designed in 1897. He also altered the interior of the hall at Balliol. On his own account Paul Waterhouse designed science laboratories for Oxford, Manchester, and Leeds Universities, and University College Hospital Medical School and Nurses' Home in London. Among his ecclesiastical buildings were the Convent of the Incarnation at Oxford and All Saints' Church, St. Andrews. He did a large amount of work for the Prudential Assurance Society and for other assurance corporations, also for banks, including Lloyds and the National Provincial, for which he erected buildings in Paris and Brussels. In domestic work he had a large practice. As President of the Royal Institute of British Architects in 1921–23 he was a leader in the movement for the unification of the profession, and as chairman of the Board of Architectural Education he gave a large amount of time to the establishment and support of the various Schools of Architecture throughout England and Scotland. He took considerable part in town-planning activities, and was an authority on the complicated problems of the London bridges.

Mr. Waterhouse married, in 1887, Lucy Grace, daughter of Sir Reginald Palgrave, K.C.B., and leaves one son, Captain Michael Theodore Waterhouse, M.C., who has followed his father's profession, and two daughters.

The funeral took place at Yattenden, Berkshire, on December 23.

Mr. Paul Waterhouse was born on October 29, 1861, the eldest son of Alfred Waterhouse, R.A. His mother was Elizabeth, daughter of John Hodgkin, and sister of Thomas Hodgkin, the historian. From Eton he proceeded to Balliol, and obtained a second class in moderations and in *Lit. Hum.* As a student he was one of the R.I.B.A. prizemen, winning s silver medal for an essay.

THE LATE JOHN SLATER

We illustrate on page 1006 an address presented to the late John Slater, F.R.I.B.A., by members of the Royal Institute of British Architects, on June 28, 1923, signed by many of his friends. Some particulars of Mr. Slater's career were given in our issue for December 5, and a life-long friend now writes :—

"The death of John Slater is a loss to the architectural profession which it will be hard to fill, as he had the well-balanced and judicial mind which is necessary in dealing with many of the complex questions which arise in the conduct of an architectural practice in these times when everything appears to be more difficult than was the case years ago. He was respected by everyone who came in contact with him; personally I had the benefit of his advice on many occasions, and always found his exceptional knowledge of the very greatest assistance. As Chairman of the Practice Standing Committee for two years recently he dealt with the many questions put before the Committee with an impartial mind which was invaluable to the members of the Committee, and also to those who asked for advice. He was a man after my own heart, and his loss is greatly to be deplored."

Peterborough Cathedral.

Mr. H. F. Traylen, F.R.I.B.A., lectured recently on "The Architecture and History of Peterborough Cathedral" in St. Peter's College Hall. Mr. Traylen, in the course of his lecture, spoke of the ravages of the "death watch beetle," and described the way in which they hatched, became grubs, and transformed into beetles when they had eaten their way through the grain of the wood. The death watch beetle was to be found in nearly every old church, and at times the beetle was found in quite new wood. The only thing to do with wood when the death watch beetle was found in it was to burn it.

CORRESPONDENCE

Architectural Education.

SIR,—Professor Budden, in his lucid and soundly reasoned lecture on "The Future of Architectural Education," delivered recently at a meeting of the Edinburgh Architectural Association, made out a strong case for the University training and status of the architect. Although he dealt exhaustively with the certainty of the enhanced prestige it would give the profession, he did not deal much with the effect it would have on the future development of architecture as an art. His brilliant analysis of the metaphysical and psychological aspects of the question in his Silver Medal essay on "The Theory of Architecture" last year (which gave such delight to students of architecture) shows, however, that he is thoroughly conversant with other aspects of the question than the educational and economic.

Is it certain that a system which is considered a success in France and America would produce satisfactory results here? We are by nature, probably, more individualistic than any other nation, and the danger of the new system would be to reduce the practice of architecture to a matter of mere intellectual adroitness. In his essay on "The Theory of Architecture." Professor Budden admits that "solutions of architectural problems are intuitive rather than intellectual and logical." (This is very obvious, as seen by the study of old work.)

The "Mystery of Rightness" in design (to quote Henry James in speaking of the Parthenon) is something infinitely more than a question of graphic statics and applied mechanics. What did the builders of Durham, Ely and Lincoln know of these things? We have seen in other walks of life (Law, Medicine, and the Church) that the tendency of mere academic education is to sterilise the imagination, and an architect must ever be a theorist, an adventurer, an experimentalist and an artist.

Referring to the increased status given by a university degree, it might be well to point out that the university education of school teachers has greatly reduced the value of M.A. and B.Sc. as degrees, although it has led to the financial improvement in the condition of teachers. In mediæval times traditional evolutionary standardisation existed in such a definite form that no special thought was needed or given to the question of education in architecture. Everybody had an interest (through the crafts) in architecture, and such works as Dalmeny Church, West Walton, and the Pilgrim's Chapel at Walsingham were taken as a matter of everyday course. Now everything is in danger of being reduced to a question of intellectual analysis and formulas.

The success of mediæval work (indeed all early and primitive work) may have been largely due to the limited means of expression through speech because of a limited vocabulary. The mediæval rustic had a range of probably not more than 300 words with which to communicate his ideas, and so he found his main outlet for self-expression through his art and craft. To-day we live in an atmosphere of wordiness. It is less laborious to talk than to work, and requires less real knowledge and original ability. Is it certain that a five-years' intensive course at a university, supplemented by two vacational periods of six months in an American office, will produce the same high, scholarly artistic quality of attainment as the more leisurely pupilage system, with its Continental measuring and sketching tours, studying the choicest examples of the works of the great masters? Waterhouse, in one of his addresses on Education, stated that "Drawing from a building, if conscientiously done, is the finest and deepest form of study." Within limits this is true.

Again, Blomfield, in his recent obituary notice of Jackson (speaking of to-day), says: "The architect and scholar is somewhat at a discount. . . . Nowadays a rush to the Continent or America is considered adequate, with the result seen in the design of most of the commercial buildings of the present day." In Scotland, at least, it is highly improbable that university-trained men after a five-years' course will at once, on entering an office, receive such salaries as Professor Budden mentioned, viz., £6 to £9 a week. (Failures would probably become ghosts for less.) One danger of the university system is that ultimately the provincial universities and schools will be staffed by men from the university with the greatest architectural reputation, and so the course will tend to become more and more standardised, to the detriment of national and local traditions. Scottish architecture has a distinct character and tradition of its own, and the appointment of English professors in Scotland will tend to destroy the national development along traditional lines.

Again, if all teachers of architecture are to be practising architects (the R.I.B.A. ideal), the profession will lose much on the scholarship and research side of its art. If we have no successors to such men as Lethaby, Pite, and Baldwin Brown, our art will certainly be the poorer for it. The influence of such men, in educating the general public alone, to appreciate architecture as an art, is very great, and this aspect of the question must by no means be lost sight of. Endless controversial questions might be raised, but the obvious conclusion of the whole matter is (as Professor Budd mitted) that here, as in France, work provinces will fall more and more in hands of the speculator and builder—a of things we have already regretted. Medicine, and the Church are not abs parallel cases in the matter of Regist

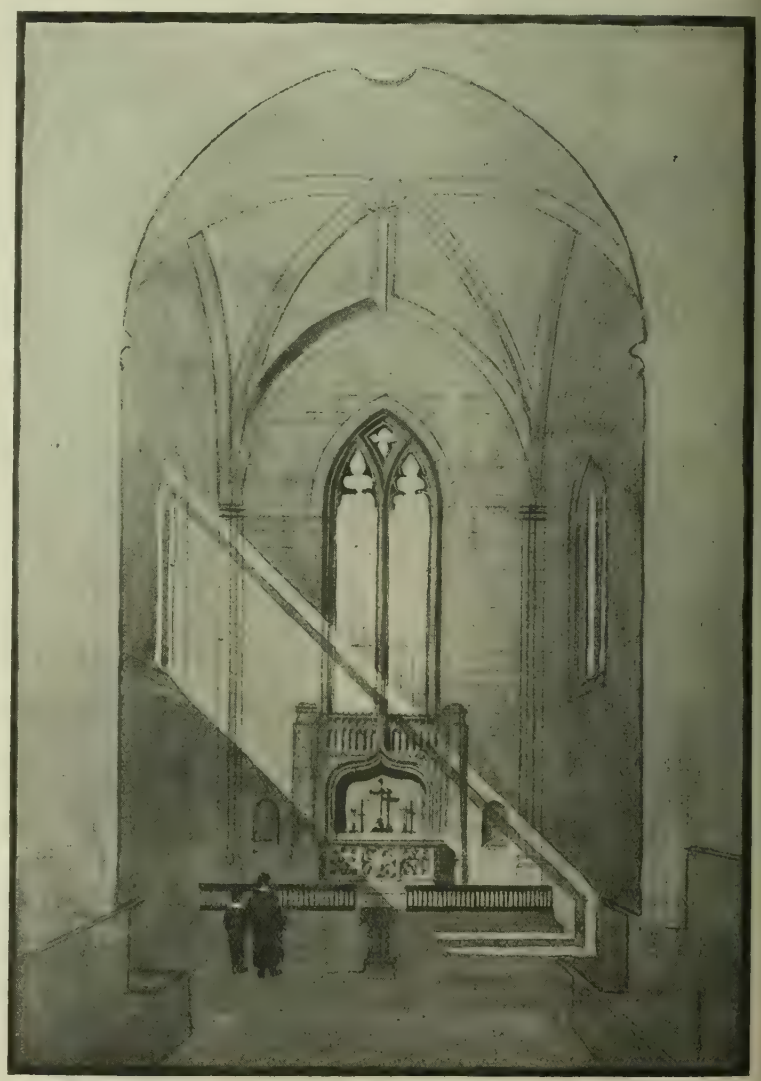
Architecture is a creative art, and a cannot be reduced to a matter of me aminations; and, as Professor Budden s his "Theory of Architecture": "The is full of persons calling themselves a who have all the technique of externali and nothing to externalise." Here lie greatest danger of the academic progra It is the inward vision which makes the not mere technical excellence.

WILLIAM DAVID

Edinburgh.

Exmouth Cliffs.

As the result of a recent meeting of Ex Urban District Council the scheme for the la and development of the cliffs at the easter of the Marine Drive was abandoned fo time being. It was considered that att should first be concentrated on the dispo the land on the foreshore already in the p sion of the town. Mr. W. T. Godfrey s was time the Council had some idea of wha being done by the Foreshore Committee regard to the lay-out scheme (recently illus in *The Builder*) on which Mr. Vincent Harr been consulted.



Northern Polytechnic School of Architecture Students' Work.

Design for a Chapel.

By MISS MURIEL HARVEY. (*See p.* 1012.)

ARCHITECTURAL EDUCATION.—IV

By W. S. PURCHON.

HE following outline notes on the teaching study of certain of the subjects in a course rchitectural education are of a tentative acter, and are put forward as a basis for ussion. They are intended, in the main, to ly to the full-time day schools, but it is ed that they may also be found of interest to se who are teaching or studying in other ools, and to those who are obliged for various sons to study privately.

The History of Architecture.

t is by no means easy to decide on the best -division of this subject into the various rs of the course. There is a more or less eral agreement that, apart from special study the purpose of a thesis, and the general study ich large numbers of architects continue as sult of their interest in architectural history, s subject should be dealt with in the first ee years of the course, while some would limit to the first two. Could this subject be con- ered quite apart from its influence on other nches of architectural study, which would course be absurd, it would be an extremely ple matter to deal with its sub-division into years of the course, for then we could take cient, Mediæval, and Renaissance (including dern) in each of the first three years respec- ely. A second method is that of taking cient and Mediæval in the first year, with naissance and Modern in the second. Both above methods have one great disadvantage, until the student has some knowledge of the naissance it is difficult for him to begin archi- tural design, and most would agree that tart in this should not be postponed beyond beginning of the second year. It therefore ms wise to deal in outline with the whole of main field of architectural history during the t year, and to take in further detail Ancient l Renaissance architecture in the second year. some cases a detailed study of Mediæval hitecture may be arranged as an alternative. further method, which certainly has dis- antages as well as advantages, is to take cient architecture in some detail in the t year, together with an outline of Mediæval l Renaissance, and to work in the second year a more detailed study of the Renaissance in ly and France and of Mediæval and Renais- ce architecture in England. A short course special study of the architecture of the last years may perhaps be taken in the third r, possibly in conjunction with a series of ures on the theory of design.

istorical work should all be strongly influenced the fact that it is leading to modern design, so much by the process of acquiring details reproduction but rather by the study of tions of old problems acting as a guide ards the solution of new ones. Each build- studied should thus be looked upon not so h as an interesting and possibly romantic , but as one which in its day was brand new, which aimed at satisfying certain human ls and aspirations. Its construction should tudied; its plan, section and elevation, and expression of function. It should be con- red as a piece of architectural design in con- tion with the social conditions of its time place, the materials available, the special atic and other conditions, and the require- ts it aimed at fulfilling. It is very helpful n attempt is made to show to what extent it eeds as a solution of a definite problem. s type of study should, however, not be ted to a consideration of isolated and lated items, but rather to the progress of itecture on the lines indicated, as, for nple, the development of the church plan ng the Italian Renaissance. While a con- rable amount of reading, and a certain unt of writing must be done in these studies, very important that a large proportion of work be done through the medium of general detail sketches approximately to scale, and, urse, every possible opportunity of studying hy buildings on the spot should be taken. The constant making of such sketches, together with frequent attempts to reproduce them from memory, is surely of great value to our students, particularly in the early years of their courses of study, and especially if it is made clear that while it in no way takes the place of design it is a step toward that end. General histories of architecture should in all cases be supplemented by study of books on various periods.

Architectural Construction.

One might prefer to use the term "Building Construction," but, unfortunately, while all architecture may be building, all building is not architecture. It is strange, too, that many students who produce presentable work under the heading of architectural history or design, apparently change in character in Jekyll and Hyde fashion at the mere mention of "Building Construction." There is, indeed, little the matter with the latter term beyond the fact that for so many it appears to connote anything but architecture; we might perhaps continue with the long effort to persuade every one concerned that "Building Construction" refers to good and not to bad building; but it will probably be more effective, and certainly simpler, to use such an expression as Architectural Construction, or Constructional Design.

While it is necessary, for certain purposes, to keep the two terms distinct, it may possibly be helpful to look upon construction as a branch of design—the designing, that is, of the making and putting together of the various parts, small and big, which go to make up the whole. It would certainly appear wise to avoid emphasizing the distinction between design and construction, and to avoid exaggerating the differences between what may become to be known as "constructional" buildings and "design" buildings.

In order to deal with the subject systematically, it seems clear that there must be definite courses of lectures on architectural construction during at least the first three years of the course, divided into two sections, applied and theoretical. In the first year, the "applied" lectures might well lead to the preparation of a set of working drawings of a small building, based on, but not reproductions of, a set for a building previously erected; while, in later years, working drawings of buildings and parts of buildings designed by the student should be similarly prepared. In the third year, particularly, it seems advisable for the students to do a proportion of their one-day "designs" in working drawing form. The preparation of full-size details should be started as soon as possible, certainly during the first year of the course. In connection with the "applied" lectures, the subject of materials should be introduced from the beginning, and while special courses of lectures on materials will be found necessary in the third year, and probably again in either the fourth or fifth, during the first two years they are probably best taken in the course of lectures on construction, as far as possible as each new material is introduced into the problems.

In an early part of the course, possibly in the second year, special lectures may with advantage be given on some such subject as the chemistry of building materials, geology as applying to building stones, or laboratory courses in the testing of strengths of materials. It may be that it would not be possible to include all these subjects in any one course, and probably in no one school would the facilities exist for teaching all of them; but genera ly one or two of them could be included with advantage.

It should not of course be overlooked that much useful knowledge of construction, material, &c., can best be obtained by visits of inspection to buildings in progress, to places where building materials are made, worked or quarried, and by the sketching and measuring of existing buildings. Opportunities for experience in these directions should therefore never be missed. With reference to the preparation of measured drawings, it is particularly noteworthy that, unless special guidance is available, students all too frequently refrain from noting information on such subjects as masonry, jointing, &c., which would be invaluable to them in later years.

The Calculation of Structures.

This is a subject which usually presents difficulties to the student, probably because, in some cases, it is not dealt with sufficiently systematically, because at first the application of it to his work may not seem obvious, or because the student is not sufficiently acquainted with mathematics and mechanics. In some schools, a course of mathematics is given in the first year, one on mechanics in the second, and the calculation of structures started in the third; but it seems advisable to omit the special course on mathematics, or to include it with mechanics, so that the latter may be taken in the first year, and theoretical construction studied in the second. The first course on theoretical construction would be followed by a more advanced one on structural steel and reinforced concrete, taken in the third or fourth year, so that either in the fourth or fifth year (preferably, perhaps, in the fourth) a set of working drawings could be prepared from calculations made by the student.

There are, no doubt, differences of opinion on this subject, but, broadly speaking, it would seem advisable not to exaggerate the possibilities in this direction for the student of architecture. He cannot, normally, be an expert in structural steel and reinforced concrete, and if he is made into one he will probably not be an architect. It, therefore, seems wise, except in very special cases, to limit the calculations of structures to buildings of modest dimensions and to those which do not present the special difficulties which are, after all, the province of the expert.

Sanitation.

During the first three years of the architectural course, probably in the third year, a short introductory course of sanitation, including lighting, ventilating and heating, appears to be necessary, so that, by the end of that period, the student will be able to deal with that subject so far as it concerns small buildings. It may, by some, be looked down upon as an excessively utilitarian subject, but it is clearly of very considerable importance, and in its wider aspects, which might well be emphasized from the beginning, is closely allied with town-planning. A more advanced course is clearly necessary in either the fourth or fifth years, and where it is possible, as is the case in certain schools, to engage the services of experts in such branches of the subject as heating, ventilating and lighting, this should certainly be done. It is clearly advantageous for students to be introduced to the main principles of this work on the soundest possible lines.

Acoustics.

A similar comment to that in the preceding sentence applies very definitely to this subject. Considerable developments may well be anticipated in the near future, and all students of architecture will be well advised in keeping in close touch with a matter which affects our art profoundly.

Specifications and Professional Practice.

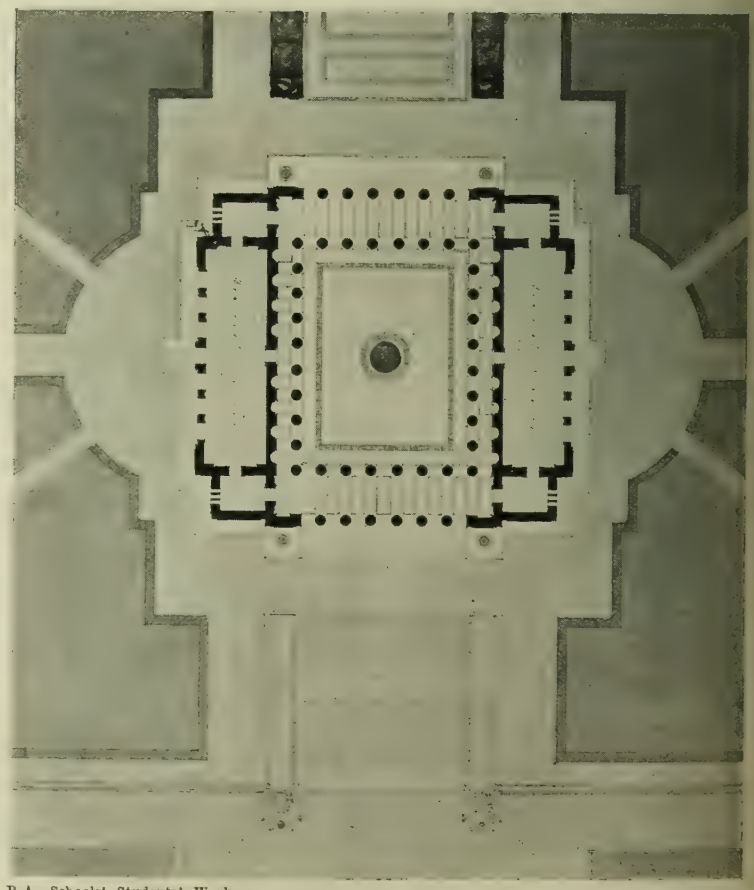
These subjects are normally dealt with in the fourth and fifth years. While it may be said that it is only in actual office experience that such matters can really be learnt, it seems clear that there is room in the schools for courses dealing with these subjects, and particularly with the principles which are at the back of them. Such courses will doubtless be of considerable value in helping the student to continue his study of these matters on right lines when he leaves the school for the office. The course on specifications fits in well with the advanced course on materials to which reference has already been made, and while, during his course on Professional Practice, the student will deal, among other matters, with the Building Acts, it should be said that the latter should be brought to his notice early in his course, and that he should constantly use them to check his working drawings.

THE CONFLICTING OPINIONS AS TO THE DATE OF WALTHAM ABBEY CHURCH

By the late W. de GRAY BIRCH.

The peculiar features of Waltham Abbey Church of Holy Cross are probably unique in the history of British architecture. Much has been written about the building, and some of the most prominent architects have propounded theories at variance with each other to account for the remarkable evidence it offers to investigators. One of the points which should be taken into consideration seems to have been entirely overlooked. It occupies a position at the meeting of the streams of history, being at the exact line of intersection between Anglo-Saxon and Norman architectural styles, just as the great tower at Evesham stands as the very last Gothic example reared before the inrush of the Palladian or Romanesque fashion of the middle of the sixteenth century. Second to none in beauty of workmanship and wealth of design, a marvel of what stone can achieve, the mind of the designer and the hand of the mason, a close rival to Durham, and to Rochester in its best day, Waltham still awaits the unravelling of its *ensemble* and the discomfiture of most of its critics. One of the most lucid accounts which are before us is from the pen of the late Charles Lynam, F.R.I.B.A., F.S.A., of Stoke-on-Trent, whose name and architectural fame claim from all students and experts in ecclesiastical art the highest respect and reverence. Lynam carefully examined the ruins of Waltham by the light thrown upon them by the expressed opinions of William Burges, E. H. Buckler, Arthur Ashpitel, Professor Freeman, J. A. Reeve (the architect of the church), Rickman, and other antiquaries, but no one seems to have valued the fact that as this building was professedly raised by or amplified from the original church built by Tovi in 1030, as a memorial of Harold, the last monarch of the Saxon dynasty, it was more likely to have derived the inspiration of its design from a Saxon than from a Norman architect—a Saxon who would be of mature age and occupying a high position in his calling, and yet to some extent biased in his leaning towards what was at that date the newly-introduced Norman style which had come to supersede our insular tastes by the introduction of a more advanced and ornamental taste. Harold is recorded to have pulled down Tovi's church and built a new one of great magnificence, consecrated by the Archbishop of York on May 3, 1060, in the presence of Edward Confessor and his queen. Two years later the King established a college for canons secular. The existing west wall of the south transept very probably shows, states Mr. Reeve, the exact projection of the transept of Harold's church. It is this blending of feeling which compels, unconsciously, Lynam to say at the end of his notice: "What . . . is significant is the fact that not a single mark of Saxon design or workmanship, as commonly understood, is present, except, possibly, in the lower part of the eastern face of the south transept west wall and the external rubble facings in the south aisle. But, on the contrary, the design and the workmanship and the ornamentation are all essentially Norman, and in all probability Norman oversight controlled the work."

This ruined church is but a fragment of the great conventual establishment which in the eleventh century occupied the surrounding site. The head, arms, trunk, are gone, all that is left is, as it were, but the stump of a tree rooted indeed at the time of one of our historical cataclysms, revived at the commencement of a new and foreign rule, nurtured by the dominant powers of the land for nearly five hundred years, but finally reduced to an appalling ruin. Rude, as it has been thoughtlessly called by some less enlightened thinkers, "a study of its details will," writes Lynam, "reveal in its construction, delicacies of proportion, refinement of design and beauties of ornamentation which the most cultured of the lovers of art must appreciate and admire." The present church consists, on plan, of the nave and aisles of the Norman church, the two eastern bays being used as a chancel; a chapel on the south side of its eastern end in a line with the east end of the nave, and other modern additions we need not take here into notice. Beneath the south chapel, for its full size, is a crypt. The main entrance to the church is by a doorway in the west wall of the tower, and there are ten other entrances, detailed by Lynam, leading to the interior. The dimensions are so well-known that it is only necessary to say here that the length from east to west within the walls is 108 ft.; width of nave, 23 ft. 8 in.; of north aisle, 9 ft. 7 in.; of south aisle, 9 ft. 10 in. from wall to piers; and height of nave to ceiling, 52 ft. Here occur also, as at Birchington Church in North Kent, at Copford Church, near Colchester, Essex, and no doubt many other churches, certain indications of change of original intention on the part of the builder. The aisles of Waltham have lost their first proportions, for Lynam finds that "they were assuredly spanned by appropriate vaulting," shown by "the shafting on the aisle side of the nave piers, strings under the aisle windows with gaps," and what else but vaulting shafts account for the present appearance of the aisle walls where the inner quoins of the vaulting shafts still appear. Freeman points out indications of special provision of increased thickness in walls in reference to two western towers which originally occupied the position, and in the western bay no clerestory was provided, and there is nothing to suggest that towers did not form part of the original façade. The first material change of design was the removal of the west wall and the substitution of the present one. We may compare this proceeding with what happened at Peterborough Cathedral, where a wide horizontal strip was simply deleted from the ori design for the west front. Lynam thinks the western front of Rochester Cath represents the probable characteristics of original Waltham front. Rickman assign Waltham the date of 1066 to 1199, and opinion has been usually, but not univers adopted by later investigators; and B finds "no sign of any very early work at tham." In another place Burges puts on re the following of his previously-menti opinions: "I am induced to believe Harold's church might have ended at the apse (on the plan) and that the subse Norman addition comprised the transepts a choir," etc. On the other hand, J. A. F lays down his opinion that from the west up to and including the second pier from east end on both sides of the nave we Harold's work—perfect on the south side perfect on the north side up to the string-c below the clerestory, the remaining por being of the time of Henry I. Freeman co "though not without doubt and hesitatio the conclusion that the balance of evi inclines to the opinion that the Romane portions of the present church are really por of the original church built by King H . . . . at latest at 1060." The writer modifies his words with, "By whoms built, Waltham Abbey is undoubtedly a No building." Lynam contrasts the Priory C of Tutbury in Staffordshire, which was menced in 1080, and the founder, Henr Ferrars therein interred before 1090, a cl not unlike, in its general aspect, to Walt and its details even favour an earlier char than this Abbey Church. Here we leav controversy to be settled by the ligh comparison and investigation. In decidin true date of the church, before the altera and improvement, we are bound to take consideration the value of the antique re and the traditional history as given by chroniclers of the eleventh and tw centuries.



R.A. Schools' Students' Work.

Design for a Propylæum.

By Mr. H. E. Furse (awarded Landseer Prize (£20) and Silver Medal for an Architectural Desi

DOMESTIC ARCHITECTURE OF THE AMERICAN COLONIES

e expression "Colonial Style of America" become familiar to British architects as of the propaganda of a movement in rn housing away from the sham Mediæval back to a more reposeful Georgian school. ssor Fiske Kimball's excellent book* rates many fine examples of the application ssic design to domestic work, and readers ld find in it an eloquent argument in favour al simplicity and directness in domestic tecture. Fashions will change and change , just as they are returning upon themselves in this present instance to the work of or three generations ago, and it would be if common sense and a keen eye to conence might inspire all efforts. Although ished at a moment when its subject-matter ens to have both a topical and a practical est to English home builders, the book is ten in an historical rather than a propalist mood, and if on the whole it is calculated trengthen the hands of the Neo-Georgians eir practical campaign, it nevertheless gives ath blow to many widely accepted theories. origin of the log cabin, for instance, used to an obvious matter. It was natural to ose that the early colonists found it easy woody country to fell trees, notch them he corners, and pile them up in the form has become familiar from illustrations in urite story books. If any architectural ry possessed abundant weight and vitality y this was it, yet Professor Fiske Kimball's rical researches into what the early colonists ally did reveals an altogether different e of affairs, and at a word arrests the lerous momentum of tradition.

ne dwellings of the early settlers are illus- d by photographs of conical huts composed icks and turf such as were still being built England as recently as 1901 by charcoal ers and bark peelers. The pattern of the ers' huts was not even copied from the ans, but was brought to America by the nists who had themselves either lived in huts, or had been familiar with their use heir poorer neighbours in the old country.

ren with the building of more substantial es the framed half-timbered house of ish Tudor type seems to have preceded the abin, of which the author writes: "A more onable supposition is that the log house was ght to America by the people in whose ve land at that time it was the customary of dwelling—the Swedes and Finns who ed on the Delaware in 1638 and the years wing. Peter Kalm, writing in 1749, and ing a settler ninety-one years old, describes first houses as of round log chinked with and contemporary accounts describe the built at New Gothenburg in 1643 as made of lock beams laid one upon the other."

nother widely-diffused theory with which essor Fiske Kimball finds himself in opposi- is that the elongated forms of certain rican versions of the Columnar orders were red by the use of wood for their construc- Early examples of orders used in Ameri- houses are, however, of approximately ic proportion and it was not until after the of the formation of the Republic that the on for attenuated shafts became at all ounced. In this connection it is a significant that the researches and example of the hers Adam—who introduced elongated ts into English practice—took place at a enient time to direct Republican America in attainment of its classical ambitions.

uring the colonial period the mediæval forms abled frame-houses with their overhanging r stories, their low rooms, and their construcal survivals from Gothic times, had gradually been supplanted by houses of a more spacious character. Elevations were developed with more symmetry, roofs erected with a lower pitch and balustraded parapets and flat deck roofs over at least a part of the house came into general use. In planning, the size and height of rooms was increased as time progressed; privacy was taken into consideration in the arrangement of stairs and halls, and, with the introduction of brick, chimneys were placed more in accordance with the dictates of convenience instead of being gathered together in one bulky wood-framed clay-lined stack.

Further developments in the art of planning for convenience are to be seen in examples of the post-colonial period, but a renewed interest in the exact details of classic art in the last quarter of the eighteenth century was often allowed to take precedence of mere utility. Planning had escaped from the compulsion of penury only to fall into a worse thraldom to the classic symmetry of ancient temple architecture and the tyranny of the orders. Professor Fiske Kimball makes it clear that the gilded chains were willingly accepted and proudly worn. The ideal of classical form appealed to the Republicans who "identified themselves with the heroes of the Roman republic. . . . Leaders of thought in the 'thirties had a consciousness of solidarity with ancient Greece which touched every department of life."

Certain architects in America could design new works in the light of the personal experience of classic effects gained in the course of their travels and studies in Europe but the excessive love of classicism may have been encouraged by the very difficulties of access which prevented recognition of any weak points in the original buildings in Italy and Greece. Ideas gained from the text-book have extraordinary force in that they are not subjected to immediate contradiction or brought into contact with mitigating circumstances. "Books were of less relative influence than in the colonial period, but remained much in use. The amateurs and craftsmen were still dependent on them for forms of detail, and now drew upon them more often for the arrangement of the ensemble. No less than four of Pain's works were republished in America before 1804."

Special English and Continental works on ancient Grecian and Pompeian art followed, and Classicism succeeded in abolishing the old colour interest of materials. Expanses of paint or stucco ruled to imitate masonry were substituted for the older red brick. Clapboard and shingles upon the façades of houses were replaced by smooth boarding with close joints with the same objective of Classic propriety in view.

Progress with the internal arrangement was not lacking, however, and orientation and aspect received attention, the valuable sunny south frontage being reserved for dwelling rooms instead of being inconsiderately given up to halls or stairs. The pass pantry, characteristic of American domestic architecture, even in the present day, made its appearance soon after 1800 and was situated either between kitchen and dining-room, when these rooms were on the same floor, or between the dining room and a landing of the service stair.

From an early period economy of first cost had been guaranteed by disposing the accommodation as nearly as possible into a cubic form, but the demands of Greek temple architecture were incompatible with any such commonplace consideration, and after the Greek War of Independence (1821–1827) the colonnaded front of an American house was liable to cost as much as the house itself.

With the temple ideal in view the flat roof was often abandoned in favour of a pediment, the difficulty of constructing a water-tight flat with the materials then in use supplying a practical inducement for the change of style. A comparatively steep form of pediment was adopted in most cases, so that it would fit at the end of an ordinary low-pitched roof, and in this respect the revived Greek work of America has less of artificiality than is so frequently to be observed in buildings of a similar style in England.

In spite of a relapse into Romanticism—a domestic counterpart of England's Gothic Revival—and an acknowledged vernacular tradition uncouthly misnamed the Dutch-Colonial style, American architecture has again returned to the Classic style, which is not unsuited to the geographical situation and climatic conditions of a great part of the United States, and in which the democratic aspirations of America found their fitting expression.

A great deal of detailed information in regard to chronological sequence of remaining early houses, the works and names of famous American architects, and methods of design and construction, are included, together with over two hundred illustrations, an index and a series of notes on individual buildings.

* "Domestic Architecture of the American Colonies and of the Early Republic." By Fiske Kimball. Illustrated. (New York: Charles Scribner's Sons. London: B. T. Batsford, Ltd. 1922.) Price £3 3s.

SHEFFIELD SOCIETY OF ARCHITECTS

Professor Beresford Pite, F.R.I.B.A., lectured recently at the Sheffield University, before the Sheffield, South Yorkshire and District Society of Architects and Surveyors, on "The Architecture of Concrete Building."

In the course of his remarks Professor Pite said architecture was either conscious or unconscious, natural or artificial, the work of the constructor or the work of an artist. This definition would generally correspond with Gothic or Classic. The Renaissance tried to be both at once. An affectation of character which might be at once an artistic and artificial imitation. It was a truth, a realised fact that unaffected simple construction eventually attained an æsthetic value; in process of time that in it produced architectural joy. When they looked at modern ferro-concrete construction it was their hope that sooner or later it would give them the same satisfaction that unaffected Gothic building afforded.

In the absence of any sense of pleasure in beholding modern concrete buildings they must fall back upon the qualities of simplicity and impressiveness of scale and of that expression of purpose which was always interesting, and await the advance of a sense of beauty. Adornment detracts from such interests. Simple bridges were better without ornament, they illustrated the interest of constructive expression and the forces at play in the construction. Architects could mock this spirit and play with it. This might be illustrated from many buildings at the last Paris Exhibition, where playfulness abounded. It was their duty to put architecture in its proper place. The progress from prehistoric construction from the primitive Greek to advanced Roman, from Norman masonry to the vaulting of Edward VII Chapel at Westminster, would show how ideas progressed from simplicity to a complex beauty, combining artistic construction with constructive expression. They must combine the simple expression of ferro-concrete construction with their artistic enjoyment of traditional forms, using these negatively as well as positively. This modern French ferro-concrete had done with success. Their heavier Saxon ideas moved in larger masses and were not yet very playful, but they did not live in the past and should seek for freshness and find a stimulus to imagination in the new use of thinness instead of thickness. Self-contained thrusts instead of abutments, and in the consequential new proportions; remembering that naked facts could never be wholly satisfactory, that clothing and ornament were necessary, and for these they must look for historic architecture in dealing with concrete buildings.—A vote of thanks to the lecturer was proposed by Mr. F. E. P. Edwards, seconded by Mr. J. M. Jenkinson, and supported by Professor Husband and Mr. J. Amory Teather.

LEADING CONTENTS

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ILLUSTRATIONS

R.A. Schools' Students' Work.

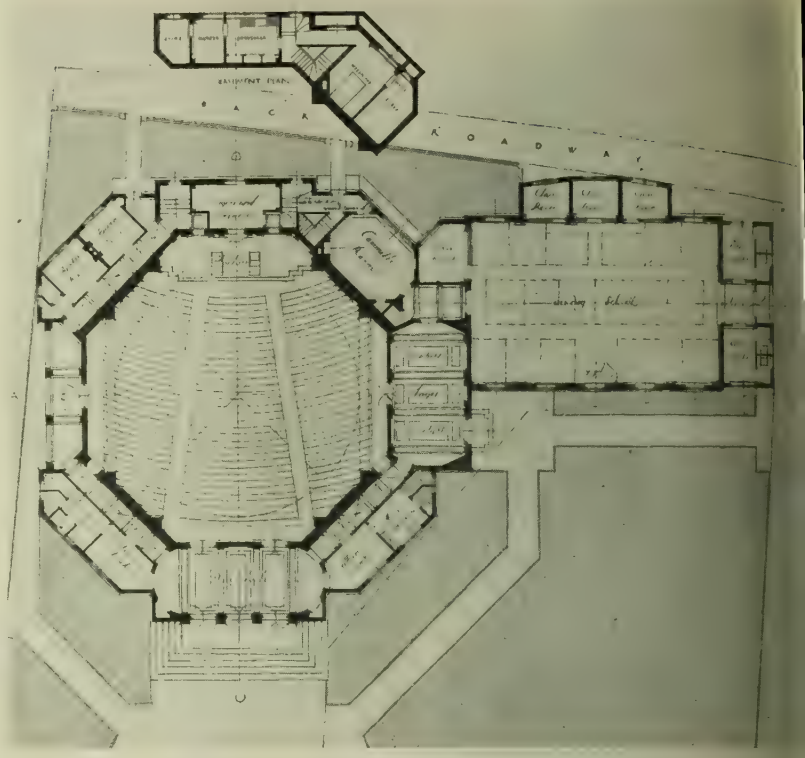
We illustrate this week the design by Mr. F. R. Chambers, for a Memorial Tomb in an arched recess, which was awarded the Edward Stott Prize (£50) and Silver Medal, and a design for a Propylaeum, by Mr. H. E. Furse, awarded the Landseer Prize (£20) and Silver Medal for architectural design, at the prize-giving at the Royal Academy Schools. The prize list and the design for a Municipal Art School and Picture Gallery, by Mr. J. F. Mason, awarded the R.A. Schools Travelling Studentship, were given in our last issue.

Northern Polytechnic Students' Work.

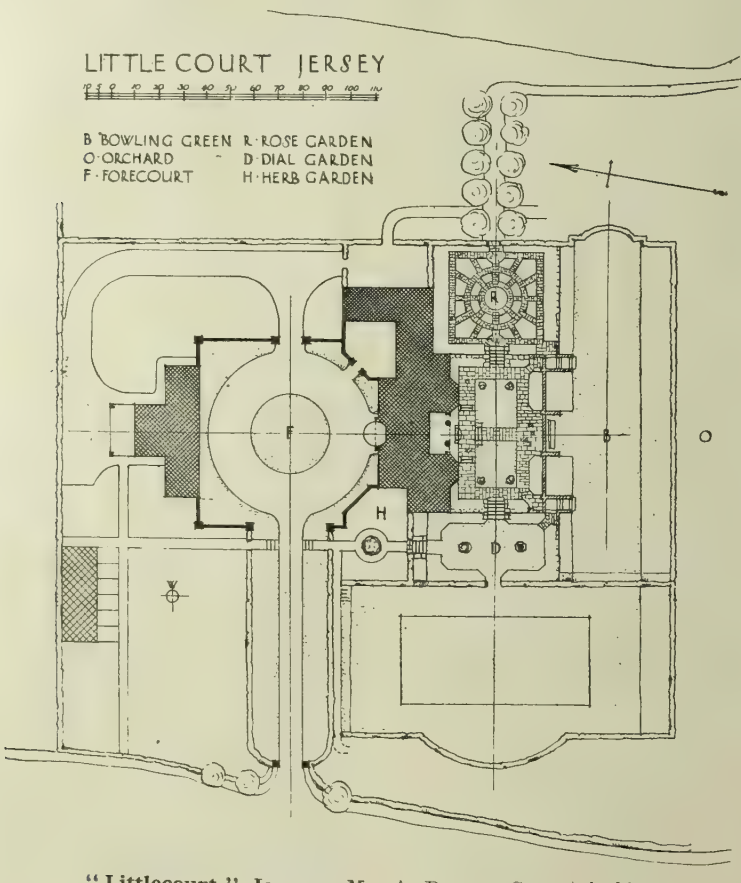
These designs represent the result of work upon a weekly design subject at the Northern Polytechnic (London) School of Architecture, the average time taken being 8 to 9 hours. At the beginning of the term a list of subjects is issued and at 9.30 a.m. on a particular day the working details are given to the students, who then proceed to design the subject in question and to make a complete coloured drawing.

The conditions for the small chapel, which is illustrated, were as follows:—A chapel is to be erected for a public school, in which the Church of England services are used. Seating in traditional style, viz., two rows of seats f inwards on each side, with a central passa about 8 ft. Design: the elevation inter looking towards the east end, and to indicat treatment of body of chapel in perspec *Drawing Required.*—Set up end elevatio ¼ in. scale and develop view from that.

Mr. T. P. Bennett, F.R.I.B.A., is Head o Department of Architecture, Surveying Building at the Polytechnic.



Competition for Christian Science Hall, Southport.
Design placed First: By Mr. W. B. Sinclair, F.R.I.B.A.



"Littlecourt," Jersey. Mr. A. Dunbar Smith, Architect.

Littlecourt, Jersey.

This house is now nearing completion stands on high ground, above and practi central with St. Aubin's Bay and has a ma cent view to the south out to sea, bet Elizabeth Castle and Noirmont Point. walls are coated with stucco finished white it was intended to use granite dressings thro out and to cover the roofs with thick s These plans have been modified in execu The roof is covered with Messrs. An Finnis's Caddock tiles. The main stai and the floors of the principal rooms a oak, while the terrace walls and paving i garden are of the local granite. As will be from the site plan, the garage block is plac the north of the house and connected to the walls enclosing the forecourt. The ge contractors are Messrs. Wort & Way, of Salis casement windows, Messrs. Wainwright & ing; glazed tiling, Messrs. Van Straaten & and the sanitary fittings (other than the b by Messrs. Emanuel & Co. The baths Kohler's "Viceroy," and were supplied Messrs. O'Brien, Thomas & Co. The ele light plant and wiring has been carried ou Messrs. Gillham & Jones.

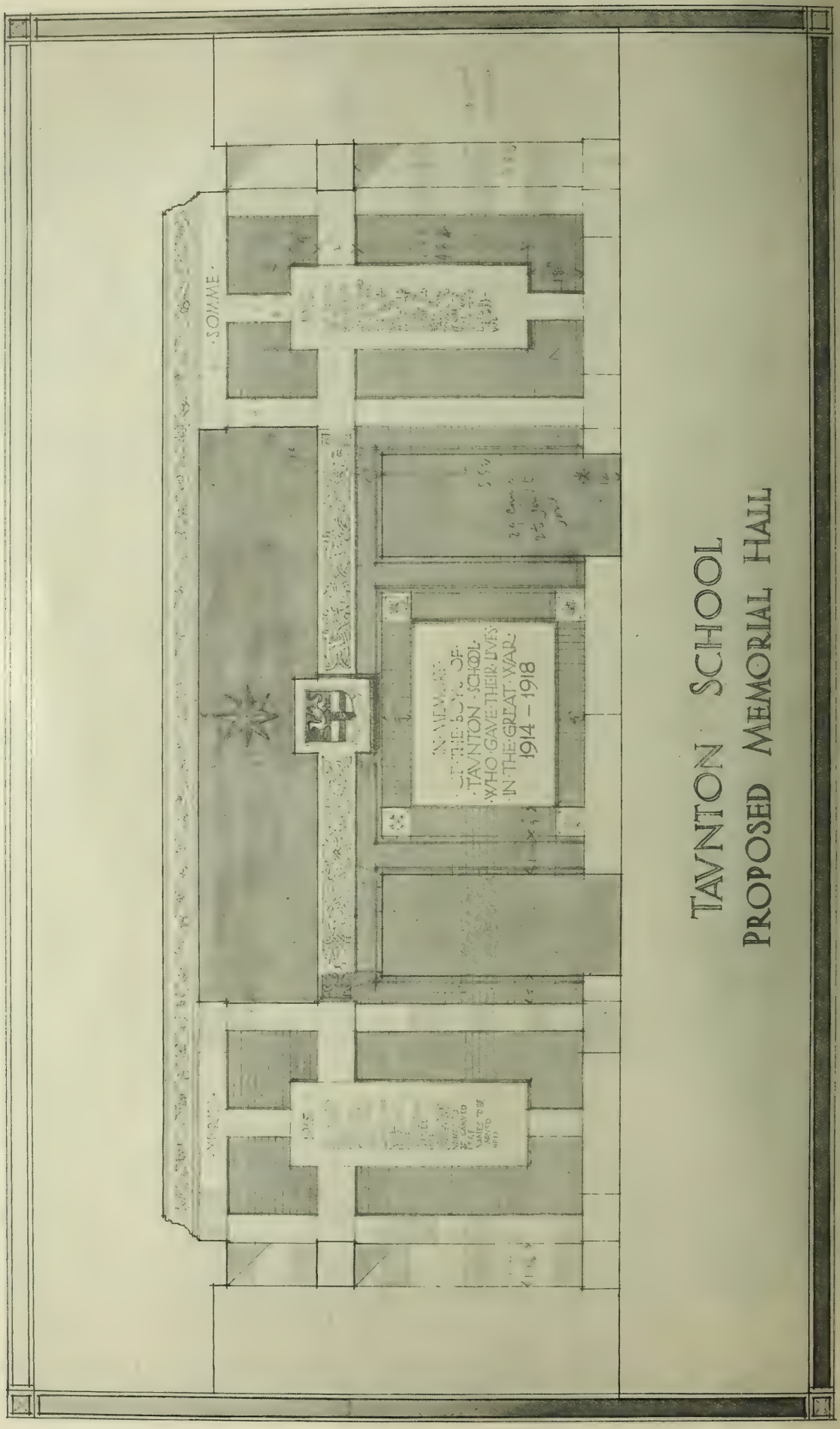
Mr. A. Dunbar Smith, of 6, Queen-sq W.C., is the architect.

Brentford Orphanage.

This orphanage is in course of construc The principal elevation is in a purple Cornish brick with red brick dressings. main entrance is in stone-faced terra-cotta. roof is in Westmorland green slates.

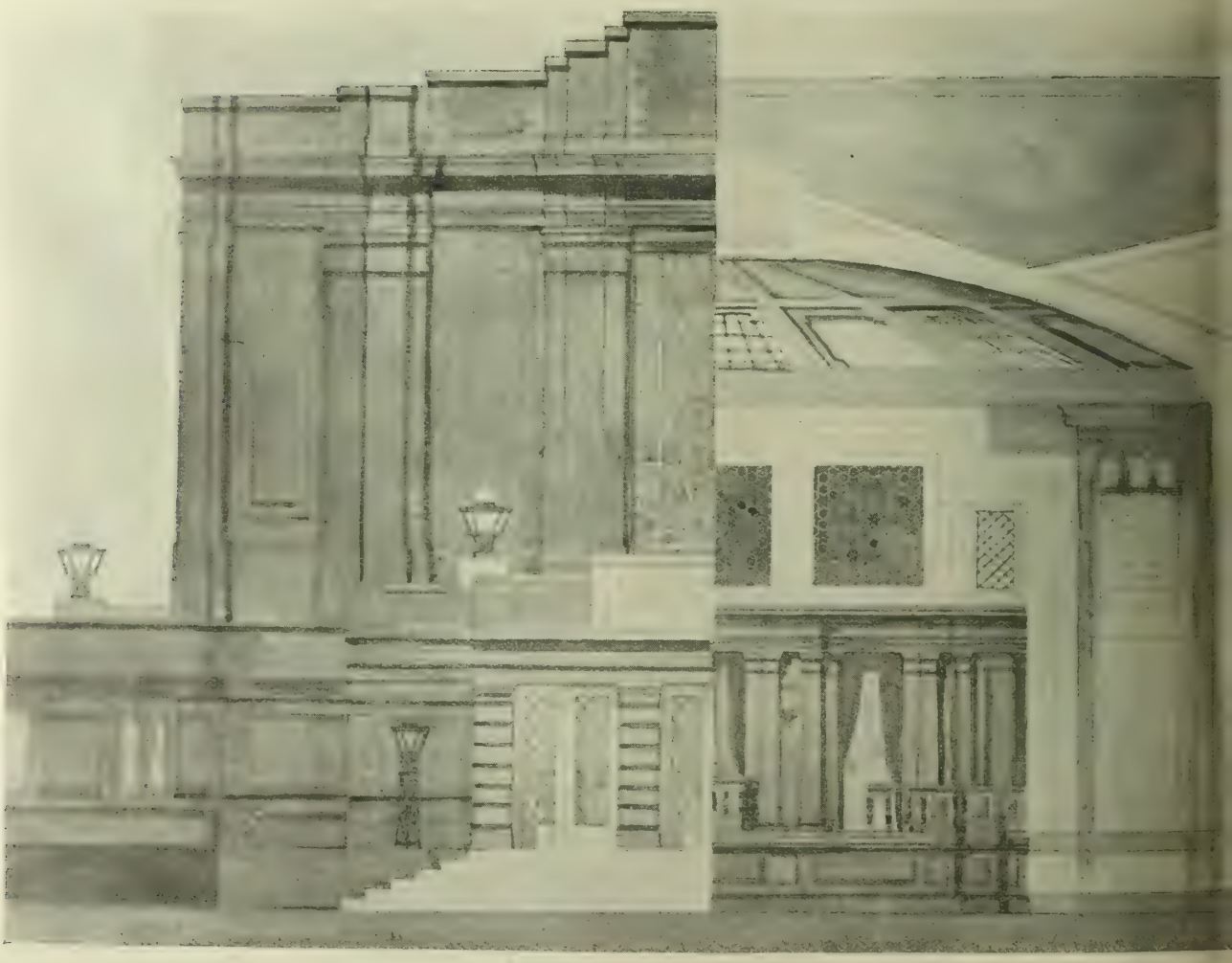
Mr. Wallace J. Gregory is the architect, the tender of Mr. William Lacey, Houn for £12,260 (modified £11,275) was accepte

Messrs. Morny's Premises, Regent Street. Messrs. Mewes & Davies, FF.R.I.B.A., Architects.
[The exterior of these premises was illustrated in our last issue.]



Taunton School War Memorial Competition. Accepted Design: by Mr. E. Vincent Harris, F.R.I.B.A.

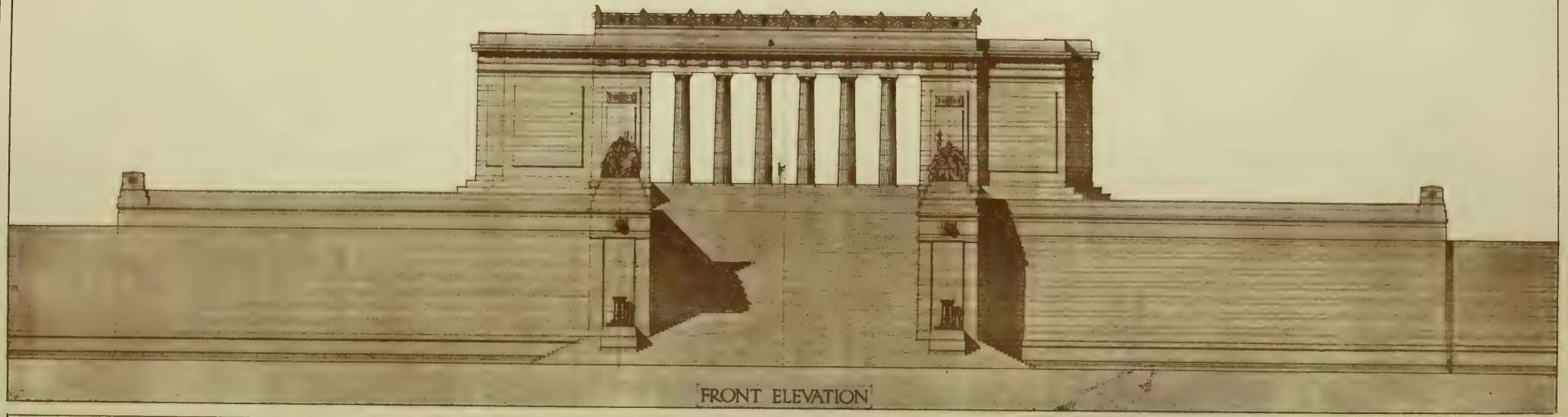




Competition for Christian Science Hall, Southport.

Design placed First: By Mr. W. B. Sinclair, F.R.I.B.A.

[The full result of this competition was given in our last issue.]



FRONT ELEVATION

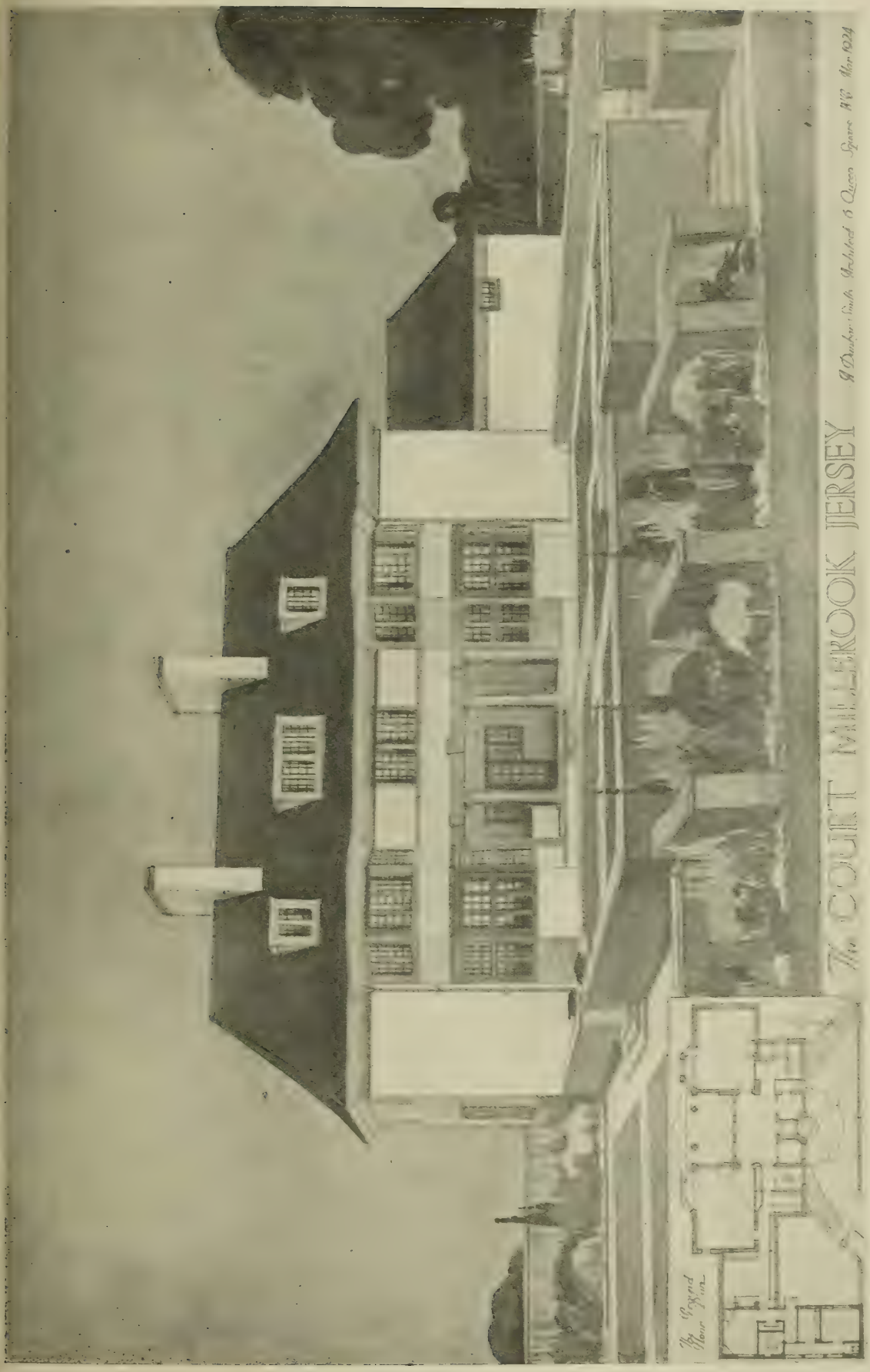




R.A. SCHOOLS' STUDENTS' WORK.

A PROPYLAEUM.

AN ARCHITECTURAL DESIGN (LANDSEER PRIZE: TWENTY POUNDS AND SILVER MEDAL). BY H. EDWIN FURSE.



"Littlecourt," Jersey. Mr. A. Dunbar Smith, Architect.



M. DE METZ.



D. E. HARRINGTON.







F. W. DARK.

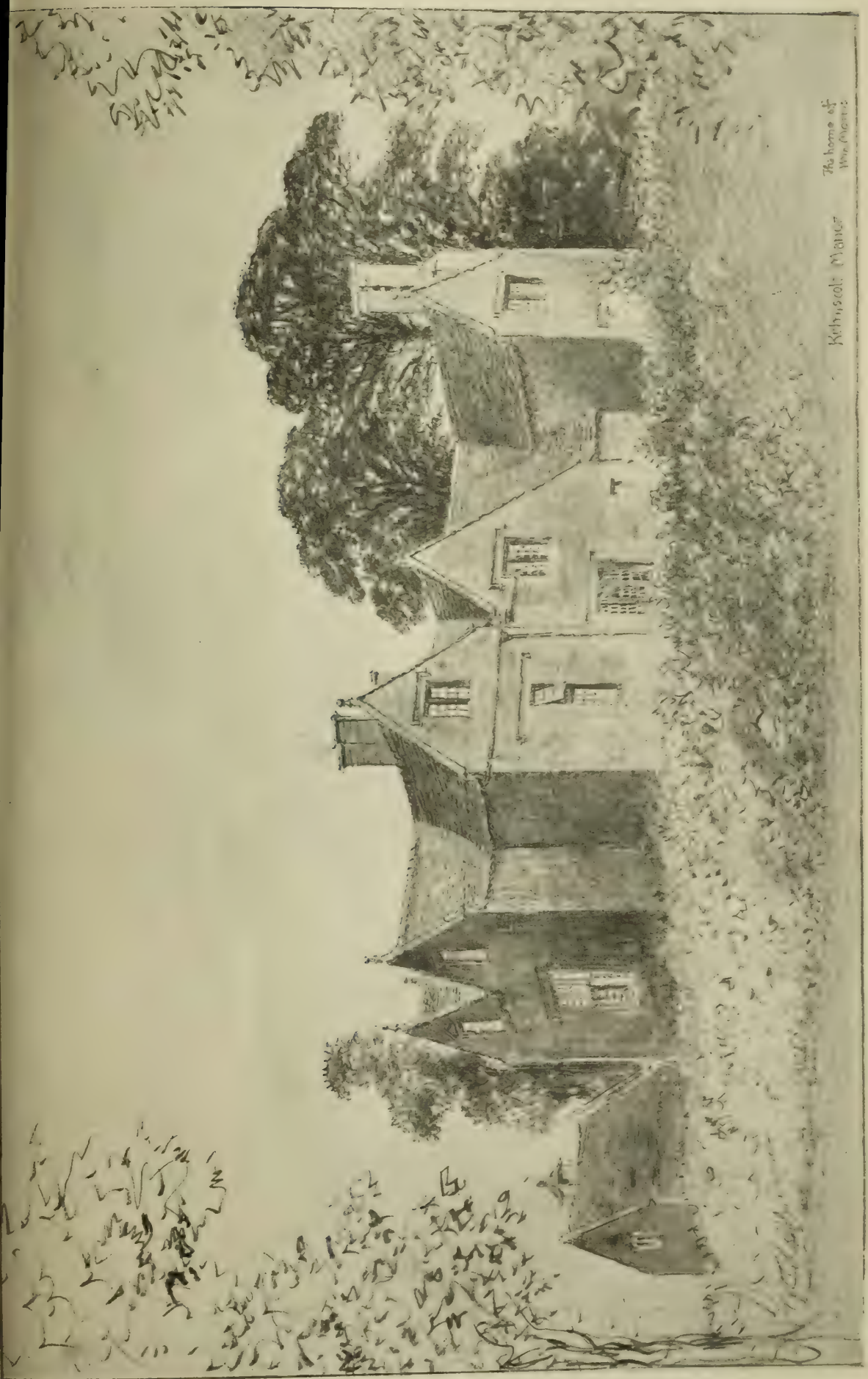




G. FORD.

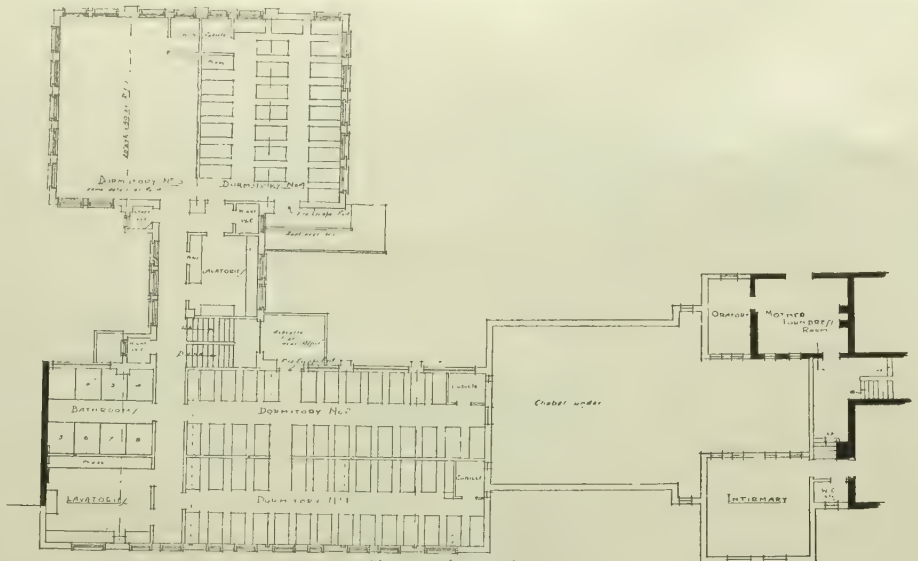
L OF ARCHITECTURE.

RD YEAR STUDENTS.

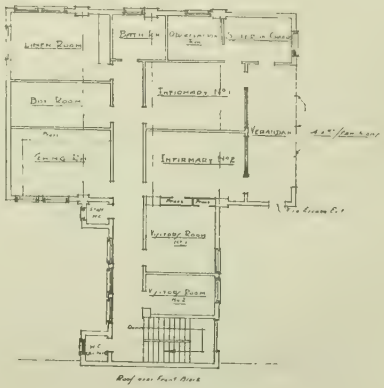


Kelmscott Manor: The Home of William Morris.

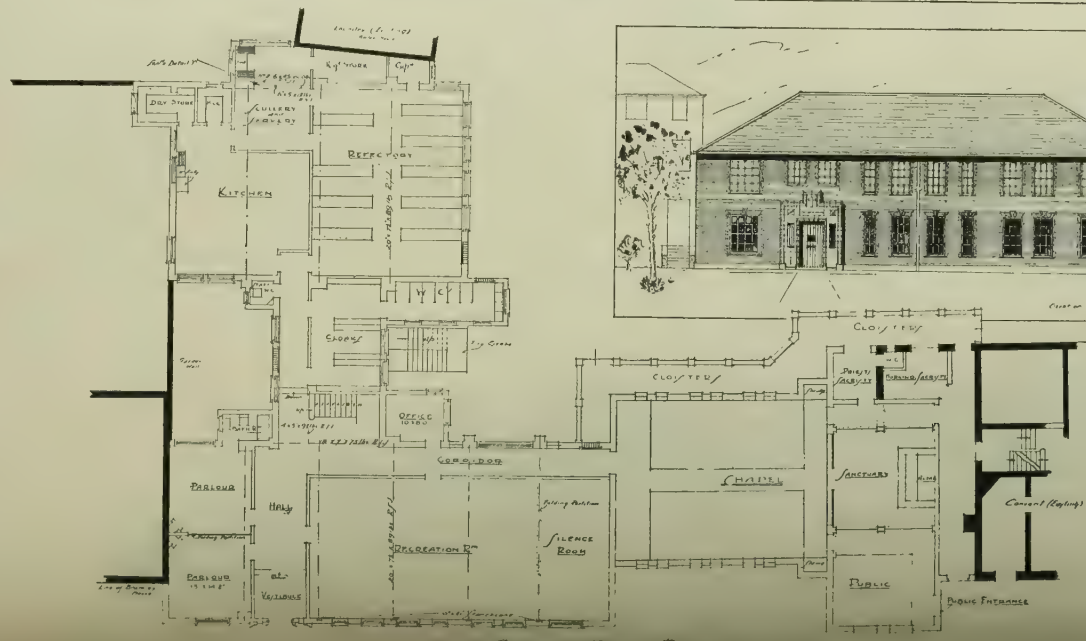
T. Raffles Davison, del.



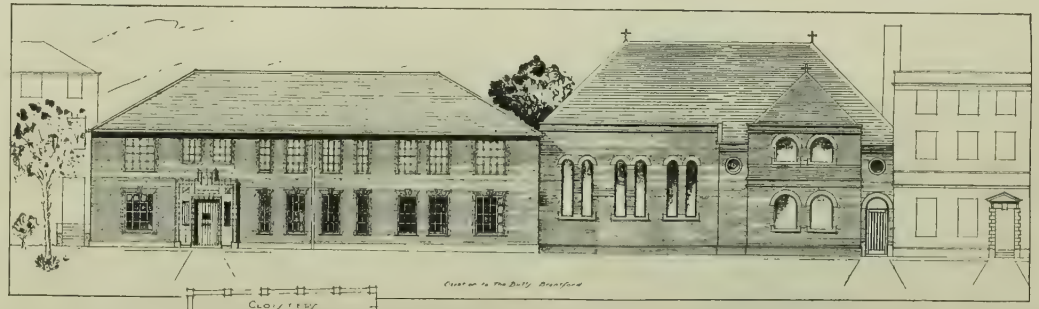
— First Floor Plan —



— 2nd Floor Plan —



— Ground Floor Plan —

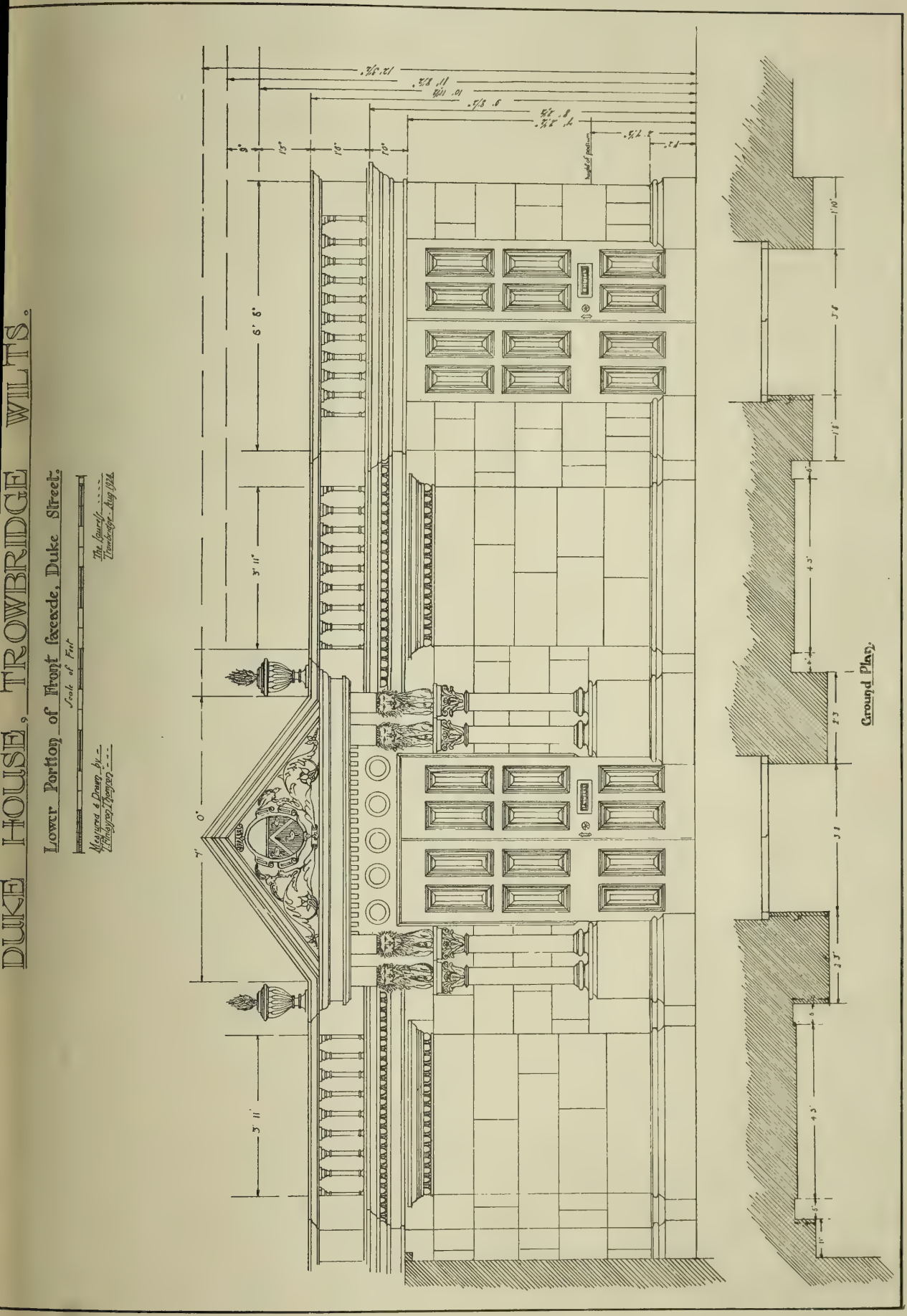


Chapel to The Butts, Brentford

Proposed Orphanage and Chapel at Brentford. Mx.

Scale
One Eighth of an Inch equal One Foot (⅛"=1')

Wallace J. Gregory I.S.A. P.A.S.I.
Architect & Surveyor.
7 Carlton St Victoria Chambers Oxford St W 1



Duke House, Trowbridge. Measured Drawing by Mr. T. F. Thomson.

[Mr. Thomson is seventeen years of age, and at the time this drawing was made had had only nine months' training in the office of a Wiltshire architect.]

LEGAL SECTION

NOTES ON CURRENT CASES

Repair of Bridges.

An interesting point has been decided in the recent case Regent Canals and Docks Co. *v.* Gibbons (*Weekly Notes*, October 25).

In 1900 the defendant's predecessor, an owner of land in Willesden, desired to make a road between two existing highways, and to do this it was necessary to construct a bridge over the canal feeder belonging to the plaintiffs' two canal companies. He obtained permission from the canal companies to make the bridge on making certain payments and on entering into a covenant that he would maintain the bridge "until the said road and bridge are taken over and maintained by the local authority."

Until his death in 1914 he had fulfilled the covenant, but in 1915 the local authority, by notice under section 152 of the Public Health Act, 1875, had declared the road to be a highway repairable by the public at large, but no steps had been taken to declare the bridge a "county bridge." The plaintiffs were claiming a declaration that the defendants, the executors and trustees of the landowner, were liable to maintain the bridge, but the defendants said their liability had determined as the bridge had been taken over by the local authority.

Section 4 of the Public Health Act defines "street" as including any highway and any public bridge, not being a county bridge, and any road, and the Court held that the act of the local authority in declaring the road which passed over the bridge to be a highway repairable by the inhabitants at large was "a taking over" of the road and bridge within the meaning of the covenant and put an end to the defendant's obligation to repair the bridge.

Another case of importance as regards bridges is the decision of the House of Lords in an Irish case, Attorney-General for Ireland and Lagan Navigation Company (1924, A.C. 877). There the Canal Company by a special Act in 1843 was created to take over and manage a canal in Ireland and the undertaking included a bridge constructed before the Act to carry a public road over the canal. The bridge had been maintained by the Canal Company in a sufficient state of repair to carry the ordinary traffic at the date of the passing of the Act, but owing to the increase in the amount, and the alteration in the character of the traffic, part of one of the retaining walls of the bridge had collapsed and the road authority claimed to recover from the Canal Company the expenses incurred in repairing the retaining wall. Under the special Act it was provided that the Company should at all times during the continuance of the Act maintain and keep the said navigation and every part thereof, and all bridges, and all works, bridges, viaducts, preservation, retaining and other walls, fences and embankments upon, or connected with, all county or other roads made and constructed by the Company, and all works to be thereafter executed for the improvement thereof "in good substantial and serviceable repair and in an efficient state for all the purposes thereof and of the traffic on the same respectively." The duration of the private Act had by a subsequent Act been extended to 99 years.

Under the Act the works improvements and repairs had to be executed to the satisfaction of the Commissioners of Public Works in Ireland, and the Commissioners had power to inspect the state of repair and efficiency and to require performance of any repairs or works they considered necessary, and in case of any difference arising as to the manner in which the works improvements and repairs were to be executed the decision was to be left to an engineer appointed by the Treasury.

The question was whether the Canal Company was bound to keep the bridge and retaining and other walls in such repair, and in such an efficient state, as to sustain the present-day traffic, or only for such traffic as existed at the date of the private Act? The trial Judge in Ireland had held that the Company were bound to keep the bridge in repair for the present-day traffic, but the Court of Appeal in Northern Ireland had reversed this judgment, and the House of Lords by a majority of four to one affirmed the decision of the Court of Appeal. We cannot give the judgments delivered by the majority in the House of Lords in any detail, but can merely briefly summarise the effect of the judgments. The principle laid down in two cases in the House of Lords, Sharpness New Docks and Gloucester & Birmingham Navigation Co. *v.* Attorney-General (1915, A.C., 654), and Attorney-General *v.* Great Northern Railway (1916, 2 A.C., 356), is that if a statute which authorises works goes on to define what are to be the rights and obligations following from the execution of the statutory act, it is in the language of the Legislature, and that alone, that rights and remedies are to be ascertained. In other words, as we may put it, the common law is displaced. Those two cases in the House of Lords turned upon repairs to be executed on works created under the Acts under consideration, and it was held that, under the terms of those Acts, there was only a liability to maintain bridges constructed under the Act in a condition which would bear the traffic of the date when the Acts were passed.

There is this distinction between those two cases and that which the House of Lords have now decided, in that the bridge in question was not constructed under the private Act, but was in existence before that date, but the House of Lords held that as the private Act dealt with the two classes of bridges, *i.e.*, those already constructed, and those constructed under the Act in the same terms, it was impossible to distinguish between the two, and the same considerations applied to both. That is to say, the decision amounts to this—as regards a bridge built since the passing of the Act, the principle laid down in the Sharpness case applied, and it need, under the terms of the private Act, only be maintained in a state to carry traffic of the nature to be expected at the date of the Act, and as the language which applied to the bridge erected before the Act was the same, it was impossible to differentiate between the two, and the same degree of repair was all that was necessary. The claim of the road authority therefore failed.

Workmen's Compensation Dependency.

A case has recently been decided under the Workmen's Compensation Act of last year. Peart *v.* Bolckow Vaughan & Co., Ltd. (*Weekly Notes*, November 8). The applicant was the father of a boy of 14 years of age who had been killed, and he was claiming compensation on the ground that he was partially dependent on the boy's earnings. His eldest son, aged 16, was earning £1 0s. 6d., the deceased earned 15s. 3d., and there was in the family the mother and a child of 11, both of whom earned nothing. It was admitted that the deceased would have advanced by rapid stages to higher wages, and the County Court judge had held that although at the time of his death the injury to his father was small, yet as the boy, had he lived, would have earned increasing wages and would have contributed more to the common family budget, £50 added to the £15 for funeral expenses, which the respondents had already paid, would represent the sum which under paragraph (1) (a) (ii) of the Act of 1906 would be "reasonable and proportionate to the injury." The respondents appealed.

The Workmen's Compensation Act of last year in section 22 has introduced an alteration in the law. In section 13 of the Act of 1906 the word "Dependents" was defined as meaning "Such of the members of the workman's family as were wholly or in part dependent upon the e of the workman at the time of his de would, but for the incapacity due to the ac have been so dependent. . . ." This def was very similar in effect to that conta the original Act of 1897 and therefo decisions given under the first Act hav good under the Act of 1906, and in th Simmons *v.* White (1899, 1 Q.B. 100 Court of Appeal held that to make a dependent he must be shown to some to have depended upon the other for the or necessaries of life, having regard to his cl position in life, but in Main Colliery Co *v.* Davies (1900, A.C. 358) the House of rejected the doctrine that the standard of must be that of the neighbourhood and life, and held that the only considerations regarded were what the family in fact earning and what the family was in fact sp for the purpose of its maintenance as a Section 22 of the Act of last year contain following definition of partial depen "For the purposes of the principal Act a shall not be deemed to be a partial dep of another person unless he was dep partially on contributions from that person for the provision of the ordinary saries of life suitable for persons in his cl position." The Court of Appeal have h the case we are considering, that the ef this section is to restore the rule adopt determining dependency by the Court of in Simmons *v.* White, which was rejected House of Lords in Main Colliery Co *v.* Davies, and that the County Court Ju this case had acted upon it, for he was e in determining the question to take int sideration a future increase in the earnings deceased, and also to apply his own local ledge of the standard of living in a family.

The application of the rule as now em in this section may not effect a different d in all cases for in both Simmons *v.* Whi Main Colliery Co., the facts were som similar to those in the case under conside and in both the award was made in the cant's favour, but, of course, cases may a which the new rule now given sanction to section may make all the difference. Th been already foreseen by text-book w Mr. Willis, for instance, in his 22nd e published early this year, says, referring new section: "It is not easy to measu effect which this definition will have up whole aspect of the subject of dependen settled in the above cases" (referring two we have mentioned and others); "it duces, or seems to introduce, the very sta of living which was rejected as irrelevant House of Lords." It will be seen from wh have said above that this is the view whic now been adopted by the Court of Appeal.

That an arbitrator may take into cons tion a prospective increase in earnings w cided in Sheldon *v.* Butterley & Co., Ltd. 2 K.B. 600; *The Builder*, January 30, 1

Workmen's Compensation Weekly Paym

Another point of some importance und new Act has been decided in the cases, P *v.* William France Fenwick & Co., and Su Leach & Co., Ltd. (*Weekly Notes*, Novembe Section 14 of the Act of 1923 provides employer shall not be entitled otherwise th pursuance of an agreement, or arbitrati end or diminish a weekly payment unde principal Act, except in the following c The first case is where a workman has ac returned to work and the second is whe weekly earnings of a workman, in receip weekly payment, have actually been incre but this case turned on the third, contain paragraph (*c*) of the section, which pr "that the payments may be ended or dimi where the medical practitioner, who ha

d the workman under paragraph (14) of First Schedule to the principal Act, has ed that the workman has wholly or lly recovered, or that the incapacity is ger due in whole, or in part, to the accident copy of the certificate (which shall set he grounds of the opinion of the medical tioner), together with notice of the tion of the employer at the expiration of lear days from the date of the service of otice to end the weekly payment, or to nish it, by such amount as is stated in the e, has been served by the employer upon workman." But to this paragraph there is oviso (*i*) "If before the expiration of the ten days the workman sends to the em- r a report of a duly qualified medical itioner (which report shall set out the nds of his opinion), disagreeing with the ficate so served by the employer, the weekly nent shall not be ended or diminished pt in accordance with such report, or if so far as the employer disputes such report, pt in accordance with the certificate given medical referee in pursuance of paragraph f the said schedule as amended by this "

ow, in the case in question, two men had with an accident, and without any legal eedings or any recorded agreement, they paid compensation, in the first of the cases full compensation, and in the second irst full compensation, and then full com- ation for partial disablement. Subse- ntly, the employers, thinking the men to ecovered, had sent a medical man to examine n (this, apparently, being an examination er paragraph (14) of the principal Act), the medical men had in each case reported very. A copy of the medical certificate had n sent to the men, together with notice of the loyers' intention to stop compensation in days, but the men had not sent a certificate he contrary, under the above section, but r an interval had applied for arbitration. the arbitrations, the employers contended , as the workmen had not sent any counter ificate, they were now precluded from dis- ng the certificate of the employers' medical , and in Pudney's case this contention had affirmed by the County Court judge; st in Smith's case it was negatived; but oth cases, the judges had found that in fact men had not recovered.

he Court of Appeal allowed the appeal in first case, and affirmed the judgment in the nd case, that is to say, the Court in effect that the section was not compulsory, the men could still go to arbitration. The nds for this decision were that, under ion 11 of the new Act, there is now power for registrar to refer a matter to a medical referee r paragraph (15) Schedule I of the principal on the application of either party, and not oth as heretofore, but under that section there is power for the registrar to refuse the rence, and to send the matter to arbitration an appeal to the judge, and, therefore, Court considered that, under section 14 the proviso set out above, which gave rrelative right to the employer to dispute ertificate obtained by the workman without ne limit, it was impossible to interpret the iso as imposing an absolute time limit upon action of the workman which was to be a lition precedent to the workman's right to g the matter to arbitration.

he case is only reported at present in the of a headnote, and we confess we find it ult to follow the decision, as it seems to er the new section nugatory. Section 14 oduces a new provision. The employer shall be entitled to end or diminish a weekly nent unless he follows the procedure pre- ed. If the employer follows the procedure cribed, and he does not accept the report he workman's medical man, then, under graph (15), was concluded by section 11 he Act of 1923, the matter must be red to a medical referee. Pending this ence and report, section 14 of the new states specifically what shall be done the payments in dispute, and if the effect of the report of the medical referee is disputed, an appeal lies to the registrar of the county court, or the judge. The present decision as at present reported appears to enable the workman to ignore the new section, whilst leaving the employer compelled to adopt that procedure whenever he desires to end or diminish a weekly payment.

EJECTMENT ACTIONS, RENT RESTRICTION AND COSTS

A very important decision has been given in the case Gunter *v.* Davis (*Weekly Notes*, November 15) in an action to recover possession of a dwelling-house. (1) The plaintiff was the owner of a dwelling-house in Fulham, the rental value of which brought the premises within the Rent Restriction Act, 1920. The premises were let on a lease which had come to an end June 24, 1923, but the defendant was in possession at that date and claimed to be a tenant. The grounds upon which this claim was made are not given in the report, but Mr. Justice McArdie had decided that the defendant never had been a tenant and was a trespasser, and the defendant having previously yielded up possession, judgment was given for the plaintiff for mesne profits. It was then contended on behalf of the defendant that under section 17 subsection (2) of the Rent Restriction Act, 1920, the plaintiff was entitled to no costs as the action had been brought in the High Court. That subsection provides "A county court shall have jurisdiction to deal with any claim or other proceedings arising out of this Act or any of the provisions thereof, notwithstanding that by reason of the amount of the claim or otherwise the case would not but for this provision be within the jurisdiction of a county court, and if a person takes proceedings under this Act in the High Court which he could have taken in the county court, he shall not be entitled to recover any costs."

The case is only reported at present briefly in the form of a headnote, but the Court intimated that the point raised was a serious one, as if it was successful it would cut down the ejectment jurisdiction of the High Court in a very drastic fashion. This section was considered in Wolff *v.* Smith (1923, 2 Ch. 393; see *The Builder*, July 20, 1923), and the plaintiff in that case was a statutory tenant who was suing the landlord of the premises for an alleged trespass for which nominal damages had been awarded, and it was held that the section applied because to support the action for trespass the plaintiff must show his right to possession, and to do that he had to rely upon the Rent Restriction Act, and therefore the action was one "arising out of the Act" in the words of the subsection. There the tenant could only show title through the Rent Act, but in this case the plaintiff, claiming possession of his own property, had not to rely upon the Act. In the case under consideration the Court accepted the effect of this decision, although it expressed the opinion that a different view might be taken, but then the Court had also to consider whether by reason of a dictum in Gill *v.* Luck (1923, *Weekly Notes*, p. 284; see *The Builder*, November 30, 1923, sub-nomine Hill *v.* Luck) the matter had not been carried further, and that the subsection applied where the premises by reason of their rental value came within the Rent Restriction Acts at all. The dictum in question was that of Lord Justice Atkin, "When it is shown that the house is within the Act, proceedings to recover it must arise out of the Act," but this dictum, not having been necessary to the decision in that case, which was also distinguishable on the facts, the Court did not follow it and held that the present action was not "a claim or other proceeding arising out of the Act," although the defendant relied upon the provisions of the Act and the house was within the limits of the Act.

We may note that the words in the subsection, "any claim or other proceedings arising out of this Act," relate only to the jurisdiction given to the county court and that the operative words as to costs commence "and if a person takes proceedings *under* this Act in the High Court," and that these words appear clearly to refer to the claim and not to the defence. The jurisdiction of the county court is extended beyond the ordinary limits where the proceedings arise out of the Rent Acts, and the earlier words appear to relate to this extension of jurisdiction, whilst the latter words apply to persons taking proceedings under those Acts.

STRENGTH AND DEFENCE IN ARCHITECTURE

Sir Banister Fletcher, in his last lecture of the year, dealt with the secular architecture of the Middle Ages in France, turning from cathedrals to castles, country houses, hotels-de-ville, palaces and hospitals, which introduced a study of a different aspect of social and political life, the castles being the well-nigh impregnable fortresses of a proud and exclusive nobility. The public buildings reflected the delight shown by the citizens in erecting beautiful buildings in which their disputes should be adjudged, their municipal affairs settled, and their aged and infirm housed.

The lectures will be continued next term on January 14, and Sir Banister Fletcher will deal with English mediæval architecture, including cathedrals, churches, and domestic buildings during the term.

Devonshire House.

At a recent meeting of the Westminster City Council the Improvements Committee, reporting on the proposed Berkeley-street (Piccadilly to Lansdowne-passage) improvement, stated that they had had before them a notification from the Superintending Architect, London County Council, of an application from Messrs. Holland and Hannen and Cubitts, Ltd., for consent to the erection of a new building upon the site of Devonshire House.

The plan submitted showed a give-and-take line with piers projecting about 9 in. beyond the existing building line at the east and west ends of the proposed building on the Piccadilly front. The central portion, between the piers, was set back behind the present building line to the extent of 9 in. also. The Commitee was of opinion that the proposed bringing forward of the piers on the Piccadilly front was objectionable, and recommended that the Superintending Architect of the London County Council should be informed that the City Council disapprove of the proposed encroachments on the footway of Piccadilly as shown on the plan submitted. The recommendation was agreed to.

Books Received.

Some Manchester Streets and Their Buildings. By C. H. Reilly. (London: Hodder & Stoughton, Ltd.) Price 5s.

Some Architectural Problems of To-day. By C. H. Reilly. (London: Hodder & Stoughton, Ltd.) Price 6s.

Home Building. By Robert H. Goodsall. (Canterbury: Cross & Jackson). Price 5s. 6d.

The Panelled Rooms. (London: The Board of Education.) Price 1s. 6d.

We have received from the publishers a copy of the *Electrical Contractors' Year Book* for 1924–5. It gives a great deal of extremely useful information, including a list of members of the various provincial branches; a short history of the Association, together with the President's Report, and a Register of Electrical Installation Contractors. At 2s. 6d. it is an exceedingly profitable investment.

MANCHESTER SOCIETY OF ARCHITECTS

THE Manchester Society of Architects recently held their annual dinner in the Midland Hotel. Through the indisposition of the President (Mr. Arthur J. Hope), the chair was occupied by Mr. F. B. Dunkerley (Vice-President).

Proposing "The City of Manchester," Mr. J. Bradshaw Gass said that the projected Reference Library and Art Gallery were still in the clouds, though he believed the Art Gallery was somewhere on the horizon. In the public interest he thought the architectural profession had not been used sufficiently. When registration was an accomplished fact, he looked forward to the time when no building plan would be accepted without being signed by a registered architect.

The Lord Mayor, responding, said the City ought to benefit by the erection of some new municipal buildings—such as the new Art Gallery, the Reference Library, the extension of the College of Technology, and of the Town Hall. The most important development of which engineers and architects in combination would take advantage was, he thought, that of ferro-concrete. Architects would have, in the future, material of great durability that was almost as susceptible to artistic treatment as stone and timber had been.

The Chairman, proposing "The Royal Institute of British Architects and the Allied Societies," referred to the foundation of the Institute in 1834, and its growth. Associated with the Institute were forty allied societies, the majority in the British Isles; but, for the rest, spread over the world. The registration of architects was just as much, he said, in the interests of the public as of the architects. The Chairman spoke strongly against the disfigurement of the countryside now going on through the erection of bungalows, wretchedly designed, fussy villas, and atrocious garages set in unsuitable places. While, as architects, they could do little to remedy this state of things, a remedy might be found in the increased interest the public were taking in their art.

Mr. J. A. Gotch, in the course of his response, said that the outlook for their Institute and the allied societies was, in his opinion, better than it had ever been, and this was largely due to the unstinted support which the allied societies had given to the parent society.

Mr. H. L. Paterson, who also responded, said he had never seen so many "subterranean" cafés as he had seen in Manchester

Dr. Percy Worthington, who proposed the toast of the guests, offered a hearty welcome to the new Dean of Manchester.

The Dean, replying, spoke of his studies in almost all the cities of North Italy, South Germany, France, Belgium, and Holland, and especially of the time spent in at least eighty great cathedrals. He had a good word to say of Manchester's old buildings, and especially of Chetham's Hospital. He looked forward with great pleasure to association with a society like that, which looked after and protected ancient monuments, and he recalled the satisfaction with which, in the diocese of Chester, he had been engaged with others in seeing that no vandal hands were laid on the old churches.

Professor Weiss (pro-Vice Chancellor of the University) mentioned the remarkable success of the department of architecture in the University under the direction of Professor Dickie. He asked architects to give their support to the effort to deal with the smoke evil. If it could not be effectively dealt with, the only alternative would seem to be to start building in black granite, which was more fit for tombstones than for city buildings, or to imitate American methods and build so high as to get above the fog and smoke screen.

A Plymouth Housing Scheme.

Messrs. Hennell & James, 19, Russell-square, London, W.C., the architects for the Welwyn Garden City Housing Scheme, tenders for which are published in this week's issue, have been appointed architects for the Lady Astor Housing Scheme at Plymouth.

THE ARCHITECTURE CLUB

ON Thursday, last week, Mr. J. C. Squire (Chairman) presided at the seventh dinner of the Architecture Club, when the company included Mr. Oswald Barron, Mr. R. M. Barrington Ward, Sir Chartres Biron, Mr. Muirhead Bone, Mr. R. S. Bowers, Mr. Darcy Braddell, Lt.-Col. H. P. Cart de Lafontaine, Mr. Ewart G. Culpin, Mr. A. J. Davis, Mr. Matthew J. Dawson, Mr. C. W. F. Dening, Mr. J. H. Elder Duncan, Mr. G. Topham Forrest, Mr. H. Austen Hall, Mr. Cecil Harmsworth, Mr. E. Vincent Harris, Mr. C. Lewis Hind, Mr. P. Morley Horder, Mr. Charles Marriott, Mr. Oswald P. Milne, Lord Newton, Sir Frank Newnes, the Hon. H. Pakington, Mr. Paul Phipps, Sir Frederick Radcliffe, Mr. H. Davis Richter, Sir Giles Gilbert Scott, Mr. Harold Stabler, Mr. Walter Tapper, Mr. Arthur Vigor, and Mr. Clough Williams-Ellis.

After the loyal toasts, the CHAIRMAN, in the course of a few words on the activities of the Club, said they felt they could see all around them the good work the Club was doing. While, of course, things would go on very much as usual if the Club had not been formed, he felt that things would not be quite the same if the Club were to come to an end. The Club had been doing as much as could be expected to promote the erection of good buildings and to prevent the disappearance of good old ones. The Committee has been considering the question of an exhibition next year, and it had been decided not to hold an exhibition in the spring, although there might be one in the autumn.

In proposing the toast of "Architecture," LORD NEWTON said architecture was not only the first of the arts, but it was also the most stable of the arts; a picture or a statue was only a fleeting possession, for it might pass to the possession of an American at any moment, but it was not an easy matter for an American to transport a complete building. He had done something to help architecture, through the Scapa Society and the Smoke Abatement Society. If it were not for the Scapa Society, they might find the dome of St. Paul's covered with advertisements. The public were extraordinarily indifferent to the question of smoke abatement. If we had a pure atmosphere, the cost of the upkeep of national monuments would be reduced by one-half. Buildings like Somerset House, Chelsea Hospital, and Buckingham Palace had deposits of soot half-an-inch thick under the cornices which could not be broken with a hammer. Westminster Abbey was decaying, not from age, but from corrosion caused by smoke. A whole army of men was employed in preventing the ornaments of that building from falling down; one could go over the building and pull off with the hand any of the more delicate ornaments which adorned it. The same thing would be found in all industrial towns. St. George's Hall, at Liverpool, one of the finest buildings in this country, was coal black.

In responding, SIR GILES GILBERT SCOTT said he owed a great deal to the Club, which had done much to promote public interest in architecture. One of the great difficulties of the architect compared with those who practised the other arts was that the architect had to deal with so many interests and so many people; most of the other arts were confined solely to the artist himself and the medium through which he worked, whereas the architect was up against the public, the client, the building committees, and various other interests. It was extraordinarily difficult to reconcile every interest, practical and æsthetic, and to satisfy the wishes and requirements of all the people concerned in a new building. He had been exceptionally fortunate in this matter at Liverpool, where the Chairman of the Cathedral Building Committee, Sir Frederick Radcliffe, had been so very sympathetic and helpful that it had undoubtedly made a great difference to the building itself.

"The Club" was proposed by Mr. NORMAN WILKINSON, who said he could not help being afraid that in the future the present Regent-street, with its uniformity of building, would be pointed to as the architecture of this age. Refe street posters, he said the modern street as apart from the railway posters, was work of the artist, but of the manuf The average manufacturer too often t attitude that he knew what he want intended to have it, without realising th he wanted was not always what the publi A great many fine buildings were entirel by posters, whereas it would, in fact, o possible to improve a building by good tastefully displayed.

MR. CHARLES MARRIOTT briefly respon

ROYAL INSTITUTE BRITISH ARCHITECT

WE take the following notes from the n of the Council meeting held on December

Architecture and Craftsmanship.—O recommendation of the Art Standing Com it was decided to arrange an evening during the session of 1925–1926, on the s of "The Co-operation of the Architec Craftsman," and to arrange a series of p afternoon lectures in the spring of 19 various crafts.

Buildings threatened with demolition.— recommendation of the Art Standing Com it was decided to take steps to ensu collection and preservation of photogra buildings of architectural merit in L which are likely to be demolished, and to the Allied Societies to take similar st their respective provinces.

The Tribunal of Appeal under the Building Acts.—Sir Banister Fletcher appointed as the architect-member o Tribunal of Appeal in the place of the la John Slater.

The University of London Architectural cation Committee.—The late Mr. Paul Wate and Mr. Maurice E. Webb were nomina representatives of the R.I.B.A. on this mittee for the year 1925–1926.

The Royal Sanitary Institute Congress, 1 Mr. J. Inch Morrison was appointed delegate of the R.I.B.A. at the Congress held in Edinburgh in July, 1925.

Examinations Fees.—On the recommen of the Board of Architectural Educati was decided that students of recognised s exempted from the Final Examination attain to candidature for the Associateshi who pay examination fees in their sc shall in future pay fees to the R.I.B.A. to £10 10s. instead of £15 15s.

Nominations for Membership.—Three didates for the Fellowship and nine cand for the Associateship were nominate election on January 5, 1925.

"The Timber Trades Directory."

The proprietors of the *Timber Trades Jo* Messrs. William Rider & Son, Ltd., 8, B noster-row, London, E.C. 4, have just pub the ninth edition of their "Timber T Directory," containing classified lists of in the United Kingdom engaged in the fo Colonial, and home timber trades—softw mahogany and hardwoods, plywood, vene and in the saw mill, packing case and trades, together with lists of the leading in the principal wood-consuming indus of exporters of wood in the various producing countries, also of Colonial imp and merchants, &c. Information has bee tained from every quarter of the globe, a view to bringing the Directory as far as sible up to date. The book, of over 900 p also contains some sixteen plans of the cipal docks in the United Kingdom. published at 15s. net; by post, 15s. 9d.

TOWN PLANNING IN FRANCE

EUT.-COL. H. P. CART DE LAFONTAINE ntly read a paper on "Town Planning Development in the Reconstruction of the stated Areas" before the Northern Poly- nic Institute. In the course of his re- ks, the lecturer said the first work to be rtaken was, of course, the gigantic task earing the chaotic debris of war from the lefields, the restoration of the cultivated s to their owners, and the provision of porary shelters for those of the inhabit- who wished to return to their wrecked shattered homes. This was a task of edible difficulty because over the greater of the area no roads existed, the rail- s had been torn up, and the ground was red with miles of barbed wire, live shells, es and trenches. Just to illustrate this, them take the state of affairs in the De- ment of the Somme; here (at the date of Armistice) there were 500,000 acres of nd which had been churned up by shell 205 villages (or 39,497 houses) in ruins, a further 176 villages (or 24,976 houses) ly damaged and more or less uninhabit- e.

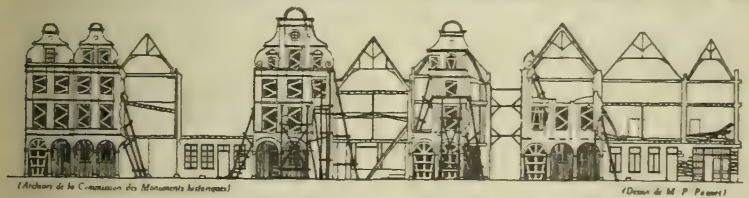
n the spring of 1919 two Acts were passed ch had an important bearing on all subsequent work of reconstruction. first, passed on March 14, 1919, in effect a Housing and Town- ning Act, and the second, of April 17 the same year, dealt with the settle- t of claims for war damage com- ation. Various amending Acts had since passed, of which the most important was of July 19, 1924.



LAY-OUT PLAN OF TERGNIER, 1923.



HE SALLE DES FETES, TERGNIER, BUILT BY THE NORTHERN RAILWAY CO. IN 1923.



(Archives de la Commission des Monuments historiques) (Dessin de M. P. Paquet)

ARRAS—METHOD OF SHORING UP BUILDINGS IN THE PETITE PLACE IN 1918.

ther step in the work of reconstruction one that naturally followed from the ts which resulted from association was the formation of co-operative (building) societies composed of all the "Sinistrés" in a particular region, village, or town. A special Act was passed in 1920 regulating the status of these societies, and it was provided that those who became members of such a Society could not withdraw until the work which was the common aim had been completed. This was an important step forward, and gave the necessary permanence to these groups, which enabled the State to grant subsidies for working expenses, etc. It also enabled the larger towns to raise the money required for reconstruction by local loans on the security of the total compensation due to citizens for war damages, etc. A panel of architects was formed for each department, and one or more were definitely associated with each "co-operative"; the actual work of re-building was generally entrusted to one contractor, or (in the case of large towns), to a group of contractors.

In this way the work of reconstruction was at last put on a solid basis, and proceeded rapidly up to the beginning of last year.

Special co-operatives were formed for such purpose as the rebuilding of churches, etc., and special loans were successfully floated at 6 per cent. interest to provide the necessary funds. Then a serious check occurred, as the funds for the payment of the war damages were practically exhausted, and, for a time, all payments by the State had to be cut down or, in some cases, ceased altogether. Work came to a standstill, and many cases of particular hardship to contractors occurred. In fact, one of the greatest difficulties which had to be overcome had always been the problem of how to meet the situation, due to the partial default of Germany in the matter of re-



1915.



1923.

THE PETITE PLACE, ARRAS.

paration payments, and it is really remarkable that, notwithstanding this, the work of reconstruction was to-day practically completed.

The work of reconstructing buildings of artistic and historical interest was undertaken directly by the State. How this was done could not now be described, but the views of the reconstruction at Arras will indicate the nature of the problem and show the results attained. This work at Arras cost just over four million francs.

In the first period, after the preliminary work of clearing away debris had been pretty well completed, there was a tremendous demand for masons, bricklayers, carpenters, and, in fact, any men with some knowledge of the various branches of the building trades. Various expedients were adopted, and dilution was practised on a scale which would have shocked our trades union friends over here. Thousands of Poles, Belgians, Italians, Spaniards, and even Arabs and Chinese were employed by the contractors working for various "co-operatives." These men were





CAMBRAI: VIEWS OF THE CENTRE OF THE TOWN IN 1919.

attracted by the big wages—when reckoned in the depreciated currencies of their native countries—paid as they were, of course, in francs, at French trade union rates. At this time several schemes were worked out for the employment of British labour in France, as there was no doubt this solution would have been welcomed by the population. But the difficulty of the difference between British trade union rates and the French rates, aggravated by the depreciated value of the franc, as compared with sterling, proved an insurmountable obstacle.

A factor which impeded the work of reconstruction was the introduction of the eight hours' day in 1919. Although legally established, the lecturer did not think this was ever observed in the devastated areas, but the question naturally led to difficulties, and in the early part of this year an amending Act was passed dealing more particularly with the building trades. The general effect of this Act was, that although the eight hours' day as established by the previous Act, must be observed, yet in cases where both employers and operatives were agreed, time lost either in stoppages from any cause or because of wet or inclement weather could be made up.

"La Renaissance des Cités," a French society, founded in 1916 by M. Mitrécy and Mlle. Tarrade-Page, had amply justified the intentions of the founders in helping local authorities with free advice on all matters connected with reconstruction. It included among its members many distinguished architects, doctors, legal authorities and engineers, all of whom for many years had devoted their time and abilities to this work in an entirely honorary capacity. It at first had to rely entirely on voluntary subscriptions, but at a later date the Society was recognised by the French Government and received a small annual grant towards working expenses. It had done much to promote the idea of town planning on Garden City lines, not only among the population but also among the captains of industry and the railway companies, etc. Much assistance and encouragement was also given to the inhabitants of the devastated area under the various schemes of "adoption" of towns and villages, and particularly with regard to the work of the "British League of Help," which had promoted direct and cordial relations between many towns in Great Britain and in the devastated areas of France. The reconstruction of the devastated areas presented an opportunity such as rarely occurred for improving the conditions under which the inhabitants lived in pre-war days. If this opportunity had not been fully made use of—and such was indeed the case—it must be admitted that this was due to the dislike of innovations and the extraordinary attachment to his own particular piece of land, which was so strong a characteristic of the peasant.



THE "STADE" AT LENS, SHOWING COTTAGES BUILT BY THE NORTHERN RAILWAY (

However, much (as they would see the lantern slides) had been done; a lead had been given by the Northern R Company of France. This building gramme was commenced in 1920, and lay-out of the new housing schemes proc on Garden City lines mainly because th



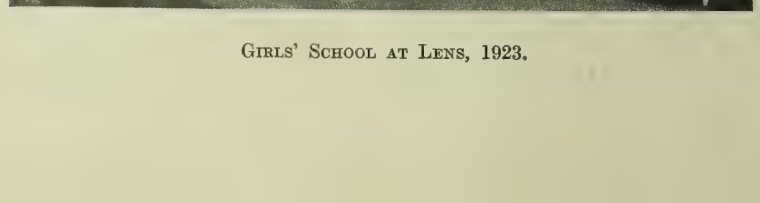
ACCEPTED SCHEME FOR REBUILDING Mail, Cambrai."



ACCEPTED SCHEME FOR REBUILDING THE D'ARMES, CAMBRAI.
MM. Leprince, Ringuet & Fortior, Arch

ployees had the right to a garden of be 400 and 500 sq. metres (500 to 600 sq. or an average of approximately eight to the acre. The accommodation pr naturally varied, but the typical plan pr a living room, kitchen, a cellar or store a small hall and three bedrooms of fai A certain proportion of the houses in scheme had five or six rooms, to me needs of employees with large families. of the most successful, as it was the l of these schemes, was that designed Bertrand for the important junctio Tergnier in the Department of the Aisn others included Lens (Louis Sue, arch Longeau, St. Quentin. Montdidier, ciennes, etc. Local materials were ma of wherever possible, and most of the shown in these views had hollow wa pre-cast concrete blocks, and were roofe tiles of what was known as the "Marse type.

In his concluding remarks the lectu ferred to the assistance which he had given by Monsieur Morain (late Pre the Department of the Somme), the late sieur Naudin (Prefect of the Departm the Nord), and many local authorities and by the Société Centrale des Archi who had kindly allowed him to reproduce trations which had appeared in their jo *L'Architecture*.



GIRLS' SCHOOL AT LENS, 1923.

A DIALOGUE ON HOUSE-BUILDING

By G. H. BLAGROVE.

E young architect known as "Y" salutes the old architect.

: I'm sorry to bother you, but I'm in le.

: I'll pull you out if I can.

: I've got a troublesome client.

: That's no unusual experience. Better no client at all. You must humour him.

: But my client is a woman.

: The study of woman's ways is an essential of our profession.

: She's on the labour-saving stunt.

: You may pick up some hints from her.

: She gives more commands than hints. wants a house designed on what she calls mmon-sense principles."

: In what style of architecture?

: None. Plain walls and openings, without ost of ornament—not even so much as a lding. I shall make the walls concrete and h-cast the surface; I shall put in two ses of slanting red tiles to break joint in ent as window sills.

: Try to keep a fixed ratio in the width and ght of your openings, say five to nine through- and you are sure of a certain quiet dignity.

: I think if I cut the windows up into ll squares it will make them look larger.

: It would, but think of the labour cleaning all those panes—wiping out dy smears from the corners. Twenty years I saw some West End mansions with small dows—casements with leaded glass in int shapes. The owner invited tenders n several firms for window-cleaning by the r, and the lowest was £62!

: I'll have sheet glass in large panes. The says the windows must be cleanable from ors.

: Casements opening inwards or some tal arrangement.

: She says there must be no mouldings where, because they harbour dust and make k.

: Here is a sketch for a low bar. I presume there t be no sunk panels in the rs?



: None. Panels to the full kness and bead-flush.

: Bead-flush would look er than a plain face. You must eschew ldings altogether and rely for effect upon beauty of the surface. In the best rooms the figured grain of polished hardwood, and ferior rooms have deal painted in two tints; and patterns on a ground; light on dark ark on light, whichever suits the character he room.

: I am told that I must have no plaster ices or centre flowers, because they harbour

: A new era is dawning. We must rely e and more upon flat colour decoration. ed, it is often difficult to combine the actions of colour and form; one mars the t of the other at times. Plaster surfaces absorbent and not washable. For ceilings well as walls I am in favour of varnished ers; and when we can afford something er than ready-made patterns, why not d-painted decoration?

: I am undecided about the position of the s in this house, which is one in a terrace. client complains that space is often wasted bbies and passages by architects who, she do not understand their business.

: If you are satisfied to have a small room ont you can have a large entrance hall with ont staircase. Then the back room can nd to the full width of the house, if you do nind crossing the room to get to the premises e rear. Another way is to run the staircase s the middle of the house, parallel with the ; but in that case it is difficult to light and ilate the stairs.

: Then she says the stairs must be so rived as to minimise sweeping and dusting.

O: An open string staircase is best for that. Oh, I have noticed how dirt nestles in the angles between tread, riser, and close string! No brush or broom will reach it; it has to be raked out with a knife or skewer. I dipped into Byron lately and I am moved to misquote:

"Know ye the land where the impress of dirt'll
Cling close in the nooks of the stairs that you climb?
Where, on touching the handrail, the cuff of your shirt'll
First act as a duster, then glisten with grime?"

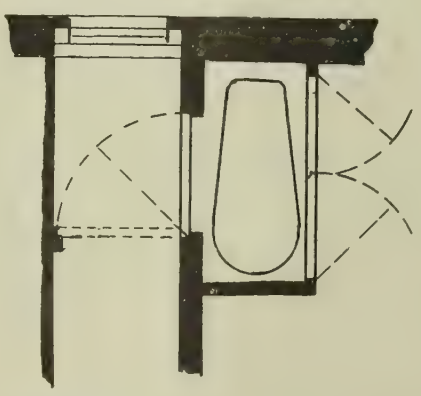
Y: But I must have a close-string staircase because my client objects to the labour of wiping down balusters. She wants the space between the handrail and the outer string filled in with solid panels. I am not going in for expensive circular work, so I must have newels.



O: Another opportunity for beautiful or beautified woodwork. There can be no turned work in the newels, except to the tops and pendants. Even there you must avoid mouldings as far as possible. The simplest forms are the best, and it does not matter how large is the sweep of a curved profile, provided that it is accompanied with narrow fillets or beads to give it scale. Here is a sketch of a turned top and pendant to a square newel. You know my partiality for urn-shaped ornaments. The handrail must have no hollows in it. A plain circular section is best.

Y: There are other questions. My client complains that in her present house the bath is fixed against the wall so that it cannot be cleaned properly. She wants a space between the bath and the wall. Of course I sympathise, but I don't see how to fit it in.

O: Here is a plan showing what you can do when you are pinched for room. The bath recess obtrudes into a bedroom with doors to



the enclosure, so that it can be used from that side. When these doors are closed, the door from the other side can be opened back across the corridor into a frame, forming a temporary bathroom. You see there is access to both sides for cleaning purposes.

Y: Another thing that my client is dead nuts on are fixed wall cupboards, instead of movable furniture, which, she says, accumulate dust.

O: Cupboard fronts to recesses ought to cost less than complete wardrobes. I would run the cupboard front to the ceiling, to avoid a dust-harbouring top. A small upper compartment is useful for articles only occasionally in request. By the by, has it occurred to you that a lady's wardrobe ought to contain compartments for hats?

Y: By jove! I don't visualise the dimensions of women's hats, although I know something of the cost.

O: Without forecasting the decrees of Dame Fashion, I should say a cube of eighteen inches. There ought to be a series of them, one above another, which might be all closed with one glazed door. Dust would not settle upon boots and shoes if they were confined in a long, low cupboard, about a foot high and wide. This might be at the bottom of a wardrobe.

Y: This lady complains of the labour involved in carrying water to bedrooms.

O: Every bedroom should have a fixed lavatory basin with hot and cold water supply and waste. How do you arrange bedsteads?

Y: Oh, in the usual way—head against the wall, if possible; if not, one side goes against the wall.

O: Too often we architects have been tempted to the latter plan. But we ought to consider that every time the bed is made the bedstead has to be dragged out and pushed back again. There should be an eighteen-inch space between the bed and the wall.

Y: We cannot always afford that.

O: Sometimes ingenuity is misdirected in trying to squeeze too much into a plan. When the side of a bed is against a partition it is sometimes possible to form a wide opening closed with folding doors in the adjoining room. This would give free access to both sides of the bed.

Y: As regards heating, this lady does not see why one fireplace should not warm two rooms.

O: I have seen a central fireplace warm six rooms by means of pipes and radiators. I can imagine a fireplace sending heat into an adjoining room, if the back were thin enough. Perhaps a firebrick slab would serve the purpose. It could be tiled on the opposite side.

Y: I propose to provide alternatively for coal or gas heating.

O: Where coal is stored let there be at least one step down into the cellar, to prevent coal dust drifting out under the door. Get in a window if possible, to save artificial light.

Y: The sink is to be in the kitchen, to save walking to and from the scullery, and the dresser, closed in front with glazed doors to exclude dust, is to be near it.

O: If the dining-room adjoins the kitchen, put the dresser into an opening in the partition between. It should be double-fronted, with doors opening both to the kitchen and the dining-room. China, when cleaned, is put in from the kitchen side and taken out from the dining-room side. Provide a plate-rack with a movable zinc tray under it to catch water dripping from the plates.

Y: My client wants the larder approached directly from the kitchen to save "journeys"; but it would get the hot air.

O: Form a ventilated lobby between the kitchen and larder and have an extra small larder for milk so that it shall not be exposed to the odours of fish, game, and sour-smelling salads. There need be no waste of space, because any inodorous foods can be kept in the milk larder.

Y: Then there is to be some arrangement for laundry work. I shall provide a copper of improved type.

O: Don't forget to feed it by a tap so that water need not be carried to it.

Y: Talking of a tap, my client thinks there is economy in using rubber washers.

O: A mistake. I know a case where a rubber washer was put in, and one day the rubber split and the water rushed out. Nothing could stop it until it was turned off at the main.

"Blurting and spurting,
And every way squirting;
In whirlpools reverting
From sink unto skirting—
That's how the water went over the floor."

Y: Poor Longfellow!

O: Rubber washers are suitable for bath waste plugs, but you must have composition or leather where there is pressure.

Y: I propose to provide a hot-closet for airing linen.

O: I wonder we have not adopted the plan commonly followed in Scotland. In front of

the kitchen fireplace is a long wooden bar suspended from the ceiling with cords and pulleys at each end. It can be adjusted to any convenient height for airing sheets.

Y : Kitchen fittings are among the most important. I am just considering where saucepans can be stored.

O : I know the usual pot-board under the dresser, which is deep enough to contain two rows of saucepans. The utensils wanted for use are frequently to be found, like extra ladies of the ballet, in the back row. Deep shelves and cupboards are only suitable for stores that are not wanted in a hurry. I would have a recessed cupboard for single rows of pots upon shelves, closed in front with doors, to keep out dust. Dish covers and other articles hung upon walls would collect dust; therefore they should be in enclosed cupboards. It comes to this, that most of the available wall space in the kitchen and offices should be occupied by shallow cupboards closed with doors.

Y : What about the roof? I suppose a hipped one with projecting eaves and cast-iron gutters would be cheapest.

O : Yes, and to my mind preferable in appearance. But if dead leaves or other obstructions block the gutter and cause rain-water to overflow it would need a labourer to clear it out from a ladder, which he might have to shift from place to place. If you have a parapet and a trap-door or dormer in your roof, you can cleanse your own gutter when you please.

Y : What is your opinion of chimneys?

O : That they should find no place in house construction. Let all heating be by gas or electricity or both. But if people will have the "cheerful open firegrate," let us guard against down-draughts of smoke. Now if you take a walk in Suburbia, or indeed, anywhere, you must be impressed by the clusters of tallboys that crowd the upper air. Are not these standing proofs that our chimneys have not been built high enough to cause sufficient velocity in the up-current?

Y : What height would you recommend?

O : Twenty-five feet from the fireplace opening to the chimney cap would give a velocity equal to that of a boisterous equinoctial wind. You do not get that height for a top story.

Y : I have picked up some useful hints from you, and should like to know where to find a few more.

O : I'll tell you. I have jotted down our conversation in shorthand, and I will ask the Editor of *The Builder* to publish a report of it and invite correspondence.

BROOKFIELD HOUSING SCHEME

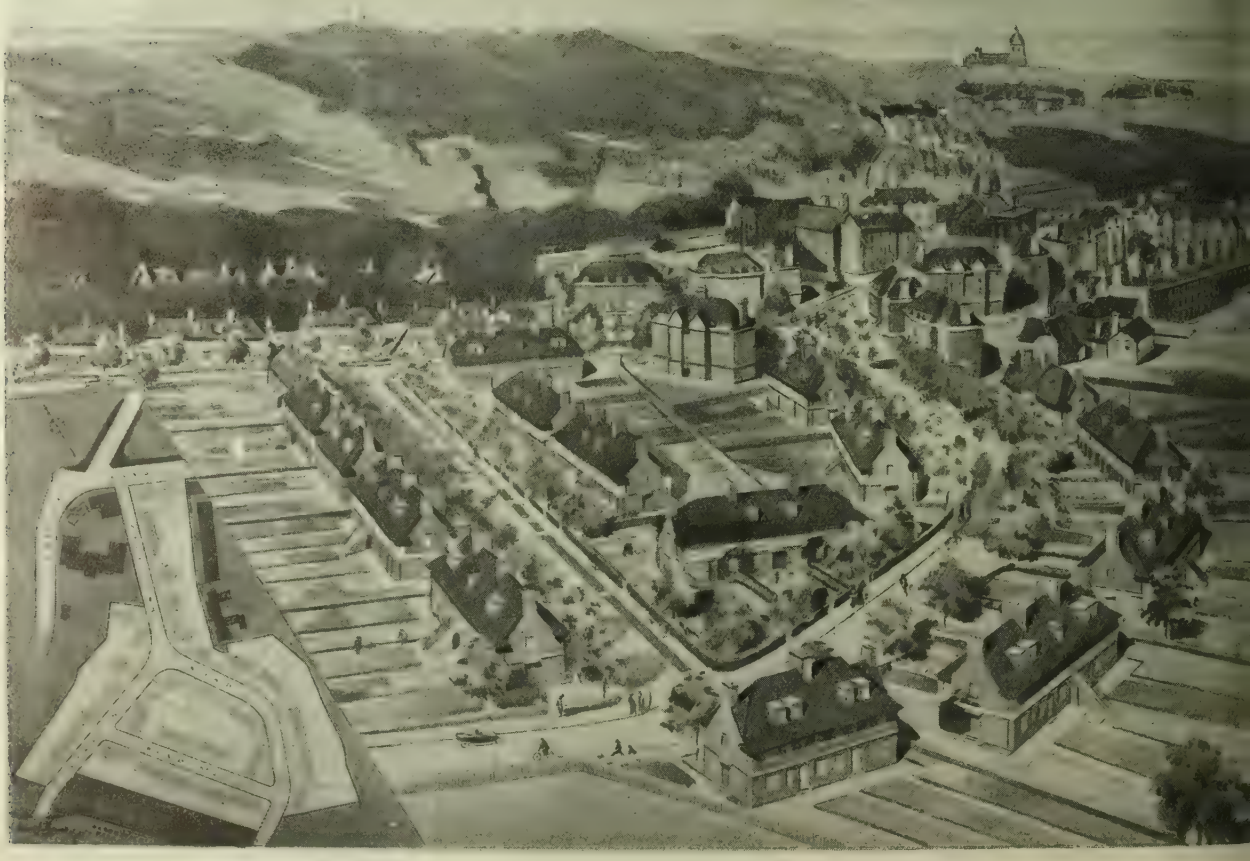
THE housing scheme at Brookfield, Highgate, N.W., for the St. Pancras Borough Council, gives accommodation for 102 families and occupies an area, including roads, of 10¼ acres. It is on sloping ground, having a difference in level of 29 ft., from south to north, is situated within three minutes of Parliament Hill Fields, and has the wooded heights of Highgate and Hampstead as a background. The lay-out was governed by a winding road through allotments. A second through road has been formed from near the upper end of Croftdown-road to St. Albans-road, with a subsidiary cross-road at the south end. The upper part of the estate is laid out for flats, four stories in height, in blocks of eight and sixteen, of three and four rooms, besides cooking sculleries, bathrooms, &c.; and the lower portion with maiso in blocks of four and five and of four rooms each, besides cooking scullery room, &c., finishing with a pair of s cottages. An allotment is planned f flat in the rear of the buildings, and each nette has its own front and back garde direct access. The front boundary an fences are formed of oak posts and wire planted with privet. The blocks of build set out on centre lines with clear vistas each block, or terminated at the end of r a building.

All buildings are wired for electric lig gas installed for domestic hot-water and cooking purposes, the living-room fitted as sitting-rooms, with tiled regist grates.

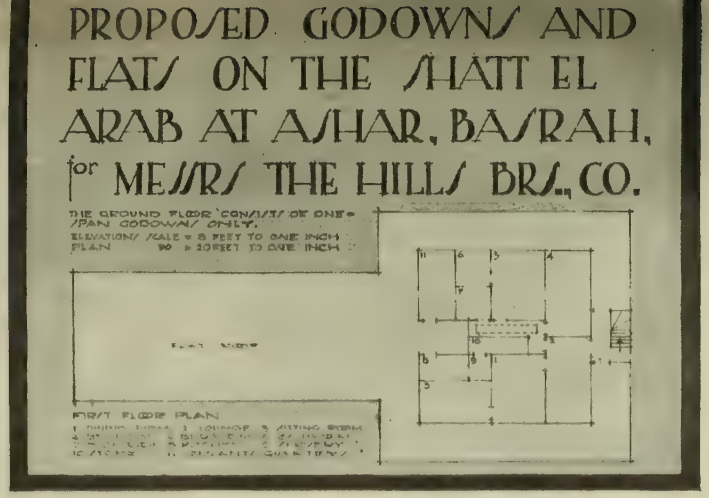
The facings of the flats are red-bricl blue-brick plinths and artificial Portlan dressings and main moulded cornice an covered with hand-made sand-faced roc The maisonnettes are roofed with simila and faced with red bricks and brown the upper part of each intermediate bloc rough-cast, the eaves being formed wi soffits. The windows of the flats are box and frames and wooden casements f maisonnettes, and all floors of steel and c covered with wood or mastic.

The scheme provides accommodatio twenty tenancies to the acre, and at th time gives large gardens and ample ope about and around the buildings, this possible by adopting as a principle th bined use of flats and maisonnettes, thu actual building-site area on land too co the usual lay-out of groups of houses.

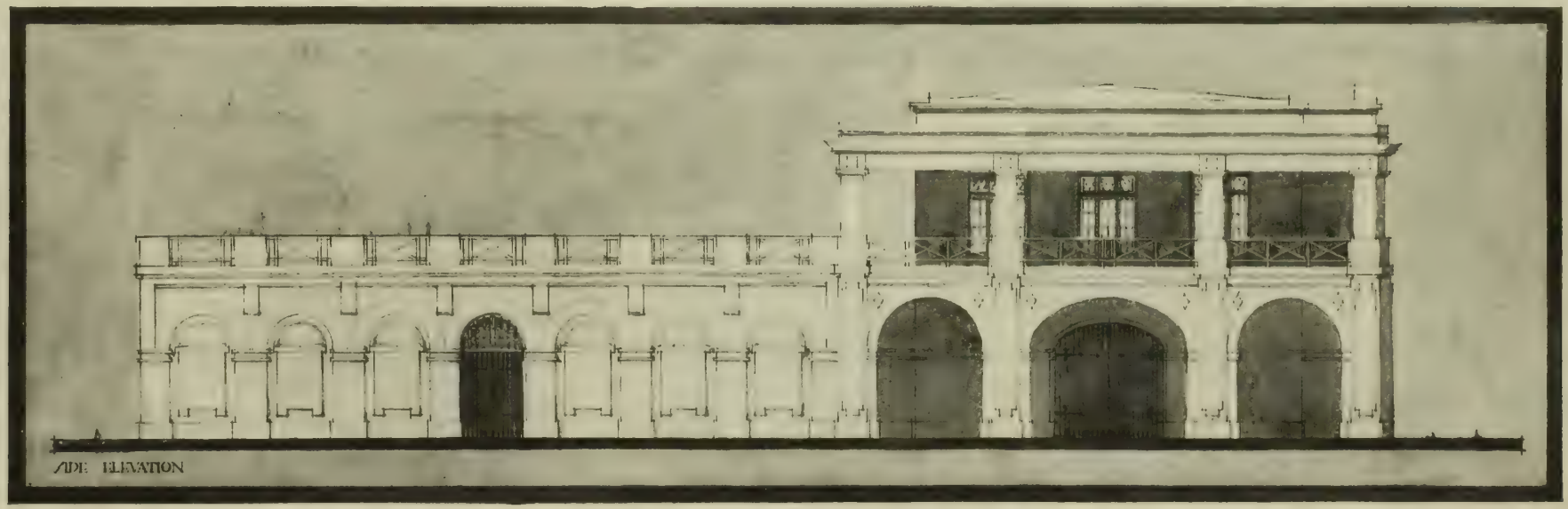
Mr. Albert J. Thomas, Lic.R.I.B.A., architect.



Brookfield (Highgate) Housing Scheme, for the St. Pancras Borough Council.
MR. ALBERT J. THOMAS, Lic.R.I.B.A., Architect.

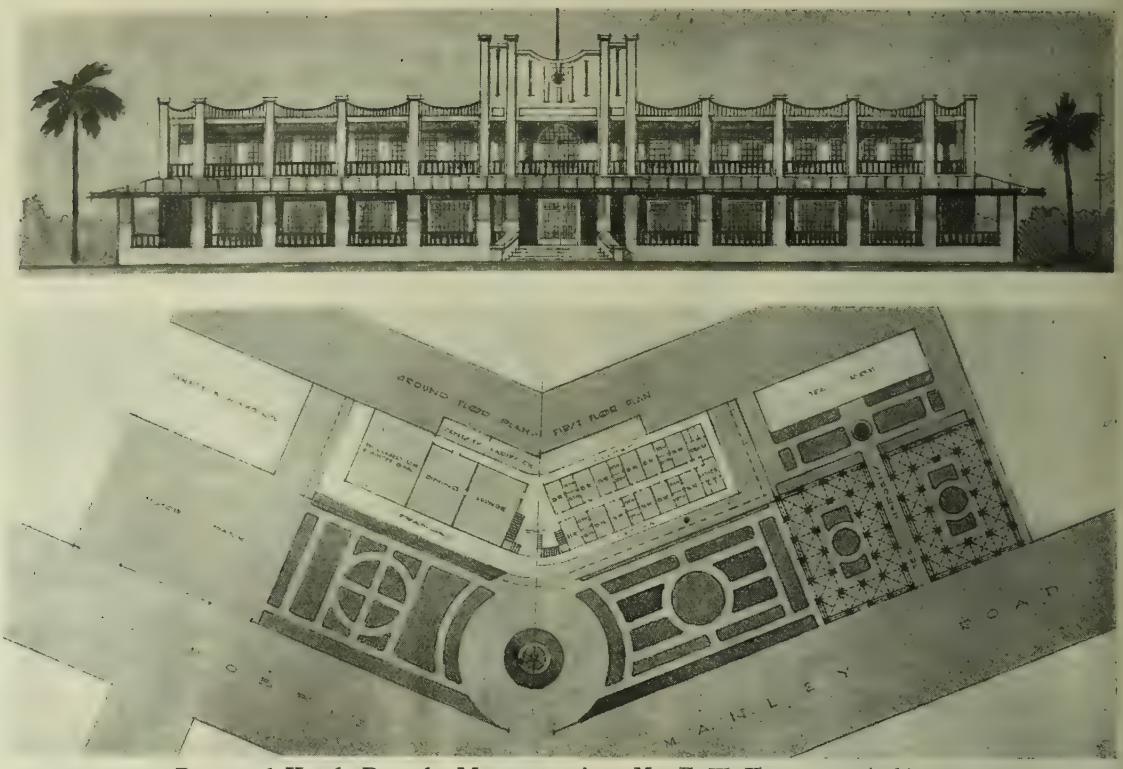




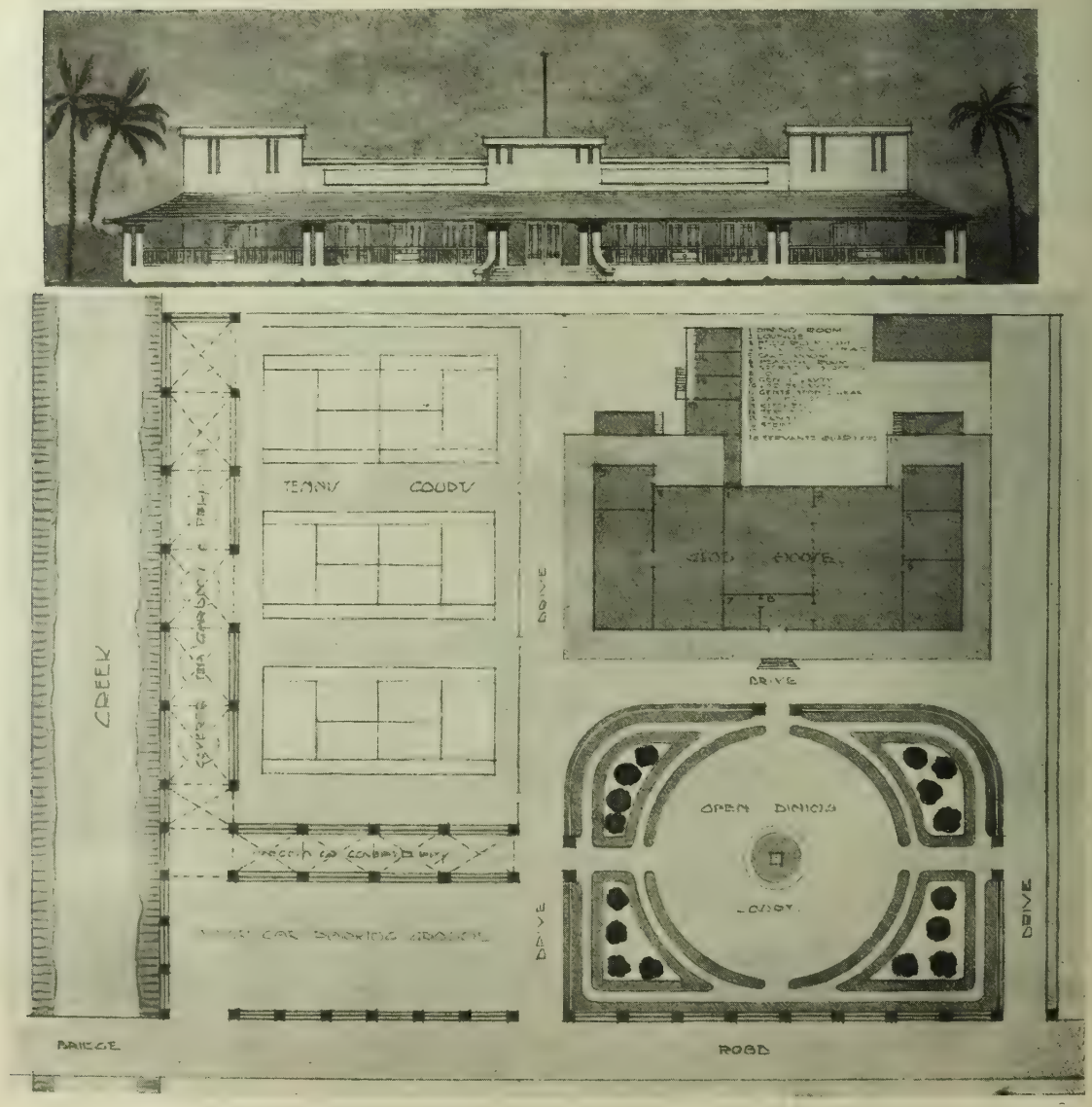


Mr. F. W. Holloway, Architect.

[These "godowns" are built throughout of local materials. Messrs Cotterell & Greig, Ltd., of Baghdad and Basrah, were the contractors.]



Proposed Hotel, Basrah, Mesopotamia. MR. F. W. HOLLOWAY, Architect.



Proposed New British Club at Basrah, Mesopotamia. MR. F. W. HOLLOWAY, Architect.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Alleged House "Profiteering."

Baker asked the Minister of Health
r he was aware of the profiteering which
ied in respect of housing accommodation,
lly in London; and whether he would
r the possibility of appointing fair rent
to which all cases of unfair rents might
mitted?

N. Chamberlain said that no cases had
y been brought to his notice. Certain
ons of the Rent Restriction Acts could
oked in this connection. The establish-
of rent courts would not be an effective
ute for such Acts at present.

Closing Orders.

N. Chamberlain informed Mr. H. Williams
cording to the reports of Medical Officers
22–23, representations were made during
ar with a view to Closing Orders in respect
55 houses. Closing Orders were made in
t of 2,331 houses, and in 640 cases Closing
were determined after works of repair
een carried out. In the same period
were secured in the case of 542,834 houses
sult of the intervention of local authorities.

A Site at Bedlam.

Day asked the Minister whether he was
that the Bedlam Institution of Southwark
be vacated at an early date; and
er he was prepared to use this site of
res, now occupied by the institution, for
ovision of 100 working-class houses on
city lines?

N. Chamberlain said that the acquisition
te for housing was primarily a matter for
al authority concerned. He understood
roposals for the use of the site, if it could
uired, for housing or other public purposes
nder consideration by the London County
il.

Special Training Schools.

Forrest asked the Minister whether his
on had been called to the experiment in
lia where the unskilled unemployed had
aken off the streets this year and, after
months' training in technical schools,
ssed a test of laying over 1,000 bricks
aight work in an eight-hour day;
r he was aware that this year classes
sterers had been started, and could he
h what success; and whether he would
r adopting similar methods in this
y?

. Wood said he was aware of the experi-
Schemes of special training were being
red in connection with the arrangements
by the building industry for increasing
pply of skilled labour in the industry.

Pre-War Rents.

Stephen asked the Minister if he proposed
oduce legislation for the reduction of
pre-war houses, and to prevent property
obtaining rent for houses which had
ondemned by the sanitary authorities
t for human habitation?

. Wood said that the Minister did not
to introduce fresh legislation for the
s mentioned. The efforts of the Govern-
ould be directed towards reconditioning
ble houses and expediting the erection
houses to take the place of those that
eyond repair.

Preference for Britishers.

ain Waterhouse asked the Minister if he
consider the advisability of making it
ition, when making grants to local
ties under the Housing Acts, that pre-
should be given to applications of
citizens, and that in cases of equal
preference should be given to the
tion of ex-service men?

N. Chamberlain said he presumed the
id gallant member referred to houses
by local authorities for letting. He did not think it was desirable, nor did he think local authorities would wish him to restrict further their discretionary powers in regard to the control and management of houses erected under the Housing Acts. He had confidence that local authorities generally gave full consideration to the claims of all applicants for a tenancy of their houses, and he believed it was the general practice to give weight to the two grounds of preference to which the hon. Member alluded.

Self-Contained Flats.

Captain Garro-Jones asked the Minister if he would give an undertaking that the Government would, in the preparation of its housing scheme, offer assistance and encouragement to builders of blocks of hygienic self-contained flats of a low rental value, and thus meet the needs of a district like Hackney, where the only available spaces for building were those to be obtained by the clearance of slums?

Sir K. Wood said assistance was available, both by way of loan and subsidy, under the existing Acts of 1923 and 1924, for the building of self-contained flats, and the Minister would be glad to consider any such proposals submitted to him by local authorities, whether as part of schemes for the clearance of insanitary areas or otherwise. Blocks of flats had already been erected, or were proposed to be erected, with Government assistance, in London and elsewhere.

Smoke Abatement.

Sir K. Wood informed Sir H. Brittain that the Government contemplated the introduction of a Smoke Abatement Bill as soon as convenient opportunity arose, but he could not promise that the Bill would be introduced before 1926.

Lodgers.

Sir K. Wood informed Sir W. de Frece, that the conditions under which the taking of lodgers might be permitted in houses provided under the Housing Acts by local authorities were within the discretion of the local authorities themselves, and it was not proposed to interfere with that discretion.

Houses Inspected.

Sir K. Wood informed Mr. Forrest that in the last year for which statistics were available the Reports of Medical Officers of Health showed that 1,115,394 houses were inspected, and repairs secured in 542,834 cases as a result of the intervention of the local authorities.

Overcrowding in London.

Mr. Thurtle asked the Minister if he would call a conference of the overcrowded boroughs of London with a view to urging upon them the necessity of taking early and full advantage of the Housing Acts in order to relieve the overcrowding existing in their districts?

Sir K. Wood, the Parliamentary Secretary to the Ministry, said it was doubtful whether any useful purpose would be served at the present time by calling such a conference. The Metropolitan Borough Councils were fully aware of the facilities provided by the Housing Acts, and the Minister understood their representatives are attending a Conference to-morrow (December 17) to consider matters connected with them. The London County Council had made considerable provision in various districts for the erection of houses to meet overcrowding needs in London, and had recently framed a programme for the erection of 20,000 further houses.

Steel Houses.

Mr. Arthur Greenwood asked whether the Minister of Health intended to limit the grant to be given to new methods of construction to the Weir type of house only?

Sir K. Wood, Parliamentary Secretary to the Ministry, replied that the Ministry had drawn attention to the Weir type because Lord Weir's experiment was probably more advanced than any other. If the Committee presided over by Sir E. Moir made recommendations as favourable the Minister would not seek to put one scheme before another.

Parliament adjourned on December 19 to February 10.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially to legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript.—ED.

Building Lights.

[REPLY TO "S. T. C.," DECEMBER 19.]

SIR,—Everyone who owns a building has the natural right of light coming to that building, either over his own land or that of another, and, for the purpose of enjoying that light, may place his building where he pleases, provided he complies with by-laws, and any restrictive covenants there may be in force. Further, he may open up windows anywhere he wishes in the building.

Now, it would appear that B, the owner of the window, has acquired an easement of light, he having enjoyed the right for the prescribed period of 20 years. S. T. C. is therefore obliged to refrain from building on his land in such a way as to hinder the light from entering B's window and causing an actionable nuisance. But this does not of itself preclude S. T. C. from building the building at A, or continuing it as shown by dotted lines in his sketch. The answer to all his questions is, therefore, No.

What S. T. C. must consider is the test that has to be applied in all these cases. It is not a certain test; on the contrary, it is very elastic, and no rules can be laid down for his guidance; but he must consider whether the obstruction is such an infringement of the easement of light, that the deprivation of light is substantial in amount and enough to render the occupation of B's premises uncomfortable; and, if they are business premises, whether it prevents the owner carrying on his business as beneficially as before the obstruction was made.

An easement of light does not give to the owner thereof a continuance of the light he has always enjoyed, and the question of what light is left does not need to be considered. It is the difference between the light received before and the light received after building an obstruction that must be taken into account in considering the diminution of light. See Colls *v.* Home and Colonial Stores, Ltd. (1904, A.C. 179); Davis *v.* Marrable (1913, 2 Ch. 421); and Paul *v.* Robson (1914, 83 L.J. (P.C.) 304), when test was held to be whether obstruction complained of was a nuisance. Also see Semon & Co. *v.* Bradford Corporation (1922 2 Ch. 737), which dealt with the application of quantitative tests.

"LEGAL."

Speculative Building.

[REPLY TO "BUILDER," DECEMBER 12.]

SIR,—I do not think good, honest building of the simplest villa character can be executed in the London area under a cost of 1s. to 1s. 1d. per foot cube. In some of the Midland and Northern districts this may, perhaps, be reduced to 11d., but there will be little enough profit for the builder in either case. Prior to the rise in prices that has occurred in the past year, I have heard of such work being carried out for 9d. per ft.

"CUBE."

SIR,—The current selling price of terrace-type houses in the North Midlands to-day is 9·75d. per ft. cube. Subsidy would be deducted to obtain net price.

"TEXAS."

Ranges.

SIR,—Can any of your readers inform me if there is a type of range on the market which will perform the usual duties and at the same time provide a fire for another room immediately behind? I have a vague idea that I have read or heard of such a type, but cannot get any particulars.

"ECONOMY."

THE BUILDING TRADE

ROAD ENGINEERING*

THE science of road construction has entirely changed in the last ten years and many who were quite *au fait* with the construction of flint or granite macadam roads in the old days find that they have to learn afresh the science of road construction, from the first principles onwards. The coming of the motor-car, and especially of the heavily-laden motor lorry, has entirely revolutionised road construction, not only in this country, but in all parts of the world. Road surfaces are entirely different and even road foundations are altering in character.

Mr. Leeming's book is an attempt to give in a concise form the technical side of road construction in the light of the new conditions created by modern traffic. There has been a tendency in the past to treat the subject of the road independently of the vehicles using the road, and it is on this dual aspect of the subject that the author touches.

The advent of the new motor licence duties in 1921 marked the beginning of a new era in road development, more especially as these duties place a much larger sum of money at the disposal of the road authorities for improvement and road maintenance than ever before. The principle is now well established that the traffic using the road should bear at any rate the major part of the cost.

As the author well says, "It is to be hoped that, in the near future, there will be a much more rapid development in the use of pneumatic tyres for commercial vehicles, omnibuses and char-à-bancs, with a much lighter taxation than for the solid rubber tyred vehicle, and there is some ground for thinking that ultimately the taxation authorities will offer encouragement in this direction with a view to reducing the damage to roads."

A large amount of research work is being carried out both in America and in this country on the subject of wear and tear of roads by various vehicles and varying loads, and there can be little doubt that both the scientific and mathematical sides of the subject will require more and more attention with the growing importance of our road system. The æsthetic side of the road, both as something in itself pleasing to the eye and as an ever changing vantage point from which to see the surrounding country, is always in danger of being forgotten.

The first essential of a good road is a dry subsoil, with efficient drainage. The question of the placing of road gullies and a proper amount of camber therefore must come into consideration at an early stage. In these days of hard impervious surfaces, much less camber is required than in the days of the old turnpike road, and the author gives as a desirable average crossfall from 1 in 36 to 1 in 48. With concrete paving this can be reduced still further.

The distance apart of the gullies will depend upon gradients, crossfall and width, as well as on the road surface, but not every engineer will agree with the suggested spacing of gullies at so close an interval as 20 yards.

There is an interesting chapter on bridges, culverts, and retaining walls. The Ministry of Transport have issued details of the maximum standard loading for road bridges. This includes provision on each 10 ft. width of the bridge for a train of heavy vehicles consisting of an engine of 20 tons weight drawing three trailers of 13 tons each. An allowance of 50 per cent. for impact increases these weights to 30 tons for the engine and 20 tons for each of the three trailers. Needless to say, many road bridges all over the country are insufficient to carry such a load and will need ere long to be entirely reconstructed. The unit of 10 ft. of width for each line of moving traffic is now generally adopted, so that road widths, as well as bridges, now very largely follow this rule, the older standard of 8 ft. for each line of traffic being gradually discarded.

On railways it has always been the practice on curves to provide for super-elevation of the outer rail, and with the increasing speeds now common on our roads it is becoming equally necessary to raise the outer edge of all road curves and to increase the road width at bends, especially as the great length of the motor lorry demands greater width in turning and quick bends are becoming increasingly difficult to negotiate.

Mr. Leeming gives elaborate rules for determining the amount of super-elevation on highway curves, but with varying speeds, weights and surfaces the problem is not by any means so simple as fixing the amount of super-elevation for a railway curve.

Even in the concrete roads of the United States the practice varies widely in the different States, but the general recommendation is that in road curves of 150 ft. radius or less a maximum super-elevation should be given of $\frac{3}{4}$ in. per ft. of width, or $\frac{1}{2}$ in. per foot of width in curves up to 500 ft. in radius. In town areas such a recommendation is hardly practicable, but there can be no question as to its necessity in bends on country roads.

The valuable census of traffic on Class A and B roads which has been undertaken by the Ministry of Transport during the past two years has already proved its usefulness in many directions, and it is certain that every real improvement in our road system must be based on accurate knowledge of the statistics and distribution of the present traffic. Not only does the road traffic in most cases vary from month to month, but large fluctuations occur from hour to hour, and it may frequently happen that a road which is crowded to excess at certain hours is almost empty at other hours.

New arterial roads and by-pass roads are being designed in all directions, and an essential preliminary to these proposals is that reliable information shall be available as to the amount of traffic and the direction or directions which that traffic wants to take.

The question of road widths is becoming more and more important. Not only is sufficient space wanted for two, four or six lines of fast-moving traffic, but there must also be ample sighting space on each side clear of trees or other obstructions, hence a total width between fences is required approximately double that of the roadway itself. A road 120 ft. wide between the fences is therefore none too much for modern traffic conditions, and with our knowledge of what the growth of traffic has been even in the last few years it is in every way unwise to hamper and limit the future development of large and growing communities by a cast-iron adherence to by-law widths or by-law standards of construction. Everything points to even wider roads in the near future, especially in the neighbourhood of our large towns.

Paving by grit setts and granite setts, creosoted wood blocks, and other materials is dealt with in detail. Brick paving has been much used in America but is, fortunately perhaps, hardly known in this country, and in any case it is hardly a suitable material for heavy traffic.

A couple of pages are given to tramways. To the motorist there is nothing more maddening and to the would-be-rapid traveller there is nothing more restraining. There is a place for the tramway, but it is not in the street.

Water-bound macadam, as the author says, is not a form of road-making which belongs to the present age of motor transport. Periodical application of tar and chippings may help, but it cannot alter the permanent character of the road. In some countries roads have been re-surfaced with silicate of soda and other materials. Surface tarring is undoubtedly advantageous, but it should never be carried out unless the road is thoroughly dry.

Bituminous road surfaces are of many types—the term bitumen, as distinct from tar, has been defined by the British Engineering Standards Committee as covering only materials essentially resilient in character, soluble in carbon-disulphide (CS_2) and obtained only from distillations of earth oils or ground asphalte. Pit macadam, sheet asphalte and bitum crete, and reinforced concrete roads a with in detail in the book, which is es a practical character.

Road corrugation—the bugbear o engineer—comes in for special treat details are given of the pneumati breakers which are so noisy an acco to modern street repair operations.

* "Road Engineering." By E. L. Leeming, M.Sc., Assoc.M.Inst.C.E. (Constable & Co., Ltd.) 18s. net.

THE RATING OF SP PROPERTIES.

MR. DALGLIESH, in a recent lecture Rating of Special Properties and U dertakings" at the College of Estate ment, pointed out that the same st applied to the valuation for rating of a £35 a year villa as to the giga mercial and public utility concerns such as the tramway system of the County Council or the Great Western system. In each case exactly the sa tion had to be asked and answered, was the rent at which this proper reasonably be expected to let from year?" Certain principles which mon to the valuation of all propert then reviewed. There must be ben cupation, *i.e.*, it must be reaso assume that a tenant would pay a re property greater than the probable annual cost of repairs, but this did that necessarily the property pro pecuniary profit. In this relation t of occupation was significant. A n pied a house because he wanted a his head; many properties were oc public authorities with quite other view than that of profit earning. other hand, the only reason why son ties were occupied was to carry on ful trade," and if this could not b on, the "rent at which the proper reasonably be expected to let" was and prejudicially affected.

The lecturer pointed out th "special properties" were the cr Statute, so that they must be va rating purposes with all the advant disadvantages which Parliament had to give or impose. In the definiti rent at which the property might r be expected to let from year to y expression "year to year" must n terpreted as meaning that the hy letting was for one year only, but it translated as meaning that the te capable of enjoying the property fo definite time, and that the tenancy which it was expected would con more than a year, but that it coul minated by notice. The effect of su struction was that the rateable value the fluctuations of the market, subje five-year period in London, and the fixed at arm's length by the higgli market.

The effect and importance of the ing out of the School Board case School Board for London)," that am tenants for the property must be inc possible tenants, including the ten owner himself" was stressed. pointed out that all economic value posed demand, and that if the pos mand to rent a property was limited way, perhaps by excluding the te whom the property made the greates the letting value would be very kept down, if it were not extinguished

A point often overlooked, was that tain unimportant exceptions arising o Rating Act of 1874, a Rating Valua never the ascertainment of a fact: it ways an estimate of reasonable expe the rent at which the property migh ably be expected to let.

USE OWNER'S LIABILITY TO WORKMAN EMPLOYED BY A TENANT

E decision of the Court of Appeal in liffe *v.* Clients Investment Company, Ltd. 2 K.B. 746) is one of importance to ords, tenants, and workmen alike. The dants were assignees of a lease for 90 years December, 1887, of certain premises ding a block of flats. Under this lease defendants were by covenant bound to the premises, both interior and exterior, od tenantable repair. On March 31, 1923, defendants had leased to one Stanley win, for a term of 14 years, a suite of rooms e first floor of the above premises, and under ublease the tenant was to keep the interior e premises in good and tenantable con-n, but he was under covenant to allow the dants and all persons authorised by them nter the premises for various purposes, ding repairing the exterior of the premises. lat in question had a bay window opening ards and a balcony with a coping sup-d by columns and small bath-stone pillars. balcony was 12 to 18 in. in depth. firm of builders and decorators was em-d by the tenant, Mr. Sherwin, to do in decorative work in the flat, and this commenced work on March 27, 1923. may observe that this apparently was the decorative work which the tenant l be under covenant to keep in repair the lease of the flat, but decora-work done with the knowledge of the dants and towards which they were also ibuting, and no doubt undertaken before tenant had gone into actual physical ation. The firm employed had fixed an tisement board which weighed some s. in front of the balcony, and when the was completed a workman in the employ e firm, on May 8, went to take the board but as he was doing so the whole of the g between the columns, and two or three e pillars gave way and the man fell into reet and was killed.

s action was brought by his widow under Campbell's Act, claiming damages for his

ore going further we should note that at rial a question was raised whether the ay did or did not form part of the demise tenant of the flat, and the learned trial had found that it was not so demised but e by the tenant was "an appurtenance the defendants were bound to repair as a n of the exterior of the premises. The of Appeal did not disturb that finding. llowing questions had been left to the jury nswered as follows :—

Was the balustrade at the time of the nt dangerous for persons using the y ?—Yes.
Was the danger apparent to anyone using lcony ?—No.
Did the defendants know, or ought they e known the condition of the balustrade ?

Did the balcony at the time of the accident ute a trap to the deceased ? That is, a concealed danger ?—Yes.
Was the deceased guilty of any want of using the balcony as he did ?—No.
Is it the usual custom of builders and tors to exhibit a signboard ?—Yes.
Did the defendants' servants know that board was being exhibited ?—Yes.
Did the balcony give way in consequence the deceased leaning against it to lower ard ?—Yes.
Damages ?—£1,250.

he appeal the real question was whether ceased man as regards the defendants mere licensee or an invitee, and broadly g the distinction between the two is The licensee must take the premises as s them, except he must not be subjected ncealed dangers, whereas the invitee, easonable care on his part for his own is entitled to expect that the owner or occupier will take reasonable care to prevent damage from unusual danger of which he knows or ought to have known. (Indermaur *v.* Dames, L.R. 1 C.P. 274, affirmed L.R.2 C.P. 311.) The position of these two classes of persons was considered by the House of Lords in the case Fairman *v.* Perpetual Investment Building Society (1923 A.C. 74), which we noted and commented upon (*The Builder*, March 30, 1923). That case was brought by a "stranger" to the landlord of the premises, as she was the sister of the wife of the tenant, and she was held to be a licensee, but the danger complained of was not a hidden danger but was obvious (which distinguishes that case from that we are now considering) and, therefore, the plaintiff failed in the action. That case was much discussed, however, in the case we are considering because it was contended that two of the noble Lords who had delivered opinions in Fairman's case had somewhat extended the law as decided in previous cases by saying that a licensor would be responsible for exposing a licensee to a hidden danger of which he knew "or ought to have known," and this would place the owner or occupier in the same position towards a bare licensee as towards an invitee so far as a hidden danger was in question. Lord Justice Bankes, in the case we are considering, deals with this contention, saying that in Fairman's case it was unnecessary to enlarge the liability of an occupier towards a bare licensee, and it did not appear that any of the members of the House of Lords intended to make any alteration of the law in that respect, and in any case it was not necessary in this case to consider the point, as here the plaintiff was more than a bare licensee.

We will now consider the judgments delivered in the case under consideration by the Court of Appeal. In the first place, what was the position of this workman ? Lord Justice Bankes, as reported, thus described his position : "He was upon the demised premises doing repairs in which both the tenant and the landlord were interested, for though the tenant was the one to give the order, the landlords were responsible to him for part of the cost." Lord Justice Scrutton put it thus : "He was allowed by the tenant to be upon the premises for the purpose of doing repairs, and so far as access to the balcony was necessary for that purpose he was there with the consent of the landlords," and both Lords Justices then describe him to have been "a licensee with an interest." Lord Justice Bankes then is reported as saying a licensee with an interest has the same rights as an invitee, and comes within the rule laid down in Indermaur *v.* Dames set out above. Lord Justice Scrutton took the same view that a licensee with an interest has the same rights as an invitee, and comes within Indermaur *v.* Dames, but in his judgment he considers a good many decided cases, and refers to them as summarised in a judgment delivered by himself in Hayward *v.* Drury-lane Theatre (1917 2 K.B. 899), and it is there shown that a further distinction may be made in the case of invitees, *i.e.*, between persons visiting the premises on invitation, and those doing so for payment. The former come within the rule laid down in Indermaur *v.* Dames, the owner or occupier must take reasonable care to protect him by warning or precautions from traps or unusual danger which he knew of or ought to have known of, but as against dangers which are not traps in this sense they are under no liability, they do not warrant the premises as safe, or as safe as reasonable care can make them, but where payment has been made Lord Justice Scrutton puts the case higher, for there the owners or occupiers must see that the premises are reasonably safe, and if they are not safe and the owners could know of the dangerous condition and negligently did not know of it they are liable for damages caused. The authorities quoted for this last proposition being Mersey Docks Board *v.* Gibbs (1866 L.R. 1 H.L. 93) and Parnaby *v.* Lancaster Canal Co. (1839 11 Ad. & E. 223).

In this case it will be seen the man was held to fall into the category of a licensee with interest with the right to protection of an ordinary invitee. It only remains to mention one further point : In the Court below the judge was asked to hold that there was no evidence on which the jury could have answered the third question as they had done, that the defendants knew or ought to have known the condition of the balustrade. The trial Judge on this point is reported as having said : "It is not for me to say in what way I should have answered that question. There was undoubtedly evidence given on behalf of the defendants which would have warranted the jury in answering 'No,' especially when they answered 'No' to the second question" (that was, that the danger was not apparent to anyone using the balcony) "but on the other hand there was evidence given for the plaintiff from which the jury may have thought that a proper supervision by the defendants would have made the defects in this balcony or balustrade apparent."

The evidence as given in the report was that the coping and pillars had suffered from exposure, that one of the pillars had been repaired by a spigot, and that three others were cracked and that the cracks were discoloured by age. There was also evidence that the defendants employed builders once a month to clean out gutters on the balconies, and had given them instructions to inspect the building and report any want of repair. On this part of the case the Court of Appeal held that as the balcony was made of bath-stone and there were cracks in it there was evidence to support the finding of the jury.

MORTGAGEES AND THE RENT ACT

A SHORT point may be noted which was decided in the case Evans *v.* Horner (*Weekly Notes*, November 29), with reference to a mortgagee's right to foreclose. The mortgage in question was for £600 with interest at 4 per cent. payable on May 19 and November 19. The half-yearly sum of interest due May 19, 1924, had not been paid, and on June 11 the plaintiff, the mortgagee, had taken out an originating summons asking for an account of what was due under the mortgage, and to have the security enforced by foreclosure. On June 14 the defendant, the mortgagor, sent a cheque for the interest overdue, and this was accepted by the plaintiff on account generally. The defendant contended that this payment prevented the plaintiff from continuing these proceedings, relying on section 7 of the Rent Act, 1920.

That section provides : "It shall not be lawful for any mortgagee under a mortgage to which this Act applies so long as (*a*) interest at the rate permitted under this Act is paid and is not more than 21 days in arrear . . . to call in his mortgage or to take any steps for exercising any right of foreclosure or for otherwise enforcing his security or for recovering the principal money thereby secured." The defendant, relying upon Welby *v.* Parker (1916, 2 Ch. 1), contended that if at the time any "steps" were taken for exercising the right of foreclosure the conditions prescribed in the section had been performed the plaintiff could not proceed, and here the subsequent payment of interest had performed the conditions. It may be noted the payment of the half-yearly interest was the only condition in question. The Court held that the meaning of section 7 (*a*) was that mortgagees could not take any "step" so long as interest was paid not later than 21 days after it was due, but here the interest had not been paid within that time and the plaintiff was entitled to judgment.

We may note that in Welby *v.* Parker the Court of Appeal held that both attending on a summons and giving a notice of appeal from the decision given on a summons were "steps" within the meaning of the section.

YORKS BUILDING TRADES EMPLOYERS

THE annual meeting of the Yorkshire Federation of Building Trades Employers was held recently in Leeds Town Hall. The chair was taken by Sir Edwin Airey, who was elected president of the Federation in succession to the late Mr. T. E. Taylor.

During the discussion reference was made to the efforts that were being put forward, locally and nationally, by both employers and employees, to overcome the shortage of skilled labour. It was hoped that the steps that were now being taken would lead towards a solution of the problem. Owing to varying rates of pay and labour conditions, the question, it was stated, bristled with difficulties, and complaint was made of the policy of local authorities, large engineering works, and concerns which were not in the building trade, employing building labour direct. Such people, it was stated, took no part in the training of apprentices, the same applying to small house builders. Consequently builders were having to train apprentices for the whole of the trade.

Reference was also made to the question in the annual report of the Federation. After alluding to the scheme of the National Building Industry Committee for an intensive course of craft training suitable for persons over 18 years of age, the report stated, "The wages paid to apprentices who enter the trade in the normal way should usually be those laid down in the working rules. . . . The best method of overtaking the scarcity of skilled labour is for the employer to take his full quota of indentured apprentices, and to see that these are thoroughly and quickly trained. It is possible that the Government will make it an essential condition of the grant of the subsidy or of the acceptance of a tender for house construction under a scheme instituted by a public authority, that the successful contractor shall undertake to employ and train a definite quota of adult apprentices as a condition of acceptance. The Yorkshire working rules provide that each employer shall be allowed one apprentice and an additional apprentice to every four men employed in that particular branch, with a maximum number of seven to each section. Every member should train the full complement of apprentices allowed under the rule. The Federation recommend that the number of apprentices should be based on the number of craftsmen employed in the district, and not in individual workshops; and that the number allowed be based on the proportion of one apprentice to three craftsmen."

With reference to output, the report stated that the paralysing effect of reduction in output with the uneconomic high wage had had a cumulative effect upon building costs, and was unquestionably deterring many clients from undertaking building work. The experiments which took place recently in Rotherham, where a bricklayer laid 809 bricks per hour, and another bricklayer 750 bricks per hour, had demonstrated that bricklayers could undertake the laying of many more bricks per day without serious physical effects, and it was to be hoped that the appeal for the loyal support of building employers and operatives to overtake urgent housing needs would result in every one realising that it was their bounden duty to give a fair day's work for a fair day's pay.

An aspect of the building strike during last summer was commented upon. "During the strike," the report stated, "many co-operative societies exploited the situation by tendering for and undertaking building work. The keen competition of co-operative societies outside their recognised legal and well-established customs calls for immediate attention and legislative adjustment. It is unfair that private enterprise should be hampered and harassed by heavy taxation, while co-operative societies, immune from similar taxation, should be placed in a preferential position to unfairly compete with private enterprise. It is submitted that there is a duty upon the Government to place all building trade employers on an absolute equality as regards taxation, and if this is done allied employers have no reason to fear the competition of co-operative societies."

RATES OF WAGES IN THE BUILDING TR

Every endeavour is made to ensure accuracy, but we cannot be responsible for err

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	L
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bedf rd	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
London { 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Newport. Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Shrewsbury	1/6½	1/6	1/6½	1/6½	1/6½	1/6½	1/6½	
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 1036)

CONTRACTS, COMPETITIONS, &c.

some contracts still open, but not included in this List, see previous issues. Those with an asterisk dvertised in this number. Certain conditions beyond those given in the following information posed in some cases, such as that advertisers do not bind themselves to accept the lowest or any ; that a fair wages clause shall be observed ; that no allowance will be made for tenders ; and eposits are returned on receipt of a bona-fide tender unless stated to the contrary.

date given at the commencement of each paragraph is the latest date when the tender, or the names e willing to submit tenders, may be sent in ; the name and address at the end is the person from whom e where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

EMBER 29.—**Broadstairs and St. Peter's.**—ROOMS. erection of two tea rooms in Broadstairs Bay e in Louisa Bay, and also two kiosks, for the Mr. L. A. Skinner, Clerk to the Council, nt Hall, Broadstairs.

EMBER 29.—**Canterbury.**—BUILDING.—For works City electrical works, comprising the enlarge- f the engine room, switch room and cable rooms, C.B. Mr. P. H. Warwick, City Surveyor and er.

EMBER 29.—**Dublin.**—REPAIRS.—For repairs and ions to the office of the Irish Land Commission, per Merrion-street, for the Commissioners of Works. Mr. J. J. Healy, Secretary, Baile Atha Dublin. Deposit £1.

EMBER 29.—**Kiveton Park.**—HOUSES.—For erec- f 28 houses, for the R.D.C. Mr. A. Lawrence Clerk to the Kiveton Park R.D.C., Council , Kiveton Park, near Sheffield.

EMBER 29.—**Leeds.**—HOUSES.—For trades in ction with the erection in brick or other forms of uction of 150 houses on the Crossgates Estate, the Middleton Estate, and 100 on the Meanwood , for the T.C. Mr. W. T. Lancashire, City eer, Municipal Buildings. Deposit £1 1s.

EMBER 29.—**Middlesbrough (near).**—BUILDING erection of a pumping station, &c., in Normanby- South Bank, for the Tees Valley Water Board. S. Calvert, Clerk to the Board, Water Board , Middlesbrough. Deposit £2.

EMBER 29.—**Monmouthshire.**—REPAIRS, &C.— arrying out, for the County Small Holdings Com- , general structural repairs to farm buildings nt Farm, Llwyncelyn. Mr. A. Every-Clayton, y Land Agent, 2, Gold-tops, Newport (Mon.).

EMBER 29.—**Sleaford.**—HOUSES.—For erection air of houses in Drove-lane, for the R.D.C. Mr. Godson, Clerk to the Council, Council Offices, gate, Sleaford.

EMBER 29.—**Wallsend.**—CONVERSION.—For con- n of cell privies into water closets, for the C.B. V. Mulcaster, Town Clerk, 28, Sandhill, New- -on-Tyne.

EMBER 29.—**Weymouth.**— ALTERATIONS. — For ions and additions to the Weymouth and nbe Regis Working Men's Club, Mitchell-street. S. Jackson & Sons, architects, Weymouth.

EMBER 29.—**Worthing.**—SHELTER.—For erec- f a glazed shelter in the Denton-gardens, for the Mr. J. Kennedy Allerton, Town Clerk, Municipal . Deposit £1 1s.

EMBER 30.—**Burslem, Staffs.**—TELEPHONE EX- E.—Erection of a telephone exchange at Burslem, for the Commissioners of His Majesty's Office orks. Contracts Branch, H.M.O.W., King s-street, London, S.W.1. Deposit £1 1s. es payable to the Commissioners of H.M. , &c.)

EMBER 30. — **London, W.5.** — REBUILDING —Rebuilding forecourt wall of Christ Church, dge-road, for the Town Council of Ealing. Mr. Wicks, M.Inst.C.E., F.S.I., Borough Engineer, Hall, Ealing, W.5. Deposit £1 1s.

EMBER 31.—**Blyth and Cuckney.**—DISPOSAL S.—For construction of sewerage and sewage al for the parishes of Hodsock and Carlton, for D.C. Mr. A. H. Styring, Clerk, 6, North Church- Sheffield. Deposit £5.

EMBER 31. — **Dartford.**—WEIGHBRIDGE FOUN- NS, &C.—Forming weighbridge foundations and s' waiting rooms at the Southern Hospital, rd, for the Metropolitan Asylums Board. Office Board, Victoria Embankment, E.C.4. Deposit £1.

EMBER 31.—**Derby.**—HOUSES.—For erection of uses, for the C.B. Mr. C. A. Clews, Borough or, Surveyor's Office, Babington-lane. De- £1 1s.

EMBER 31.—**Dublin.**—ADDITIONS.—For ad- s and alterations at St. Patrick's Convent, stown, Cabra, for the B.G. Commissioners, n Union, 1, James's-street. Deposit £3 3s.

ECEMBER 31. — **Hove.** — DWELLING-HOUSE. — ng a dwelling-house at the Council's Depot in lle-road, Hove, for the Borough Council of Hove. gh Surveyor's Office, Town Hall, Hove. Deposit

EMBER 31.—**Kent.**—CLEANING AND PAINTING. ning and painting works at White Oak, Swanley on, Kent, for the Metropolitan Asylums Board. of the Board, Victoria Embankment, E.C.4. t £1.

EMBER 31.—**London, S.W. 17.**—WOOD FLOOR- Supplying and laying alternatively pitch pine block flooring at Tooting Bec Hospital exten- Church-lane, Tooting, S.W.17, for the Metro- n Asylums Board. Office of the Board, Victoria nkment, E.C. 4. Deposit £1.

EMBER 31.—**South Shields.**—SUB-STATION.—For n of an electric sub-station at Harton Moor ry, Prince Edward-road, for the C.B. Mr. Hayton, Town Clerk. Deposit £2 2s.

UARY 1, 1925.—**Birmingham.**—PAINTING.—For r painting, &c., at the children's homes, rton, for the B.G. Mr. James Curtis, Clerk to the ians, Union Offices, Edmund-street.

JANUARY 1. — **Lincoln.** — ADDITIONS. — For additions to the C.C. Offices, Newland House, Lincoln, for the Lindsey C.C. Mr. Eric W. Scorer, Clerk of the County Council, County Council Offices, Mint-street. Deposit £2 2s.

JANUARY 1.—**Lindsey.**—HOUSE.—For erection of a teacher's house at Marshchapel, for the C.C. Mr. S. Maudson Grant, Director of Education, 186, High-street, Lincoln. Deposit £1 1s.

JANUARY 1.—**Skegness.**—ADDITIONS.—For additions to the Council school, for the Lindsey C.C. Messrs. Scorer & Gamble, architects, Bank-street Chambers, Lincoln. Deposit £1 1s.

JANUARY 2.—**Bolton.**—EMPLOYMENT EXCHANGE. —For adaptation of the old Post Office, Bolton, to form an Employment Exchange, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.)

JANUARY 2.—**Hebden Bridge.**—TRADES.—For several trades required in the erection of 12 non-parlour type houses, and the supply of about 378 yds. of 3 in. cast-iron water pipes, for the U.D.C. Mr. S. Ogden, Clerk of the Council, Council Offices.

JANUARY 2.— **Plymouth.** — HOUSES.—Erection of 800 houses (whole or part) at North Prospect (Sections 2 and 3), for the County Borough Council of Plymouth. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth. Deposit £5 5s.

JANUARY 2.—**Sligo.**—ADDITIONS.—For enlarging Moylough National School, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Baile Atha Cliath, Dublin. Deposit £1.

JANUARY 2.—**Wexford.**—RESTORATION.—For restoration of Clonevan ex-R.I.C. Barrack, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Baile Atha Cliath, Dublin. Deposit £1.

JANUARY 3.—**Argced.**—SCHOOL.—For erection of a new infants' school. Mr. C. Dauncey, Secretary, County Hall, Newport. Deposit £1 1s.

JANUARY 3.—**Harrow-on-the-Hill.**—HOUSES.—For erection of 18 parlour-type houses on the Council's housing estate, for the U.D.C. Mr. J. P. Bennetts, Engineer and Surveyor, Council Offices. Deposit £1.

JANUARY 3.—**Rotherham.**—HOUSES.—For erection of 50 houses on the Dalton housing site, for the R.D.C. Mr. J. Totty, architect, Moorgate-street. Deposit £2 2s.

JANUARY 3.—**Sheffield.**—TRANSFORMER STATIONS.—For erection of transformer sub-stations in Edward-street, Abbey-lane, Beauchief, and Blagden-street, Park, for the T.C. Mr. S. E. Fedden, General Manager and Engineer, Commercial-street.

★JANUARY 3.—**Stalybridge.**—POWER STATION.—Erection and completion of the superstructure required at the proposed Hartshead Power Station, Stalybridge, and including concrete foundation in No. 2 turbine beds, economiser, brickwork setting, &c., for the Stalybridge, Hyde, Mossley and Dukinfield Tramways and Electricity Board. Messrs. W. H. George & Son, Architects, 7, Warrington-street, Ashton-under-Lyne. Deposit £1 1s.

JANUARY 3.—**Swallowfield, Berks.**—SCHOOL.—For the erection of a new Council school for 104 children, at Farley Hill, for the Berkshire E.C. Mr. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £1 1s.

JANUARY 5.—**Aylesbury.**—COW HOUSE.—For erection of a new cow house, fodder store, &c., for the Bucks Agriculture Committee. Mr. G. M. Odam, County Land Agent, 21, Walton-street.

JANUARY 5.—**Goldthorpe.**—HOUSES, &C.—For the erection of 74 dwelling houses, together with road and surface water drainage works, in Barnborough-lane, or in sections (1) 30 houses, (2) 44 houses, (3) roads and surface water drainage works, for the Bolton-upon-Dearne U.D.C. Mr. William H. Adams, M.S.A., Council Offices, Bolton-upon-Dearne. Deposit £1 1s.

JANUARY 5.— **Hornsey.**— PUBLIC CONVENIENCES. —Erection of a public convenience, comprising chalet above ground and extension of underground convenience at the Broadway, Muswell Hill, for the Town Council of the Borough of Hornsey. Mr. E. J. Lovegrove, Borough Engineer and Surveyor, Town Hall, Highgate, N.6.

JANUARY 5.—**Keighley.**—ALTERATIONS.—Alterations to the slipper baths at the Municipal baths, Albert-street: Bricklayer and mason, carpenter and joiner, plasterer, plumber. Mr. Smith Terry, Town Clerk, Town Hall. Deposit £1 1s.

JANUARY 5. — **London, E.**— CUSTOMS OFFICE.— Erection of a Customs Waterguard Office at King George V Dock, Pierhead, London, E., for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

★JANUARY 5.—**London, E.2.**—REMOVAL AND ERECTION OF BUILDINGS.—Removing the old and erecting new out-buildings, &c., at St. Leonard's Hospital, Hoxton-street, N.1, for the Guardians of the Poor of the Parish of St. Leonard, Shoreditch, Guardians' Architect, Mr. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W.1. Deposit £2, in Treasury notes.

JANUARY 5.— **Nottingham.** — WALL. — For new boundary wall, entrance gates and office, for the widening of Lenton-road, also retaining wall, &c., to Dry Moat, for the T.C. Mr. W. J. Board, Town Clerk. Deposit £2.

JANUARY 5.—**Scarborough.**—For joiners, plumbers and painters work in connection with extensions to corner cafe, Peasholm Gap; public lavatories and shops adjoining cafe, Peasholm Gap; public shelter and lavatories, North Bay Promenade extensions, for the C.B. Mr. H. W. Smith, Borough Engineer.

JANUARY 5.—**Southend-on-Sea, Essex.**— HOUSE.— Erection and completion of a groundsman's house, and works incidental thereto, at the Jones' Memoral Ground, Southend, for the Corporation of Southend-on-Sea. Mr. Robert H. Dyer, Borough Engineer, Municipal Buildings, Southend-on-Sea. Deposit £2.

JANUARY 5.—**Stoke-on-Trent.**— CONVERSION.— For conversion into water closets of about 90 pail closets and privies in Burslem, Hanley, Stoke and Fenton, for the C.B. Mr. E. B. Sharpley, Town Clerk, Town Hall.

JANUARY 6.— **Liverpool.**— REDECORATIONS.— Internal redecorations, &c., at the Head Post Office, Liverpool, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

JANUARY 6.—**Malden.**—HOUSES.—For erection of workmen's dwellings in pairs, as follows: Tolleshunt Knights, 8 houses; Hazeleigh, 6 houses; Purleigh, 8 houses, for the R.D.C. Mr. Wm. Almond, surveyor, 6, Market-hill.

★JANUARY 6.—**Shoeburyness.**—HOUSES.—Proposed erection of 36 working-class houses on the housing site adjoining Ness-road at Shoeburyness, Essex. One tender may be submitted for building all the houses, or, alternatively, tenders may be submitted for separate blocks of houses. Office of the Council's Surveyor, Mr. E. Read, High-street, Shoeburyness.

JANUARY 7.—**Cardiff.**—CONVENIENCE.—For erection of a public convenience and extensions of culvert at Beulah Cross-roads, Rhiwbina, for the R.D.C. Mr. M. Warren, Clerk to the Council, Park House.

JANUARY 7.— **Llandudno.**— ALTERATIONS.— Alterations to the Post Office, Llandudno, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

JANUARY 8.— **Yorkshire.**— POST OFFICE.— Alterations to the Post Office, Brighouse, Yorks, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners, of H.M. Works, &c.).

JANUARY 9.— **Bucks.**— POST OFFICE AND TELEPHONE EXCHANGE.—Erection of a Post Office and Telephone Exchange at Beaconsfield, Bucks, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

JANUARY 9.—**Doncaster.**—HOUSES.—For erection of a pair of houses in Cowhouse-lane, Armthorpe, for the R.D.C. Mr. H. M. Marshall, Clerk to the Council, Union Offices, Nether Hall.

JANUARY 10.—**Congleton.**—SCHOOL.—Erection of an elementary school (based on firm prices) for 600 scholars, at New-street, Congleton, for the Corporation of Congleton. Mr. J. H. Walters, architect, Moody-street, Congleton. Deposit £2.

JANUARY 10.—**Forehce.**—HOUSES.—For erection of 10 houses at the Browick site, Wymondham, for the R.D.C. Mr. Wm. Partridge Smith, Clerk.

JANUARY 10.—**Ripley.**—POINTING.—For pointing brickwork, repairing spouting, roofs and walls of water works tower: also for scraping and painting ron-work, &c., for the U.D.C. Mr. G. Whitcombe, Clerk, Town Hall.

JANUARY 12. — **Birmingham.** — ADDITIONS. — For building alterations and additions at Dudley-road Hospital, for the B.G. Mr. J. Curtis, Clerk to the Guardians, Union Offices, Edmund-street. Deposit £10 10s.

JANUARY 12.— **Bognor.**— COTTAGES.— Erection of 24 cottages on the housing site off Sheepwash-lane, for the Bognor Urban District Council. The Surveyor, High-street, Bognor. Deposit £2 2s.

JANUARY 12.—**Leominster.**—HOUSES. — For construction of 28 houses on the Caswell Fields site, for the C.B. Mr. W. T. Sale, Town Clerk, Town Hall.

JANUARY 12.—**Port Talbot.**—PAVILION.—For carrying out a pavilion, for the C.B. Mr. M. Thomas, Town Clerk.

★JANUARY 13.— **Croydon.**— BUILDINGS.— Erection and completion of Welfare and School Clinics and Sick Nursery Buildings upon a site situate in Lodge-road, Croydon, for the County Borough of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £3 3s.

★JANUARY 13.—**Croydon.**—UNDERGROUND CONVENIENCE.—Construction of an underground convenience for women at Parchmore-road, Thornton Heath, for the County Borough Council of Croydon. Borough Engineer, Town Hall, Croydon. Deposit £1 1s.

JANUARY 13.—**Glasgow.**—SANATORIUM.—For erection of Mearnskirk Sanatorium, Mearns, Renfrewshire, including plaster work, glazier work, tile work, and terrazzo work, for the T.C. Mr. J. Lindsay, Town Clerk, City Chambers. Deposit £5 5s. each.

★JANUARY 13.—**Norwich.**—HOUSES.—Erection of 300 houses on the Earlham estate, Norwich, for the City Corporation, to be erected for the Corporation of Norwich. The work is divided into four sections. Mr. Arnold H. Miller, Town Clerk, Guildhall, Norwich.

JANUARY 14.—**London.**—BUILDING.—For lavatory building at the Institution, Plumstead High-street, for the Woolwich B.G. Mr. A. Holder, Clerk to the Guardians, 99, Rectory-place.

JANUARY 14.—**Stafford.**— OPERATING THEATRE.—Tenders for new operating theatre and consequent small alterations at the existing Infirmary, for the Board of Management of the Staffordshire General Infirmary, Stafford. Secretary at the Infirmary. Deposit £2.

JANUARY 15.— **Darlington.**— ELEMENTARY SCHOOL.—Erection of an elementary school on a site adjoining Bates-avenue and Stooperdale-avenue, Cockerton, Darlington, for the Darlington Corporation. Mr. H. G. Steavenson, Town Clerk, Houndgate, Darlington. Deposit £2 2s.

JANUARY 15.—**Langley.**—POLICE STATION.—For erection of a police station and six residences at Langley, near Oldbury, for the Worcestershire C.C. Mr. A. Vernon Rowe, County Architect, 38, Foregate-street, Worcester.

JANUARY 19.—**Birmingham.**—ALTERATIONS.—For alterations and additions at the Selly Oak Hospital, to provide new nurses' dining room, new kitchen, staff dining rooms, &c., for the B.G. Mr. J. Curtis, Clerk to the Guardians, Union Offices, Edmund-street. Deposit £10 10s.

JANUARY 22.— **London.**— ROOFING WORK.— Renewal of roofing, skylights and gutters and repainting, &c., at the locomotive and carriage works, Oswestry, for the Great Western Railway. Mr. A. E. Bolter, Secretary, Paddington Station, London, endorsed "Tender for Roofing, &c.," Oswestry.

✱JANUARY 27.—**Eastleigh.**—HOUSES.—Erection of 58 houses, being first instalment of a scheme for 220 houses on the Council's housing site, Winchester-road, Eastleigh, for the U.D.C. The Surveyor, Offices of the Council, Leigh-road, Eastleigh.

✱DATE LATER.—**London, S.E.1.**—SUPERSTRUCTURE.—Erection of the superstructure (foundations have already been put in) of five blocks of dwellings on the East Hill Estate at Wandsworth, S.W. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit payable to the Cashier of the Council.

✱NO DATE.—**Ramsgate.**—STRUCTURAL ALTERATIONS.—Structural alterations at 7, High-street, Ramsgate, Kent, for Messrs. Timothy White, Co., Ltd. (Construction Department), 30, Chandos-street, Portsmouth.

FURNITURE, MATERIALS, etc.

DECEMBER 29.— **Rawtenstall.**— MATERIALS.— For materials required in the sewering and paving, &c. of Foundry-street and Back Holme-bank, for the C.B. Mr. J. Whalley, Town Clerk, Town Hall. Deposit £1.

DECEMBER 29.—**Reading.**—SAND.—For supply of broken road material, gravel and sand, for the Berkshire C.C. Surveyor's Department, Shire Hall, The Forbury.

DECEMBER 30.—**Bexley.**—PIPES.—For supply of highway materials, best glazed stoneware socketed pipes, and best Portland cement, for the U.D.C. Mr. Thos. G. Baynes, Clerk to the Council, Council Offices.

DECEMBER 31.— **London, S.W.17.**— PORTLAND CEMENT.—Supply and delivery of about 175 tons Portland cement of English manufacture, at Tooting Bec Hospital extensions, Church-lane, Tooting, S.W.17, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

JANUARY 1, 1925.—**Dorchester.**—MATERIALS.—For supply of granite, basalt, limestone, and other surface dressing material, for the Dorset C.C. Mr. W. T. Fletcher, County Surveyor, County Offices.

JANUARY 3.—**East Suffolk C.C.**—MATERIALS.—For supply of granite, gravel, &c. W. Jervis, County Surveyor, County Hall, Ipswich.

JANUARY 3.—**Spilsby.**—GRANITE.—For supply of broken granite, broken slag and slag chippings, for the R.D.C. Mr. T. Gwilym Jones, Clerk.

JANUARY 5.—**Bromley.**—GRANITE.—For about 3,000 lin. ft. of 5 in. by 10 in. Norwegian granite kerb, and 30 tons 5 in. by 4 in. granite setts, for the R.D.C. Mr. L. O. Wall, Clerk to the Council, Park House.

JANUARY 5.—**Exeter.**—FURNITURE.—For supply of school furniture, for the Devon E.C. Secretary, The Castle.

JANUARY 5.—**London.**—MATERIALS.—For supply of Yorkshire stone and artificial paving slabs, granite kerbs, paving setts and broken granites, gravel, ballast, sand and shingle, sundry materials (lime, cement, bricks, stoneware pipes) for the St. Pancras B.C. Mr. C. H. F. Barrett, Town Clerk, Town Hall, Pancras-road, N.W.1.

ENGINEERING, IRON AND STEEL.

DECEMBER 31.—Hamilton.—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

JANUARY 3.—**Kingston-by-Sea.**—REPAIRS.—Construction and repairs to the middle pier, for the New Shoreham Harbour Commission. Mr. C. Baguley, Clerk to the Trustees, Harbour Offices, Southwick, Brighton.

JANUARY 5.— **Eastbourne.** — FLAPS. — For removal of existing tidal flaps, &c., in the valve chamber, Langney Point and the supply and fixing of new tidal and sluice valves, for the C.B. Mr. L. Roseveare, Borough Engineer, Town Hall. Deposit £1 1s.

JANUARY 9.—**Long Eaton.**—RECONSTRUCTION.—For a bridge reconstruction in ferro-concrete and approaches, for the U.D.C. Mr. H. Raven. Engineer, The Hall, Long Eaton.

ROAD, SANITARY, AND WATER WORKS.

DECEMBER 27.—**Bridlington.**—SEWER.—For the construction of a new reinforced concrete roadway, kerbing, a 9 in. stoneware pipe sewer and accompanying manholes, gullies, &c., on the west side of Forty Foot-road, for the C.B. Mr. G. Melvin, Town Clerk. Deposit £2 2s.

DECEMBER 29.—**Dublin.**—ROAD.—For laying of a reinforced concrete roadway, for the Corporation. Mr. J. J. Murphy, Town Clerk. Deposit £1 1s.

DECEMBER 29.—**East Preston.**—DRAIN.—For laying a storm water drain at Goring-by-Sea, for the R.D.C. Mr. A. Shelley, Clerk to the Council, Town Offices, Littlehampton.

DECEMBER 29.—**Orsett.**—MAINS.—For laying of about 3,210 lineal ft. of 3 in. cast-iron water main, together with all valves, specials, &c., in the parish of Langdon Hills, for the R.D.C. Mr. G. F. Andrassy, Engineer and Surveyor, 2, Orsett-road, Grays, Essex.

DECEMBER 29.—**Orsett.**—SEWER.—For laying of about 647 lineal feet of 9 in. stoneware pipe sewer, together with all manholes, flushing tanks, &c., in the parish of Stanford-le-Hope, for the R.D.C. Mr. G. F. Andrassy, Engineer and Surveyor, 2, Orsett-road, Grays, Essex.

DECEMBER 29.—**Prestatyn.**—SEWERS.—For construction of about 2,720 yds. of stoneware pipe sewers, 9 in. diameter and under, with manholes, ventilators, one ejector chamber, and cast-iron air and delivery mains, in the Towyn area, for the U.D.C. Mr. J. Lloyd Hughes, Clerk to the Council, Council Offices, Prestatyn, N. Wales. Deposit £5 5s.

DECEMBER 30.—**Devon.**—ROAD.—For work required in the reconstruction and widening of the Whipton–Pinhoe section of the Exeter–Taunton road, for the C.C. Mr. B. S. Miller, Clerk of the Council, The Castle, Exeter. Deposit £10 10s.

DECEMBER 31.—**Cowbridge.**—MAINS.—For a covered service reservoir in mass concrete, and 18,900 lin. yds. of various cast-iron mains, for the Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s.

DECEMBER 31.—**Totnes.**—ROADS.—For making up Jubilee-road, for the C.B. Mr. Geo. E. Windeatt, Town Clerk, Town Clerk's Office. Deposit £2 2s.

JANUARY 1.—**Glamorganshire.**—PIPES.—For laying of about 21 miles of steel and cast-iron pipes of 37 in. and smaller diameters, together with ancillary works, in the counties of Brecknock and Glamorgan, and for the construction of a break pressure tank, for the Taf Fechan Water Supply Board. Mr. J. Colenso Jones, Clerk to the Board, Board's Offices, 101, High-street, Merthyr Tydfil. Deposit £5.

JANUARY 3.—**Birmingham.**—SEWERS.—For construction of about 2,318 yds. of stoneware pipe sewers, 27 yds. of brick and concrete sewers, and 457 yds. of cast-iron pipe rising main and sewer syphon, for the T.C. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit, £2.

JANUARY 3.—**Harrow-on-the-Hill.**—STREET.—For carrying out a public street improvement in station (main) road, for the U.D.C. Mr. J. P. Bennetts, Engineer and Surveyor, Council Offices. Deposit £3.

JANUARY 5.—**Bideford.**—SEWER.—For laying a sewer and a water main in the old Barnstaple-road, for the U.D.C. Mr. Wm. B. Seldon, Town Clerk, Town Clerk's Office.

JANUARY 5.— **Margate.**— PIPES.— For supplying pipes, excavating for and constructing about 999 yds. of 48 in. by 32 in. egg-shaped intercepting sewer, for the C.B. Mr. E. Brooke, Town Clerk, Town Clerk's Office.

JANUARY 5.—**Mossdale.**—DAM.—For construction of a concrete dam-reservoir, 8 in. conduit pipe, and filters, &c., for the Ayr C.C. Mr. A. S. Glass, Parish Council Chambers, Dalmellington. Deposit £2.

JANUARY 6.—**Kidwelly.**—PIPES.—For laying about 1½ imles of 4 in. and 3 in. cast-iron pipes, with all necessary valves and hydrants, &c., for the U.D.C. Mr. J. P. Williams, Surveyor, Town Hall, Kidwelly, Carmarthen.

✱JANUARY 6.— **Shoeburyness.**— SEWERING.— For making-up, sewering, &c., a road across a portion of the housing site, adjoining Ness-road, for the U.D.C. Mr. F. Gregson, Clerk, 46, Alexandra-street, Southend-on-Sea, Essex.

JANUARY 7.—**Fleet.**—PIPES.—For construction of several miles of cast-iron and stoneware sewers, brick, concrete and cast-iron manholes, flushing tanks, ventilating shafts and columns, cast-iron rising main, air mains and additions to the sewage disposal works, and other incidental work, for the U.D.C. Mr. E. Nash, Solicitor and Clerk to the Council, Council Offices, Fleet (Hants). Deposit, £10.

JANUARY 8.— **Southend-on-Sea.** — MAKING-UP. — For making-up of Blenheim-crescent, Camper-road, Olivia-drive, and Uplands-road, for the C.B. Mr. H. J. Worwood, Town Clerk, Municipal Buildings. Deposit £2.

JANUARY 8.—**Stockton-on-Tees.**—IMPROVEMENTS.—For private street improvements required to be done in part of Albany-road, Nodton, for the C.B. Mr. Thos. Downey, Town Clerk, Borough Hall.

JANUARY 12.—**Caerphilly (near).**—SEWER CONNECTION.—Constructing a sewer connection at Gwaunabara, near Caerphilly, of approximately 280 lin. yds. of 18 in. and 24 in. stoneware and cast-iron sewer, with manholes, for the Caerphilly U.D.C. Mr. T. H. Richards, Surveyor, Council Offices, Caerphilly. Deposit £2 2s.

JANUARY 15.—**Chelmsford.**—PAVING.—F out wood block paving on reinforced coner tion and other work, in Baddow-road, from street to Goldlay-road, for the C.B. Mr. G. Town Clerk, Municipal Offices. Deposit £

JANUARY 16.—**London Colney.**—DRAI main drainage of London Colney, consistin manholes, outfall works, ejector chamb house, &c., for the St. Albans R.D.C. M Hieatt, Clerk to the R.D.C., Union Office £3 3s.

JANUARY 20.—**Rowley Regis.**—PA paving footpaths, laying limestone cros kerbing and channelling, and for relaying k channelling in certain streets and roads, for Mr. D. Wright, Clerk to the Council.

JANUARY 31.—**Mull.**—ROAD.—For o of 1,400 yds. of roadway in the Island of T D.C. Mr. D. M. Mackinnon, Mull Dist County Buildings, Oban.

Competitions.

(See Competition News, page 1

Auction Sales, Tenders,

DECEMBER 30.—**Barnet, Herts.**—Messrs R. Davis & Co. will sell, by order of the Re the Debenture Holder, *re* McCormick & S woodworking machinery, motive power, buil contractors' plant, timber, &c., at the yard Bath-place, High-street, at 11 o'clock. Au 285, Borough High-street, S.E.

JANUARY 14, 1925.—**London, E.**—Messrs. J. T & Co., without reserve, owing to expiration at the Building Material Depot, Tredegar-squ End-road, E., timber and building materials, 200 tons of old oak beams and scantlings, R steam pipe and fittings, slates, scaffolding vans, timber and corrugated iron sheets, &c tioneers, 48, Gresham-street, Guildhall, E.C.2

JANUARY 14 AND 15.—**Bedfordshire.**— Mess & Phillips will sell (unless previously sold b treaty), at "Cranfield Court," Bedfordshire, of the interior and exterior fixtures and fittings to demolition. Auctioneers, High-street, Bl

JANUARY 15.— **London, E.C.** — Messrs. Owers, Ltd., will sell (unless previously sold p at the Mart, 155, Queen Victoria-street, E.C., of executors of late G. Warman, Theydon Bo about 8 acres of valuable freehold land. Au 155, Queen Victoria-street, E.C.

Public Appointments

DECEMBER 27.—**Enfield.**—Clerk of Works by the U.D.C. Mr. H. R. Crabb, Surveyo Offices, Enfield. Middlesex.

DECEMBER 31.— **Middlesex.**— Town-Planni tant in the Engineer and Surveyor's Depart the Heston and Isleworth Urban District Mr. H. J. Baker, Clerk to the Council, Coun Hounslow.

JANUARY 1, 1925.—**Cambridge.**—Assistan Master required by the Board of Architectur at the University of Cambridge, School of Ar The Secretary of the Board of Architectura Mr. Edward Bullough, Gonville and Caius Cambridge.

✱JANUARY 2.—**Norwich.**—Builder's required by the Henstead Rural District C erection of concrete cottages (about 30 in Clerk, Henstead R.D.C., 6, Tombland, Norwi

✱JANUARY 5.—**London, N.13.**—Building required by the Southgate District Council. Lauder, Clerk and Solicitor of the Council, T Palmers Green, N.13, by sending stamped envelope.

✱JANUARY 14.—**Portsmouth.**—Architects perience in designing and supervising the e abattoirs required by the Portsmouth Co Mr. F. J. Sparks, Town Clerk, Town Hall, Po

✱NO DATE.—**Hellingly.**—Carpenter ar required at the East Sussex County Mental Hellingly. Must have good all-round expe knowledge of wood-working machinery. Engineer and Surveyor at the Hospital.

New Concrete Pier.

As soon as an order is granted to the company for running the scheme, wor started on a new concrete pier at H length of which will be 1,250 ft. The e cost, it is stated, will be over £200 contract for the building has been pla Messrs. Armstrong, Whitworth & Co.

Builders' Estates.

Mr. Frederick Alfred Badman, Acoc Birmingham, who started life as a jou builder, and who died in October, years, left estate of the gross value of with net personalty £76,377.

Mr. Evan Evans (70), of 29, Borrowd Liverpool, £29,527.

Mr. Arnold James Jacklin, of Royst fordshire, builder (net personalty £19,266.

ROPOSED NEW BUILDINGS & OTHER WORKS*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board of Education.

ERDEEN.—The T.C. passed plans:—Bungalow, burn-drive, for Mr. Leslie Simon, consulting engi- per Messrs. Sutherland & George, architects.

CTON.—The local authorities of Acton, Ealing, wick and Hanwell are endeavouring jointly to ge for the acquisition of 200 acres, forming part of nersbury Park, as an open space.

DERSHOT.—A new omnibus garage is to be built in rshot for the Aldershot and District Traction Co., of Hallimote, Aldershot. The contractor is Mr. Snuggs, of Brickett-road, Aldershot, who has just ed operations. The architects are Messrs. Friend loyd, of Grosvenor-road, Aldershot.

RDLEY.—The B.E. has approved plans of the wickshire E.C. for a school for 400 children.

HERSTONE.—Warwickshire E.C. is purchasing a for the erection of a school.

TDENSHAW.—The U.D.C. is conferring as to the ning of the canal bridge. Plans passed: Two es. Manchester-road, for Mr. G. Hadfield.

YLESBURY.—The Bucks C.C. has under con- tation proposals for the provision of an institution mental defectives. The provision of accommo- on for the county staff is also under consideration. suggested scheme involving an outlay of nearly 000.

ARNES.—Sketch plans of the proposed secondary ol for boys have been revised by the Surrey county itect to meet requirements of the B.E., and it is nated that the new scheme will involve an outlay 29,760.—The U.D.C. approved plans: House, k-avenue, by Newborn & Smith; six houses, tmoreland-road, by R B. Rowell; four houses, kfield-avenue, by J. A. Carter; house, York-avenue, Newborn & Smith; six houses, Gerard-road, by A. Broughton.

ARNSLEY.—The T.C. passed plans: P. Dalby, t-up shop, Pogmoor-road; J. Townsend, two ses, Woodstock-road; A. P. Haigh, house, Dod- th-road; P. Dalby, two houses, Gawber-road; W. Todd, house, Woodstock-road; J. Dunk & Son, houses, Dodworth-road; S. Taylor, four houses, ke-avenue.

ATLEY.—The Borough Surveyor has been in- cted to prepare lay-out plans for the erection o f an itional 20 houses.

EDFORD.—Plans passed:—House, Bradgate-road, Mr. T. Matkin; house, London-road, for Mr. E. H. C. ip..—A new telephone exchange is to be ted in Lime-street. Plans passed: House, Bush- d-avenue, for Mr. J. Munday.—The T.C. passed ns: Messrs. Usher & Anthony, for Mr. G. Munday, se. Bushmead-avenue; Mr. G. P. Allen, for Mr. Rose, lock-up shop, Harpur-street.

EDWORTH, LEICESTER.—The B.E. has approved s for three new classrooms at the elementary school e erected by the Warwickshire E.C.

IRMINGHAM.—The T.C. is to erect two branch banks rdington and Springhill. A school is to be erected he Billesley Farm estate, at a cost of £14,900. taining wall is to be constructed on the banks of Tame at a cost of £3,900. Sewerage works costing 000, are to be undertaken.

LACKBURN.—Plans passed by the T.C.: Bungalow, lley New-road, by Mrs. Fletcher; two houses, lley New-road, by Mr. T. Gregson; bungalow, rial-road, Pleckgate, by Mrs. A. Richardson; two ses, Winston-road, by Mr. Hy. Thompson; bunga- Arterial-road, Pleckgate, by Mr. J. Whalley; galow, Arterial-road, Pleckgate, by Mr. J. Whalley; galow, Pleckgate, by Mr. J. Ainsworth.

LYTH.—The M.H. has sanctioned a loan of £5,500 reliminary work in connection with the Corporation me for the construction of a promenade and sea .

RADFORD.—The T.C. passed plans for 40 houses e erected under private enterprise.

RAMPTON.—The B.G. approved plans: Mr. T. riner, Boothby, pair of concrete block cottages on n Tree-road.

RAMPTON (CUMBERLAND).—The R.D.C. has oved plans submitted by Mr. T. Marriner, Boothby, he erection of a pair of concrete block houses on Tree-road.

RENTFORD.—The U.D.C. has passed plans: Forty es, Boston-road, for Messrs. Taylor & Co.; four es, Clifton-road, for Mr. Hayden; two cottages, ny-road, for Mr. Lander.

RISTOL.—The City Council has decided to erect 460 tional houses as follows:—70 at Fishponds, 150 at minster Down, 140 at Speedwell, and 100 at field.

ULKINGTON.—Warwickshire E.C.' has prepared sed plans for an infants' school.

URY ST. EDMUNDS.—Work is to be started in nection with the erection of a beet sugar factory in y St. Edmunds. The cost will be £350,000.

ARDIFF.—The T.C. decided to proceed with the k of painting and decorating certain portions of City Hall and Law Courts. It is estimated to cost 00.

ARLISLE.—Cumberland C.C. has appointed a com- ee to report on the utilisation of old Carlisle prison ffice accommodation.

OSELEY.—The D.C. recommended that the sur- or be instructed to prepare plans for the erection he 25 houses already approved by the M.H.

COVENTRY.—The Gas Committee proposes the purchase of land at Foleshill at a cost of £1,800.

CROYDON.—The C.B. approved plans: Allen & Potter, house, Woodmansterne-road; J. M. Barclay, house, Ryecroft-road; J. M. Barclay, house, Ryecroft-road; Tysoe & Harris, five houses, Pollards-crescent: Young & Macintosh, 29 houses, Green-lane; Young & Macintosh, 12 houses, Green-lane; Young & Macintosh, six houses, Green-lane; F. Windsor, shop, George-street; Polden & Authers, 27 houses, Dunbar-avenue; J. M. Barclay, two houses, Ryecroft-road; D. Waller, house, Nottingham-road; H. Findlay, three houses, Clyde-road; J. M. Barclay, two houses, Ryecroft-road; P. Richardson, 12 houses, Ross-road, U. N. W. Cooper, 10 houses, Berne-road; Jones & Keen, four houses, Burlington-road; J. E. Maeres, 16 garages, Parchmore-road; J. & C. Bowyer, Ltd., house, Haling Park-road; V. Savage, house, Leslie Park-road; Young & Macintosh, house, Ryecroft-road; T. C. Winter, house, Bedford-park; F. H. Willcocks, five houses, Nutfield-road; G. Poulton & Sons, eight garages, Shirley-road, 10 garages, Shirley Church-road; G. Poulton & Sons, house, Shirley-road; Parr & Sons, house, Addiscombe-road; F. S. Smith, house, Blenheim Park-road.—The Borough Engineer submitted plans of 112 houses, comprising 126 tenements, proposed to be built on the Waddon estate.—The Committee have had under consideration the question of providing additional laboratory, cloakroom, and class-room accommodation at the Selhurst Grammar School for boys, and recommend that, subject to the approval of the B.E., and to the sanction of the M.H. to a loan for the purpose, a separate building of a permanent character, in keeping with the style and architecture of the main building, be erected on a suitable site in the playground, at an estimated cost, including the provision of furniture and fittings, of £2,700.—The M.H. has sanctioned the borrowing by the C.B. of £4,400 for the purchase of premises in Lower Addiscombe-road as a site for public baths.

DARLINGTON.—The T.C. decided to contribute a sum of £30,000 towards the erection of the new war memorial hospital, which it is proposed to take the place of the present hospital. The estimated cost will be £200,000.

DORCHESTER.—Plans passed by T.C.: Bungalow Maud-road, for Mr. A. Rogers; shop and bungalow, Damers-road, for Mr. W. Adams.

DORKING.—The Surrey C.C. has under consideration the acquisition of a site for a secondary school.

DUDLEY.—The B.S. has prepared a lay-out of the Netherton site on which 60 houses are to be erected.—The Corporation Veterinary surgeon urges the imperative need of a public abattoir.—The excavations are to be carried out for the foundations in connection with the proposed erection of new town hall.—An engineering section of the Technical College is to be built at a cost of £25,000.—The Grammar School is to be enlarged at a cost of about £7,000.

DUNCHURCH (WARWICKSHIRE).—The Boughton Trust proposes to proceed with a scheme for the provision of a central school.

ELLESMERE PORT AND WHITBY.—The U.D.C. recommends subsidising another 50 houses. It is proposed to purchase 18 acres at Stud Farm, at £200.

EPSOM.—The Surrey C.C. proposes the erection of a mixed secondary school.

ESSEX.—A joint committee of the county authorities of Essex, Cambridgeshire, East and West Suffolk is to consider the enlargement of the Rural Eastern Counties Institution.

FARNBOROUGH.—The D.C. accepted a tender for the erection of houses at £495 10s. each.

FINCHLEY.—Plans passed by U.D.C.: New road, Hampstead Garden Suburb, for Copartnership Tenants, Ltd.; two houses, Waverley-grove, for Mr. E. Campkin; three houses, Hampstead-lane, for Mr. Tomblin; sewer, Hill-rise, for Oakwood Tenants, Ltd.; two houses, Christchurch-avenue, for Messrs. McCann & Dixon; two houses, Brooklands-rise, for Copartnership Tenants, Ltd.; house, Northway, for Mr. A. Simpson; house, Bishop's-avenue, for Mr. E. F. Jones; sub-station, Summers-lane, for Finchley Electricity Committee.

FOLKESTONE.—Plans passed by the T.C.: House, for Mr. J. H. Faulkner (Mr. Thompson, architect); 22 houses, for Mr. W. Davis; house, for Mr. S. H. Hansom (Mr. A. R. Bowles, architect).

FRIMLEY.—Surrey county architect has been asked to report on the possibility and the cost of converting certain premises which can be acquired into a secondary school.

GREASBOROUGH.—The Council has agreed to the lay-out plan for 30 houses on the Potter-hill site, and also decided to ask for the loan of £6,500 for the purposes of public hall, offices, depot and mortuary.

HALTWHISTLE.—The R.D.C. has decided to erect a number of houses at Greencroft Park.

HANLEY.—Plans passed: Warehouse, Garner-street, for Messrs. Twyfords, Ltd.; house, Heath House-lane, for Mr. E. Rowley; two houses, Albany-road, for Mr. Jervis.

HARROGATE.—The West Riding Standing Joint Committee approved plans and estimates for new divisional police headquarters. The estimated cost of the buildings was £22,220, and of furnishing £930.

HEBBURN.—The U.D.C. has approved plans prepared by Mr. J. W. F. Phillipson, architect, of Gateshead, for the conversion of the old workmen's club at Pelaw into a Primitive Methodist church and schoolroom.

LEYTON.—Lea Bridge-road is to be widened, at a cost of £15,500.

LONDON (EALING).—The T.C. passed plans for the erection by private enterprise of three houses in Liverpool-road, and four in Sunnyside-road.

LONDON (POPLAR).—Plans passed by the B.C.: House, Weston-street, for O. Abbott.

LONDON (ROTHERHITHE).—The Office of Works is to build a new labour exchange in Clarence-street.

LONDON (VICTORIA).—The L.C.C. approved estimates in respect of the provision of two new ambulance stations in the vicinity of Victoria railway station and of the Old Kent-road.

LOWESTOFT.—The T.C. passed plans: Mr. J. H. Disney, bungalow, London-road South; Mr. W. Turrell, bungalow, Beccles-road, Oulton Broad; Mr. Geater, bungalow, Beccles-road, Oulton Broad; Mr. W. Weaving, house, Acton-road; Mr. J. H. Crews, house, Yarmouth-road; Mrs. Stevens, house, Carlton-road; Mr. S. E. Catchpole, two houses, Victoria-road, Oulton Broad; Mr. H. V. Castleton, house, Carlton-road; Mrs. L. E. Knight, house, Yarmouth-road.

MANCHESTER.—Plans passed by the Corporation:—Shops and offices, 180 to 184, Oldham-road, Pollard-street, and Portugal-street; H. McIlbreck, eight houses, Waltham-road, Withington; British Recovered Rubber Co., Ltd., revised plan and section of stores to works, Chatham-street, Clayton; Stewart Thompson, details of steelwork to warehouse, Aytown-street and Bloom-street; Ferguson Paling, boiler-house to Canteen, Melba-street, Openshaw; Droylsden Industrial Co-operative Society, two lock-up shops, North-road and Vialo-street, Clayton; Crossley Motors, Ltd., chimney to works, Stewart-street, Gorton; offices to works, 10, Acre-lane, Newton Heath; house, Bennett-road and Polligan-road, Crumpsall; S. Watson, house, Victoria-road, Blackley.

MARKET HARBOROUGH.—The U.D.C. is urging that the subsidy should be increased from £75 to £100 in order to encourage private enterprise, and that the superficial area should be increased of houses ranking for subsidy.

MERIONETH.—The C.C. suggests united action by county authorities in North Wales for the provision of a colony for about 500 mental deficients.

MIDDLEWICH.—The U.D.C. proposes to widen the town bridge, at a cost of £16,000.

NEWTON ABBOT.—The R.D.C. passed plans: Bungalow, at Maidencombe, for Mrs. Malden; pair of bungalows, at Ogwell, for Messrs. Carpenter and Mayne; pair of bungalows, at Wynne estate, Maidencombe, for Mr. H. C. Powell.—The cost of rebuilding the G.W.R. Station will be £247,000.

PLYMOUTH.—Plans have been submitted for alterations, Little Efford Open Air School for increasing the accommodation by 50 places and for improving the premises generally for school work, and estimated to cost £2,740.—The Borough Surveyor submitted plans and estimate of £21,659 for erecting 22 houses containing 44 flats and for laying out paths and drains, &c., at "Stonehall." East Stonehouse, which were approved.—Plans passed by T.C.: E. Hill, two houses, Fircroft-road; E. J. Elliott, two houses, Milne-place; Mrs. G. A. Wollacott, house, Tavistock-road, Milehouse; —. Rendle, house, Coleridge-road; Hayter & Coles, two houses, Lanhydrock-road; F. Downard, two houses, Carmarthen-road; M. L. Finch, house, Lower Compton-road; J. A. Blatchford, three houses, Old Laira-roap; Plymouth Properties, Ltd., new urinal and w.c., Royal Hotel.—Messrs. Hennell & James, 19, Russell-square, London, have been appointed architects for the Lady Astor housing scheme.

PORTLAND.—A new school is to be erected on a site at Tophill.

RAWMARSH.—The U.D.C. has accepted tenders for the erection of 75 houses on the Haugh-road site, at £475 per house, within eight months. Local builders are to be approached with a view to the erection of a further 25. Application is to be made to the M.H. for sanction to borrow £47,500. The M.H. have provisionally sanctioned a loan for public baths.

SCARBOROUGH.—The Corporation has decided to construct medical baths on the Sarony-square site on the South Cliff.—The Valley Bridge is to be widened and reconstructed at a cost of about £130,000. The M.T. has granted £85,000 towards the scheme.

SEATON SLUICE.—Important building developments are pending at Seaton Sluice so soon as the new L.N.E.R. branch line from Monkseaton has been completed.

SHIPLAKE.—A £3,500 village hall is to be erected.

SMETHWICK.—The T.C. passed plans:—Convenience at the Crystal Palace, Cranford-street, for Showells Brewery Co., Ltd.; sub-station, Cape Hill, for the Shropshire, Worcestershire and Staffordshire Electric Power Co.; 12 houses, Bertram-road, for W. Lees.

SOUTHALL.—A large site in Southall, Middlesex, has been purchased by the Cambrian Coaching and Goods Transport Co., Ltd. The company propose to cover an area of about 70,000 super feet with buildings. A steel-framed building has been designed with brick walling and a "north light" roof of asbestos cement tiles and patent glazing. The floors will be of concrete, except for those in the factory and shops, which will be partially covered with wood. The architects are Messrs. George Hubbard & Son, of 45, New Bond-street, London, W.1.

SOUTHEND-ON-SEA.—Work has recently been initiated and excavation for the foundations are in hand on the site of the new Westcliff Secondary School, which is to cost about £60,000. The general contractor is Mr. J. E. Gray, of Broad-street, Coventry, whose estimate of £49,134 was accepted. The architects are Messrs. H. H. Thompson & Co., of 8, Market-place, Leicester.

SUNDERLAND.—The Seamen's Mission has secured a promise of £3,000 towards the cost of the new institute which it is proposed to erect in the town.

SWANSEA.—Plans passed by the T.C.: Factory, South Dock Embankment, for Mr. W. Jones; Bungalow, Salem-road, for Mr. Owen Rees; house, Cefn-road, Glais, for Mr. Thomas Richards; bungalow, Gower-road, for Mr. S. B. Burgess; bungalow, Bays-

* See also our List of Contracts, Competitions, etc.

water-road, Tycoch Estate, for Mr. D. A. Williams; three houses and lock-up shop, Danygraig-road, for Messrs. L. Owen & Son; house, Murton, for Mrs. M. Barrow; house, Glanmor-park, for Mr. W. H. Waller; house, Clydach-road, for Mr. Dd. Hopkins; bungalow, White Stone-lane, Newton, for Mr. Dd. Davies; two houses, Townhill, for T. & G. Spragg; house, Tycoch Estate, for Mr. J. A. Davies; house, Tycoch Estate, for Mr. F. J. Bebb; house, Monterey-street, for Mr. D. T. Thomas; house, Cecil-street, for Mr. H. H. Taylor; house, Waunwen-road, for Mr. D. H. Davies; bungalow, Hendrefoilan-road, for Mr. J. Coffey; house, Goitre-fach-road, Killay, for Mr. L. C. Grimshaw; house, St. John's-road, for Mr. W. R. Crosby; house, St. John's-road, for Mr. T. Richards; house, St. John's-road, for Messrs. Weaver Bros.; house, St. John's-road, for Mr. D. J. Lewis; two houses, Pentregethin-road, for Messrs. Harris & Macleod; two houses, Pentregethin-road, for Messrs. T. Williams & Son.

THORNTON (LANCS).—The U.D.C. are seeking sanction from the M.H. for the borrowing of £5,000 for the purpose of carrying out extensions at the Council offices.

THUNDERSLEY.—Essex C.C. has decided to provide additional elementary school accommodation by direct labour, at a cost of £1,659.

THURNSCOE.—The U.D.C. has acquired a site comprising 27 acres adjoining the present Council scheme upon which it is proposed to erect 50 houses. Sanction of the M.H. is being sought.

TROWBRIDGE.—The U.D.C. passed plans: Messrs. E. Linzey & Son, four houses in Bradford-road.

TRURO.—The T.C. passed plans for a house at the Crescent, for Mr. Russell.

UPMINSTER.—The parishioners of Upminster are raising a fund for the enlargement of the parish church, which will cost about £4,000. Sir Charles Nicholson has submitted plans.

WAKEFIELD.—The T.C. passed plans: Bell & Kay, two houses in Thornes-road, for J. W. Easter and B. Buckland; Bell & May, two houses in Cross-lane, for Messrs. Kilkenny Bros.; Bell & Kay, house in Thornes-road, for Mr. H. Campbell.

WELLEY (NORFOLK).—The M.T. is expected to contribute one-half of the cost of £15,000 involved in the construction of a new bridge.

WEST BRIDGFORD.—Plans passed by U.D.C.: Three houses, Blake-road, for Messrs. West & Cross; house, Rutland-road, for Mr. Haskard.

WILLINGTON.—The U.D.C. has prepared a scheme for erecting 60 houses.

WOKING.—It is proposed to add to the buildings of the St. Peter's Harbour Nurses' Home at Woking and to erect a new wing and a small chapel. The new additions will be of brick construction, the roofs being tiled. The cost is estimated at £6,000. Plans have been prepared by Messrs. John & Paul Coleridge, architects, of 14, North Audley-street, London, W.1.

WOLVEY.—A teacher's house is to be erected at a cost of about £750 by the Warwickshire E.C.

TRADE NEWS

Messrs. N. Gerver, 8–10, Mare-street, Hackney, E.8, will be pleased to send their 1925 almanac to anyone sending their trade card.

Messrs. Christmas & Walters, Ltd., of Caxton House, Westminster, inform us that subsequent to a recent order from the High Commissioner for India for 38,000 sq. ft of Blawforms, they have received a repeat order for an additional 12,000 sq. ft. These forms will be used by native labour under native gangers, their design being of such a simple nature that unskilled labour only is required for handling them.

We have received from Mr. A. L. Curtis, Westmoor Laboratory, Chatteris, a copy of his catalogue of industrial sands. It gives interesting details of the innumerable varieties of sand which have commercial values. Mr. Curtis claims to supply every variety of sand, and it may surprise many people to know there are as many as 77 different kinds used for industrial purposes, apart from the varieties which can be supplied for foundry work, glass manufacture, water filtration, pottery work and other purposes. The catalogue has many illustrations and should prove invaluable to all users of sand.

We have received from Messrs. Smart & Brown, Erith, Kent, a descriptive catalogue dealing with their "S. & B." motor winches. It is fully illustrated, and it can at once be seen that the word "simplicity" is fully justified in describing these winches. The fact that a letter of appreciation with regard to their various appliances was received from the War Office during the war is, we think, proof positive of their engineering efficiency. The "Simplicity" winch, they state, can be used by the most inexperienced person in a few minutes. Builders should note that it can be worked by the man on the scaffold who lands the load; and is suitable for working spoon dredgers, also for hauling trucks in chalk, sand or gravel pits. For pile driving they claim it is ideal, taking up little space and being quick in action.

NEW BUILDINGS IN LONDON

London.—The Congregational Union propose to erect a memorial building dedicated to the late Dr. Clifford. The building will take the form of a Sunday school, an institute and other church buildings on a site in Westbourne Park, W.2. The new premises will be faced with best quality brick and relieved with stone dressings. It will have a pitched roof of slates. The floors will be of wood blocks and the interior will be divided up into classrooms by glazed and boarded partitions. Heating plant, supplied by an outside boiler-house, and electric lighting will be installed, the total cost of the building being estimated at £15,000. The architects are Messrs. Spalding & Myers, of 12, New-court, London, W.C.2.

Peckham.—A new covered-in market is to be built at Rye-lane, Peckham, S.E., for a company called the Peckham Arcade, Ltd. The building will be of brick with a roof of glazed louvres and corrugated asbestos cement sheets, supported on a steel framework, and will cover an area of 8,000 sq. ft. Stalls will be fitted around the walls inside, with a double row of shops along the centre. The floors will be of concrete, covered with granolithic paving. Breeze slabs will be used for partitioning. Collapsible gates will be fitted at the entrances. Electric lighting will be provided and drains laid on. The architects are Messrs. Cannell & Goummant, of 259, High Holborn, London, W.C.2.

Ilford.—New premises are to be built in the High-road for Messrs. Harrison, Gibson, Ltd., general furnishers. A new block of four stories in height is to be carried out in brickwork faced with terra-cotta. Steel frame construction will be adopted and the floors will be of hollow tiles reinforced with steel bars. The ground floor will be used for shop display fronts and will include a large arcade. There will be a frontage to the High-street of about 80 ft., the building extending back about 130 ft. The roof will be flat, constructed of reinforced concrete and asphalted. Central heating, electric lighting, ventilating and pneumatic cash tubes, and a passenger lift and a goods hoist will be installed. The contractors are Messrs. Clemens Bros., Ltd., 77, Derby-road, E.7. The architects are Messrs. C. J. Dawson, Son & Allardyce, Clock House Chambers, Barking, Essex.

King William-street.—Building work will be in progress shortly on another site in King William-street, E.C.4, where the Caledonian Insurance Company, of Edinburgh, intend to provide new London offices. A modern block will be erected reaching a height of about 80 ft. and covering a street frontage of 50 ft. There will be six floors and a basement, the whole of which will be of fireproof construction. The building will have a Portland stone front and will be supported by a steel framework. The window casements on the ground floor will be of ornamental bronzework, whilst above they will be of cast-iron and steel. The rear walls will be of white glazed brick and the roof will be flat and of concrete covered with asphalte. A lift will give access to all floors and central heating and electric lighting will be installed. Vacuum cleaning apparatus will also be fitted. Marble will be used for flooring and skirtings, &c., in the main entrance, and wood block flooring is specified. The builders are Messrs. Howell J. Williams, Ltd., of 11, Bermondsey-street, S.E.1. The architect is Mr. Arthur Blomfield, M.A., of Grocers' Hall, Princes-street, E.C.2.

Tower Bridge-road.—A block of buildings, consisting of shops with flats above, is to be erected on a site in Tower Bridge-road, S.E.1. Having a frontage of 200 ft. and a superficial area of 12,500 ft., the premises have been designed as a three-story block, built of red brick, with artificial stone dressings. The floors will be of concrete finished with granolithic. The roof will be flat and asphalted. Mahogany shop fronts will be fitted, to suit individual tenants. The architects are Messrs. North, Robin & Wilsdon, 35–39, Maddox-street, W.1, acting on instructions from Messrs. Edward Mortimer (London), Ltd., 9, New Bridge-street, London, E.C., the owners.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach us later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

BRIGHTON.—Supply, erection and setting complete of an electrically-driven multi-stage fugal pump, electric motor and other appurtenan in connection with the Race Hill and Warren voirs, for the T.C.:—

Drysdale & Co., Glasgow	£700
Gwynnes Engineering Co., London	(a) 695 (b) 635
Holden & Brooks, Manchester	648
*Pulsometer Engineering Co., Ltd., Reading	556

CROYDON.—For steel flooring for the engine at the Generating room, for the T.C.:—

*G. P. Banbury	£2

CITY OF LONDON.—Repairs and painting underground conveniences, for Court of Co Council:—

*John Greenwood, Ltd.	£962

LONDON.—Conversion of "Beehive" public Burnard-place, into a garage, for Islington B.C

‡W. Bolt, Eden-grove, Islington	£1,79

LONDON.—For tenders for H.M. War Office

Building Works and Services at: Hounslow Barr Ashford Builders, Ltd., London, W.C. Deptf Renewal of corrugated sheeting to roof: W. G. mont & Son, Bromley-by-Bow, E. Leicester-Parva Barracks: Chitham & Co., Ltd., Leic Dover—Connaught Barracks: T. T. Denne, Wa Kent. Wellington Barracks—Officers' Mess: Gaze & Sons, Ltd., Kingston-on-Thames. Car Camp—Re-surfacing of road: W. & J. Glossop, Hi holme, Halifax. Richmond Barracks (Yorks Gradon & Son, Durham. Dover—Reconstructio W. Heath, Ltd., London, S.W. Lichfield Whitt Barracks—Erection of steel fencing: Hill & S Ltd., Brierley Hill, Staffs. Bovington Camp—R ditioning Sports Ground: Humphreys, Ltd., Lo S.W. Ipswich: W. Laughton, Bedford. New James Stephens, Cardiff. Weedon: W. W. W Guilsborough, Northants.

LONDON.—For tenders, H.M. Office of Works

Building Works.—Attercliffe Employment Exc —Asbestos slating: W. W. Fawcett, Sheffield. P ing: J. T. Curtis, Sheffield. Beauchief Tele Exchange—Plastering: Higgins & Son, Sh Plumbing: G. Simpson & Co., Sheffield. B Stormont Castle—Erection of Speaker's Courtney & Co., Belfast. Boulmer—Erection of guard cottage, &c.: Alexander Anderson, New on-Tyne. Brighton P.O.—Plumbing: A. Gr Sons, London, E. Cardiff Head P.O.—Steel A. D. Dawnay & Sons, Ltd., Cardiff. Chorley Erection: Baxendale Bros. (Chorley), Ltd., Ch Colwyn Bay, P.O., &c.—Steelwork: Dorman. & Co., Ltd., London, S.W. Crewe Head Plastering: W. Jones & Son, Crewe. Darwen Iron and steel work: Joseph Webb & Sons, Ltd., Dumfries P.O., &c.—Erection: Brown, Fraser Glasgow. Carpenters' and joiners' work: A. & Sons, Glasgow. Glazing: The City Glas Glasgow. Painting: James Stirling, Glasgow. tering: Wm. McNish, Dumfries. Plum P. & P. Meechan, Dumfries. Slating: Hastings & Sons, Dumfries. Structural steel Fleming Bros., Glasgow. Hanley Telephone change—Alterations, &c.: J. E. Harper & Sons Birmingham. Holborn Telephone Exchange—S Works: F. & H. F. Higgs Ltd., London, S.E. H P.O.—Steelwork: Dorman, Long & Co., Ltd., L S.W. Kensington, Science Museum—Iron balu ing: John Boulting, Sons & Cowling, Ltd., Londo Kirkburton, near Huddersfield—Erection of Recr Hall, &c., at Storthes Hall Asylum: Humphreys London, S.W. Nuneaton Employment Excha Glazing: Wm. Pearce & E. Cutler, Ltd., Birmin Palmers Green Telephone Exchange—Tar Pavin Smart & Son, London, W.C. Radcliffe Employ Exchange—Alterations, &c.: E. & S. Street, Farnworth. Rugby Wireless Station—Plaste J. Routhorn, Northampton. Shipley P.O., &c.— tion: William Irwin & Co., Ltd., Leeds. Slough &c.—Asphalt: Engert & Rolfe, Ltd., Londo Steelwork: Redpath, Brown & Co., Ltd., London Teddington, National Physical Laboratory—A Damp course: The Neuchatel Asphalte Co., London, S.W. Portland stone work: F. J. B Ltd., London, S.W. Roofing felt: Permanite, London, E. Steel sashes: Williams & Williams, London, W.C. Steelwork: The Somerville-Be Construction Co., Ltd., London, S.E. Walworth phone Exchange—Excavations: Willment London, S.E. Wigan P.O., &c.—Alterations, John Johnson & Son, Wigan. *Engineering Servi* Bishopsgate Telephone Exchange—Heating: K Bros. (1917), Ltd., London, S.W. Cardiff Merc Marine Office, &c.—Heating: The Brightside Fo and Engineering Co., Ltd., Cardiff. Hyde Park— standards, bollards, &c.: Carron & Co., London Liverpool, Ministry of Pensions, Mossley Hill—He The Brightside Foundry and Engineering Co., Liverpool. Rampton State Institution—Hea William Freer, Leicester. Sloane Telephone Exc —Heating: Adams & Adams, Southampton. Tec ton, National Physical Laboratory—Manholes, C &c.: Siemens Bros. & Co., Ltd., London, S.E. *ing.*—Bovis, Ltd., London, W.; Douglass, Halse Ltd., London, S.E.; M. Greenwood & Son, London, N.W.

(*Other Tenders, see p.* 1038.)

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.
Kettons, at	½ s. d.
King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose ..	" 8 3
Best Stourbridge Fire brick:—	
9 in.	8 11 0
3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers ..	23 0 0
Headers ..	22 10 0
Coins. Bull-nose and 4½ in. Flats	29 10 0

Second Quality, £1 per 1,000 less than best. Cream buff, £2 extra over white. Other colours, Hard blaze, £5 10s. extra over white.

D'ble Str'tch'rs	31 10 0
D'ble Headers	28 10 0
One Side and two Ends ..	32 10 0
Two Sides and one End	33 10 0
Splays and Squints	31 0 0

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	2 1	3 in. per yd. super	2 11
4 in. "	2 6	"	3 6

delivered 2 miles radius Paddington.

	s. d.
Thames Ballast	10 6 per yard.
Best Sand	13 9 " "
Thames Sand	14 6 " "
Best Washed Sand	14 6 " "
2 in. Shingle for Ferro-Concrete	12 9 " "
1 in. "	14 0 " "
1½ in. Broken Brick "	11 6 " "
Thin Breeze	7 6 " "

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification Test £2 18 0 to £3 51/- alongside at Vauxhall in 80-ton lots.	£3 3 6
Ferrocrete per ton extra on above	0 10 0
Super Cement (waterproof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Grapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Tourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE— Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above stations, per ft. cube	4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

PORTON-WOOD STONE.

Delivered at any Goods Station, London.

	s. d.
Small random blocks, up to 10 ft. cube. Per ft. cube	7 /-
Random blocks from 10 ft. and over "	17 /-
Sawn two sides "	27 /-
Sawn three or four sides "	32 /-

PORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.

	s. d.
1 in. sawn two sides landings to sizes (under 30 ft. super.) ..... Per Ft. Super	5 6
1 in. rubbed two sides, ditto ..... "	6 0
1 in. sawn two sides slabs (random sizes) "	2 3½
1 in. to 2½ in. sawn one side slabs (random sizes) ..... "	1 6½
1 in. to 2 in. ditto, ditto ..... "	1 4

YARD YORK—

Delivered at any Goods Station London.

Tapped random blocks ..... Per Ft. Cube	6 3
1 in. sawn two sides landing to sizes (under 40 ft. super.) ..... Per Ft. Super	5 1½
1 in. rubbed two sides ditto ..... "	6 1½
1 in. sawn two sides slabs (random sizes) "	2 10
1 in. ditto. ditto "	2 1½
1 in. self-faced random flags .. Per Yard Super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
9 × 11	£32 0	3 × 6	£23 0
7 × 9	28 0	3 × 11	28 0
6 × 8	26 0	2 × 11	28 0
6 × 7	25 0	3 × 9	25 0
7 × 8	24 0	2½ × 9	25 0
6 × 7	23 0	3 × 4½	24 0
7 × 7	22 0	3 × 4	24 0

PLANED BOARDS.

11 × 1	£31 0
1 × 9	£30 0

WOOD (*Continued*).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	21/-	1¼	32/6
¾	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	25/-
1¼	32/6
1½	37/6

MATCHINGS (BEST)

Inches	per sq.
⅝	16/6
¾	20/-
1	25/-

BATTENS

Inches	s. d.
⅝ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 6
Dry Wainscot Oak, per ft. super, as inch	0 2 0 to 0 2 6
½ in. do. do.	0 1 6 to 0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9 to 0 2 6
Cuba Mahogany	0 3 0 to 0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0 to —
American Whitewood planks, per ft. cube ..	0 12 0 to 0 14 0
Best Scotch Glue, per cwt.	4 10 0 to —
Liquid Glue, per cwt. ..	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand made ditto	5 17 6
Ornamental ditto	6 7 6
Hip and valley tiles (per dozen) { Hand made	0 9 6
{ Machine made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

	£ s. d.
R. S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
" Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	16 10 0	⅝ in. to ½ in...	13 10 0
⅜ in.	14 10 0	⅝ in. to 2½ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes. All sizes.	Fittings. ¾"&up.	Fittings. ½"to¾" inclusive.	Flanges ¾"&up.	Flanges ½"to¾" inclusive.
Black Gas....	50 %	50 %	47½ %	60 %	57½ %
Blue Water ..	45 %	45 %	42½ %	55 %	52½ %
Red Steam ..	40 %	40 %	37½ %	50 %	47½ %
Galv'd Gas ..	35 %	40 %	37½ %	50 %	47½ %
" Water.	28⅜ %	35 %	32½ %	45 %	42½ %
" Steam	22½ %	30 %	27½ %	40 %	37½ %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. " "	6 3	6 8	11 4
5 in. " "	7 6	11 6	18 2
6 in. " "	8 10	14 4	23 5

IRON—	Per ton in London. £ s. d.	£ s. d.
Common Bars	13 10 0 to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0 —	15 10 0
Staffordshire "Marked Bars"	17 0 0 ..	18 0 0
Mild Steel Bars	12 0 0 ..	13 0 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	12 10 0 ..		13 10 0
Hoop iron, basis price	16 10 0 ..		17 10 0
Galvanised	31 0 0 ..		32 0 0
Soft Steel Sheets, Black— Ordinary sizes to 20 g...	14 10 0 ..		15 10 0
" " " 24 g...	15 10 0 ..		16 10 0
" " " 26 g...	17 10 0 ..		18 10 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g...	21 0 0 ..		22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0 ..		23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0 ..		26 10 0
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0 ..		21 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0 ..		22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0 ..		24 0 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0 ..		24 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0 ..		26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0 ..		27 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0 ..		22 0 0

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	53 0 0
Pipe in coils	53 10 0
Soil Pipe	56 10 0
Compo pipe	59 10 0

NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

	£ s. d.
Old lead, ex London area, at Mills ..... per ton	39 10 0 .. —
Do., ex country, carriage forward ..... per ton	40 10 0 .. —

COPPER.

	s. d.
Seamless Copper tubes (basis) ..... per lb.	1 1½
Strong sheet ..... "	2 4
Thin " ..... "	2 3
Copper nails ..... "	2 3
Copper wire ..... "	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

½ in.	¼ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per doz

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1½ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ..	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps ..	35/-	45/-	66/-	126/- "

TIN—English Ingots, 2/6 per lb. SOLDER—Plumbers' 1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes .....per gallon	0 4 3
" " " in barrels .... "	0 4 5
" " " in drums .... "	0 4 8
Boiled " " in barrels .... "	0 4 8
" " " in drums .... "	0 4 11
Turpentine in barrels ..... "	0 5 4
" in drums (10 gall.) .. "	0 5 7
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	64 10 0

GENUINE WHITE LEAD PAINT—

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered 83 15 0

Red Lead, Dry (packages extra) ....per ton	56 10 0
Best Linseed Oil Putty .....per cwt.	0 15 0
Filocol .....per cwt.	0 15 6
Size, XD Quality .....fkn.	0 3 6

[*Continued on next page.*]

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds .....10½d.	
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d., 21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
3/16 Rough rolled	5½d
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white..	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak.....	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water).....		0 12 0
Brunswick Black.....		0 7 6
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine.....		0 9 0
Cuirass Black Enamel.....		0 7 0

FIRE PRECAUTIONS.

The following extracts are from a pamphlet recently issued by the National "Safety First" Association :—

(1) Erect buildings of fire-resisting construction or as substantially as possible. Reduce their cubical capacity and height to the minimum and protect them from fires breaking out in adjacent premises.

(2) Avoid openings in floors, and if they are necessary, protect them as stated.

(3) Refrain as far as possible from allowing open spaces between buildings to be occupied by sheds, &c., of inferior construction, or as dumps for timber, crates and the like.

(4) When extending buildings guard against the extension of a fire.

(5) Light your premises efficiently. Do not let there be any dark corners. Authorise a responsible man to light up and to look after the installation. Use automatic lighters for gas, protect inflammable ceilings over gas burners, and combustible material in the neighbourhood of swinging gas brackets. Do not place electric bulbs in contact with inflammable materials. Give instructions for the maintenance of these safeguards.

(6) If electric lighting is used, do not permit extension or alterations of any kind except by an efficient electrician.

(7) Give special attention to the protection of combustible material in the neighbourhood of any heating device, whether for a trade process or for warmth.

(8) Remove all waste from the buildings every night and burn or otherwise dispose of it in a safe manner. The use of metal receptacles with lids for the temporary deposit of oily or greasy waste is essential.

(9) Keep the premises scrupulously clean and tidy and avoid overcrowding of any description

(10) Do not allow unauthorised persons to gain access to your premises.

(11) Keep your stock in buildings not occupied for hazardous trade processes and do not keep it all in one building if you have sufficient accommodation.

(12) Advise your insurance company *before* you make structural alterations, or before you introduce new fires or gas-heated appliances or a different method of lighting.

THE SCOTTISH BUILDE

WORKMEN'S DWELLINGS

At the annual meeting of the Glasgow Workmen's Dwellings Company, Sir Daniel M. Stevenson, who presided, said there were many inhabitants of Glasgow—in fact, in all big towns—who did not require houses of three apartments, and who would find three apartments a great encumbrance. The policy of the Glasgow Corporation at the moment, in the opinion of some people, was erroneous, in the sense that it did not take into consideration the position of single women, who would be completely hampered with two or three rooms to look after. It was probable that for many years to come there would be a need for a minimum of two apartments, as the minimum of three or four apartments was unnecessary meantime. With regard to the general question of housing policy, daylight would not be seen for two or three years yet. The people concerned in the question were groping for a definite policy, and as the new Government were apparently going to have a long lease of power they might have a fair policy worked out. On Sir Daniel Stevenson's motion, seconded by Mr. Arnold Fleming, the annual report of the Company was approved. Mr. John Dallas said the Glasgow Corporation had not been providing the houses which were required at all. From 1921 until 1924 they had erected about 4,000 houses, chiefly of three, four, and five apartments. They had made no provision at all for those who lived in one room and kitchen houses, although of 236,000 houses in the city 112,000 were of the one room and of the kitchen type.

Kirkcudbright County Offices.

At a recent meeting of the Stewartry County Council, held at Kirkcudbright, the Finance Committee reported on the provision of offices for the County Council and its officials at Kirkcudbright. The committee reported that their present accommodation for county officials is inadequate, but recommended that before deciding as to the erection of new county buildings authority be given to the committee to employ an architect to draw up a plan providing for the accommodation of all essentially County Council officials. The report was adopted, and it was also agreed that the ques of accommodation at Castle-Douglas considered.

Glasgow Ice Rink.

Further particulars of the scheme to erec ice rink in the centre of the city were rece issued by Colonel Robertson-Aikman, the cl man of the committee, and Mr. James Gou the secretary. The sum required to build a rink on a site bounded by West Regent-s and Pitt-street and Jane-street is £50,000 plan of the proposed building has been prep by Messrs. Watson, Salmond & Gray, F.R.I.I West George-street.

Steel Houses.

With regard to the two experimental steel houses which the Glasgow Corporatio erecting at Drumoyne, the Scottish Counc the National Federation of Building T Operatives recently informed the Hou Committee that building trade conditions r be observed on the work if the erection of houses was to proceed. The Committee dec to write to Messrs. Weir that these condit must be observed. By the Standing Or of the Corporation, trade union wages r be paid on all contracts given out.

Glasgow Art Club.

At the annual meeting of the Glasgow Club held recently, the following office-bea and members of Council in room of t retiring were elected:—President, Alexa Proudfoot, A.R.S.A.; vice-presidents, H Stuart Brown and A. R. W. Allan; treasurer, A. Graham Henderson, A.R.I.B hon. secretary, Henry Y. Allison; membe Council in room of those retiring—Hugh Buchanan, Wm. Smith, jun.; James A John Watson, F.R.I.B.A.; Arch. Daw and A. Haswell Miller, R.S.W.

Aberdeen Building.

The total value of the buildings for w plans were passed in Aberdeen during year ended November 30 was £253,450. pared with £196,781 last year, an increas £56,669. The figures for the preceding t years were respectively £87,025, £119.887 £468,105.

BUILDING TRADE WAGES IN SCOTLAND

The following are the present rates of wages in the building trade in the principal towns Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for er that may occur :—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-Masons' layers' t Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/6	1/6	1/6	1/6-1/6½	1/6	1/6	1/6	1/2
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/0
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Stirling	1/3	1/3	1/8	1/8	1/8	1/8	1/6½	1/3½
Stirlingshire (Eastern District)	1/3-1/10	1/3-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England Wales are given on page 1039

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
...g and throwing or wheeling and filling carts, ...nd carting away to shoot—6 ft. deep	per yard cube	11	6
...nway	" "	1	0
...or every additional depth of 6 ft.	" "	0	6
...ing and strutting to trenches	per foot super	0	5
...sides of excavation, including shoring	" "	1	0

CONCRETOR.

...ndement concrete in foundation 1 to 6 ..	per yard cube	32	0
...f underpinning in short lengths	" "	7	0
...f floors 6 in. thick	" "	3	3
...beams	" "	3	9
...gregate 1 : 2 : 4	" "	10	0
...isting not exceeding 10 ft. beyond the ...10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
...ce brickwork in lime mortar and Fletton ...ks	per rod	30	0	0
...f stocks	"	7	10	0
...f Staffordshire blues	"	22	0	0
...f Portland cement and sand	"	1	10	0

FACINGS.

...ra for facing in English or Flemish bond for ...every 10s. per 1,000 over the price of the com...mo bricks	per ft. super	0	0	1½

POINTING.

...t flat struck or weathered joint	" "	0	0	3

ARCHES.

...ra only to the price of ordinary brickwork :— ...r external in half brick rings	" "	0	0	10
...ed to stocks	" "	0	1	9
...e and gauged jointed in putty camber or ...emental	" "	0	6	0

SUNDRIES.

...mp course in double course of slates breaking ...joint and bedded in Portland cement	" "	0	1	0
...ting ordinary register grates and stoves	each	1	0	0
...ting kitchener, including forming flues, &c., ...with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
...alf-inch horizontal damp course	per yard sup.	4	3
...ree-quarter-inch vertical damp course	" "	8	6
...inch on flats in two thicknesses	" "	6	3
...e fillet	per foot run	0	3
...rting and fillet 6 in. high	" "	1	2

MASON.

...brick stone templates fixed	per foot cube	13	0
...brick stone sills fixed	" "	22	0
...th stone and all labour fixed	" "	10	6
...rtland stone fixed	" "	20	0

SLATER.

...elsh 16 in. × 8 in. 3 in. lap, including nails....	per square	72	9
Do 20 in. × 10 in. Do. Do.	"	80	9
Do 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

...ir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		½"	1"	1½"	2"
...eal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
...last entering for concrete floor, in...nding struts or hangers .. "		50	0
...Do to beams	per ft. sup.	1	0
...entes for arches	"	1	6
...utter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1½"	1½"
...Deakdges shot	per sq.		44/6	53/-	60/6
...Dotongued and grooved	"		49/-	57/6	65 -
...Domatchings	"	45/-	51/-		
...Moulded skirting, including back...ings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
...One-and-a-half moulded sashes or casements	per foot super	1	10
...Two Do. Do. Do.	" "	2	1
...Addor fitting and fixing	" "	0	3
...Deacased frames with 1 in. inner and outer ...linings, 1½ in. pulley stiles tongued to linings. ...hard wood sills with 2 in. moulded sashes in ...squares double hung, double hung with pul...leys, lines and weights; average size.....	" "	3	9

DOORS.

		1½"	1¾"	2"
...Two-panel square framed	per ft. sup.	2/1	2/4	2/6
...Four-panel Do.	"	2/5	2/8	2/11
...Two-panel moulded both sides	"	2/8	2/11	3/2
...Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1½"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1½"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run.	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	" "	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and	
Casement stays	1/2	making good	19/-
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roof work	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints ..	ft run	1/11	2/4½	3/7	4/-
Ogee Do. Do. ..	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	68	6
Do. Do. in flats	"	67	6
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run.	0	6
Soldered seam	" "	1	6
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/0	
Do. service	"	1/8	2/2	2/7	3/10		6/9
Do. soil	"					3/3	8/2
Bends in lead pipe	each						
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints ..	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64/-		

PLASTERER.

			s.	d.
Render, float and set in lime and hair	per yard sup.		2	4
Do. Do. Sirapite	" "		2	7
Do. Do. Keen's	" "		3	7
Add sawn lathing	" "		1	7
Add metal lathing	" "		2	6
Portland cement screed	" "		1	11
Do. plain face	" "		3	3
Mouldings in plaster	per 1 girth		0	1½
One-and-a-half granolithic pavings	per yard sup.		5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8
26 oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

			s.	d.
Preparing and distempering, 2 coats	per yard sup.		0	9
Knotting and priming	" "		0	7
Plain painting 1 coat	" "		0	9
Do. 2 coats	" "		1	2
Do. 3 coats	" "		1	9
Do. 4 coats	" "		2	4
Graining	" "		2	3
Varnishing twice	" "		1	9
Sizing	" "		0	3
Flatting	" "		0	7
Enamel	" "		1	1
Wax polishing	per foot sup.		0	6
French polishing	" "		1	2
Preparing for and hanging paper	per piece	2/-	to	4/

These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modifications.

LONDON.—For construction of the North Western storm relief sewer from Notting Hill to the River Thames, for the L.C.C. :—

James Byrom, Ltd.	£461,663 11 4
Wm. Muirhead, Macdonald, Wilson & Co., Ltd.	381,857 18 11
Edmund Nuttal, Sons & Co., Ltd.	347,036 9 8
Kinnear, Moodie & Co.,	338,724 12 10
The Foundation Co., Ltd.,	334,128 10 0
Charles Brand & Son	330,333 5 3
John Price & Son	328,079 14 3
J. G. White & Co., Ltd.	319,773 3 0
‡Walter Scott & Middleton, Ltd.	318,140 17 8

We are advised that the chief engineer's estimate comparable with the tenders is £280,000.
(All of London.)

PLYMOUTH.—For alterations to Hartley House, for the T.C. :—

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